PREPARING LEARNERS FOR HIGHER EDUCATION SUCCESS THROUGH INDIVIDUALISED HOME EDUCATION IN SOUTH AFRICA: A NARRATIVE RESEARCH STUDY

by

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Declaration

I, **Jacqueline Morkel**, declare that the thesis, *Preparing learners for Higher Education success through Individualised Home Education in South Africa: a narrative research study*, submitted for the degree Philosophiae Doctor in Higher Education Studies at the University of the Free State is my own independent work.

All the references that I have used have been indicated and acknowledged by means of complete references.

I further declare that this work has not previously been submitted by me at another university or faculty for the purpose of obtaining a qualification.

24 July 2024

SIGNED DATE

Abstract

The South African education system is currently severely criticised for failing to adequately prepare learners for higher education, leading to high dropout rates and unfulfilled potential. Previous research has indicated how this challenge could be addressed through educational reform – on multiple levels of the educational system – and how to support underprepared higher education students to achieve success. However, what is not known is how a home education environment could prepare students for higher education success in the context of a developing country like South Africa. The purpose of this study is to create a deeper understanding of how a specific approach to home education, i.e., individualised home education, could effectively prepare learners for higher education success. As a qualitative research study from an interpretive perspective, this study used narrative inquiry method to achieve the above-mentioned purpose. Snowball sampling was utilised to obtain adults who firstly have successfully completed their undergraduate studies at a public South African university, in the minimum residential period allowed for each of the participant's respective degree programmes. Secondly, it was important that these families applied an individualised home education approach. Semi-structured serial interviews were conducted in order to gather rich and meaningful data. A total of twenty-one interviews were conducted of which fifteen interviews were transcribed. The data presented in this study included the first round interviews of seven home educated adults and five home education parents with two sets of siblings being interviewed. The second round of semi-structured interviews involved seven participants, i.e., four homeschooled students and three parents. A thematic data analysis process was used to analyse the data.

The data presented four themes which describe individualised home education pertaining to higher education success: (1) milieu, (2) learning, (3) life skills and (4) quality interactions. The data indicated specific aspects for each of these elements. These aspects created a nuanced understanding of the home education environment that successfully prepared students for higher education success in later years. The research results were then compared with *student engagement* as a theoretical frameworks for higher education success. This comparison between the research results (at earlier education phases) and student engagement, provided correlations between the data and student engagement mechanisms: Affective-, Behavioural-, Cognitive-, Critical-, Political- and Socio-cultural student engagement. The results showed that individualised home education was highly effective in incorporating student engagement strategies, which was adapted throughout developmental phases, and how this

education philosophy successfully prepared learners for higher education success, because it effectively facilitated learner engagement at the Primary and Secondary level.

This research study provides deep insights, in an empirically grounded way, about the value of home education – especially individualised home education – and how it could prepare learners for post-secondary success.

Keywords

Home education, Higher education, Individualised education, Higher education success, Student Engagement.

Afrikaanse Opsomming en Sleutelterme

Die huidige Suid Afrikaanse onderwysstelsel is onder hewige kritiek aangesien dit faal om leerders genoegsaam voor te berei vir sukses in hoër onderrig, wat hoë falingsyfers en onvervulde potensiaal tot gevolg het. Vorige navorsing het reeds gedui watter oplossings moontlik kan lei tot onderrig reformasie op verskeie vlakke. Veranderinge in die stelsel kan moontlik daartoe lei dat leerders beter voorberei word vir hoër onderrig en sukses behaal op tersiere vlak. Wat wel onbekend is, is hoe ‘n tuisskool omgewing leerders kan voorberei vir hoër onderrig, veral in ‘n ontwikkelende land soos Suid-Afrika. Hierdie studie ondersoek hoe informele individuele onderrig leerders effektief voorberei vir hoër onderrig.

Die studie ondersoek hoe kwalitatiewe interpretatiewe metodes die navorsingstudie kan steun. Die narratiewe ondersoek het gebruik gemaak van sneeubal monsterneming om kandidate te identifisieer wat voldoen aan die volgende kriteria. Eerstens het die tuisskool leerders hul hoër onderrig voltooi aan ‘n Suid-Afrikaanse universiteit in die minimum toegelate tyd. Tweedens het die gesin gebruik gemaak van ‘n informele, geïndividualiseerde tuisonderrig sisteem. Narratiewe semi-gestruktureerde onderhoude het kwalitatiewe data gegenereer wat gebruik is in die navorsingstudie. Eerste en tweede onderhoude met tuisskool leerders en hul tuisskool ouer is gevoer wat getranskribeer is. Die studie sluit die data in van sewe tuisskool leerders en vyf tuisskool ouers. Die tweede rondte onderhoude het vier tuisskool leerders en drie ouers ingesluit. Tematiese data analise is toegepas op die data.

Die data het vier temas uitgelig wat die geïndividualiseerde tuisonderwys-opset wat verband hou met hoër onderwyssukses beskryf: (1) Milieu, (2) Leer, (3) Lewensvaardighede en (4) Kwaliteit-interaksies. Die data het spesifieke aspekte vir elkeen van hierdie elemente aangedui. Hierdie aspekte het 'n genuanseerde begrip van die tuisonderwysomgewing geskep wat studente suksesvol voorberei het vir hoër onderwyssukses in latere jare. Die navorsingsresultate is verder vergelyk met studentebetrokkenheid as 'n teoretiese raamwerk vir hoër onderwyssukses. Hierdie vergelyking tussen die navorsingsresultate (by vroeëre onderwysfases) en studentebetrokkenheid, het korrelasies verskaf tussen die data en studentebetrokkenheidmeganismes: Affektiewe-, Gedrags-, Kognitiewe-, Kritieke-, Politieke- en Sosio-kulturele studentebetrokkenheid. Die resultate het getoon dat geïndividualiseerde tuisonderrig hoogs effektief was om studentebetrokkenheidstrategieë, wat deur ontwikkelingsfases aangepas is, te

inkorporeer, en hoe hierdie onderwysfilosofie leerders suksesvol voorberei het vir hoëronderwyssukses, omdat dit leerderbetrokkenheid op die Primêre en Sekondêre vlak effektief gefasiliteer het.

Hierdie navorsingstudie verskaf diepgaande insigte, op 'n empiries gefundeerde wyse, oor die waarde van tuisonderrig – veral geïndividualiseerde tuisonderwys – en hoe dit leerders kan voorberei vir na-sekondêre sukses.

Sleutelterme

Tuisonderrig, Hoër Onderrig, Geïndividualiseerde Onderrig, Informele Tuisonderrig, Hoër Onderrig Sukses, Student se aktiewe betrokkenheid.

Dedication

To by parents who have sacrificed immeasurably in supporting us in this journey. And to my two wonderful boys who forfeited time, fun and countless other things so that I could complete, what is most certainly the most difficult thing I have ever done. I love you more than words can say and I am so incredibly proud of you. The greatest accomplishment in parenting is that your hearts understand the mission of love and mission for the kingdom.

I SEE YOU.

Alas, the key is unveiled and opens the door to achieve the mission set before us.
Let us bravely take hold of it.

"It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, who comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who neither know victory nor defeat."

Theodore Roosevelt

Every being cries out silently to be read differently
Simone Weil (2005)

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List of Acronyms

ADCS	The Association of Directors of Children's Services
AHEI	Africa Home Education Indaba
AIHEC	American Indian Higher Education Consortium
BBC	British Broadcasting Corporation
BOSTES	Board of Studies Teaching & Educational Standards NSW
BUSSE	Beginning University Survey of Student Engagement
CAPS	Curriculum Assessment Policy Standards (South Africa)
CIRP	Cooperative Institutional Research Program
CLASSE	Classroom Survey of Student Engagement
CSEQ	College Student Experiences Questionnaire
DBE	National Department of Basic Education (South Africa)
HSLDA	Homeschool Legal Defense Association
IHEP	The Institute for Higher Education Policy
LSSE	Lecturer Survey of Student Engagement
MLE	Mediated Learning Experience
NAPLAN	National Assessment Program Literacy and Numeracy
NCES	National Center for Education Statistics (US)
NSSE	Nasional Study of Student Engagement

SABC	South African Broadcasting Centre
SASSE	South African Survey of Student Engagement
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children’s Emergency Fund
ZPD	Zone of Proximal Development

1 Orientation to the Study

1.1 Background to the Study

This study positions itself in one of the biggest education problems South Africa currently faces: the failure to adequately prepare learners for higher education. But how can learners be adequately prepared for higher education? What kind of environment is needed in this regard? This research study has as a theoretical point of departure the strong correlation between higher education student success and student engagement. Noticeably a home education environment could provide the elements for student engagement through Affective-, Behavioural-, Cognitive-, Critical-, Political- and Socio-cultural student engagement. The correlation between a home education environment and student engagement has the potential to contribute to the creation of a conceptual framework for individualised home education environments that are optimally conducive to student learning and development, and indirectly, to higher education preparation.

The purpose of this chapter is to provide an orientation to this study. Firstly, this chapter presents the problem statement, outlining the contextual background and limitations in the current body of literature. The research problem follows, leading into the research questions, aim, and objectives. Thereafter, the research paradigm, design, and methodology introduce the reader to the data collection, data analysis, and data trustworthiness. The ethical considerations of the study were overviewed as well as the key concepts and the scope and limitations of the study.

1.2 Problem Statement

1.2.1 Contextual Background

The South African education system faces enormous challenges. Mlachila and Moeletsi (2019) highlight the intensity of these challenges by stating that “about half of South Africa’s students drop out of school before completing secondary education. Among the learners who write the final high school examinations, about a quarter fail. Moreover, less than 5% of students who start primary school end up with a university qualification.” This failure of the current education system to produce post-secondary graduates is underlined by the fact that a mere 15% of South Africans between the ages of 25 and 34 had a tertiary qualification in 2020, in comparison with an average of 47% across other OECD countries (OECD, 2022). What is unsettling about these statistics is the fact that

the national expenditure on education is proportionally greater than that of the United States (US) and the United Kingdom (UK) (Cohen, 2017). It is, therefore, understandable that the South African education system received intense criticism after the World Economic Forum ranked it at 126 out of 138 countries (World Economic Forum, 2016). Thus, it is crucial to consider how an education environment could be shaped during primary and secondary education so that it is conducive to learners' learning, development, and success; something that should also adequately prepare learners for post-secondary education.

This need to thoroughly prepare learners for higher education is evident in the sub-optimal completion rates at South African universities. Marwala and Mpedi (2022) state that more than 40% of all first year students in South Africa are unsuccessful in completing their degrees. "According to a 2019 government review of the first 25 years of democracy, in the 2010 cohort, 22% of students achieved a three-year degree within three years, only 39% had completed their degrees by the fourth year, and only 56% of students completed their degrees by the sixth year." (Marwala & Mpedi, 2022). This concern about the completion rates in South African universities is highlighted by various authors (Scott, 2018; Case, Marshall, McKenna, & Mogashana, 2018). Van Broekhuizen, Van der Berg & Hofmeyr (2017) indicated that a mere 36,9% of students graduated after four years of study at a prominent South African university. This success rate only increased to 58,1% after six years of study for an undergraduate degree at the same institution. Thus, considering the sub-optimal graduation rates in South African universities, how could primary and secondary education environments better prepare learners for higher education success?

One of the ways in which the quality of primary- and secondary education could be enhanced, is through home education. Research by Steytler (2019) and Van Oostrum (2021) indicates how home education significantly increased in South Africa during the last two decades, and how home education provides a feasible option to create an education environment that is conducive to learning, development, and success. However, until now, dominant responses to the education challenges facing South Africa assumed that these challenges could best be addressed through greater quality control of state-governed accountability systems. This research study will show the opposite, that the ownership and responsibility for education should be primarily located in the home environment. What this study will aim to achieve is to define what the characteristics of such a home education environment should be, how parents could fulfil the role of an engaging educator, and how the process of education could unfold to

achieve success, even on the post-secondary level. The premise of this study is that one particular approach to home education, namely *individualised home education*, could create an environment that is conducive to learners' learning, development, and success through enhanced student engagement. However, many gaps exist in the current body of literature about this specific approach to home education and how it could assist to prepare students for higher education success, especially in a South African context.

1.2.2 Research Problem

Although considerable research evaluates the impact of home education, several limitations in the current research make it difficult to derive concrete generalisations about how and why an individualised home education environment can prepare learners for higher education success, especially in the context of a developing country like South Africa.

Many research findings are based on studies performed in the Global North, or other developed countries, and largely fail to use data samples from developing countries like South Africa. In this regard, the international perspectives on home education are discussed in Chapter 2 and confirm a substantial body of literature for the US and to a lesser degree for Australia, the UK and other European countries where home education remain active. Thus, Chapter 2 provides an overview of the empirical data on the prevalence of home education, demographics, reasons why families home educate, academic achievement, and culture capital in different world regions. However, the extremely limited empirical evidence on home education in South Africa becomes evident in Chapter 3. Empirical data on demographics, academic performance, and reasons for home education in the South African home education sphere is limited and dated; something that accentuates a glaring gap in the current body of literature. Although limited in scope, the empirical data of this study could contribute to addressing some of the contextual limitations in the current body of literature.

Additionally, some research studies primarily focus on the short-term and immediate effects of home education. It is questionable whether the results of these studies are directly applicable to higher education preparedness, especially in relation to an individualised approach to home education and its long-term consequences (specifically in relation to higher education preparation). Furthermore, many studies apply quantitative research methods. Although these studies provide valuable insights about general patterns across large groups of home education families, many studies fail to generate rich contextualised data about the lived experiences and storied accounts of

home education families, especially minority groups. What is at stake is that no deep understanding is established about the complexity of home education situations in various contexts. Although limited in scope, this study will aim to address some of the methodological limitations through narrative inquiry. In this regard this study will focus on the storied accounts of different students (and their parents) who incorporated an individualised home education process in South Africa and who then proceeded to complete their higher education studies in the minimum residential period allowed for these respective qualifications.

The current body of literature also poses some framing limitations, i.e., shortcomings in relation to the kind of research questions that have been asked, or not asked, to date. Many studies focus on the demographic data associated with the home education population in a particular world region. These studies provide excellent quantitative data to evaluate general patterns across nations. Furthermore, several studies focus on research questions about the educational impact of home education during primary or secondary education years. In some cases, these studies also evaluate, in more detail, the impact of home education on specific academic subject areas, for example, STEM areas. However, limited data exist about the narratives of home educating families, and even fewer studies focus on narratives that connect home education with higher education preparedness. Also, an overall silence exists about the storied accounts of families that used an individualised approach to home education, especially in the context of a developing country like South Africa. This research study will address to some degree these framing limitations by asking novel research questions (as outlined in the next section).

Thus, in the light of these contextual-methodological-framing limitations, the interest of this study is to focus on what potential new insights the storied accounts of different (past) stakeholders in individualised home education can provide about preparedness for higher education. The researcher believes that the findings of this research study will produce many benefits unavailable in the current body of literature. Since existing empirical evidence about home education in South Africa is extremely limited and dated, especially in relation to the individualised approach, this study – although limited in scope – aims to contribute to a deeper understanding about the process to better prepare learners for higher education.

1.3 Research Questions

To address the above-mentioned limitations in the current body of literature, this study will focus on the following primary research question: In what ways, if any, can the storied accounts (past) of different stakeholders in individualised home education, provide deeper insights about preparedness for higher education in a South African context?

The following secondary research questions will assist in answering the above-mentioned primary research question:

1. What are existing international perspectives on home education?
2. What are existing national perspectives on home education?
3. What are the existing home education philosophies and approaches that host and formulate the definition of individualised home education as a unique approach in a South African context?
4. What specific theoretical perspective does *Student Engagement* provide concerning the preparation of learners for higher education?
5. How could narrative research be used to create a deeper understanding of how an individualised home education environment could prepare learners for higher education?

1.4 Research Aim and Objectives

Considering the above-mentioned research questions, the primary aim of this study is to get a deeper understanding of preparedness for higher education through the storied accounts (past) of different stakeholders in individualised home education in a South African context. This primary research aim relates to the primary research question mentioned above.

The following research objectives will collectively provide evidence for the achievement of the primary research aim:

1. Describe existing international perspectives on home education. This aim relates to the first secondary research question mentioned above and will be addressed in Chapter 2.
2. Describe existing national perspectives on home education. This aim relates to the second secondary research question mentioned above and will be addressed in Chapter 3.

3. Describe the philosophies and approaches to home education which contextualises individualised home education as a particular approach in the South African setting. This aim relates to the third secondary research question mentioned above and will be addressed in Chapter 4.
4. Describe the specific theoretical perspective that *Student Engagement* provides about the preparation of learners for higher education success. This aim relates to the fourth secondary research question above and will be addressed in Chapter 5.
5. Discuss the research design, methodology and method of this study. This aim relates to the fifth secondary research question mentioned above and will be addressed in Chapter 6.
6. Analyse the storied accounts (past) of different stakeholders in individualised home education and discuss the implications of these results for higher education preparedness in a South African context. This aim relates to the fifth secondary research question and will be addressed in Chapter 7 and Chapter 8.

1.5 Research Paradigm, Design, and Methodology

Although Chapter 6 provides a detailed outline of the research paradigm and research design of this study, this section will provide an overview of these aspects as utilised in the current research study.

This qualitative research study utilised an interpretive perspective. This means that the research philosophy upholds an ontology that perceives the nature of reality as complex, and socially constructed through culture and language with multiple meanings and realities (Saunders, Lewis, Thornhill and Bristow, 2019). Additionally, the epistemology associated with the interpretive perspective of this study enables the researcher to place a strong emphasis on *narratives*, and the interpretation thereof, to create a new and deeper understanding of the complex and multi-faceted lived experiences of home educated students and their parents that followed an individualised approach to home education in South Africa (Saunders, et al., 2019).

The methodology of this research study is defined as a narrative inquiry. To this end, specific focus is placed on the storied accounts of different stakeholders in individualised home education in a South African context. The research methodology of life history *narrative inquiry* was chosen, because it enabled the researcher to apply methods to gather rich, complex, and layered data about the storied accounts of home educated

students and their parents, as well as the rigorous analysis of this data. Paiva (2008) states that narrative inquiry is particularly effective to represent minority, unknown, oppressed, or ignored social groups. Because the individualised approach to home education could be considered as less known than other more established approaches, the researcher argued that narrative inquiry would be an effective methodology to apply for this study. Furthermore, the aim of narrative inquiry is to interpret, describe and improve meaningful, social experiences (Squire, 2008). Differently stated, the researcher, using narrative inquiry, is particularly interested in a comprehensive view of individuals' storied accounts of a specific historical phenomenon and how it became a structured perspective for them (Flick, 2009). Thus, narrative inquiry enabled the researcher of this study to gather and analyse rich qualitative data from the storied accounts of participants.

The methods applied for the collection and analysis of the data are described below.

1.5.1 Data Collection

A snowball method of data collection was used to select specific home educated students and their home education parents. The following two criteria were used. Firstly, students that successfully completed their higher education studies in the minimum residential period allowed for their respective undergraduate degrees, and in this regard graduated from a public higher education institution in South Africa, were selected. Secondly, only students and their parents that followed an individualised approach to home education were selected.

Aligned with a narrative inquiry, two rounds of semi-structured narrative interviews were conducted utilising an online platform and recording of the interviews. Read (2018) discuss utilising serial interviews for specific applications such as exploring a large set of past experiences, episode by episode. Serial interviews hold various other rewards such as deepened, more extensive and more reliable data, trust and familiarity between participants and the researcher, cross-checking and validation of data, creating data on key topics from various angles and covering past experiences from various angles (Read, 2018).

The interview questions were designed to allow for rich data that could provide deep insight into the process of individualised home education. The first round consisted of a total of twenty-one interviews, of which fifteen interviews were transcribed. These fifteen interviews were chosen because they contained rich data. The fifteen interviews included

nine home educated adults and six home education mothers. The average age of the home educated adults was 26 years. Candidates were home educated for an average of 11 years. The candidates finished their higher education between 2016 and 2020. The transcriptions of interviews were uploaded to the NVIVO software for data coding. After transcribing and initial data analysis, second round interviews were conducted with seven of the original participants, which included four home education adults and three home education parents. The additional interviews were transcribed, uploaded to NVIVO, coded, and analysed for themes.

1.5.2 Data Analysis

A thematic data analysis process was followed (Braun & Clarke, 2006). The units of analysis were the storied accounts of respondents. After the researcher familiarised herself thoroughly with the first round of transcribed interviews, the transcribed documents were uploaded to NVIVO software, and initial codes were generated utilising this software. A thematic data analysis process was followed in analysing the storied account of respondents and how it relates to elements of Student Engagements as a specific perspective on higher education preparedness, as presented in Chapter 5. The initial coding enabled the researcher to collate the codes into potential themes and then review these potential themes in relation to the coded extracts. This also allowed the researcher to check potential themes in relation to the entire data set.

After initial coding and the identification of potential themes, the gaps in the data were identified and addressed with the second round of interviews. The second round of interviews were transcribed, uploaded into the software, and coded. The codes from the second round of interviews were then integrated with the first round interview data which enabled the researcher to finalise and review the themes. This allowed for a theme map to be developed. A subsequent process of clearly defining and naming the themes followed. The data trustworthiness is discussed next.

1.5.3 Data Trustworthiness

Data trustworthiness remains an important aspect of data gathering even in the field of qualitative research (Tracy, 2010; Winter, 2000). Best practices in the complex field of qualitative data trustworthiness refer to the “big tent” framework which includes the following criteria: i) worthy topic, ii) rigor, iii) sincerity, iv) credibility, v) resonance, vi) significance, vii) ethics, viii) meaning (Denzin and Lincoln, 2008, 2011; Tracy, 2010).

Each of these criteria was incorporated and addressed in the design and execution of this narrative study. The topic was framed within the current challenge of preparing learners for higher education in the South African context. Through narrative enquiry the study aimed at achieving rich and contextual data providing depth to the question of the individualised home education approach as a strategy for preparing learners for higher education. Because it intends to address contextual-, methodological-, and framing limitations in the current body of literature, the *worthiness* and value of the study was grounded in the theoretical body of literature. Through the lens of student engagement as a higher education success strategy the study aims to address critical issues in the current education sphere of South Africa. Data *rigor* requires meticulously defining the data gathering and interpretation. In this case the qualitative study utilised narrative enquiry through an interpretive perspective focused on accurately representing the complexity, social construct and lived experiences of the home educating families. The process following in recruiting, informed consent, transcribing, coding and thematic analysis as data *credibility* criteria was discussed in detail in Chapter 6. Researcher reflexivity on *positionality*, bias, values and influences on the data gathering and interpretation was discussed in section 1.7. Techniques employed to prevent bias was also discussed further.

Data *credibility* employed the use of triangulation, which was incorporated by utilising narratives of both participants and the home education mother. Another triangulated view was provided where siblings that matched the requirements provided the opportunity to view the data on individualised home education from a different angle. Incorporating serial interviews allowed for greater depth and covering the timeline from early education throughout higher education. Student engagement as the theoretical framework allow for generalisations on the educational environment, skills, activities and quality interactions within the individualised home education approach that prepared learners for higher education. The data becomes transferable to the home education community and other educational settings urging improved student engagement. The data generated with the narrative interviews of home education families provided insight into learning strategies that successfully established student engagement and finds it *significance* in the student engagement strategies provided by the individualised home education philosophy. Making *meaning* of the data employed thematic coding as a data analysis technique and compared the data to the theoretical framework of student engagement as a higher education success criteria. *Ethical* considerations were discussed in the next section.

1.6 Ethics

Ethical approval was obtained from the UFS General Human Research Ethics Committee (GHREC) with reference number UFS-HSD2020/1755/252.

The following aspects of ethical concern were identified with information on how risk was mitigated:

i. **Participation:** Participation was voluntary with the provision of a detailed information overview of the research project, the aim of the research study, and what it would entail.
ii. **Loss of work/personal time:** Risk was mitigated by full disclosure of the process and how much time it would entail. Interviews were scheduled at times convenient for participants.
iii. **Privacy and confidentiality:** No disclosure of information to third parties. Secure storage of data/interviews on password-protected computer with soft copies on password-protected hard drive.
iv. **Recordings of interviews:** Interviewees provided written consent for recordings of online videos.
v. **Researcher ethical considerations:** Care taken in protecting confidentiality and shield participants from harm. The researcher acted respectful towards the contributions of participants. Data and quotes were reported truthfully and honestly.

1.7 Researcher Positionality

Since transparency on the positionality of the researcher forms an integral part of qualitative research the next section discussed reflexivity and positionality (Holmes, 2020). Reflecting on the researcher's background provides various positions in relation to the current study. As a home education mother with more than 10 years' experience, the researcher holds a unique understanding of the culture, setting and various approaches to home education. This experience provides a familiarity and context to the culture, persons, surroundings and situations of the participants (Johnstone, 2020). Having an appreciation and understanding of the cultural norms of the setting because of 'fitting in', this could have instilled trust during the data collection phase, something which could have allowed the researcher to obtain more open and honest responses. Respondents felt understood from a social construct, values and motivations point of view. Johnstone (2020) warns that if the participants or topic are too familiar, this could

influence data collection, analysis or interpretation. In this study the participants were not familiar to the researcher, but the specific topic, as a very familiar subject, could cause partiality or bias. Other bias could include filtering questions or responses through her own perceptions or lenses, which was considered closely throughout the research process. Utilising the repeating of themes, triangulation in the data from family respondents, and meticulously upholding the principles of thematic data analysis, assisted the researcher against researcher bias towards specific themes or topics. Glassick's criteria for Assessing the quality of a Research Study (Glassick, 1997, 2000) was utilised as a validation and rigor technique which includes the 6 criteria listed and discussed below:

(1) Clear Purpose

Setting the research problems, aim and objectives early in the study provided the necessary goal oriented purpose preventing the researcher from going off topic. Keeping the study aligned with the research questions. Developing clear and concise research questions was some of the first outcomes of this research study.

(2) Adequate preparation

Incorporated in the research problem and objectives was the thorough investigation of current and historical literature pertaining to home education internationally and nationally before starting data collection.

(3) Appropriate methods

Preparing for data collection and research design, the literature and approaches pertaining to qualitative research was overviewed. The research design was carefully planned to align with answering the research questions. All these principles prevent researcher bias from influencing the direction of the study.

(4) Significant results

The study sought to provide novel understanding of a fairly unknown phenomenon (i.e. how individualised home education in a South African context could prepare learners for higher education), and how it could contribute to the possibility of presenting significant data that advance knowledge in this unique field.

(5) Effective preparation

The research design presented in Chapter 6 pursued dependability. In order to achieve dependability, the data design, accumulation and interpretation were presented in such

a way to allow for repeatability. Future data should be able to repeat or emulate and build upon this study in future research.

(6) Reflective critique

The research design provided a systematic approach to obtain narrative data, analyse and present the data. Thematic analysis aimed to accurately and responsibly represent the narratives of participating families.

The key concepts of the study was presented next in section 1.8.

1.8 Definition of Key Concepts

The key concepts are presented in Table 1-1 in order to create a contextual framework for the study.

Table 1-1 Introduction of key concepts

Homeschooling	The schooling of children at home, as opposed to attending private or public pre-primary-, primary-, and secondary schools usually within the same framework used by state/country schools. Mostly used in the context of the US.
Home Education	The education of children at home, as opposed to attending private or public pre-primary-, primary-, and secondary schools. Home Education refers to a broader approach and includes various philosophies and/or curriculum approaches. Home education includes homeschooling as one approach. In some countries the words are used interchangeably. In the South African context the newest Bela Bill (Bela Bill, 2022:5): provided the following definition for Home Education: ‘‘home education’ means a purposeful programme of education for a learner, alternative to school attendance, which— (a) is provided under the direction of the learner’s parent, primarily in the environment of the learner’s home; (b) may include tutorial or other educational support, if necessary, secured by the parent on specific areas of the curriculum followed by the learner”
Formal home education	Formal home education refers to a home education programme that utilises an institution which provides the

	curriculum, syllabus, instruction and provides a certified qualification. This approach is structured and involves teaching and formalised assessment and testing. A chronologically graded and hierarchically system that is fully structured.
Non-formal home education	Non formal learning refers to any educational activity performed outside the structure of formal learning. It can entail systematically planned activities or objectives but with some flexibility and can take place anywhere. It often entails self-directed interest-based learning and indirect teaching.
Informal home education	In the case of informal home education learning is facilitated through daily home and family activities with no formal instruction or material. It refers to acquiring knowledge and skills through daily experiences and exposure rather than direct teaching. It is unorganised and unsystematic. It is often referred to as incidental learning.
Individualised education	The term individualised education refers to an approach customised to the individual child, where the content and educational approach takes into consideration who the child is and their learning preferences, interests, strengths, and abilities. The individualised approach can refer to what content is incorporated, how the content is presented, what the output will be, the time of learning, the pace of learning, and where learning occurs.
Home education philosophies or approaches	Philosophies or home education approaches refers to a school of thought on how education is achieved. In the broader sense, it refers to a formal vs. informal vs non-formal approaches. Focusing specifically on the non-formal approaches various schools of thought can be chosen, such as value or literature-based, individualised, classical, Montessori, Charlotte Mason, Leadership Education, Experiential learning, John-Holt philosophy, or informal home education i.e. unschooling.

Developmental phases	The developmental phases refer to the natural growth and development trajectory a human experience with regard to physical, mental, emotional, and social development. This developmental trajectory unfolds in stages or phases that increase in complexity.
Student Engagement	Student Engagement, in the context of this study, refers to a specific theoretical approach to post-secondary student success. In essence, it refers, on the one hand, to the energy and effort students devote to what is considered as educationally purposeful activities. On the other hand, it refers to what higher education institutions do to provide and support students, especially in relation to opportunities to access and participate in educationally purposeful activities. Thus, it refers to the higher education milieu and determines the interaction with academic engaging activities. Student Engagement aims at the development of higher-order thinking, reflective and integrative practices, learning strategies, and quantitative reasoning. Student engagement also defines the interaction with fellow students, the campus environment, and staff. Student engagement is presented in the literature as one of the theoretical frameworks for higher education student success.
Student Success	Kinzie and Kuh (2017:19) define student success as "increasing the numbers of students from different backgrounds proportionate to their age cohort consistent with national goals for postsecondary attainment who participate in high-quality educational programs and practices culminating in high-quality credentials (e.g., certifications, certificates, degrees) and proficiencies that enable them to be economically self-sufficient and civically responsible post college." Student success involves increased access to post-secondary education, student persistence and retention, as well as completion and graduation rates. Furthermore, student success often aims to address the achievement gap between mainstream and traditional students, and marginal student groups. Student success also focuses on the

	development of graduate attributes to enhance the personal, professional and social development of students. The notion of employability is, therefore, an important aspect of student success.

1.9 Scope and Limitations of the Study

This research was conducted using narrative interviews with a small minority home education group in the South African context, which places many contextual limitations on this study. The first is the fact that it takes place in South Africa and does not necessarily represent any home education setting in the Global North or other developing countries in the Global South. Furthermore, the research employed narrative research gathering qualitative data, which represents the lived experiences of a particular group of individuals. The participants belong to a narrow socio-economic group and do not represent the bigger South African economic and demographic climate. The researcher also only interviewed families who employed individualised home education and does not represent the bigger home education community in South Africa with regard to other approaches. Due to the nature of the study, a small number of participants contributed, limiting the statistical representativity. This study only interviewed home educated adults who successfully completed higher education in the minimum residential period and, therefore, cannot provide data on all home educated learners in the South African home education and higher education setting.

1.10 Conclusions

This research study aims to create a deeper understanding of how an individualised approach to home education in a South African context could prepare learners for higher education. The narrative accounts of participants provide rich data on the lived experiences of families that upheld an individualised approach to home education, and whose learners then proceed to complete their higher education studies in the minimum residential period. The primary research question on this study is as follows: In what ways, if any, can the storied accounts (past) of different stakeholders in individualised home education, provide deeper insights about preparedness for higher education in a South African context? To answer this research question, the researcher used a qualitative research study from an interpretive perspective. Narrative inquiry was chosen as a particular research methodology. Data was gathered through two rounds of semi-

structured interviews and a snowball sampling method was used. The researcher used thematic data analysis to identify codes and themes appropriate to the data. The significance of this study is underpinned by the various limitations it aims to address in the current body of literature on home education, especially in a South African context. It is believed that this study will provide deeper insights, unavailable in the current body of literature, on the ways in which an individualised approach to home education in a South African context could prepare learners for higher education.

The next chapter will focus on the international perspectives on home education.

2 The International Perspectives on Home Education

The purpose of this chapter is to contextualise this study both theoretically and historically. This chapter focused on the international context of home education, and Chapter 3 on the national context of home education. The chapter starts by reviewing the historical development of home education and then progressed to the current prevalence of home education worldwide. The demographic data as well as reasons for home education was reviewed followed by a review of the academic performance of home educated learners. The chapter concluded with a review of the culture capital of home educated learners as well as a review of data on home educated adults. The historical development of education and home education will proceed.

Home education is defined by the Department of Basic Education (DBE) in the South African context as: (Bela Bill, 2022:5): ‘‘home education’ means a purposeful programme of education for a learner, alternative to school attendance, which— (a) is provided under the direction of the learner’s parent, primarily in the environment of the learner’s home; (b) may include tutorial or other educational support, if necessary, secured by the parent on specific areas of the curriculum followed by the learner”. Education worldwide has seen vast changes since the 1700s, changing from a predominant home education environment and culture to remarkable public and private schooling systems and organisations. Investigating the definition and function of education can shed some light on why home education has become an attractive alternative for families even today.

Ruminating about the word education and the meaning and function of education is a worthwhile pause in this context. According to Dhaker (2016:1) the word education originated from the Latin words (1) Educare (to flourish or bring up), (2) Educere (to lead forth or draw out), and (3) Educatum (developing or progressing from inward to outward). In a sense, it creates the symbol of a flower progressing from a seed to a bud all the way to a mature flower, symbolising a child intentionally developed and grown into a mature flower as they are cheered on by parents and educators. This beautiful imagery suggests that without the proper care, reassurance, encouragement, and support, the developmental process might be hindered in the life of a child, pupil or student. Intentional development of learners and helping them flourish is certainly a noble goal. How to develop students then becomes a strong focus in striving for successful education.

Developing pupils and enabling them to flourish, is a strong area of debate with multiple viewpoints. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) describes education as the "organised and sustained instruction designed to communicate a combination of knowledge, skills and understanding valuable for all activities of life" (Jarvis, 1990:59). Jarvis (1990) further probes this definition, questioning learning limited to instruction. Institutionalised formal schooling, often associated with learning that is limited to instruction, is also questioned by Colebrook (2017:652) 'to the extent it is an object of knowledge'. Colebrook (2017) suggests that governmental educational policies are focused on data and testing with the focus on gaining knowledge. If obtaining satisfactory outcomes based on assessment and testing is the goal of education, she suggests there is no future for education. Interestingly, Colebrook (2017) phrases the term 'normalised education' suggesting it edifies the inauthenticity of mere training with no regard for the 'potentiality of humans'. What Colebrook (2017) underlines is that the education philosophy has two opposing poles. One in favour of formal, structured, normalised, and institutional education primarily by instruction and learning only occurs through instruction. On the other side, there exists numerous non-formal pedagogies for learning outside of the normal and known modes of instruction. Most government and private schools align with the formal, structured, rigid, and normalised education model. Although this model has value, it is limited. While a few schools, mostly private, function outside this norm, most institutionalised education organisations operate from the foundation that knowledge needs to be built into the child in a uniform manner. In this education process, there is little choice for the student of **what** and **how** they want to learn and limited recognition of the individuality of the learner being educated. To a large extent, the current system trains all learners at the same approximate rate, utilising the same subjects, and measuring against the same standards. This uniformity suggests that we have reached a time like no other for the reform and reconstruction of institutional education. What would such reform and reconstruction look like?

The education sector worldwide has been highly criticised for not adapting adequately to the rapid changes in technology, the 21st century, and the Fourth Industrial Revolution. The continuously changing economic and business sectors suggest that the skills that will be needed in the future will very much differ from what was required in the past, and education needs to adapt towards new goals and objectives. Critical thinking and problem-solving are two of the must have skills for these changing times according to Fadel (2008:14). Time Magazine (Wallis & Steptoe, 2006:1) in their article "How to bring our Schools out of the 20th Century", published the following statement: "This is a story

about whether an entire generation of kids will fail to make the grade in the global economy because they can't think their way through abstract problems, work in teams, distinguish good information from bad, or speak a language other than English." Although this statement was made almost two decades ago, it still applies. More recently, Forbes published an article on 22 May 2019 by Bernard Marr (2019) entitled "8 Things every school must do to prepare for the 4th Industrial Revolution". The international best-selling author and keynote speaker in this article focuses on how educators, schools, government officials, and parents need to address their own values and perceptions about education to make scope for the changes that a new era requires. The article lists eight ways in which adaptation could improve how learners are prepared for the global markets in the 4th Industrial Revolution (Marr, 2019). The eight focus points of this article are listed below:

1. Redefine the purpose of education
2. Improve STEM education
3. Develop human potential
4. Adapt to lifelong learning models
5. Alter educator training
6. Make schools makerspaces
7. International mindfulness
8. Change higher education

These eight focus points are important because they represent multiple dimensions of change that might be required from the current education system. Education experts around the world mostly agree that change is required for education to move forward. The Forbes article by Marr (2019:4) printed the following quote by John Dewey (Dewey, 1947:167 in Marr 2019), "If we teach today's students as we taught yesterday's, we rob them of tomorrow." Educators worldwide are collaborating on how the education industry will need to adapt and re-align with changing times to incorporate these necessary skills in curricula and structured school programmes and to which extent change is needed.

However, education in the form of schools, as we know it today, is from a historical perspective, a fairly new development of the last 100-200 years. Early forms of education were mostly at home. Through play, young and older children acquired knowledge and skills needed to flourish in life by means of non-formal learning from parents, family, and culture (Gray, 2008:1). What Gray (2008) underlines is that important life skills during early times had to do with the way of living and included hunting, making tools, agriculture, and military skills. These forms of socio-cultural learning happened in the

context of a home, family, and/or community environment, and were not confined to specific subjects, books, or routines. It allowed for a much broader view of what education has become during the past 200 years. This more encompassing understanding of education is also provided by Dhaker (2016:1) who stated that “it is the transfer of knowledge, skills, values, beliefs and habits through the processes of storytelling, teaching, training, discussion and research.” Thus, this definition of education views life as learning through numerous modes and methods.

At this point it becomes clear that a diverse view exists on the definition, meaning, and purpose of education. Education institutions, teachers, parents, governments, and the private education sector, have diverse views of the best education philosophy to suit the needs of individual children worldwide. Various educational approaches and or pedagogies have been developed over the last few centuries and have served families, schools, and education purposes worldwide. These approaches and pedagogies will be discussed in more detail below, shedding light on the historical development, implementation, and how these education philosophies have been incorporated in the home education setup.

In contextualising this study, the next section will focus on the historical development of home education.

2.1 Historical Development of Home Education

The National Department of Basic Education (DBE, 2021) in South Africa define home education on their website as follows: “Home Education is a programme alternative to attending public or independent schools where a parent of a learner of compulsory school going age may provide education for his/her own children at home.” Most importantly it implies that the parents take primary responsibility for the education of the child instead of the government or school or any external institutions (Laughton, 2020; Moore and Moore, 1994). As mentioned earlier, education at home was the predominant mode of education for children until the early 19th century when attending a school became the norm in education.

From ancient times, education had a predominant social-cultural approach and in cases where it was institutionalised, it was closely interwoven with the cultural and religious practices and norms of the day. It is believed that the earliest schools formed in Samaria and Egypt after the development of writing, and was solely for teaching, reading, and writing (Hudson, 2012). The teaching of reading and writing was in addition to the

established socio-cultural practices of knowledge transmission. Between 1800 – 1000 BC religious schools began where priests would teach privileged boys the secret Hebrew writings (MCcormick,1953). McCormick (1953) further explains how education movements by the Chinese in these early times – such as the Chinese philosopher Confucius (551-479 B.C.) –taught literature, music, conduct, and ethics. Ancient Greek schools were used for training boys in military skills but also reading, writing, and music as well as poetry and athletics. Later these schools developed and included the teaching of boys in social and political arts by teachers of Greek philosophy, as it was believed that this would mould young men into 'ideal statesmen' (Hudson, 2012). During the early Middle Ages, education was mostly through the Catholic church as centres for education and literacy (McCormick, 1953). For example, Germany was, by the end of the 1700s, the first to mandate schooling, but education was the responsibility of the Lutheran church and not the state (Mulhern, 1959). Education remained intricately linked to religious institutions and it was only in the early 1900s that state-funded schools started. For instance, the first school in the US was established in 1635, the Boston Latin School, and was a boys-only secondary school (Public School Review, Chen, 2020). Similarly, all the early schools catered only for boys, usually with a strong religious basis. Thus, ancient education, whether at home with the family or in some institutionalised way, had a strong social-cultural approach. This is important because it underlines the fact that from early times education was interwoven with the social fabric of communities to transfer knowledge and skills from one generation to the next. Education was *relational*, whether at home or in the broader community. This relational dimension of education found expression mostly in the form of home education (Gray, 2008). By 1870, public schools were present in every state in America (Kober, 2020). An estimate of 60% of children aged 5 to19 years old attended school by 1870. However, it is important to note that these children only attended school for an average of 78 days per year, with home instruction as the predominant education for the remainder of the year (National Center for Education Statistics, 1993). Thus, domestic education upheld notions of social-cultural learning until the early 1900s. Even after more institutionalised forms of education were introduced, domestic education (or the home curriculum) remained an integral part of an individual's developmental journey.

However, during the early 1900s education became much more formalised. This movement in education transformed schools from religious-based education for the elite to an all-inclusive academic-focused institution, both in North America and Europe (Zinkina, Korotayev, Andreev, 2013). As compulsory laws and attendance came into practice the prevalence of home education reduced and formal classroom schooling

became the norm in the 19th century (Zinkina et al., 2013). This transformation of education into more institutionalised forms created the ideal environment and need for the modern home education movement to emerge.

The history of home education in North and South America, Europe, Australia and New Zealand, and other countries that contributed significantly to home education movements will be discussed in more detail in the next section. However, data on home education contexts is not available for all continents and in many cases extremely limited. The US has by far the greatest body of literature on home education. Small bits of research and published data that could be found for less-presented continents were included for a broader perspective. The historical and significant development of home education in North and South America is discussed next.

Historical Development of Home Education in North and South America

In the United States (US), between the 1960s and 1970s, the modern home education movement began with Rousas John Rushdoony and John Holt, but for varied reasons and motivations (Gaither, 2008). Rushdoony opposed schooling, arguing it was *secularising* children and advocating for Christian home education to preserve Biblical values (Gaither, 2008; Ray, 2014). John Holt, on the other hand, criticised the school system for rote memorising, and ongoing assessments and argued that compulsory schooling destroyed natural inquisitiveness, curiosity and exploring minds (Gaither, 2008; Ray, 2014). According to Holt, schools created self-conscious and fearful learners, focused on pleasing a teacher (Gaither, 2008). Seminal works like 'Escape from Childhood' (Holt, 1974) and 'Instead of Education" (Holt, 2003) suggested that children be liberated from school altogether and explored alternatives to traditional schooling.

In 1977, he started a home education magazine 'Instead of Education', supporting and coaching home education families on alternative strategies and pedagogies (Gaither, 2008). The term unschooling was initiated during this time and is still in use and referred to in home education communities today. More information on Holt's philosophy is discussed in section 4.1. Soon Raymond Moore (a friend of John Holt) also joined in raising a voice in the home education community, specifically advocating for play during the early years. Both argued that formal school during the early years is detrimental to children's development. Raymond and his wife Dorothy Moore authored the book "Home Grown Kids" in 1981 and it soon became the first book home education parents would read (Moore & Moore, 1981, 1994; Gaither, 2008). They later also wrote the book, "*The Successful Homeschool Family Handbook*" (Moore & Moore, 1994), which is still

available today and still regarded as one of the must-read books on home education. These seminal works made a significant contribution to the shaping of the home education movement in the US.

During the 1980s, home education was legal in every state in the US but with various forms of regulation (Ray, 2014). In most cases, home educators worked together with state institutions, providing lesson plans and documentation required by law. A new movement in the US during this time, initiated by what was perceived as fundamentalist Christians, caused home education families to be less cooperative and created tension with government and administrative officials in the regulation of home education (Ray, 2014). During this time, home education families did not all agree and while a portion was content with some level of assessment and regulation, others petitioned state regulation and continued to pursue more freedom for the home education community (Ray, 2014). Some states saw changes to policy regarding home education regulations while others remained unchanged. These differences in how home education is regulated remain today, with every state enforcing its own regulation regarding home education. Regulations vary from limited oversight to stringent testing and assessment, depending on the state. John Holt died in 1985, undoubtedly changing the home education setting forever. By 1990 most states in the US accepted home education as a legal and viable education alternative and it became a growing education model. During these times various home education organisations, legal entities, and support structures originated with different goals and agendas. Half of the US states legalised home education by 1980 and by 1993 all states in the US legalised home education (Ray, 2014).

Home education has always been legal in Canada and has seen tremendous interest and growth recently (Canadian Centre for Home Education, 2022). The growth in home education in Canada is corroborated by the Fraser Institute (2015). The modern-day home education movement that developed during the last 40 years, is now acknowledged, due to its prevalence and growth in research and support in the Canadian context (Fraser Institute, 2015). As with other countries, home education was to a large degree replaced by classroom education and only significantly re-established during the 1970s. Currently, home education in Canada is widespread and diverse with extensive support and community involvement. Regulation depends on the province and ranges from only registration to moderate and high regulation in terms of submitting educational plans and progress at regular intervals (Kunzman & Gaither, 2013). Data on home education in Canada is readily available and not included in the United States Census

Bureau (2021) data as part of the fifty states and, therefore, covered independently from the US data. The history of home education in Europe will be discussed in the next section.

Historical Development of Home Education in Europe

Although the historical development of the modern home education movement originated from the US, some developments in the United Kingdom also contributed to or followed developments in the US. In the UK, home education had been the norm for the Royal Family (Fortune-Wood, 2005). With very few schools available to an average family, children were schooled at home up until the 1870s when compulsory education was introduced in the UK. With influence from the US, a supporting organisation (Education Otherwise) was established in 1978 and continually grew during the past four decades. Numbers, however, remained low until the '90s when technological advancement allowed easier access to knowledge and improved communication between home education families (Fortune-Wood, 2005). The 'modern home education movement' started in 1970 and especially grew in the early '90s, grounded in the theoretical framework that was formed by UK and US academics like Meighan, Charlotte Mason, Neill, and Bertrand Russell (Fortune-Wood, 2005). By the late '90s, home education was a significant national proportion upheld by various support structures. Fortune-Wood (2005) suggests an estimated 1-1.5% of school-aged children were home educated in the UK by 2005, and by 2009 this attributed to 9 000 home education learners registered in the UK (Kunzman & Gaither, 2013). Recent numbers are mostly estimated due to a lack of registration.

A predominant voice for home education in the UK, Mike Fortune-Wood has published various books and journals on home education in the UK. To this end, he has also researched this topic rigorously, something that also resulted in a number of research outputs (Fortune-Wood, 2005, 2006, 2007). Although various perspectives exist in the current body of literature on home education, some critique has emerged from Webb (2011) and Kunzman and Gaither (2013). According to them the current body of empirical research was conducted primarily by home education advocates and shows limitations concerning sample collection, uncontrolled testing conditions, and is not representative of the bigger community (Webb, 2011; Kunzman & Gaither, 2013). Although these scholars underline important aspects to improve the impact of home education, these limitations do not nullify the impact already demonstrated in the current body of literature. It does, however, present constraints in how the data is interpreted and identify gaps in the literature for future research.

Home education in Germany is currently illegal, irrespective of the fact that home education was, like most other countries, the primary form of education until the 1500s when the first schools appeared in Europe (Poole, 2020). It was still present until the 1900s with especially upper class families performing home education until 1933, although mandatory school education was implemented in 1918. In 1933, the National Socialist German Workers' Party (Nazi) became in full control of the Country and banned home education. Hitler, as the ruler of the Nazi's, wanted children educated in the 'identity of the state' in order to create loyal citizens (Poole, 2020). This law on home education is still in place today and families that perform home education in contravention of this law, have been prosecuted and jailed (New Oxford Review, 2018).

The home education setting in other parts of Europe varies widely with eleven countries holding home education as a legal education alternative. Oversight in these countries ranges from registration to submitting education plans, home visits, and testing. The number of home education learners in these countries is estimated at less than 1/10th of a percent (i.e., <0,1%), except for the UK (Kunzman & Gaither, 2013). According to Kunzman and Gaither (2013), home education is legal in the following European countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Hungary, Ireland, Italy, Luxembourg, Norway, Poland, Portugal, Romania, Sweden and Switzerland, with variations in regulation. The most predominant presence of home education is in the UK as discussed earlier.

The historical development of home education in Asia will be discussed in the next section.

Historical Development of Home Education in Asia

Home education is currently illegal in China and is, therefore, frowned upon by the government and society. Chinese law, instituted in 1986, requires that children must attend school for at least nine years (Wang, 1990). International learners in China, however, can undergo home education without any government interference. Home education in China has, however, grown with 20 000 learners being home education in 2022 according to the 21st Century Research Institute in China. Against the 1.4 billion population this is still a tiny fraction. According to Zhao and Badzis (2014) home education in China is considered unorthodox according to their culture and Chinese children are seen as 'aberrant' if they don't attend school due to a strong emphasis on conforming and socialisation. Little research has been done and published in China about home education, given the small fraction of home education families and that it is

a unique and new occurrence in China. Families in China that opt for home education are not well supported in their community, are often in remote locations and because families often have only one child, it rends healthy socialisation a concern (Zhao and Badzis, 2014). Given that home education is an unknown and new topic in China, these families face various obstacles with regard to community interaction, support, academic freedom, and socialisation. Academic content and curriculum are strictly monitored and regulated, and a low degree of academic freedom is available for Chinese citizens.

Home education has shown various levels of growth in other parts of Asia. Furthermore, according to Zhao and Badzis (2014) home education has also shown increasing trends in Malaysia and Taiwan. Home education is not deemed legal in Japan but is considered in exceptional cases, especially when social difficulties are experienced at school (Kunzman & Gaither, 2013). Japan's economic success has raised interest in the success of the school system, because of their international academic standards and results (Kemble, 2005). Despite their academic success, there are parents who choose to home education for assorted reasons. Not agreeing with the methods of instruction or social issues like bullying has been raised as concerns by Japanese parents. The vague education laws in Japan present both barriers and opportunities for parents opting for home education. In Korea, institutional schooling is highly rigid, test and assessment focused, with little room for the individual. This has caused some families to consider home education as an alternative despite the collectivist culture (Kunzman & Gaither, 2013). The future growth of home education in Japan, Korea, and Taiwan is highly questionable due to a strong emphasis on conventional academic credentials and fear of limited opportunities for non-conforming academic outcomes (Kunzman & Gaither, 2013). The home education history and current setting in Australia and Oceania are the next focus area in this historical layout.

Sheng (2021) discuss motivation for home education in China, growth of home education and academic and social outcomes. It reviews the influence of religion, social stratification and marketisation.

Historical Development of Home Education in Oceania

Home education in Australia is legal and regulations vary by area of jurisdiction (Morrow, n.d.). Like the American home education environment, this causes challenges in obtaining accurate numbers and statistical data (Kunzman & Gaither, 2013). Like previously discussed, initial education in Australia was performed at home. The first school in Australia according to Cleverly (1971) was a dame school started by Isabella

Rosson in Sydney in 1788. The dame schools consisted of women who would get together and teach children homemaking in their living rooms and kitchens. Like the education trends elsewhere, the responsibility of education moved from the home to the church. The first school and church were built in Sydney in 1793, with the school accommodating more than 150 learners (Harding & Farrell, 2003). In 1872, the education responsibility was transferred to the state in Victoria and became the 1872 Education Act which demanded education that was "compulsory, free, and secular". Within 100 years the core of education moved from the home to the church and then to the government. A national education system was implemented, that was government funded and was fulfilled by all states in Australia. Currently, all states in Australia except Victoria require registration for home education and oversee and approve the educational content/curriculum that is followed. Victoria views education as primarily the responsibility of the parent and does not require oversight if the child is under regular instruction, which is equivalent to the education in Victoria. The '*Homeschool Legal Defense Association of Australia*' (2022) as well as the Home Education Association of Australia (2022) assist home education families. Some legal issues have arisen in Australia around freedom of religion, the instructor of the home educated child, and the content or curriculum that is followed (Lindsay, 2003). The number of home educated learners and other relevant data will be discussed in section 2.2.

Learning at home was also the norm in New Zealand where children would learn from their parents and community and through life, until compulsory education was passed in 1877 (Cumming & Cumming, 1978; Laughton, 2020). However, the compulsory education act that was introduced did make provision to be exempted under specified teaching and instruction conditions. Compulsory education was difficult to implement in New Zealand with a limited number of schools and teachers. This led to the start of a Correspondence School in 1922, where children were schooled by their parents under the guardianship of the school (Laughton, 2020). Institutional school attendance, however, became the norm by 1960 with a new interest in home education by 1979/1980. The renewed interest in home education started when Jean Hendy-Harris and Anne Denny started home educating their gifted children, whom they felt the system could not adequately instruct. Jean Hendy-Harris authored the book 'Putting the Joy Back into Egypt" which was the first book published on home education in New Zealand (Hendy-Harris, 1983). They also started a newsletter, held support meetings, and worked hand in hand with the Department of Education to improve the public opinion of home education (Smith, 2003). During this time, the Department of Education would perform home inspections, keep regular oversight, and advise home education families. Various

home education associations and support services have formed and continue to support home education families in New Zealand, which is now estimated to be around 7 500-8 000 learners or 0.9% of school-aged learners (New Zealand Government statistics, 2022). The last perspective on international home education will investigate practises in Africa.

Historical Development of Home Education in Africa

Very little published research is available on the home education setting in Africa. This contextual limitation substantiates the significance of this research study. There are limited data available for home education in Nigeria and Kenya. Nigeria has no laws prohibiting or legalising home education (Ohikere, 2022) and has seen growth in the last decade, although accurate numbers of home education learners are not available. Co-ops and small international schools formed in the past two decades, allowing freedom in content, and individual focus with international examination possibilities (Ohikere, 2022). A comprehensive blog on many aspects of home education in Kenya is published under *Lifehack Academy* (2021). According to *Lifehack Academy* home education is both legal and a recognised alternative. The '*Association of Homeschoolers*' and the '*East Africa Christian Home Educators*' are separate bodies that assist and advise home education families in Africa. It is estimated that around 400 families in Kenya home educate, but there isn't any way to obtain accurate numbers (Lifehackacademy, 2021). Other published work on home education in Kenya discuss uncertainly with regards to the legal aspects and oversight (Gathure, 2015).

The Africa Home Education Indaba (2019) invited speakers from Kenya (Godfrey Kyazze) and Uganda (Canute Waswa) for the African Home Education Conference in South Africa. The African Home Education Indaba (AHEI) published short articles as well as presentations on their website (after the conference) that shed some light on home education in these two countries (African Home Education Indaba, 2019). According to AHEI, home education became of interest to some families especially in the early 1990s due to private schooling cost, academic quality at state-funded schools, remote locations, and the desire for more intimate family bonds. These families mostly use Cambridge or the ACE (Accelerated Christian Education) as preferred curricula. Sports and support groups meet regularly assisting others in their home education journey. There are 300 families that home educate in Uganda where it is also legal, but like Kenya, the law requires a basic education which is the right of every child (Tweni, Wamocha and Buhere, 2022). Families in Africa similar to the South African context are criticised for social development of home educated learners. A recent study by Tweni, Wamocha and

Buhere (2022) investigated the social learning outcomes of 213 ACE homeschooled students in Kenya and compared social learning based on persistence, self-control and social competence. The results of this study showed no difference for social learning attributes between home educated and traditionally schooled learners. The home education movement in South Africa will be discussed in Chapter 3.

Summary of Historical Development of Home Education

The modern home education movement developed in different world regions during the past five decades as a response to the increasing institutionalisation of education. What is important is that the institutionalisation of education is a relatively recent development, in comparison with the long history of home- and community-based education. The next section will focus on the current prevalence and growth in the home education movement.

2.2 Current Prevalence and Growth in Home Education

Although home education historically was the predominant education form, it diminished in the face of compulsory schooling. With the introduction of government control and the perceived 'one-size-fits-all' method of education, critique of mass uniformed education caused concerns and the modern home education movements originated. Over recent times, home education kept on steadily growing and gained momentum in numbers whilst providing families with an alternative to traditional schooling at least in some countries. Illustrative of this point, the number of home education learners in prominent home education countries is listed in Table 2.1 below. The highest number of home education learners by far is in the US with an estimated 3.7 m learners (or 7-9%) in 2022.

Table 2-1 Numbers of home education learners for various prominent countries

Country	Year of Published Data	Number of Home education Learners
United States	2022	3.1 m*
Australia	2019	21 437**
United Kingdom	2021	81200***
New Zealand	2021	7749✡
Canada	2021/2022	72700✡✡
South Africa	2022	300 000✡✡✡
Russia	2021	50 000-100 000‡

* Ray (2022a), United States Census Bureau (2021)

** Homeschool Legal Defense Association (HSLDA) 2019

*** The Association of Directors of Children's Services (ADCS) (2021)

✡ New Zealand Government Statistics (2022)

✡✡ Canadian Centre for Home Education (2022)

✡✡✡ South African Broadcasting Centre, SABC News (19 December 2020)

‡ Homeschool Legal Defense Association (HSLDA) 2021

The next section will discuss the current status and growth of home education in some countries with significant home education numbers or countries with published data available for continents with limited data.

In the US, the number of home education children more than doubled between 1999 and 2012 (Redford & Battle, 2012). This accounted for around 3.4% of the total student population by 2012. Recent data by Ray (2021a) of the National Home Education Research Institute (NHERI) shown in Figure 2-1, shows a tremendous increase from spring 2019 up until early January, with the US home education children estimated at 7-9% of school-aged children.

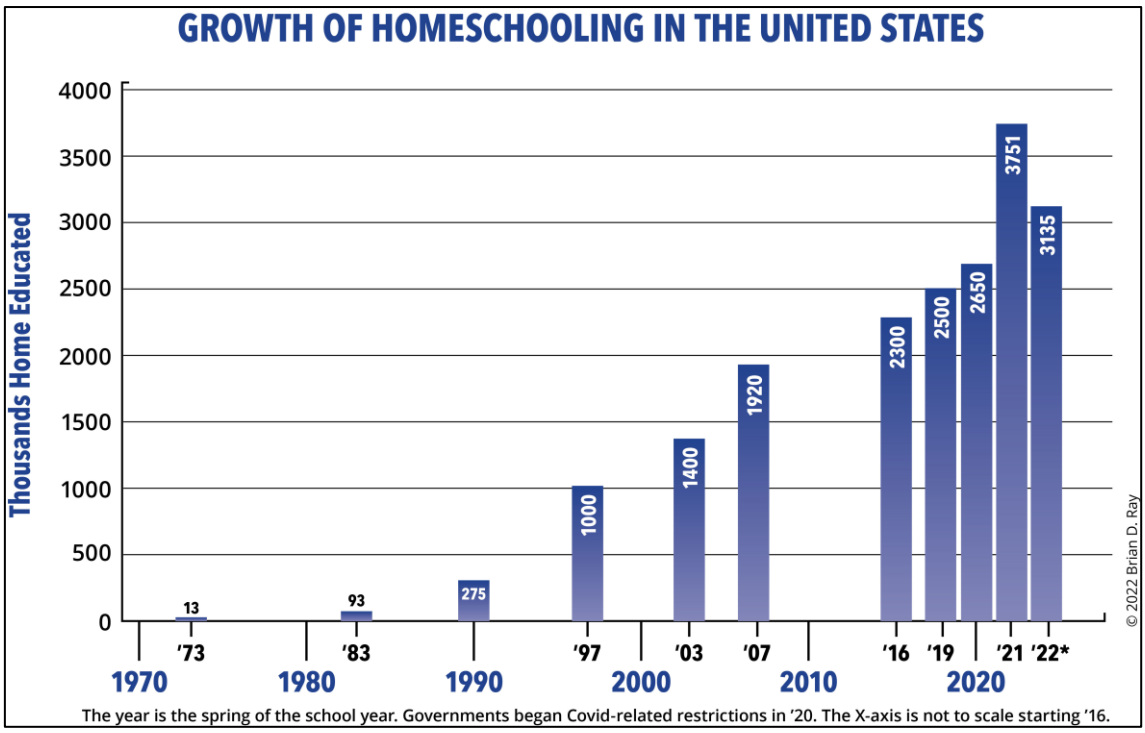


Figure 2-1 Growth of home education in the United States, adapted from Ray (2022a)

It is evident from the data in Figure 2-1 above, that there is a rapid growth trajectory in home education in the US since the early 1990s and that it continues to grow. Based on the US Census Bureau data for the fall of 2020-2021, Ray (2022a) concludes a possible doubling in home education children. This is based on 5.4% of households that reported school-aged children, home educated in 2020 compared to 11.1% of households that reported home education in 2021. This resulted in 3.7 m home education learners in 2021, which represents an artificial growth due to the Covid-19 period as shown in Figure 2-1 above. Online or virtual schooling via a private or public school was excluded from the data for true home education data. A reduction in home education numbers was observed as education normalised after the Covid-19 period for the 2021-2022 time period after a massive increase in the 2019-2020 period. The reduction in home education numbers for 2021-2022 was expected. The average growth is maintained over the 3-year time period 2019-2022. Thus, to summarise, a significant rise in home education was observed since the early 1990s and continued to grow.

Online schooling has also significantly grown and presents even more opportunities in the home education environment, creating easy access and quality education options for home education families. This tremendous growth in the US has created opportunities in research, curriculum development, and also a wider interest and acceptance of alternative forms of education. Many US education organisations allow learners to register as distance or home education candidates, creating a much simpler process for

home education learners to get an accreditation similar to any school-attending learner. This opportunity will most likely sustain and possibly improve the growth of home education observed during the last decade in the US.

Like the United States, Canada also reported tremendous growth in home education. The total home educated learners before the Covid-19 period (2018/2019) were 2.5% or 48 800 learners. This increased by 69% to 4.3% of school-aged children with a total of 82 400 learners for the 2020/2021 year (Canadian Centre for Home Education, 2022) . This decreased in the 2021/2022 year to 72 700 learners (3.8%), suggesting that some learners who started home education returned to school after the Covid-19 pandemic. According to the Canadian Centre for Home Education (2022), this represents a 71% retention of newly home educated learners and, therefore, still shows significant growth, which most likely will continue to grow in the future. The growth and current home education practises in Europe will be discussed next.

Home education in the UK has shown a steady increase up until 2018/2019, but similar to the US, a dramatic increase during the Covid-19 time period. An article by the British Broadcasting Corporation (BBC) discussed a 40% increase in home education in the UK during the time period 2016-2018 (Issimdar, 2018). Data by Schools Week (2017) in the UK is shown in Figure 2-2 below, illustrating the increase during 2010-2018.

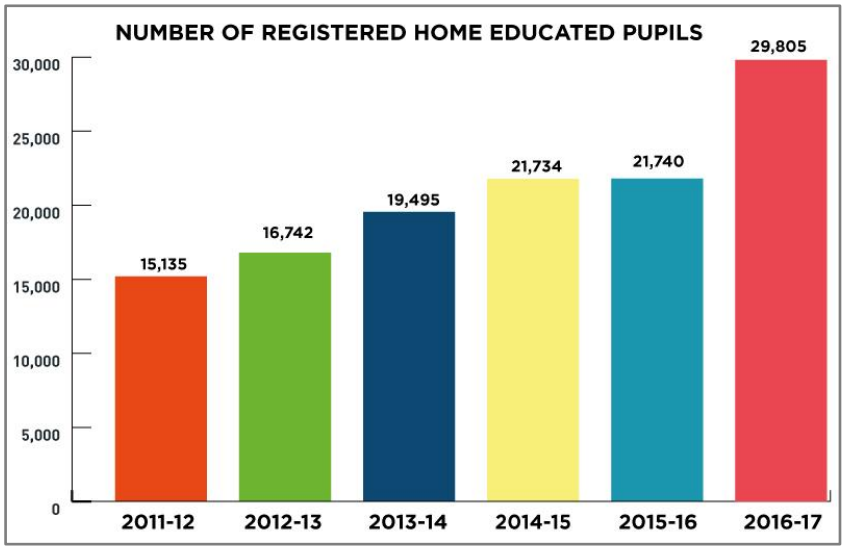


Figure 2-2 UK home education learner growth 2011-2017, adapted from Schools Week (2017)

To create an integrated illustration of growth in home education in the UK, data from various resources (Schools Week UK, 2017; Issimdar, 2018; Long and Danechi, 2022; The Association of Directors of Children's Services, 2018) were combined and an average growth profile was created – see Figure 2-3 below.

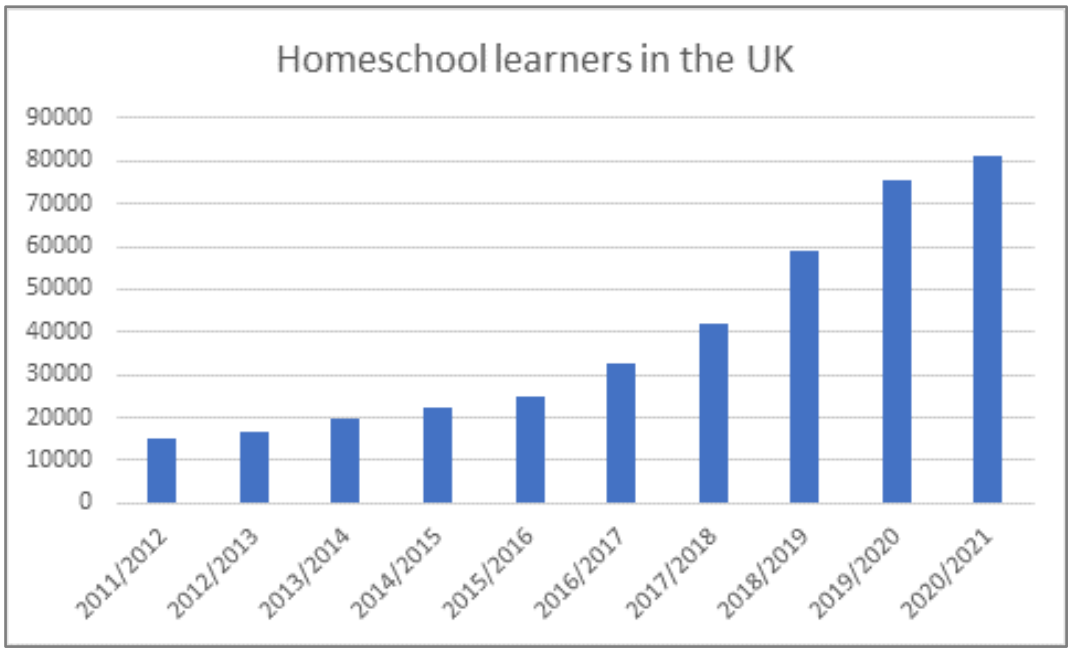


Figure 2-3 Average home educated learners in the UK compiled from various sources

Thus, Figure 2-3 confirms a steady yearly increase for the last decade but a larger than usual for the 2018-2019 school year, indicating a Covid-19-induced growth year. This growth trajectory agrees with published news by The Guardian (Weale, 2021) reporting a 34% increase in home education during 2019-2020. The average before this year was 15-20%. An average increase was observed in the 2020-2021 school year compared to the last ten year's data. Although these numbers seem significant, it is still less than 1% of the school population in the UK (Long & Danechi, 2022).

Home education numbers for Australia reported 0.5% of school-aged learners being home educated in 2019, equal to a total number of 21 437 learners. A growth of 105% was reported over eight years, an average growth of 9.4% annually (*Homeschool Legal Defense Association*, 2019). According to 'The Conversation' (2021), home education grew by 20% during the 2020 academic year. Using data provided by The Conversation (2021), Figure 2-4 below was constructed with estimates of home education learners for 2021, assuming the 20% growth rate reported. This article also estimates 2022 numbers in excess of 26 000 home educated learners in Australia. Please note the end of 2021/beginning 2022 datapoint is an estimate (The Conversation, 2021). An average of 12% growth was calculated for the 2011-2021 time period.

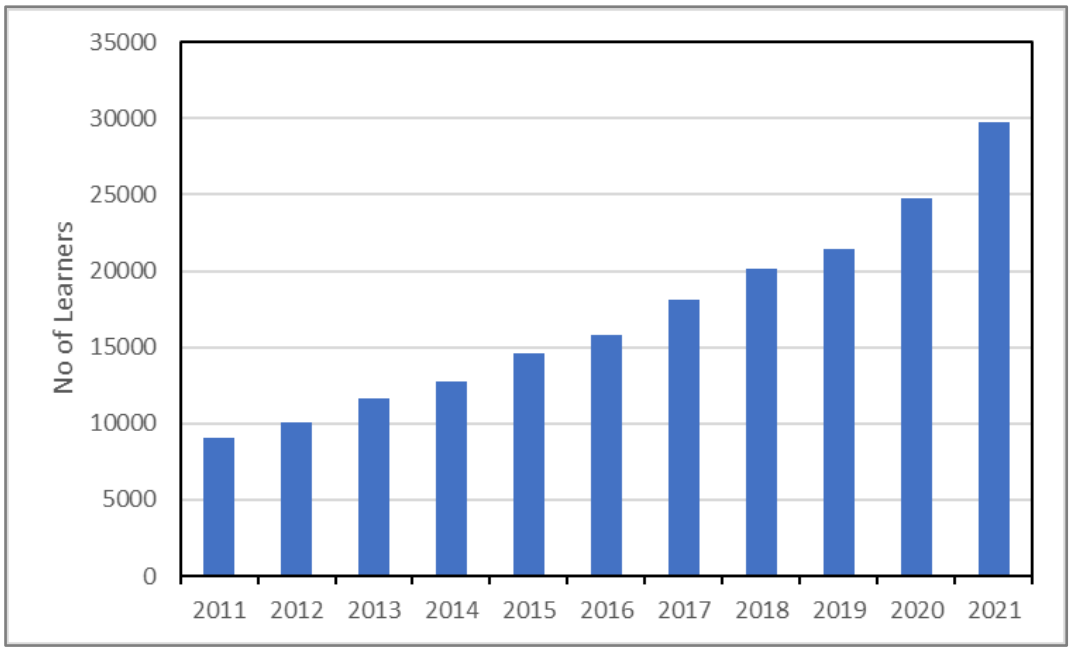


Figure 2-4 Constructed data for home educated learners in Australia for the time period 2011-2022

Home education numbers in New Zealand represent 0.9% of total school-going learners. According to New Zealand Government Statistics (2022), the 7 749 learners that were home educated in 2021 were part of 4 412 families, with 65% under the age of 12. Statistics show that less than 3.8% were home educated for longer than ten years. Other data in the report suggest that many home educated children return to school at the age of 13.

The literature overview included data for the US, UK, Canada, Australia, and New Zealand. Other countries and regions not included in the literature overview were excluded due to a lack of representative empirical data for these regions.

Summary: Home Education Growth and Numbers

In summary, home education has grown in many countries over the last two decades. The US remains the country with the highest home education numbers and continues to grow yearly. Their contribution to the current body of literature and statistics is invaluable and, in many instances, represents the only data available. South Africa is a part of the growing trend and will be discussed in the next chapter. The UK is the predominant home education country in Europe although their numbers still represent less than 1% of the school-going population. Similarly, New Zealand and Australia represent home education numbers of around 1% of the school-aged population and remain small in comparison. Canada is represented theoretically independently as their research and

statistical contribution is significant with regards to home education due to the *Fraser Institute (Van Pelt, 2015) and the Homeschool Legal Defense Association*', (2022).

Apart from the data mentioned above, little empirical data is available for other countries in the world on the topic of home education numbers. From the data that is available, it seems that prior to the Covid-19 2019-2020 period, an average of 0-8% growth in home education was observed, depending on the country, legislation, oversight and support, and communities that exist. The 2019-2021 time saw an abnormal growth of 20–50% in home education for certain countries. This period furthermore exposed many families to alternative education options available. Home education became more acceptable, and families also became more familiar with home education being forced to school at home, at least for some time (Lonas, 2021). This exposure to home education, albeit a different form of home education, has exposed many to the unfamiliarity of this education experience. The rise of more online, distance, and blended learning opportunities grew and broadened once again, the alternatives that are available (Lockee, 2021). Home education in most likelihood will continue to grow (perhaps not as much as during the 2019-2020 period), but curiosity and interest in this education model will hopefully initiate more research and understanding in this subject area in the future.

The next section will focus on the demographic data of home education families. It is important to note that much of the published international data on home education is focused on the US. Thus, many of the generalisations concerning international trends in home education are based on these data sets.

2.3 Demographic and Other Data on Home Education Families

The demographic data for home education families will be discussed in this chapter with a focus on North and South America initially.

The NCES (National Center for Education Statistics, 2018) published data for home education learners ages 5-17 in the US for the year 2016. These statistics recorded 52% female learners and 48% male. Demographic data for the time period 1999-2016 is shown in Figure 2-5 below. The data show a reduced percentage of white home education families, from 75% in 1999 to 59% in 2016.

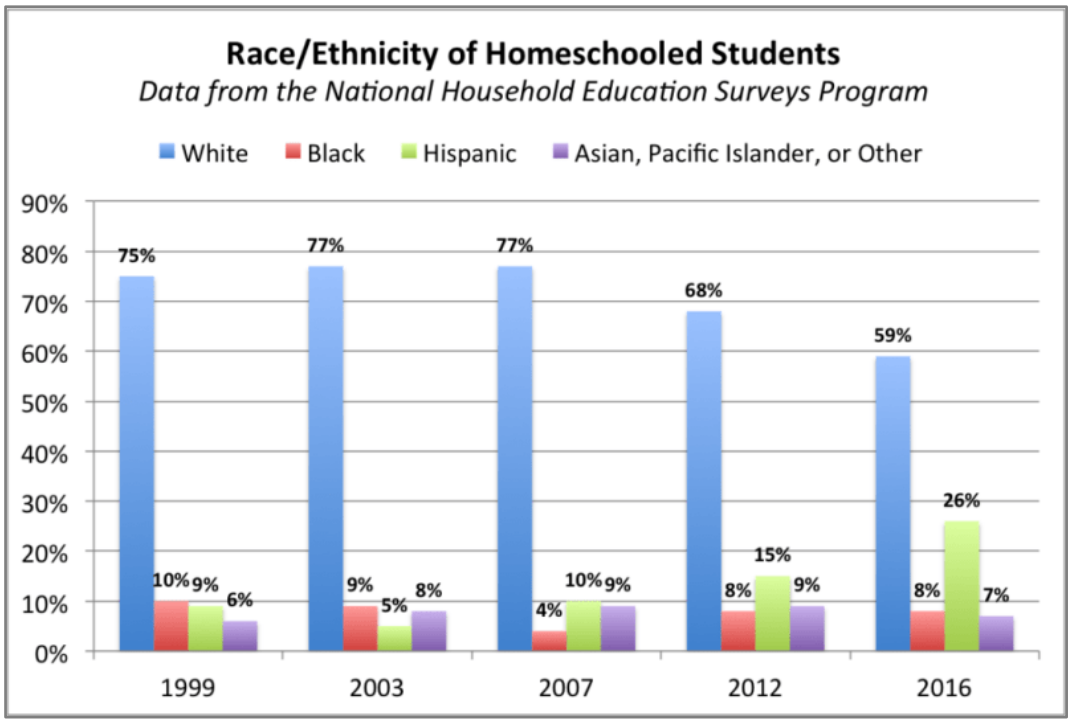


Figure 2-5 Demographic data for the US for time period 1999-2016, adapted from the Coalition for Responsible Home Education (n.d)

The National Center for Education Statistics demographics data (2019) was superimposed on Figure 2-5 and is included in Figure 2-6. The illustration of this comparison is important because the data for 2019 shows a quite different demographic distribution from what it used to be in earlier home education years with the Hispanic group growing to 33% in comparison with the White demographic group at 36%. Black home education learners grew to 18% and Asian and others to 13%. The data available for the UK was reviewed next.

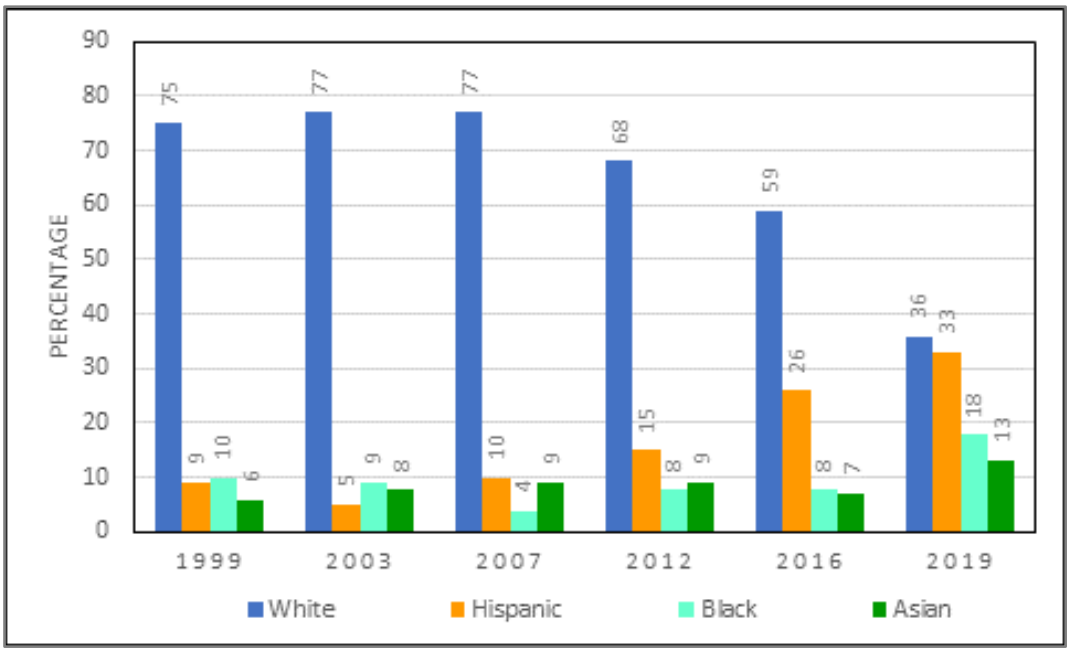
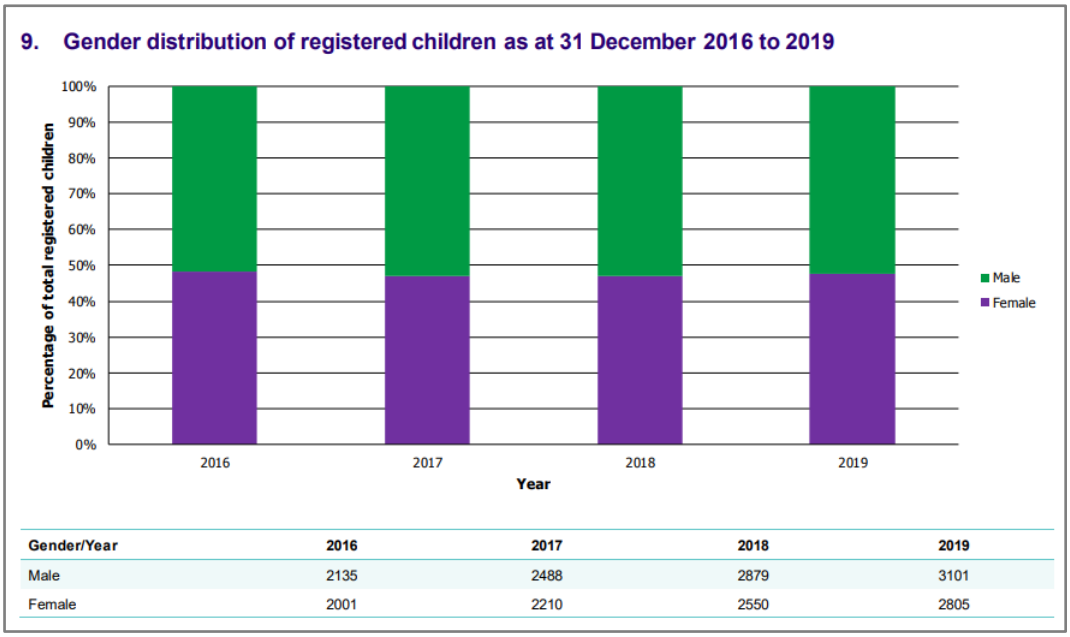


Figure 2-6 Home Education demographic data from 1999-2019, adapted and adapted from Coalition for Responsible Home Education (n.d.) and The National Center for Education Statistics (2019)

Ray (2024) provides a review of the 2019 U.S. Department of Education nationwide study which revealed that 41 % of home educated learners were Black, Asian, Hispanic or other races (not white). Demographically the paper shows that a wide variety of religious orientations were presented in the Home Education statistics of the U.S: atheists, Christian and Mormons, conservatives, libertarians and liberals and also comprised of low-, middle and high- income families.

Limited demographical data is available on home education families in the UK. From the limited published home education research and findings, the following data is reported. In 2020, it was found that the children most likely to be home education were in the UK Key Stage 3 or ages 7-9 years old (Long & Danechi, 2022). It was also found that children were more likely to be removed from schools with an inadequate rating suggesting that the type of school and academic quality contributed to children being removed for home education (Long & Danechi, 2022). The Home Education in England publication of 2022 discusses the lack of home education data (Long & Danechi, 2022). This research document (although limited data is available) suggests that for the home educated learners ages 16-18, only 22% were not in education, training, or employment. This is compared to 5% for school-going peers suggesting that home education learners are more likely to lack direction and actively pursue goals. This perceived phenomenon will be discussed further in section 2.7.

The NSW Education Standards Authority (2020) published a home education data report for 2019 providing insight into various facets of the Australian home education community. This report provides information on gender distribution and age categories for the Australian home education landscape. Australian male home educated learners report at slightly more than 50% (Figure 2-7).



Gender/Year	2016	2017	2018	2019
Male	2135	2488	2879	3101
Female	2001	2210	2550	2805

Figure 2-7 Gender distribution for Australian home education families for the time period 2016-2019 (NSW Education Standards Authority: 2020)

Slater et al. (2022) found an equal number of male and female home education learners in their study of Australian home education learners. Furthermore, this study showed a similar percentage of learners in the age groups 6-8, 9-11, and 12-14, but a very sharp decline in the following age group 15-17 years. According to the '*Homeschool Legal Defense Association*' (2019), the average home education period in Australia is four years, suggesting that learners often return to school in higher grades. This confirms data by Slater et al. (2022) discussing a higher probability for learners to return to school at 14-15 years of age, to enable academic courses that open possibilities for tertiary education or alternatively employment in vocational training.

Research by Slater et al. (2022) found that home education families were located in city, urban and rural areas. Learners were mostly educated by a 31–50-year-old female guardian taking full responsibility for home education. These female parents or guardians were highly qualified with 53.8% achieving a bachelor's degree or a higher qualification. Furthermore, this data indicates that 21.3% of home education parents or caregivers had a postgraduate qualification (Slater et al., 2022).

Another important aspect highlighted by Slater et al. (2022) is that 33% of home educated learners required educational intervention due to a developmental disparity. The study revealed a mental health condition for 22% of these home education learners.

New Zealand home education data shows that around 1% of school-aged children are home educated (New Zealand Government Statistics, 2022). Of the home education learners, 65% are younger than 12 years of age and 71% were home educated for less than five years (New Zealand Government Statistics, 2022). Demographic data for home educated and schooled children in New Zealand is shown in Figure 2-8. The demographic data shows that 70% of home education learners were classified as European/Pakeha compared to 47% for school-going learners. Home educated learners are less likely to be of Māori ethnicity with only 13% of home education learners found to be of Māori descent compared to 25% of school learners. Home educated learners were thus much less likely to be of Māori, Pacific or Asian ethnicity.

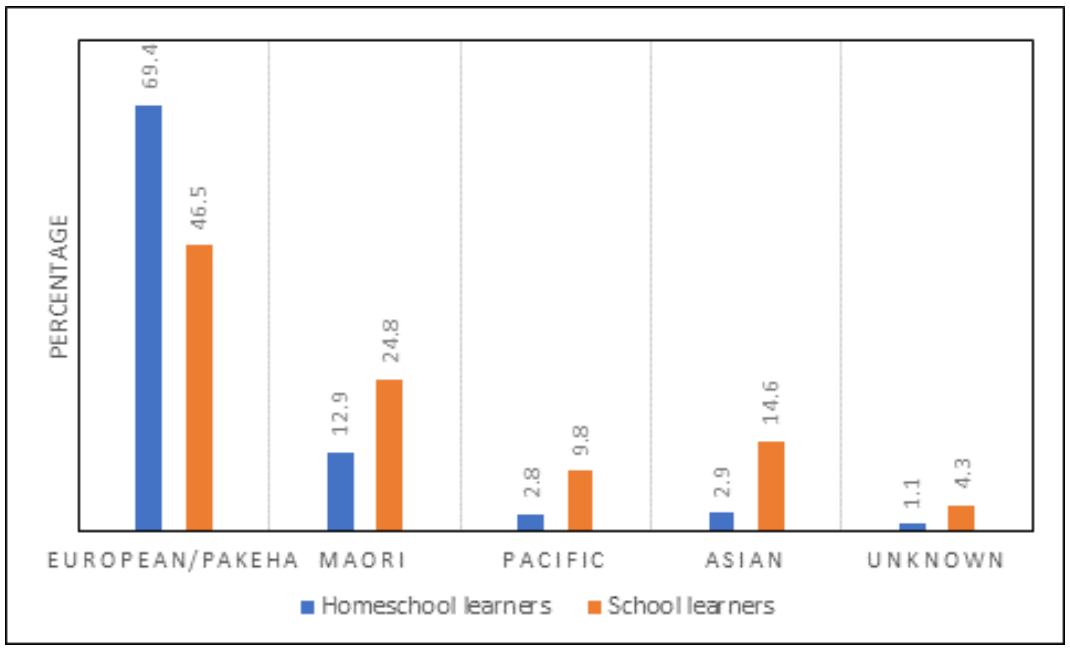


Figure 2-8 Demographic data for home educated learners in New Zealand, derived from New Zealand Government Statistics, 2022

That concludes the demographic and other data available for the US, UK, Australia, and New Zealand. The next section will focus on the reasons why families opt to home educate.

2.4 Reasons Why Families Home Educate

Reasons for home education is highly dependent on the country, socio-economic and political climate as well as the current state of education milieu. Van Pelt (2015) suggests that parents' main motivation for home education has changed since the early home education movements. Ideological and religious motivations by Holt (2003) and the Moore family (Moore & Moore, 1994) have made way for more pragmatic and diverse motivations in recent times. Van Pelt (2015) combines the reasons for home education into three categories: (1) the achievers, (2) the avoiders, and (3) special needs. Group one, which is focused on academic, social, and or moral goals represent a significant group of home educators. The second group's main motivation is removing children from negative and concerning situations such as bullying or peer pressure. The third group includes cases for learning disabilities or behavioural problems or gifted children.

The National Center for Education Statistics (2019) published data on the reasons for home education in the US. These results as displayed in Figure 2-9 showed that 80% of parents chose home education because of concerns about the school environment (which includes drugs, safety, and negative peer pressure) which agrees with the second group of avoiding negative influences. Dissatisfaction with the academic instruction at school at 61% agrees with the first group focused on achieving better academic instruction. A further 67% wanted to instruct their children in a moral value system or religious value system (51%). The third group which focuses on special needs are represented by 20%, and an additional 14% cited mental or physical health as the main motivation.

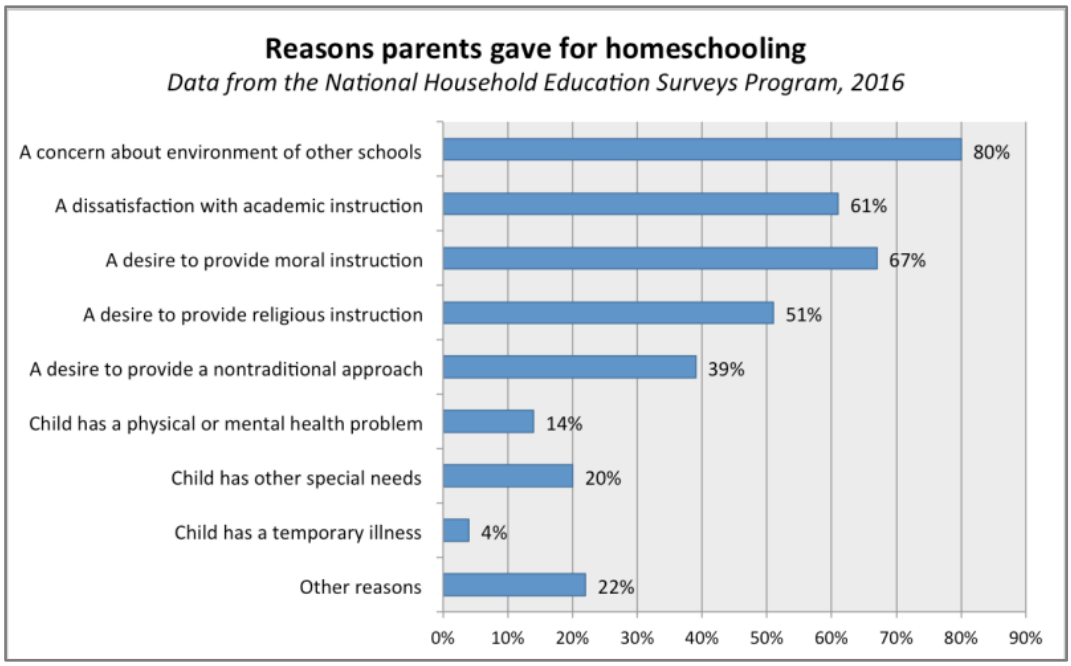


Figure 2-9 Reasons for home education in the US, adapted from the Coalition for Responsible Homeschooling (2017)

Additionally, a review of home education literature by Ray (2017) highlights data from a federal survey in the US, indicating that 47% of parents believed they could provide better education at home relating to the focus of achieving. Montes (2006) found that younger learners were three times more likely to be home education as a means of moral and character instruction compared to older learners. Research with Black families concludes that 40% of Black parents wanted to expose their children to African American culture and history (Ray, 2015). The reasons for home education in the US have been concluded and will be compared to the data available for the UK, Australia, and other countries.

Home education data for the UK represented by *'The Elective Home Education Survey of 2018'* (The Association of Directors of Children's Services, 2018), which is completed by local authorities and not parents, cite similar reasons for home education as discussed for the US. The results showed that 21 % of responses referred to dissatisfaction with the school environment, also the most cited reason for the US data presented earlier, although this data does not differentiate between academic or social reasons. The second highest reason for the UK data refers to emotional or physical health. The 2021 version of the Elective Home Education Survey provided a 19% portion to an additional Covid-19 related option. Parallels can be drawn between the reasons for home education in the US and in the UK. However, what is different, is that the notion of health, and

emotional health, is more accentuated in UK data. An article by BBC (Issimdar, 2018) states that parents chose to home education mainly because of mental health issues and exclusion at school, which agrees with the data shown. St Rose (2022) investigated home education in Trinidad and Tobago, providing reasons for parents to choose home education but more so found that these parents placed learners at the centre of the learning process. These families followed a purposeful holistic educational approach envisioning the kind of human being they were developing and preparing them for real life.

Bhopal and Myers (2018) provide an overview of home education in the UK, US and North America, the reasons parents opt for such an approach especially for black and minority ethnic groups and special needs families, despite the risks associated with it.

Home education by Australian families discussed by Varnham (2008) – although it might be considered dated – cited religious reasons, academic quality, health issues, bullying, and special needs (for example, learning disorders) as motivating reasons for home education. These agree well with the data presented for the US and the UK. In the same vein, Slater, Burton, McKillop, (2022) deduced four main themes for home education which were:

1. social and emotional wellbeing,
2. developmental differences,
3. curriculum, and
4. lifestyle choice,

Bruce Arai (2000) shows that Canadian families home educate for different reasons than most US counterparts. The author discusses the influence of the hugely different legal sphere in Canada as one reason parents in Canada home educate. Bruce Arai (2000) found that parents in Canada did not make a strong differentiation between ideological and pedagogical home education philosophies. Canadian families cited overcrowded classrooms and the lack of individual attention as their main motivation for choosing home education. Like the US and UK, the social environment outside the classroom was also a big concern for Canadian parents. Parents in Canada furthermore noted an improvement in family bonding, relationships, and connection because of home education rather than being a motivation factor (Bruce Arai, 2000). From this study, it seems that the home education sphere in Canada differs quite a bit from the US home education community.

A fascinating study by Gathure (2015) on home education in Kenya reported that parents cited religious and academic reasons for home educating. Parents wished to provide an education based on mastery and felt that traditional schools could not provide the education they wanted for their children. Towards creating a better understanding of home education in Kenya, Mutea (2020) cites the desire of parents to incorporate character and value training in their education and to form strong family bonds and develop well-rounded adults. In addition to these reasons, parents also expressed the desire to teach their children about their identity, history and their role in community. Finding their strengths and talents and providing an individualised home education that would grow strengths and weaknesses was also cited in the research by Mutea (2020). Additionally, parents articulated that being able to provide security and develop healthy self-esteem and confidence in addition to protecting their children from defiant behaviour such as drug and alcohol abuse provided further motivation for home education.

The historical nature of education and socio-cultural learning was sentimentally interpreted by Greenwalt (2016) reviewing how education was removed from the home, taken to a classroom where love was replaced by competition, merit and hierarchy. He arguments for a revision of the views on homeschooling as something that happens in every home and that all parents engage in homeschooling in some way and carry responsibility for developing their children.

The reasons for home education discussed here highlight the desire of parents all over the world to provide an education of high academic standard where physical, emotional, and intellectual wellbeing is considered from a relational perspective. Additional to the studies mentioned above, Kunzman and Gaither (2013) underline another significant factor in several studies for home education, namely the desire to be involved and to be able to influence and connect with their children in a deeper and more meaningful way. It is suggested that family bonding helps children withstand the negative influences of moral tolerance, consumerism, anti-intellectualism, and self-entitlement. This value comes to light under the theme of *family life* found in the US parents' reasons for home education. Parents who want what is best for their children and are willing to make the necessary sacrifices in order to do so, can indeed provide an education of high academic quality while developing well rounded adults. The next section will focus on the generalisable trends in the academic achievement of home education learners.

2.5 Academic Achievement of Home Educated Learners

This section will provide empirical evidence indicating that home educated learners perform academically on par or above average in comparison with their peers in institutional education. There is, however, some critique on how these samples for research are obtained and that the samples are not representative of the entire home education community. Furthermore, various limitations in the current body of literature make it challenging to establish a deep understanding of the academic performance of home education learners in all contexts, especially in comparison to their school-going peers on a global scale. However, the empirical data that is available will be discussed in the next section, and the concerns about deriving conclusions from the current research body will be highlighted.

A nationwide study in the United States by Ray (2010) investigated 11 739 home educated learners between grades K-12 and evaluated academic ability in reading, language, math, science, and social studies. The sample represented 57% White learners, 19% Hispanic, 15% Black, 4% Asian, and 5% other (Ray, 2010:10). In this sample 66% of fathers held a bachelor's degree or higher education compared to 62% of mothers (Ray, 2010:10). The academic achievement tests reported by the research cited an 89 percentile (mean) for reading, 84% for language, 84% for math, 86% for science, and 84% for social studies (Ray, 2010:15). These are all compared to the national percentile mean of 50% for these subjects. Home education students scored much higher than the public school mean average for reading, language, math, science, and social studies (Ray, 2010) in these cases.

Some of the most referenced data in favour of home education originates from research and published work by Ray (2015, 2017, 2021a, b, c) and Rudner (1999). In the overview of literature by Ray (2017), fourteen peer-reviewed studies, by several scholars, were examined and eleven confirmed the positive effect of home education on academic achievement.

Rudner (1999) presented another study demonstrating the positive academic performance of home educated learners. The study, performed on 20 760 home educated student's grades K-12 utilising achievement tests, found that home education students scored in the 70^{th}-80^{th} percentile with exceptionally high median scores (Rudner, 1999:32). Furthermore, 25% of the learners were enrolled in higher grades than their school-going peers. The study also found that home educated learners watched

considerably less television than their peers. In Rudner's study, 88% of parents continued with some higher form of education after high school, 98% were married and the families earned a much higher family income than the median for US families (Rudner, 1999:31). The study showed that achievement was influenced by money spent on education, family income, parent education, and television viewing. Although the research comes from a non-random group, with parents of a higher education background, and a family income well above the average, the study confirmed the successful academic development of home education learners when parents maintained a strong commitment to education. Rudner (1999) also commented on the results confirming that it does not conclude that home education is superior to other education forms, only that home education can be performed successfully. Although it could be argued that there are limitations associated with Rudner's (1999) study, it serves as an important confirmation of the academic benefits of home education, as confirmed by Ray (2010). Many studies by Brian Ray confirm the high academic performance of home education learners (Ray, 1997, 2010, 2015, 2017, 2021a, 2022b; Ray & Wartes, 1991).

Criticism of home education data focuses on small sample sizes, and non-representative samples gathering data on mostly White Christian home educated learners and high-income families. Ray (2015) addresses some of these concerns by focusing research on Black home education students for academic achievement utilising standardised testing. The results showed that black home educated children also outperform their school-going peers of all ethnicities, confirming the significant influence of home education independent of race.

The Cardus Education Survey retrieved data from 1 500 American Diploma graduates in the US, ages 24-39 (Pennings, Sikkink, and Casagrande, 2019). The research was not designed to assess home education, but rather compare outcomes for religious and non-religious students in public, private, and home education environments. This study found that home education learners were much less likely to take advanced math or science classes than learners in public, private, or Catholic schools (Pennings, Sikkink, and Casagrande, 2019). Also, religious home education graduates were 60% less likely to obtain an advanced degree than a public-school graduate and significantly less likely to obtain a bachelor's degree than public and private school candidates. The same survey found that religious home education graduates accomplished much higher grades than public school graduates, confirming academic success for home education candidates once reaching higher education. The survey (Pennings et al., 2019) suggests that home education learners are more conscientious about their studies. The Cardus survey, when

asked about employment, showed that religious home education learners were more likely to be unemployed than public school graduates, but also 1.64 times more likely to become self-employed. Questions aimed at income showed that religious home educated candidates reported significantly lower household incomes than public school graduates. Comments in the reports discuss that home education graduates were highly unlikely to take a job based on money, but highly likely to prioritise a job that fulfils their religious calling. The data confirms the importance of gathering recent and relevant data on home educated learners who (1) pursued higher education, (2) were successful in higher education, and (3) pursued higher levels of mathematics and sciences in their home education and higher education journey. The results of the Cardus Education Survey raise questions about the type of home education environment that causes learners to pursue higher-level math and sciences and careers in these disciplines. These questions form part of the desired outcomes of the current study. The current study included home educated learners that entered math, STEM, and engineering fields of study and, therefore, could address some of the questions identified by the Cardus survey of Pennings et al. (2019).

A study by Belfield (2004) evaluated SAT scores of home education for the 2001 year. Home education made up 0.5% of the overall SAT test results (during this year). Although the data might be dated, it still adds value to this study by providing a direct quantitatively measured outcome and indicated that home education represented a small fraction more than two decades ago. Although in a minority, the SAT average scores for home educated learners were 80.5 points higher than the public-school average and 37.5 points higher than the private religious school average. It was, however, 30.7 points lower than the private independent school average. After correcting for background factors such as parental income and parent education, home education learners scored 38.6 points higher than predicted, which contributed mostly to the verbal section of the test (Belfield, 2004).

Kunzman and Gaither (2013) confirm higher verbal scores in many research studies, but that the same high achievements were not observed with math. In their review of research, they propose the explanation that language was prioritised during home education. Another suggestion is that home education parents might not be as prepared in supporting learners with math and sciences resulting in slightly lower math scores. Other studies have also found that home educated learners are at a disadvantage in math or perform slightly lower in math than languages, which is still higher than the national school average (Frost & Morris, 1988; Ray & Wartes, 1991; Ray, 1997; Rudner

1999). These findings reinforce the importance of research in the field of home education, where education was indeed successful in preparing these learners for higher education, especially in the fields of math and science. The current study will specifically investigate the type of home education environment that accomplished successfully preparing home educated learners for higher education including disciplines in math and sciences.

Kunzman and Gaither (2013) suggest that markedly improved academic achievement is not observed once family background is corrected in the data. This suggests that parent involvement, good family structure and support, and parent education influence the academic outcomes of home educated learners and that these students would probably also have done academically well in school. Kunzman (2009) found that parents' education background significantly influenced instructional quality. The conjectures of Kunzman (2009) and Kunzman and Gaither (2013) are important to this study, which seeks to understand how a home education environment – in the context of a developing country like South Africa – could become optimally conducive to prepare students for higher education success. One should also keep in mind that a decade of research has transpired since these reviewers offered their hypotheses.

A study by Martin-Chang, Gould and Meuse (2011) compared the academic performance of both structured and non-structured home education learners with public school learners within the age group 5-10 years. The sample size for unstructured home education learners was small and was considered a limitation of the study. Figure 2-10 shows the results for structured home education learners, public school learners, and unstructured home education learners. A positive result indicated that the learners were performing better than the grade average, whereas a negative score indicated that the learner performed at a lower grade level. The academic performance was measured by the Woodcock-Johnson standardised test, assessing letter word, comprehension, word attack, science, social science, humanities, and calculation abilities. The results indicate that structured home education learners perform better than school-going peers in all seven subtests. Martin-Chang, Gould and Meuse (2011:7) questions whether these results will change if repeated at a later phase: "whether the children receiving unstructured homeschooling would eventually catch up, or even surpass, their peers given ample time". That is, the differences between the unstructured and structured homeschool students' academic achievement might be no different and above the public-school average by the time the children are 13 to 17 years old. Chapter 4 will discuss different approaches and pedagogical approaches to home education, specifically

structured- and unstructured approaches to home education. The children in public school performed better than unstructured home educated learners. The results furthermore show that a structured approach to home education academically prepares children to a higher degree and structured home education learners perform better in standardised testing on these seven levels. The unstructured home education learners obtained negative values on four of the seven subtests which indicate performing at a lower grade level. These results were however completed for learners of ages 8-10. Martin-Chang et al. (2011) questions how these results would change for learners towards ages 13 and up. Their review questions the results with the following (2011:7): "*This raises the question of whether a similar pattern would be observed with larger sample sizes, and if so, whether the children receiving unstructured homeschooling would eventually catch up, or even surpass, their peers given ample time*"

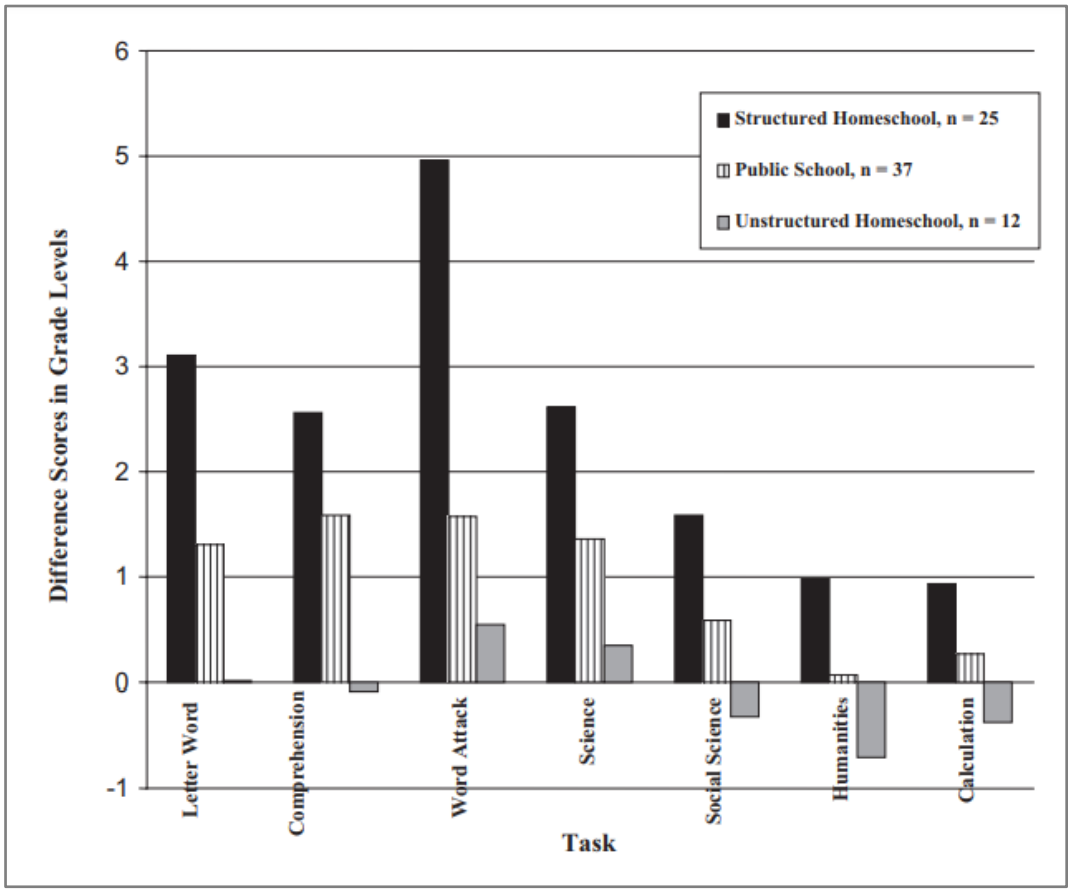


Figure 2-10 Academic achievement of structured, unstructured and school-going learners (aged 5-10 years) based on the Woodcock-Johnson tests, adapted from Martin-Chang, Gould and Meuse (2011)

This study by Martin-Chang et al. (2011) suggests reasons why structured home education learners perform better than school-going peers, which include small class size, individualised instruction, and more time being spent on crucial academic activities such as reading, math, and writing. The unstructured home education families who were

mostly unschooled, indicated that they rarely used structured curriculum or resources. The conclusion by Martin-Chang et al. (2011) is that a knowledgeable mentor that engages the children in learning is fundamental to successful home education. It is furthermore suggested that structured learning time should be prioritised in a family's home education routine. The results from this study, although limited in number, are an important discovery for home education families worldwide.

Data on the academic achievement of home education learners in Australia verify the data from other world regions, i.e., that the home education environment – under certain conditions – can create an educational environment that is conducive to learning, development, and success. NAPLAN (National Assessment Program Literacy and Numeracy) tests were voluntarily taken by 500 home education learners in NSW during 2008-2013 and the results were published by the Board of Studies, Teaching an Educational Standards for New South Wales (2014). These 500 tests represented around 10% of home education learners. The tests were taken at levels for years 3, 5, 7, and 9 and provided feedback for reading, narrative writing, persuasive writing, spelling, grammar, and numeracy at each of these levels. The average score for home education was higher in all instances, with average scores typically 70 marks higher than the NSW average. The improved marks were slightly less for Spelling (average of 40 marks higher) and for Writing (average of 20 marks higher). In addition to these home education specific NAPLAN tests, the NAPLAN results for previously home educated learners were also investigated for the period 2008-2013 (Board of Studies, Teaching and Educational Standards for New South Wales, 2014). These tests included 2 572 learners that home educated for two years or less and an additional 1 394 learners that home education for two or more years. These results showed that students who have been registered for home educated scored significantly higher in reading and grammar but not in writing, spelling, and numeracy. The report furthermore investigates results of School Certificate Test Results and Higher School Certificate English results, and both these tests did not show a significant difference for candidates who previously homeschooled.

Academic Achievement results were not available for New Zealand. A publication by the New Zealand Government (2015), however, reported that home educated learners were less likely to obtain a bachelor's degree (12%) compared to 26% for school leavers. The report also shows that home educated students were more likely to obtain a Certificate level 1-4 at 64% compared to an average of 56% for school-leaving peers. This suggests that home education learners are more likely to obtain a lower-level qualification than school-leaving peers.

The data presented confirm that home education can be successful under certain conditions and with support and commitment, especially from parents. This means that home education, in and of itself, does not result in higher academic achievement, but that it demands selected conditions to create an educational environment that is conducive to learning and development. However, when these conditions are introduced, data indicate that home education learners perform better than their peers, especially in languages, reading, and writing. Some studies show similar or slightly lower academic performance for home education learners in math. In specifically controlled groups, overwhelmingly higher academic performance was observed on the account of home education learners, especially with graduate parents, under wealthier conditions and with family stability. Research shows that parent motivation and involvement and academic background play a significant role in the quality of instruction. The current study will contribute to creating a deeper understanding of the type of home education environment that led to academic achievement specifically for home educated learners. The next section will investigate the extent to which home education learners develop in culture capital as an additional measurement of academic achievement.

2.6 Home Educated Adults

A very important aspect of reviewing the success of home educated adults are the ability to function in society, integrate in social structures and contribute to the economy and wellbeing of communities. This chapter will review various aspects of home education from the perspective of the home educated adult.

A study by McCabe, Belanova and Machovcova (2021) interviewed home educated adults who reported home education developed independence, responsibility, social skills, time management and financial literacy, which was invaluable to them.

A recent study by Hamlin and Cheng (2021) investigated college attendance, household income, marital status and subjective wellbeing of home educated adults. The findings conclude that no difference was observed for all four of these categories between adults who homeschooled for 10-12 years, adults who homeschooled for 3-9 years and adults who homeschooled for 1-2 years therefore receiving most of their education at traditional schools. Notably the study concluded that home educated adults function as socially integrated members and actively participate in larger social constructs. The study did however suggest that the social skills of home educated and non-home educated adults might depend more on personability traits than schooling.

A comprehensive study by Ray (2004) of 7300 home educated adults concluded that 71 % of home educated adults participate in community programs compared to 37 % of US adults. The results further showed that 74 % of home educated adults between the ages of 18 to 24 have attended college level courses contrasted to 46 % of the general US. Other aspects of the study showed the 82 % of the adults said they would home educate their own children. A staggering 59 % revealed that they were happy with their life and a further 39 % stating they were 'pretty happy'. Of the participants 95 % stated that they were not hampered in their education or career. The results overall represent a positive outcome for home education although it was performed in a single state in the US and a more representation of the US would be useful.

With regards to life and social outcomes researchers have reported that home educated adults are able to successfully navigate college, employment, community and social settings (Gaither 2009; Sorey & Duggan 2008; Murphy, 2012; White, Moore and Squires, 2009). Apart from these literature sources other studies have reported that home educated adults developed sufficient social skills, contribute and partake in local community groups and participate in extra-curricular activities (Smith & Sikkink 1999; Tillman 1995; Medlin 2006; Reavis & Zakrinski 2005). Contrasting studies have deviated from these type of findings and reported that home educated young adults showed lower volunteering and civic commitment than their school counterparts (Hill & Dulk, 2013; Sikkink & Skiles, 2015). Essentially Hamlin and Cheng (2021) reach the conclusion that home educated families and adults cannot be viewed as a homogenous group and an important conclusion that should be made from these publications is that home educated adults will segregate based on personality, family background, home education approach, social structure and various other factors which will all influence the outcome of home education.

McCabe, Beláňová, Machovcova, (2021) reviewed the reflection of home educated adults on their home education journey. The study showed a strong valuation for the independence, responsibility and life skills that was developed through home education and how this helped them later in life. They viewed the development of independence, responsibility, social skills, literacy, time management, and other real-world skills as great benefits of home education. The data revealed that mothers functioned more in the role of facilitation than provider of teaching.

Home educated adults was shown to attend college at an equal or higher rate than general population (Ray 2024), they tend to participate in in community service more (Seiver & Pope, 2022), vote and attend public meetings more frequently, are more likely

to be politically tolerant and internalised values of their parents at a higher rate. Ray (2017) review that 69 % of peer reviewed journals showed that home educated adults succeeded and perform significantly better than institutional school attending adults.

Research furthermore confirm that home educated adults are rated above average in social, emotional and psychological development. These adults show healthy self-concept, self-esteem, peer interaction, leadership skills, community participation and family cohesion (Ray, 2024).

Home Educated Adult Summary

The results on adults who were home educated show that they are just as likely to attend college, are just as likely or more likely to succeed, are civically responsible and invested in their communities and are more likely to internalise values from their home and promote family cohesion. These adults furthermore show highly adaptive social, emotional and psychological skills, report being happier and show higher self-esteem and self-concept.

2.7 Recent developments

Home education from a historical perspective can provide insight about philosophies and techniques that have been used over decades to educate children at home. With technological development however the landscape of the home education environment has changed dramatically (Jolly, and Matthews, 2020) and requires a revisitation of the home education framework. Where home education traditionally took place exclusively in the home with the mother as the primary teacher (Greenwalt, 2016), this setup most probably, with technological advancement, have changed to incorporate other sources of teaching and learning. Parents now have a multitude of online education options which can be incorporated in the home setting. Jolly and Matthews (2020) proposed the staircase model as a tool to describe how home education families incorporate extra-curricular activities. Revisiting the home education landscape, Jolly and Matthews (2020) the novel concepts of self-education and how much control parents hold should be defined, as teaching and learning, with the implementation of technological advancement, could move further away. The staircase model proposed by Jolly and Matthews (2020) incorporate the novel variables that has been introduced into the home education setting and intends to better define the context, pedagogy and curriculum being utilised, making it possible to include a greater variety of approaches that are now possible in the home education setting.

Neuman and Guterman (2017) discovered additional reasons for families to start home education not explicitly explored in previous research. They found that some families initially start home education by following a more arbitrary approach (rather than a rationalised decision) where they start home education as a result of a series of random opportunities or processes or a natural flow.

Home education as an enterprise for developing motivation and characteristics for entrepreneurs was explored by Baugus (2022). He explores the reasoning and motivation for home education and associated return on investment from an economical point of view.

Forlin, Chambers, & Banks (2023) discuss developing the *Parents' Perceptions of Home-Schooling* (PPHS) scale and attempting to gather large scale quantitative data worldwide with the aim of understanding reasons for home education better. The scale includes questions for reactive reasons which refer to negative schooling experiences as well as opposing proactive reasons focused on family values or beliefs. Another part of the questionnaire places the focus on the child reviewing medical, emotional, behavioural or curriculum as reasons for home education. The prospect of large scale quantitative data could provide a clearer picture of the international home education setting.

Madar, David-Hadar (2021) investigated the social derivative of home educated learners and reported that learners educated at home exhibited higher social competencies (as also shown by Ray, 2004; Medlin, 2006) and exhibited higher levels of creative thinking than traditional learners.

Covid-19 changed the home education sphere forever which created a new interest and abundance of much needed research exploring the educational approach (Krumsvik. 2020; Kinzer, Herbst, Pohlman and Herbst, 2020).

2.8 Conclusion

The purpose of this chapter was contextualising this study in the body of literature especially the international perspectives on home education. The historical depiction shows that home education was the earliest form of education and preceded all forms of formal and institutionalised schooling. Earlier forms of education were characterised by socio-cultural learning in the context of a community. Empirical data from the modern home education movement indicates that this approach to learning and development is still effective under certain conditions.

The predominant research on home education from the US provides information on demographics, reasons for home education, academic performance, and other areas of interest. Data on these areas of interest is limited in other parts of the world and, therefore, the review of literature remains dominated by data from the US.

The current home education movements are strongly driven in the US, with large home education numbers, prevalent research, and great community support. Growth in home education has been and continues to be strong in the US, UK, and Canada. Numbers amongst African American, Hispanic, and Asian demographic groups have also seen growth in the US. Research amongst home education families on the reasons for home education confirms various reasons including: (1) concern for the school environment (socially) (2) desire to provide better academic instruction or use an alternative form of education (3) desire to provide moral or religious or more culturally relevant education (4) special needs or health or mental illness.

A review of research on the academic performance of home education learners is often reported as superior to school-going peers under certain conditions. In many instances, the data show that home educated learners perform similar or better than their school-going peers.

A review of home education research suggests that parent involvement, effective family structure and support, and parent education influence the academic outcomes of home educated learners. Students with strong parental support and involvement are more likely to perform academically well in school. Parents' educational background significantly influences instructional quality.

The next chapter will further contextualise this study theoretically and historically by focusing on the South African perspectives on home education.

3 The National Perspectives on Home Education

The previous chapter focused on international perspectives on home education. This chapter will focus on national perspectives on home education in the South African context. This is important because it contextualises this study historically and theoretically.

This chapter is categorised in six sections. In the first section, the historical development of home education in the South African context will be reviewed. Then the current prevalence of home education in South Africa will be discussed based on the literature available nationally. The next section will investigate the reasons for home education in the South African education sphere followed by a review of the literature on the topic of academic performance of home educated learners. A chapter reviewing the complexity of the South African policy and home education framework was included as it defines the home education setting in South Africa to a considerable extent. It is important to note that the researcher has done a thorough literature search. However, the current body of literature concerning the national perspectives on home education is largely dated. This indicates a severe limitation in the current body of literature about empirical evidence appropriate to home education in South Africa. The historical context of home education in South Africa will now be reviewed.

3.1 Historical Development of Home Education

Until the late 17th century, South African education, through the lens of an indigenous knowledge system, was mostly accomplished through sociocultural learning within the home- and community environment (Meek & Meek, 2008). Early San and Khoisan communities educated children in their culture and moral values as well as survival and hunting skills. Meek & Meek (2008) discuss the complexities associated with education during these early times, which included all aspects required to become a fully integrated member of the natal group from birth to adulthood. Early tribal and ethnic South African groups valued their pre-colonial education, which included education in moral, spiritual, survival, communication aspects, and social integration both autonomously and collectively within the group. This type of education was a gender-specific individualised process within the social sphere of the tribe performed by older members of the tribe teaching children about their culture, role, environment, society, and life (Corby, 1990). This continuous education process occurred by living alongside parents, family, and

community members, who continuously mentored the transformation to adulthood, with significant traditional moments becoming rites of passage (Corby, 1990).

With the arrival of the first settlers in the Cape in 1652 and slaves in 1658 (which continued after that) the need for schools as a vehicle for education became apparent. From these early times until formal native education was instituted much later in 1951, a time of segregated education existed, predominantly instituted by European missionaries (Meek & Meek, 2008). The network of mission and church schools was sponsored by mostly British churches and to a lesser degree by Catholic, Dutch Reformed, and other smaller churches. Because these schools were operated by English educators and ministers, the goal was to create a peaceful society where every learner had equal opportunity to, through hard work, obtain the highest social and economic status (Meek & Meek, 2008).

The British mission schools that dominated the 18th Century were opposed by the Afrikaner community, who chose to educate children in their homes or churches in their own language. Education at home, therefore, was still prevalent in these communities until later (South African History Online, 2022).

With the founding of Bloemfontein in 1846, quality education became a priority, and private Afrikaans boys' and girls' schools were founded between 1850-1880 in the Free State (South African History Online, 2022). Legislation on the administration of education was introduced in 1865 in the Cape of Good Hope and between 1873-1877 in the Transvaal, Orange Free State, and Natal (Britannica, 2022). More schools followed and school attendance became more prevalent. Between 1899 and 1902 most efforts at educational development ceased with the South African Boer War and children were once again educated mostly at home for the next few years (Britannica, 2022).

With the establishment of the Union in 1910, bilingual schools were instituted for white Europeans (Britannica, 2022) and school attendance gradually grew with slightly more than half of all white school-aged children attending school by the end of 1910 (Brockliss & Sheldon, 2012). By 1930 it is estimated that 88% of white children aged 7-15 were attending school (Brockliss & Sheldon, 2012). Education remained segregated and continued along this trend until much later (Britannica, 2022; De Wet & Wolhuter, 2009).

Home education declined during the 1900s with the introduction of more quality schools. During the 1970s-1990s home education was only legal until grade 3 and under extremely strict regulation (Pestalozzi Trust, 2016). '*The Association for Homeschooling'*

was established in 1992, which played a crucial role in the following years. In 1993 an Education Renewal Strategy had been developed which would introduce a single education for all South African citizens. In the same year, the government initiated a legal battle against the Meintjies family for home education their three children (Pestalozzi, 2016). The Meintjies husband and wife were imprisoned in December 1994, but with the help of the '*Association for Homeschooling*' and '*The Homeschool Legal Defense Association*' (HSLDA) from the USA, were released six months later. During the same time, other home education parents were given suspended sentences on the condition that their children were put in school (Pestalozzi Trust, 2016). Home education remained invisible during these times until it was legalised by the ANC government in 1996 when the South African Schools Act was published, mainly due to international pressure on the government.

In 1998 The Pestalozzi Trust was established as a legal defence for South African home education families. The trust acts on behalf of South African families protecting their right to home education (Pestalozzi Trust, 2022). The Pestalozzi Trust has been extensively involved in the home education and government spheres acting on behalf of and protecting the interests of home education families for the past 24 years.

In November 1999, the policy on Home Education was published stipulating the requirements for home education. Before this publication, limited documentation and policy information caused uncertainty in the legal implications and responsibilities of home education parents. The publication required amongst others that home education families register with the Department of Education (Van Oostrum, 2014). The policy was met with great resistance and very few families chose to comply with the requirements. The legislative measures of the Policy, perceived as being intrusive by some, were found unenforceable by the Constitutional Court in 2001 (Van Oostrum, 2014). According to Van Oostrum (2014), 95% of home education families chose to remain unregistered due to the controversial nature of the policy and perceived infringement on the constitutional rights of parents to choose the kind of education they want for their children.

The current public education system in South Africa is managed by the Department of Education and uses the Curriculum Assessment Policy Statements (CAPS, 2022). The current policy on home education and legal requirements will be discussed in section 3.6.

3.2 Current Prevalence and Growth in Home Education

According to Durham (1996), there were around 1 300 South African children being home educated in the 1996 academic year. It is suggested that this number was most likely incorrect, as families were not open to being recorded as such out of fear of prosecution. By the end of 1997, this number increased to around 2 400 (Van Oostrum & Van Oostrum, 1997). As stated earlier, the Pestalozzi Trust was established in 1998 by Leendert and Karin van Oostrum as a legal defence aid for home education families in South Africa. Statistics South Africa estimated home education learners at 11 000 in 2009 and then observed an increase to 32 000 in 2017 (Statistics South Africa, 2010, 2018). The number of home education learners was estimated at 100 000 by the end of 2018 according to *BusinessTech* (2019), although empirical evidence remains extremely limited. South Africa has seen the same growth in home education as observed in other countries where home education has become a popular alternative. According to Engle (2021), the number of learners doubled between 2019-2020 and was estimated at 300 000 for the year beginning 2021. With the growth in home education came home education communities, co-ops, and groups that support each other and socialise together. These highly active home education communities prevalent in cities in South Africa have created the much-needed interaction and socialisation that home education families require.

Most of the home education philosophies being followed internationally are also prevalent in the South African sphere and smaller communities have formed based on similar education philosophies that create opportunities for interaction.

3.3 Reasons why Families Home Educate

Empirical evidence on the reasons why South African families choose home education is limited. Durham (1996) found that South African families opt to home education mostly because of dissatisfaction with the school environment (high student-to-teacher ratios, violence, lack of discipline, a perceived decline in academic and educational standards, increasing costs), as well as the desire to provide higher quality education. These correlate well with international data on the topic presented in section 2.4. According to Van Oostrum and Van Oostrum (1997), religious and first language instruction is another reason families choose to home educate. Negative social interactions and the desire to follow a different pedagogical approach are also cited as further reasons for choosing to

home education (Van Oostrum & Van Oostrum, 1997). These sentiments were corroborated by the research by Steytler (2019), who found that parents were concerned with the quality of curriculum and academic instruction, overwhelmed teachers, and felt that teachers could not adequately assist learners' needs. Other reasons highlighted in the study by Steytler (2019) included poor classroom and school discipline, disengaged and disruptive classes, too large classes, lack of personal attention, the assessment-focused system, too much pressure, and the curriculum lacks developing critical thinking and problem-solving. There were also parents who chose to home educate for medical reasons, special needs as well as concerns for safety and the school environment (bullying, negative peer pressure, drug and alcohol exposure, early sexual exposure). Some parents also indicated a desire for religious and value instruction. Lack of flexibility concerning the learning pace, leading to boredom (if too slow) or failed mastery (if too fast) were other concerns parents raised. The study also highlighted mistrust in the school system, the curriculum and the assessment procedures currently utilised in the South African Education system.

The research by De Waal (2000), although not a recent study, found that parents opted for home education for several reasons, of which higher quality academic instruction was the predominant reason and the desire for religious instruction the second. The public school setting has, however, changed drastically since 2000, for example, school safety was not a big concern during those times but have now become a concern for parents.

Another study by Bester (2002) investigated the reasons for home education in the South African context. The results showed that parents believed having more time with their children will not only improve family bonding but also allow parents to have more influence in their children's lives resulting in a higher degree of impartation of religious, moral, and value instruction. This agrees well with data in the international sphere.

Parents also indicated dissatisfaction with state schools, too much pressure, distrust in the curriculum, and school system. Parents furthermore mentioned negative peer pressure at school, negative socialising, emotional harm, and that children were unhappy at school. Learning problems, medical and special needs were also indicated as reasons for choosing home education. Other factors included more freedom, to create a love for learning and create an environment for creativity.

Dlamini (2018) review home education as an educational choice and why parents opt for this educational model. The research discusses benefits of home education specifically referencing connection and bonding in the family. The study found that parents

approached home education as a holistic, learner centred approach that could provide a high quality education to their children through customisation (Dlamini, 2018). The research specifically cites the advantages of creating a pace suitable to the strengths and weaknesses of the learner.

Dlamini, Maharaj and Dunn (2021) investigated home education in South Africa on a small sample group which revealed that parents wanted to provide affordable quality education that will optimally develop their children and will provide valuable, conducive and efficient education. Concerns were expressed by parents concerning i) the quality of public education, ii) peer pressure in public schools, iii) negative social environments and iv) pressure for medication. Interestingly Dlamini, Maharaj and Dunn (2021) concluded that most parents choose to home educate in order to provide an individualised, high quality education at an affordable price. From the data it seems that the one size fits all, currently employed in South African schools fails to cater for the individual needs of children.

In summary, although data on the reasons why South African families choose home education is limited, it does allow for a partial perspective on this aspect of home education. Strong similarities exist between the reasons why South African families choose home education and those reasons listed by families in other world regions – as indicated in the previous chapters. The next section will focus on the academic achievement of home education learners in South Africa.

3.4 Academic Achievement of Home Educated Learners

Extremely limited data on the exit examination academic achievement of home education learners in South Africa makes it difficult to derive generalisable conclusions on the academic achievement of South African home educated learners. Obtaining academic achievement data based on matriculation or exit examination results is especially difficult in South Africa as many home education families opt for different international examinations such as Cambridge, American Diploma, SAT, and the IEB independent national exams. There are many examples of individual success stories, but an overall silence exists on representative comparative data for home education learners in South Africa.

However, a study conducted by Bester (2002), although dated, provides some empirically based insight into the academic development of home education learners in

South Africa. The academic level of grade 4 home education learners was compared to the school peer group in a study by Bester (2002). The learners were assessed by the Monitor Learning Achievement (MLA) test (Strauss, 1999), which is a basic literacy test designed by the Department of Education, the Research Institute for Education Planning from the University of the Free State, UNESCO, and UNICEF (United Nations International Children's Emergency Fund). The test was designed to measure the academic standard of grade 4 learners worldwide and in South Africa. The MLA project was designed to determine the strong and weak points of a school system as well as develop and monitor a school curriculum (Strauss, 1999). The project allowed for international comparison of the academic standard of grade 4 learners and determine how individual school systems compare with the universal and international standards. The results from the MLA test on home educated learners, therefore, allowed for the comparison of these learners' academic progress to school-going peers of the same grade level. The MLA test measured language proficiency, numerical literacy, and life orientation. The MLA test was completed by approximately 11 000 school learners in South Africa. The study by Bester (2002) utilised the MLA test for assessing the academic performance of 145-158 home educated learners participating at the Breinlein online home education centre. These learners utilise the same CAPS curriculum utilised in South African schools. The results for the three tests are presented as a percentage from 0-100%. For the basic literacy test, home educated learners obtained an average of 90.5% compared to the South African school average of 48.1%. On the basic numeracy test, home education learners obtained 82.4% compared to 30% for school learners and lastly, for Life Orientation home education learners obtained 81.7% average compared to 47.1% for school learners (Bester, 2002). These results are limited in various ways including a limited sample of home education learners that utilise the CAPS curriculum, the data not representing the larger home education community, voluntary participation in the tests, and no correction for socio-economic background. The results, however, are very clear concerning the grade 4 MLA tests that home education learners academically perform much better than school-going peers.

3.5 South African Home Education Characteristics

Research by De Waal (2000) defines the South African Home Education setting and makes some conclusions about home education families. De Waal (2000) indicates that South African home education families are diverse, with the mother as the principal home educator. Furthermore, these mothers usually do not come from a formal teaching

background (De Waal, 2000). The parents are mostly older than 30 years with a matric or matric plus a tertiary qualification. De Waal (2000) also found that at the beginning of this century, home education families in South Africa were predominantly white, with an equal number of English and Afrikaans-speaking families. Other findings include that most families were not registered with the Department of Education and were spread all over South Africa; not concentrated in a specific province (De Waal, 2000). The families did not belong to a single religious view. The results with regards to academic activities showed that formal lessons and self-study were employed in learning and that home education families mostly made use of formal curriculum programmes. In most cases, home educated children participated in extra-curricular activities of which some participated in a school setting (De Waal, 2000). Parents were shown to be dedicated and spent a lot of time educating their children.

The Study by Bester (2002) investigated academic, social, and other characteristics of home education families in South Africa. The results showed that in most cases home education families intentionally seek opportunities for social interaction and that the home education learners indicated sufficient socialising opportunities (Bester, 2002). Parents reported that learners could comfortably socialise horizontally and vertically; with both younger and older people (Bester, 2002). Home educated learners were often involved in team sports, which they considered an important part of social interaction. The learners furthermore indicated that they did not feel socially isolated. Home education families implied that learners were less exposed to difficult and negative peer situations but that parents did not feel the children would be less prepared in dealing with negative peer and social situations later in life (Bester, 2002). The families indicated that children accepted a high degree of responsibility and autonomy in their learning and develop intrinsic motivation because of autonomy in their education.

A survey by the Pestalozzi Trust in 2021 (Van Oostrum, 2021), completed by almost 3 000 home education family respondents, showed that 89% of home education families do not make use of the National School CAPS curriculum. Another question revealed that 68% of respondents do not make use of age or grade-based resources as used by the school curriculum.

Dlamini, Maharaj and Dunn (2021) investigated home education in South Africa on a small sample group which revealed that parents wanted to provide affordable quality education that will optimally develop their children and will provide valuable, conducive and efficient education. Parents expressed the desire to choose relevant and quality resources and material, especially in obtaining basic language-, numeracy and life skills.

Being able to individualise their learning and implement freedom and flexibility was expressed as major advantages of the home education environment. Other benefits included caring and focusing on relationships. According to their study home education does involve a great responsibility and requires dedication and commitment which can become burdensome. Parents express feeling pressure to be innovative and progressive in their way of teaching and presenting content. The study revealed a need for more support especially for parents fulfilling the role of teacher and parent. Their study placed a degree of focus on the influence of COVID-19 on schooling and how parents can be better equipped and prepared for such an event in future.

Thus, in summary, home education is mostly performed by the mother who is in most cases not a qualified teacher. The data available show a diverse community regarding language, geographical location, and religious views. Home education learners are exposed to cultural, sports and other extra-curricular activities and report socialising as an important part of home education. The home education approach in South Africa does not follow a strict curriculum or pedagogy but seems to focus on developing autonomy in learning. The next section will describe the South African education policy and framework.

3.6 Current South African Policy and Framework

The following section will give an overview of the Current South African policy and framework that guide the legal perspectives on home education in South Africa. South African Education is monitored and administered by the National Department of Basic Education (DBE) under the guidance of the Minister of Education. The Education policy is subordinate to the Constitution of South Africa and functions within the parameters of the Constitution (De Waal & Theron, 2003). The South African Schools Act (No 84 of 1996) and the Education Policy Act (27 of 1996) guides the Education philosophy of the National Department of Basic Education. On 16 November 2018, the Government published A Policy on Home Education in Government Gazette No 42037 to provide guidelines on the monitoring of home education (Department of Basic Education, 2018).

The Constitution of South Africa includes the Bill of Rights that determines the rights of all people in the country. The Bill of Rights includes two specific statements regarding the education of the child. The first refers to the best interests of the child being of utmost importance in all matters and the second confirms that every person has the right to a basic education. The South African Schools Act states that parents must cause learners

to attend a school from the year they turn 7 (grade 1) until the age of 15 or grade 9. The schools act also stipulates that parents (or any other person responsible) who do not comply with this requirement, are guilty of an offence and can be fined, convicted, or imprisoned for up to six months. The policy on home education issued in 2018 was developed with the aim of ensuring the rights of all learners to education and to protect these rights (Department of Education, 2018; Mutlokwa, H. 2022). The policy also confirms the right of parents to choose the type of education for their children. The policy mandates registration of learners for home education (per phase) and provides the framework for the application, maintaining that the HOD (Head of the Provincial Department) may approve home education if it is shown to be in the best interest of the child and will be provided at least at the same standard to the curriculum provided in schools. The policy furthermore stipulates that home education must primarily take place at the child's home and provides conditions for the parent such as guiding, assisting, and managing the child's education, keeping a record of attendance, and a timetable and complying with any 'reasonable conditions set by the HOD'. The policy also confirms that the parent may choose the curriculum they want to follow. The policy then also confirms the role of the Provincial Education Department in registration of the learner, protecting personal information, maintaining data on the learner, and monitoring of the home education provided. Another condition set by the policy requires the parent to submit proof of meeting the minimum requirements for the three phases: Foundation Phase (Grades 1-3), Intermediate Phase (Grades 4-6), or Senior Phase (Grades 7-9).

More recently the Government published a bill on education called the Bela (Basic Education Law Amendment) Bill (Bela Bill, 2022), which was passed on 26 October 2023. The bill affects various aspects of the Schools Act and will not only have a huge implication on how schools operate but also vastly affect the current home education sphere in South Africa.

One proposed change that has created significant attention is the change to the length of imprisonment for not complying with the compulsory schooling of learners, which has increased from six months to six years (Bela Bill, 2022). The implication is that learners who do not attend school is now regarded as a much more serious offense for parents and educators. The bill also adjusts the conditions for registration approval by the HOD subject to i) home education being in the best interest of the child ii) the parent accepting full responsibility for the education and knowing what home education entails, iii) that the home education being provided is at the suitable level for the age, grade level and ability of the child and also not inferior to the school national curriculum. This statement could

indicate that parents would have to cover the content included in the CAPS curriculum each year. As many home education families choose other pedagogical approaches (see Chapter 4) this would place a stringent constraint on the freedom home education families currently have in choosing their own approach and curriculum.

The bill also states that the parent accepts responsibility to supply the learner with the necessary educational resources, to monitor the learner's academic progress, and lastly to subject learners to 'external assessment by a competent assessor' annually (Bela Bill, 2022). The assessments will have to be submitted to the HOD in addition to academic records, at the end of each phase. Because many families choose other pedagogical approaches and other curricula, these learners could not be assessed based on the content covered by the CAPS curriculum and these compulsory annual assessments create many unanswered questions, not to mention the additional cost of annual assessment incurred on the home education family. In a survey by the Pestalozzi Trust (Van Oostrum, 2021), 90% of families indicated that the cost of annual assessments impacted their home education. Most home education families have already made significant adjustments in enabling a parent to be available to home education and often these families are classified as single-income families.

The Bela Bill has received a great deal of opposition from both schools and the home education community. The Pestalozzi Trust has engaged with the government on various levels to discuss the Bela Bill and the rejection of compulsory registration by the home education community (Pestalozzi Trust, 2022). Burger (2022) raises the concerns of many home education parents in an article in the Daily Maverick, questioning why parents need to ask permission to home educate when the Department of Education has failed to place more than 500 000 learners in schools in South Africa due to school shortages in Gauteng, KwaZulu Natal and the Western Cape. On top of that, the lack of proper infrastructure, learning material, water and sanitation, and qualified teachers remain real problems in the education sphere in South Africa (Burger, 2022). Parents also question the increase in power that the bill establishes to the Minister in making changes to the regulation and registration of home education without consultation and oversight. Burger (2022) indicates that a high percentage of the home education community in South Africa continues to oppose various sections of the Bela Bill, including the registration process. (Burger, 2022).

The proposed Bela Bill continues to be a concern for the home education community in South Africa. The future of home education in South Africa remains cloudy with a multitude of uncertainty looming.

3.7 Conclusion

Home education in South Africa like so many international narratives was the earliest form of social and cultural education which included mentoring of the child, with a focus on the individual and preparing them for adult life. The South African education sphere historically was a complex and painfully segregated system until the 20th Century, with the formation of schools initially established by missionaries and churches. The missionary schools later in the 19th century became a formal governmental framework. Home education became almost extinct during these times with very limited and restricted applications, under oversight, and only for younger children. With the changes in the political scene in 1996 home education was legalised and marked the beginning of a new home education era in the South African context. Although it began small, steady growth in home education numbers has been observed with an estimated 300,000 home educated learners in 2021. Although still a small number in comparison to the school-aged education population, the home education community in South Africa has become a significant voice and a socially integrated ecology. Families in South Africa choose to home education for reasons very similar to other countries, which include concerns with the school environment, better academic instruction, religious or moral motivation, special needs, physical, social or mental health, and a different pedagogical approach to education. And although not the motivation for home education, parents have confirmed a closer family bonding and engagement as a result of home education. These worthy causes have resulted in the considerable growth home education has seen and continues to observe in the South African education sphere.

Home education research and data remain limited with very little recent quantitative data for any aspects of home education. Understanding the academic performance of home educated learners in the South African context is an almost impossible task due to the extreme limitation of empirical evidence in the current body of literature. The little data available for the early 21st century showed promising and impressive academic performance for home educated learners but measured academic indicators at a young age with no data for school-leaver academic performance. This gap in the home education sector is one that will hopefully be addressed in some way in the next decade, motivated by the growth in numbers and renewed interest in this educational model.

The home education community in South Africa has experienced freedom to a large extent in registration, monitoring, and the instructional approach followed in home education. This freedom might be in jeopardy with legislative changes recently

implemented. The future of home education in South Africa paints a blurred and uncertain picture with a legion of questions on how home education will function in the South African context.

The next section will focus on the Strategies, Curriculums and Pedagogical home education approaches that exist worldwide as well as the South African context.

4 Home Education Philosophies, Pedagogical Approaches and Curriculums

The previous two chapters provided, respectively, international and national perspectives on home education. These perspectives were important to contextualise this study both historically and theoretically. This chapter will continue to contextualise this study theoretically from a home education scholastic viewpoint. To this end, various philosophies, curriculums and or pedagogical perspectives will be presented regarding home education. These philosophies and or pedagogical perspectives are crucial because they will assist to position the contexts of this research study accurately, i.e., individualised home education in South Africa.

4.1 Introduction

Home education is diverse in its approaches, applications, and values, from a specific pedagogical approach to Instruction based, school at home to a Biblical or value-based education focus. It ranges from an instructional, structured school setting utilising a fixed curriculum, to a very unstructured non-formal approach. Furthermore, the normative all-in-one curriculum can be a book-based or online system, worked out for every day per subject. This vast variety of home education approaches can sometimes overwhelm parents who are just starting on their home education journey. This chapter will aim to illuminate and categorise the home education philosophies, approaches, curriculums and pedagogical foundations.

A principal filter that allows for the categorising of education approaches is a formal vs non-formal vs informal educational approach. The formal, non-formal and informal approaches are categorised in Figure 4-1 below.

Some home education families opt for the school at home approach and, therefore, follow a formal instruction, content-based and highly structured instructional approach to home education. For the many families who choose to opt for non-formal educational philosophies, the informal approaches are not exclusive and can be implemented simultaneously or in parallel. A specific approach can be implemented for a certain period and replaced by a different approach at a later stage for various reasons including developmental changes, child or mother's preference, changes in physical or mental health, or family stability. Often a non-formal approach will be executed in the early

education phase and replaced with a more formal and structured approach at a later developmental phase. These various approaches that home education families readily incorporate are discussed in more detail below.

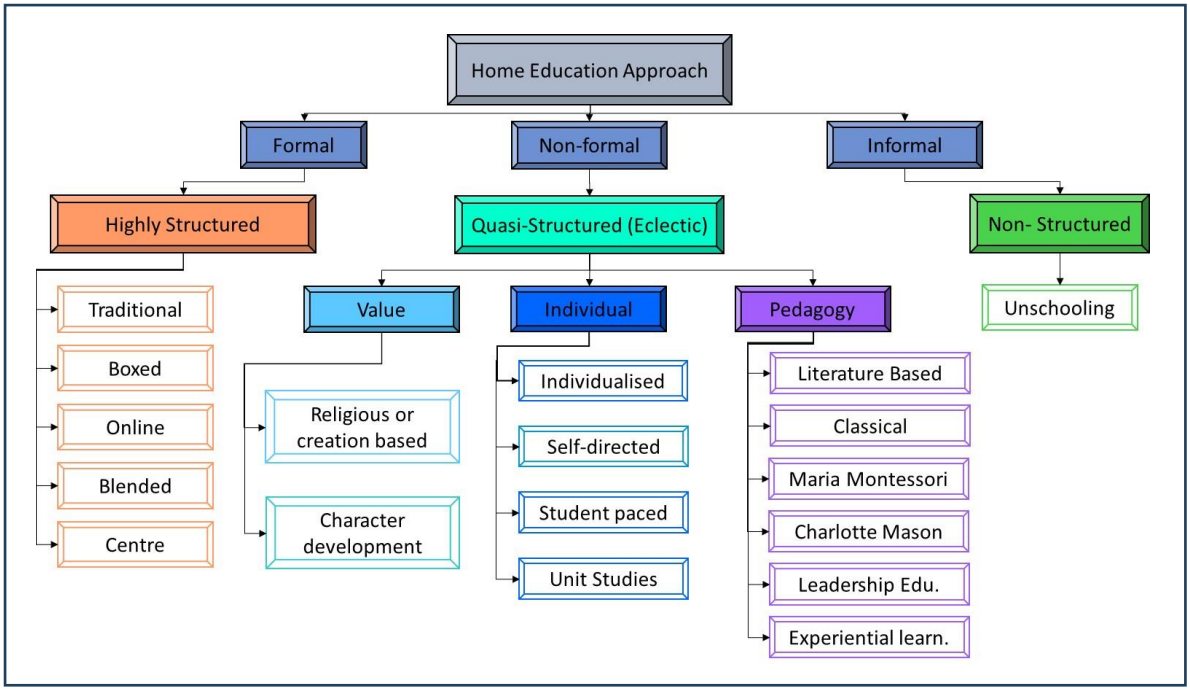


Figure 4-1 Various home education approaches based on the formal, non-formal and informal classification

4.2 Formal: Highly Structured

The highly structured educational approaches include the traditional approach, the boxed approach, an online approach, a blended learning environment or the home education at or through a home education centre or institute. In most of these cases an Instructional technique of learning is applied. Each of these highly structured formal options will be discussed briefly.

4.2.1 Traditional

Traditional home education implies an educational model that closely simulates the traditional school environment, utilising instruction and normative school textbooks and curriculum, assessments, teaching and lecturing, and a worked-out schedule (Time4Learning, n.d.). The school-at-home approach means all subjects and lesson plans correlate with the parallel school programme per year, age, grade, and subject. This option is usually preferred in cases where children are removed from school for social reasons, for example, bullying. The child will continue at the same pace as their local school without falling behind and will stay academically on par with school-going

peers and could re-enter a school at any time. This can be accomplished in coordination with a local school or through a supplier that provides the exact same curriculum, books, and assessment options each year by grade level. This option holds various advantages from familiarity for the parent and child, less fear of getting it wrong or falling behind, and keeping to a structure and content provided with easy independent assessment certifying the level of education (Time4Learning, n.d.).

4.2.2 Boxed

The home education boxed refers to an all-inclusive curriculum programme that provides all the material for a school year, including teacher and student manuals, readers, lesson plans, schedules, assignments, and instruction guidelines (Bookshark Homeschool curriculum, 2015). The complete boxed curriculum includes the conventional subject content for a specific age and grade level, with the advantage of worked-out schedules, assignments, and less preparation required from the home education parent. This type of curriculum often reduces the stress and worry associated with falling behind or not doing enough or not staying on par with the school system.

4.2.3 Online

Online home education refers to home education that is provided with online resources where classes and or content are developed and presented by knowledgeable teachers reducing the teaching and instruction burden on the parent (*What Is An Online Homeschool?*, 2020). Online home education often presents some aspects of freedom associated with home education in terms of the curriculum choice, subjects of choice, and the level (grade) at which the subject is followed. Online home education present various advantages, from freedom in when and where home education is conducted, flexibility in subjects, schedule, daily learning and continuing with school while travelling without any books or material. Online assessment is also possible providing external feedback and tracking of progress.

4.2.4 Blended

Blended learning involves the merging of traditional teaching and online learning (Bridgeway Academy, 2016). This hybrid approach to learning utilises the constantly expanding world of online resources providing many advantages to home educated learners. The approach allows flexibility in content, time of learning, more time to absorb material, and higher rates of success in grades. The blended environment combines

subjects and grades with other skills like problem-solving, research, and self-directed learning. The blended learning environment utilises both online resources and traditional teaching and, therefore, still requires real-time interaction with a teacher presenting material, lab work and interaction which can be in a virtual space. The blended learning approach also involves class interaction, discussion, and projects (Bridgeway Academy, 2016). According to Bridgeway Academy (2016), the blended learning environment encourages engaged learning utilising different learning styles whilst still providing freedom in content, time, and space of learning. Next, the home education centre option will be discussed.

4.2.5 Centre

A home education centre, or in the South African context also referred to as Cottage Schools, is an alternative home education option. According to Footprints (n.d.), learning centres or cottage schools are attractive to parents who are not able to home education their own children. This usually constitutes a small setup that uses the same curriculum as local schools or home education curriculum alternatives. In some cases, the flexibility of the home education environment is adapted due to the small number of learners. In the South-African context, the learning centre or cottage school options provide some issues with legality, accreditation and school leaving certificates offered. The formal home education approaches are concluded, and the discussion will now turn to non-formal home education alternatives.

4.3 Non-formal and Informal home education

Informal home education refers to a flexible learning environment. This approach usually does not use a fully worked-out or pre-packaged curriculum. The informal home education approach includes the quasi-structured approaches as well as the unstructured approaches. Various quasi-structured as well as informal home education approaches will be discussed.

4.3.1 Value Based Education

Value-based education refers to the priority position the family chooses to uphold. In this context, the values of religious or faith-based home education are one possibility supporting value-based home education. In this case, the learning material are chosen to uphold this value and all material align with faith-based home education. Another

value-based home education approach that exists is the character-based home education approach. The character as a value home education approach chooses to prioritise character training above other priorities and align the home education resources, curriculum, and material with this value.

4.3.1.1 Religious or Faith-Based Home Education

Faith-based home education or homeschooling with a religious focus is widespread in the homeschool community, offering many home education curriculums to assist with this home education approach, from full-boxed curriculums to subject-specific resources or unit studies. Christian-based curriculum options include Theocentric Christian Education (TCE, n.d.), Weaver (n.d.), The Good and the Beautiful (n.d.) and Love 2 Learn (n.d.). A large focus area within faith-based home education is the teaching of creation-based science or the young earth creationist model in opposition to evolution teaching (Cathy Duffy Reviews, n.d.). Creation-based science resources are also available with the Apologia (n.d.) and Science in the Beginning (n.d.) series being very popular resources for this application.

4.3.1.2 Character Based Home Education

Character home education is described by "*How to Homeschool*" (n.d.) as:

> *"Character education is an umbrella term loosely used to describe the teaching of children in a manner that will help them develop variously as moral, civic, good, mannered, behaved, non-bullying, healthy and successful human beings."*

Various resources are available for character-based home education targeted at a specific developmental level (How to Homeschool, n.d.). The Konos Character based home education curriculum (Konos, n.d.) is popular in the South African context and available from South African homeschool curriculum suppliers, although various other resources are available and utilised in the South African context. Character-based home education can be integrated with a different philosophical approach, for example, unit studies. The character training home education approach is also discussed in section 4.3.3 under Leadership Education as one of the important facets of the Leadership Education homeschool model. The individualised approaches to home education are discussed next.

4.3.2 Focus on the Individual

This approach focuses on the child as an individual and can accommodate various facets of the child, such as their academic ability, strengths, weaknesses, mental abilities, academic challenges, for example, ADHD or dyslexia, interests, passions, and physical and sporting ability. The individualised learning approach will be discussed in more detail.

4.3.2.1 Individualised Learning

The term individualised education is typically used in the disability or special needs education sphere of American learners. The term is, however, used in various contexts with various meanings. In a broader education sense, it is suggested that the term individualised education refers to a customised education plan specifically focused on the nature and interests of the child. This could also include learning preferences, personality profiles, strengths, and weaknesses. With this approach, the child gets to know themselves and typically know their own strengths and weaknesses. In many cases, strategies for managing weaknesses are identified and intentionally developed during their education journey. Steytler (2019) found that South African families who follow an eclectic approach often used an individualised style customising curriculum, resources and learning to the needs of the child and family. This approach can overlap with some of the other approaches discussed in Chapter 4.3. An advantage of individualised learning is that learning can progress at a slower or faster rate depending on the child. The eclectic home education approach will be discussed next.

4.3.2.2 Eclectic approach

The meaning of the word eclectic according to the Merriam-Webster dictionary (2022) is:

(1) composed of elements drawn from various sources
(2) selecting what appears to be best in various doctrines, methods, or styles

Eclectic home education refers to a custom design approach where various resources and approaches are combined to fit the child, their lifestyle and value system. Reasons why parents would choose this approach can include any of the following (1) using resources with a creation or Biblical viewpoint (2) custom designing the curriculum to fit a child's learning preferences or interests (3) allowing for different levels in different subjects (4) using an integrated approach to subjects (5) using unit studies to integrate

subjects (6) choosing subjects based on a child's interests (7) combining skills development with subjects and intellectual development (8) character training incorporated with subject/intellectual development (9) adapting to special needs, for example, dyslexia, etc. This method is highly individualised and can be customed based on the child's strengths, interests, weaknesses, and or learning styles (Time4Learning, n.d.). The next section will discuss the Maria Montessori learning philosophies and how these are incorporated by home education families.

4.3.2.3 Self-Directed approach

Self-directed learning is founded on the natural inquisitiveness of children. The passionate internal motivation for discovery and the joyful satisfaction in playful learning motivate especially home education families to consider this option. The self-directed learning approach is believed to be more adaptable in creating learners that think practically, creatively, and critically and especially more ready for the constantly changing 21st century. It is more focused on soft skills development and, therefore, focused on equipping learners with communication, collaboration, and innovation skills. They also tend to be purpose-seeking individuals with a strong value base that ground them in their beliefs. According to the Association for Self-Directed Learning, this educational approach has become more accepted and visible as an education alternative, not only to home education families but also to schools. Learning centres in America, such as the Sudbury Schools (n.d.), have adopted this radical alternative. Technological progress has created a huge foundation of resources, support, and collaboration opportunities that enable student-centred learning. One major advantage of this approach is the flexibility in pace and ability to move at a faster or slower pace depending on the student. Child-led education is used interchangeably with student-centred or student-directed home education.

4.3.2.4 Student Paced approach

Student-paced learning takes into consideration the abilities of the child and adjusts to a faster or slower pace as required. The focus is on mastery of content and, therefore, gifted children can then move at a faster rate as determined by a curriculum. These children can graduate at earlier ages and move on to higher education in advance of their peer groups. This approach also allows for subjects at different grade levels and children can, for example, advance faster in math but slower in languages or vice versa. The interests of the child in a specific field of study will allow them to move as fast or as

slow as they are able to. Similarly, if a child struggles in a specific subject or with academic work in general, a slower approach can be adopted to focus on mastery rather than rushing to complete content but missing crucial concepts or skills. Learning disabilities such as dyslexia or ADD or ADHD can be mitigated with a different pace or approach. Some research on this approach is discussed further.

Delayed Academics Approach

Research work by Stanford University recently found that sending children to school at the age of 7 rather than age 6 reduced inattention and hyperactivity by 73% (Dee & Sievertsen, 2018). The delayed academics approach follows various published and researched work and popular books in the home education community such as 'Better late than early' (Moore & Moore, 1975). This approach delays formal schoolwork until the age of around 12 and utilises the early childhood years to learn through everyday life and life experiences. This approach is similar to the philosophies of Charlotte Mason and Maria Montessori.

Gifted Children

The home education of gifted children has seen growth not only in numbers but also in research. Student-paced learning is often a good fit for gifted children, allowing progressive development in certain areas of their interest (Jolly et al., 2013). The approach is often combined with other philosophies and depends on the family, the child, and their unique circumstances (Jolly, Matthews, and Nester, 2013).

4.3.2.5 Unit Studies approach

The unit study approach does not use subjects but rather cross integration of multiple subjects using a mastery-based approach to learning while studying a specific topic or theme (Moore and Moore, 1998; Clarkson and Clarkson, 2001; Time4Learning, n.d.). A theme is studied from different angles, using various resources and a multi-sensory exploration of the subject. This approach improves how engaged a learner is with the content and applies a neuro-learning approach for brain-smart learning. The unit study approach works well when working with children of different ages and when families are designing their own curriculum and want to follow the passion and interests of a child or family. It is, therefore, possible to use the unit study approach together with the Eclectic approach or even the Montessori approach. The unit study approach can be executed in a very non-mal or more formal setting depending on how the family chooses to home education. Various home education curricula and resource suppliers can be utilised with

this approach including Sonlight (n.d.), Weaver (n.d.), and The Good and the Beautiful (n.d.). The next aspect of the quasi-structured home education approach focuses on the pedagogical approach families prioritise.

4.3.3 Pedagogy or Approach

Some families do not prioritise a value or the individual approach or merely a change in the pace of progression but prioritise a specific pedagogical approach to learning. Various approaches to home education have developed over the years, influenced by great voices in the education sphere. These approaches can be significantly different or have some areas of overlap or in some instances can be combined in parallel. Some of the most important approaches utilised in the home education sphere will be discussed in more detail.

4.3.3.1 Literature-Based

The literature-based educational philosophy focuses on using excellent books and stories as the foundation for learning. The learning experience is focused on joy and delight in reading. Narratives have been found to be effective in capturing learners' attention and improving retention and emotional intelligence. Foundational to comprehension, vocabulary development, and critical thinking, reading is an excellent mode of instruction in many disciplines of learning including science, math, language, and art. Great literature books can offer perspective, wisdom, and insight (Sonlight, n.d.), growing character, curiosity, thinking, and cognitive skills through a simple act that children enjoy and love. A literature-based education has been found to not only instil a love for reading but also a love for learning. Sonlight (n.d.) is one such curriculum supplier that developed a literature-based curriculum that teaches Bible, science, language, and history by reading historical, fiction, biographies, and other award-winning classical literature books. Learning, development, and modification take place through discussion and questions discussing context, characters, empathy, choices, and many other character-based life skills and principles. This type of approach has shown advantages in communication and critical thinking skills. These resources are then usually supplemented with math and other elective subjects to complete the curriculum (Sonlight, n.d.), although narrative-based math books are also available. Another important advantage of literature-based learning is the integration of content across disciplines with major advantages in effective learning principles. This method is often integrated with unit study approaches broadening the learning experience. Curriculum

suppliers that are based on the literature approach include Learning Language and Arts Through Literature (LLATL, n.d.) and Sonlight (n.d.). Please note that curriculum resources are in abundant supply and there will be vastly more options than listed here. The classical pedagogical approach to home education will be discussed next.

4.3.3.2 Classical

The classical home education approach utilises three stages of learning referred to as the trivium: (1) the grammar stage, (2) the logic stage, and (3) the rhetoric stage (Time4Learning, n.d.). Memorisation and gathering of knowledge are the goals in the grammar stage. During the next logic stage, the focus moves to the application of knowledge. The last rhetoric stage is when wisdom and judgement develop and allows for complex understanding and solving of problems. The curriculum will have a strong focus on core subjects: language, arts, mathematics, science, and history. Latin is introduced between ages 4-12 as a strong focus area. Community is an important part of classical conversations and requires co-op participation in arts, science, and other activities (Classical Conversations, n.d.). The approach concentrates on acquiring the following skills through a year-by-year worked-out curriculum: (1) Logic, (2) Grammar, (3) Research, (4) Reasoning, (5) Exposition, and (6) Debate.

4.3.3.3 Maria Montessori

The Italian physicist Maria Montessori was an inspirational voice in the history of education. The Montessori education philosophy is constructed on the innate creative and curious mind of a child, able to facilitate learning (Montessori, 1995, 2021; Ceciliani, 2021). Her proposed philosophy of childhood education especially the development of cognitive functions and motor skills are now firmly linked to neuroscience (Shivji, 2016; Roessingh & Bence, 2018). Body movement and the links with cognitive development, as well as emotional health and wellbeing; all grounded in Montessori's theory were confirmed by authors Atli, Korkmaz, Tastepe, & Koksal (2016); Akkerman (2014) and Lillard (2011). The success of individualised education dates back to the Montessori methods focused on engaged, higher-order and reflective thinking.

Maria Montessori left a legacy in the field of early education. Worldwide training in her methods of education still takes place and continues to impact early education. Some of the most important principles of her methods are discussed here.

Montessori noted that children initially might seem possessive in their nature but she, however, found that the behaviour was not about possession but the desire to spend more time with resource materials (Standing, 1998; Montessori, 1995, 2021). She taught three higher levels of thinking with the maturation of the intellect: (1) to know, (2) to love and (3) to serve. Her understanding of children taught independence, dignity and respect. During her studies she found that children loved being taught how to do things like blowing their nose, etiquette, manners, and other physical and character traits that result in respectability (Standing, 1998; Montessori, 1995, 2021). During experiments Maria Montessori found that writing often came before reading and that reading would sometimes only occur months after a child started to write. She found that both reading and writing were joyful and spontaneous discoveries and that the children were eager to read secret messages she left for them. During the early times, Maria Montessori was intent on only teaching children to write after age 6. But often children were intent on learning to write before 6 and she found this repeatedly. She also found that the child's natural exploring of writing was a gift to the child that they celebrated. It was not taught in any formal way but discovered by accident and the children viewed it as a magical discovery (Standing, 1998; Montessori, 1995, 2021). Her writings suggest that children are initially motivated by curiosity, but that it is later replaced by choice as an intrinsic motivator. Interestingly Montessori found that children could concentrate for hours when they were engaged and interested (Standing, 1998; Montessori, 1995, 2021). She found that this type of activity did not tire children, it took place spontaneously and that children frequently repeated activities. She explained some depths of the mind of a child and that repetitive actions already known to the child was part of the 'manner of working' of a child's brain. Maria wrote that children, when focused on an activity in deep concentration, would retreat into their own world, and were not affected by other children, sounds, or even music (Standing, 1998; Montessori, 1995, 2021). Montessori called this psychological isolation. They would be found in a faraway place of concentration, deep thinking, and learning. They would only retract once their curiosity was satisfied and then would be joyful and recharged after their learning experience. Intriguingly Maria Montessori found that children learn best when their learning experience, could be attached to reality. Their first learning experiences were through their senses and movement and only later by intellect and imagination (Standing, 1998; Montessori, 1995, 2021). These sensory and movement experiences become the base on which intellect assimilates knowledge. The philosophy of freedom that Maria Montessori found was that children would repeat activities according to a routine (Standing, 1998; Montessori, 1995, 2021). She suggested placing educational items in a cupboard within their reach, allowing them freedom to choose in what activities they wanted to engage in, and they

would do so in an orderly fashion. She furthermore found that it was in the best interest for the child to become as independent as possible in the early developmental phase. Montessori noticed that children liked to put things back in their places and liked to have order at an early age. She found that this was not the same for older children and that this was an inherent quality defined to the developmental phase, which she termed: the "law of sensitive periods in development" (Standing, 1998; Montessori, 1995, 2021). Another fascinating aspects of this philosophy was the discovery that reward and punishment were not fruitful in motivating children's behaviour. Instead having work to do, progressing in things they were interested in, and being allowed to participate in activities, was reward enough (Standing, 1998; Montessori, 1995, 2021). Removing children from activities was enough punishment. In her findings, Maria Montessori found that children who were content, fulfilled, and serene had no interests in sweets. She repeated the experiment many times but found that if the other principles were in place, there was order, children were allowed freedom, time to explore, and time to be quiet, she found that they could resist sweets for long time periods to many adults' astonishment (Standing, 1998; Montessori, 1995, 2021). She also found that children experienced joy and competence when their will can be subjected to obedience. She found that children go through degrees of obedience, with the last stage of willing docility is not blind obedience to a power struggle (Standing, 1998). Maria stated that this obedience was a product of a high degree of independence and initiative. This principle suggests that children spontaneously engage in work and meaningful activities, rather than playing with expensive toys (Standing, 1998; Montessori, 1995, 2021). Although working with 'disorderly' children, Montessori found after some time that the children possessed inherent self-discipline and that once they were used to this way of life, they went about their work without disturbing others, completed tasks, respected others, and put away materials orderly (Standing, 1998; Montessori, 1995, 2021). There was a new harmony, discipline, dignity, and an interest in learning. Montessori was astonished at the discipline in the classrooms and concluded that there was a natural rhythm to life. Discipline was inherent and linked to the very atoms that made up these tiny humans and the whole universe (Standing, 1998; Montessori, 1995, 2021). This discipline, which was born out of freedom, seemed to be a contradiction: the fact that they were not forced to do anything or forced to be quiet. She transcends the discovery back to Biblical values and concluded that freedom and discipline are intertwined and that a universal discipline was ruling the world and these children. Maria Montessori described the joy in such a group of normalised children like a perfume that light up little faces and causes happiness and pleasure in their demeanour (Standing, 1998; Montessori, 1995, 2021). The joy comes from satisfaction in the deep concentration and occurs with "acting in obedience

to the laws of our nature". Maria Montessori was sometimes unbelieving to some of these discoveries and fascinated herself, with what she saw and observed. She herself was changed by these children and her faith was uplifted and restored (Standing, 1998; Montessori, 1995, 2021). She remarked that these children were held by Christ, taught by Him, and that she would follow into heaven behind them. This part of her discovery established the child as a valuable being in God's kingdom and worthy of being treated with respect and honour (Standing, 1998). The work of Maria Montessori appreciates the child as a unique, valuable individual, with contributions to make to society. The child is respected and honoured and loved.

Maria Montessori furthermore wrote about child developmental phases (physically and mentally), how they develop, and how the Montessori system as a living system accompanies childhood.

Childhood is an Entity in Itself

Maria Montessori wrote the following piece (Standing,1998:81): "The child and the adult are two distinct parts of humanity which must work together and interpenetrate with reciprocal aid. Therefore, it is not only the adult who must help the child but also the child who must help the adult. Nay more! In the critical moment of history through which we are passing, the assistance of the child has become a paramount necessity for all men. Hitherto the evolution of human society has come about solely around the wish of the adult. Never with the wish of the child. Thus, the figure of the child has remained outside our minds as we have built upon the material form of society. And because of this, the progress of humanity may be compared to that of a man trying to advance on one leg instead of two." With this quote, Maria Montessori suggests that the child and the adult are two distinct and separate entities, both with their own identity and purpose. Both entities are in a reciprocal exchange with each other, stimulating growth and development in each other. Then Montessori suggests that the child has not been given its rightful place (Standing, 1998; Montessori, 1995, 2021). The entity of childhood has been neglected, overlooked, and made invincible. And society has paid a price for overlooking this fundamental and important aspect of ourselves. The innovation, authenticity, passion, and love of learning natural to a child have been neglected. Instead, the entity of childhood has been limited to the view of the adult and diminished as meaningless because of the adults' view of importance. She finally tells us how the child can contribute to the construction of Society? Her answer: By being allowed to bring their 'work'. But I suggest it is not only by being allowed to bring their 'work' but by giving a child's work its rightful place, by giving meaning to a child's work

once again, and by being open to the reciprocal process of learning and growing from a child's view and perspective. The vulnerable and authentic child should be protected, safe, and valued for childhood to carry the adults as its predecessor. Their unique contribution to innovation and creativity should be embraced and heard and no longer silenced by the adult's perception of importance.

This piece by Maria Montessori is the definition of Individualised education and is central to this study. Many home education families worldwide, adopt practices and principles from Maria Montessori and her philosophy is a well-known and loved pedagogy in the home education sphere.

4.3.3.4 Charlotte Mason

Charlotte Mason was a 19th Century British Educator and pioneer who influenced the British primary school setting indefinitely (Andreola, 1998). She founded parent-controlled schools known as the Parents' National Education Union (PNEU). Her philosophy continues to influence school and home education settings still today. She viewed the main responsibility of education as the bringing up of the young child in living a life as intended by God. She believed in providing opportunities for children in the following areas: (1) someone or something to love, (2) something to do, and (3) something to think about (Andreola, 1998). She encouraged labours of love towards people and animals and learning to serve. She wanted children to have something worthwhile to do, instead of idle passing of time and was an advocate for outdoor exploration (Cooper, 2023).

These would include making or building things, being creative, and working with their hands. Something to think about first required listening and observing whether from a book or nature. She viewed thinking as a necessary skill in direct opposition to keeping busy (Andreola, 1998). She viewed living books as one of the greatest sources of joy and knowledge and wonderful things to think about. She had a special and refreshing definition of education as shown by a quote from Andreola (1998:29).

> *"The idea that vivifies teaching … is that Education is a Science of Relations; by which phrase we mean that children come into the world with a natural appetite for and affinity with, all the material of knowledge; for interest in the heroic past and in the age of myths; for a desire to know about everything that moves and lives, about strange places and peoples; for a wish to handle material and to make; a desire to run and ride and row and do whatever the law*

of gravitation permits. Therefore… we endeavour that he shall have relations of pleasure and intimacy established with as many as possible of the interests proper to him; not learning a slight or incomplete smattering about this or that subject; but plunging into vital knowledge, with a great field before him which in all his life he will not be able to explore. In this conception, we get that touch of emotion which vivifies knowledge for it is probable that we feel only as we are brought into our proper vital relations."

Charlotte Mason talked about 'masterly inactivity' as well as direct teaching (Andreola, 1998). Independent exploration, reflection, and rumination were done independently in the masterly inactivity timed spaces. These times were balanced with structured learning with direct teacher interaction. This balance is accomplished by developing good habits of self-education. **She believed that a child is not built from outside but from within and that idea generation is one astonishingly creative skill that children inherently possess.** And that regular contact with living books, nature, and beauty will continuously maintain their thinking and idea generation (Andreola, 1998). Her teaching of education as a method, rather than a system, focuses on the **process** of learning and acquiring knowledge rather than the end goal of tests or measurements (Cooper, 2023). Interestingly her method attributes about one-third of education to discipline and more specifically to good habits. She commented that a child should enter adult life with at least of these good habits or as she called it 'minor moralities' (Andreola, 1998). Some of the habits Mason referred to were: (1) attention, (2) obedience, (3) manners, (4) truthfulness, (5) thoroughness, (6) punctuality, (7) selflessness, (8) doing our best, (9) prayer, (10) gratitude, (11) courteous, (12) considerate, (13) helpful, and (14) friendly. These character traits will become habitual and part of their behaviour. Training a child in virtue will keep their moral compass on target and is habit training that is both essential and our responsibility. She also commented that for parents and teachers to live a life of example is crucial in virtue and habit training. Like Montessori's view, Charlotte Mason viewed the child as a person with enormous human potential which could be shaped for either good or bad (Andreola, 1998; Cooper, 2023). As a Christian writer, her teachings pointed towards obedience to Christ and a lot of her teachings centred on spiritual matters. She focused on training the mind in intellectual matters but also moral and spiritual character. Charlotte demanded the use of creative, inspiring, real, and living books written by a single passionate author that transcend enthusiasm to the reader (Andreola, 1998). These included fictional and non-fictional books which allowed children to gather facts and information from good and wholesome sources. Literary works were

considered fundamental as they include emotion, are full of ideas, and are excellent sources for instruction.

Mason encouraged the narrative retelling of books or visits or any learning experience (Andreola, 1998, Cooper 2023). This approach creates opportunities, not only to acquire knowledge but to reflect, make judgements and develop empathy. She noted that narration required all mental faculties and, therefore, developed thinking, vocabulary, and describing thoughts and events in their own version. Her did not include homework to children under 13 years of age (Andreola, 1998). The child learns and masters the content in contact time through narratives and reinforcing. Afternoon time was for play, reading, and quality time. Notably Charlotte Mason believed children to be motivated by admiration, love, and faith rather than rewards, grades, prizes, or candy (Andreola, 1998). A love and curiosity for learning was developed and lifelong learning was a consequence. A strong focus on attentive listening and narration of stories accomplished many of the acquired skills. Short lessons are key for focused concentration and encourage children to do their best. As children get older, they will develop the self-discipline to sit with longer lessons and spend more time on their subjects. Charlotte did not believe in many or long worked-out lessons but advocated for children to learn by themselves. Free afternoons were designed for physical activity and acquiring skills like handicrafts, chores, cooking, musical instruments, and gardening. Charlotte believed in creating a love for nature and, therefore, an advocate for time outdoors, observing plants, creatures, and animals, and the beauty of nature (Andreola,1998). Nature studies and nature notebooks were used to encourage learning about the wonders of nature but also to develop the enjoyment of nature. The Charlotte Mason approach presents children with a wide variety of cultures, teaching them an appreciation for arts, music, poetry, and history (Andreola, 1998). According to Charlotte, education was founded on good habits and that good discipline allowed a home education parent and the children enjoyment and pleasure. She argued that education was one-third the discipline of good habits (Andreola, 1998). Good habits will ensure smooth and easy days, less friction, and fruitful times. Charlotte discussed that the school or home atmosphere attributes to one-third of the education experience. According to her, the atmosphere is an instrument the educator utilises to encourage the ‘work of thinking’ in the learner (Andreola, 1998). The atmosphere must stimulate the physical, mental, spiritual, and emotional aspects of the child. The atmosphere will create ideas in the mind of a child through history, cultural experiences, narratives of heroes, the Bible, nature, and everything else. The home also creates the rhythm and routine as well as habits required to sustain a lifelong learning environment. The loving nature of a mother is fundamental to the atmosphere of

education. A Biblical home with loving parents creates the opportunity for learning about relationships, religion, communication, empathy, character, virtues, manners, conflict, housekeeping, and love.

4.3.3.5 Leadership Education

Leadership Education, also referred to as the Thomas Jefferson Education (tjed.org, n.d.) by Oliver and Rachel DeMille (De Mille & De Mille, 2013), is a Christian-based educational philosophy developed around the developmental phases of children combined with character training and an individualised approach. This educational philosophy, according to De Mille and De Mille (2013), train thinkers, leaders, entrepreneurs, inventors, etc. because the focus is on teaching individuals how to think. It upholds a focus on the family, the greater good of a community and society, liberty, and solving problems that civilization is facing. The book describes the content-based approach of traditional schooling as 'conveyor belt' education with the aim of educating the masses in basic literacy to obtain better jobs and relieve poverty. De Mille and De Mille (2013) define, discuss, and suggest superior Leadership Education for home education families. Leadership Education is based on a few principles. (1) Every child is born with a purpose and a mission. (2) Children are born with a unique set of talents, passions, and strengths that will allow them to fulfil this mission. (3) Children should be educated according to their developmental phase and learn differently in each phase. The developmental phases as presented in the Leadership Education book (i) the Foundation Phase which includes the Core and Love of Learning phases, (ii) the Education Phase which includes the Scholar and Depth phases and (iii) the Application Phase which includes the Mission and the Impact phases. These phases are integrated but follow chronologically from the core phase to the Impact phase. According to Leadership Education, a healthy foundational phase is critical for the educational and application phases to build on a solid foundation. The developmental phases will be discussed in more detail.

Foundation Phase: Core and Love of Learning Phases

The foundation phase lasts from birth until ages eight or nine and according to De Mille and De Mille (2013), this phase remains part of a person. It is not something they will pass over or outgrow; it shapes the foundation of their being as roots to a tree. That is why this phase is so important and should develop well for it provides the basis for a good life. It is also the foundation for education and without a successful foundation phase, the education phase cannot develop competently. De Mille and De Mille (2013)

describes the education phase as an expansion, deepening, and transcendence of the foundation phase. The foundation phase consists of firstly the Core phase followed by the Love of Learning phase.

The Core phase teaches a child about good and bad, right, and wrong, true and false, spiritual- and family values, relationships, family identity, family routines and responsibilities, accountability, love, and play (De Mille & De Mille, 2013). According to the leadership model children in this phase should be trained and instructed gently and with love, giving positive affirmation and feedback. They are perceptive and learn by what they see, hear, and feel more than explicit teaching. During the Core phase they will learn life lessons to important questions like: 'What is home?', 'What is success?', 'What is family? 'Why am I here?'. If attention is focused on academic work and content and achievement instead of life lessons, faith, love, family, and responsibility they create a performance driven self-image, and their vulnerability is compromised. The life lessons learned during this phase are learned by experiencing daily life, reading, family time, music, and wholesome activities (De Mille & De Mille, 2013). Children in this phase will see self-discipline, pursuit of excellence, perseverance, and resilience by watching their parents. The parents will model these character values through work, chores, animals, gardens, schooling, and daily routine.

The Love of Learning phase follows between ages eight to twelve and during this time the learner is curious, excited, fascinated and loves learning new things. It is an exploratory phase of investigating and trying all sorts of things. They will also learn about themselves, what they like, what goals they have and what they are good at. These learners tend to be bold, take risks and usually without fear. This phase teaches learners about responsibility and accountability. This is also the phase where reading, writing, math, and other tools of learning develop. During this phase time should be scheduled daily for learning activities according to the interests of the child. Reading alone and as a family is very important during this time. Project work is also an important learning activity during the Love of Learning phase with an opportunity of learning various skills like communication, research, budgeting, planning, and execution. The Love of Learning phase will have routine, structure, and discipline but with the freedom of exploring curiously their interests and passions (De Mille & De Mille, 2013). The foundation phase is followed by the scholar education phase.

Education Phases: Scholar and Depth Phases

The Education phase represents the book learning phase with 70% of scholarly learning time supplemented with practical internships, lessons, clubs, and field experience (De Mille & De Mille, 2013). A high-quality scholar phase is fundamental in developing a foundation for the intellectual education of a child usually between the ages of twelve and seventeen. This phase of learning should be broad and include mathematics, history, architecture, literature, geography, philosophy, commerce, agriculture, art, poetry, and anything else wholesome the child may be interested in. Additional skills to develop during this phase include business planning, public speaking, skills of writing, technology, and finance. The phase is about acquiring knowledge and skills to accomplish their mission. Usually in this phase, the learner becomes more self-disciplined, can spend more time studying, and mastery and thirst for knowledge kicks in. These scholars can at the mature phase spend 6-12 hours daily in scholarly activities that interest them (De Mille & De Mille, 2013). The child should pursue knowledge from a place of inspiration. Peer interaction in this phase is an important part of their development. There should be frequent interaction with peers/mentors and parents with accountability. The learner will start to set their own goals, own schedules, and diligently work towards their own goals. The education scholar phase is followed by the Depth phase usually accomplished at College or Higher Education. This phase will focus on filling gaps in their skills and knowledge, going into a deeper study of focus areas, and lastly preparing for their mission. Mentors play an extremely important part in the education scholar and depth phase and should be chosen wisely. The Education phase is followed by the Application Mission and Impact phases.

The Application: Mission and Impact Phases

The Mission phase consists of the building of family and organisation and the Impact phase is defined by impacting society for a better tomorrow (De Mille & De Mille, 2013). During this phase, the child becomes an adult that edifies the community, serves, and loves. They own their obligation to their family, society, and community. They become mentors, statesmen, and problem solvers who communicate hope, exhibit virtue, and act with moral authority and wisdom. They impact the world with vision, leadership, love, and authority (De Mille & De Mille, 2013). Leadership Education does not require a specific career or vocation but obedience to the call of God and to fulfil this assignment. Leadership Education is an individualised education based on the identity of the child.

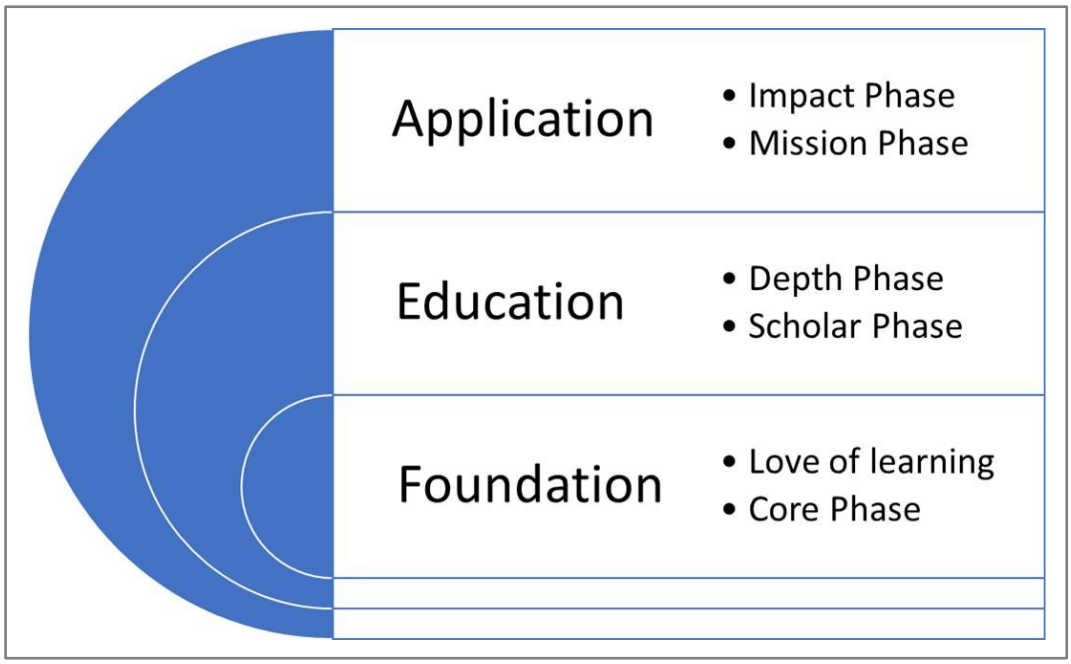


Figure 4-2 Learning phases as in Leadership Education: Phases of Learning (De Mille & De Mille, 2013)

The Keys to Great Teaching: The Leadership Education Keys

In addition to following the developmental phases, Leadership Education gives eight keys (principles) of great teaching. There exist similarities between these principles and some of the previous philosophies discussed. The combination of these principles in teaching forms reinforcing cycles that synergise with each other.

i) Classics not Textbooks

Leadership Education emphasises the use of great classical works that inspire instead of rote memorisation of traditional textbooks. Learning from great thinkers, scientists, philosophers, and artists in a narrative or living book will inspire a love for learning.

ii) Mentors, not Professors

The Leadership Education approach prefers mentors that will ignite passion and transfer a love for their field. A mentor will engage with the student and understand their goals, strengths, weaknesses, and purpose. Collaboration with a mentor will result in a plan for reaching goals and intentional development of the learner to enable them to reach their goals and accomplish their mission (De Mille & De Mille, 2013).

iii) Inspire, not Require

Traditional content-based education requires learners to know certain content and learners are assessed based on a certain pre-defined outcome. Leadership Education is in contrast with this approach by inspiring students to enthusiastically and willingly do the work to reach their own goals. This approach focuses on igniting curiosity and passion.

iv) Structure Time, not Content

Discipline and scheduling are ways to consistently work towards goals. The traditional approach can enslave families to a task list, outcomes, and assessments. Leadership Education, however, does not rigidly schedule tasks, times, and routines. The approach suggests scheduling time for learning but leaving it flexible for exploration and self-directed learning. The learner is allowed to follow their interests and passions and take responsibility for their own education including scheduling. It assumes that learners want to be successful, do not want to fail, and desire to work towards and achieve worthy goals.

v) Quality, not Conformity

Conformity refers to the pull on the mother, parents, and family to conform to the societal education norm, often out of fear. It takes deliberate, focused intent to stay on the Leadership Education track. In the Leadership Education philosophy, the mentor will inspire quality and also expect and nurture excellence and quality in all work.

vi) Simplicity, not Conformity

The traditional, structured, and content-based curriculum forces the parent and learner to be reliant on the curriculum, books, and ‘experts’. This is the conformity discussed earlier that requires rote memorisation and obtaining of knowledge and according to De Mille and De Mille (2013) is the training of ‘followers’. The goal of Leadership Education is independent thinking, creativity, skills development, and problem-solving. By studying great thinkers, leaders, and mentors the learner is transformed in their thinking and inspired to also be great.

vii) You, not Them

With the focus on self-education, learners need to be inspired by parents who also invest in their own education, training, and learning. When the parent grows in their own

education the children are inspired and follow the example. Learners tend to be curious and intrigued by the parents learning and are likely to join in the adventure.

viii) Secure

Being secure in your approach and the Leadership Education philosophy is as important as the teaching itself. Knowing why you are choosing this type of education philosophy is crucial to trusting this educational process. Continued reading on the topic, philosophies, and development of children can reduce stress and bring more security in Leadership Education.

Figure 4-3 Education as presented by Leadership Education: Phases of Learning (De Mille & De Mille (2013)

4.3.3.6 Experiential Learning

The term experiential learning reflects a philosophy where children learn by doing in contrast to working with content in the traditional book form. Learning by experience includes experiments, practical work, projects, nature studies, fieldwork, and internships. According to the Center for Teaching and Learning at Boston University (2022), the experiential learning approach can promote various aspects of academic and intellectual development, as well as improve learning, career preparation, and civic engagement.

Experiential learning requires the freedom to take initiative in learning activities, explore, make decisions, and take responsibility for outcomes. Learning occurs from both successful and failed attempts, from designing and redesigning, and refining activities based on previous results. Learning by this technique requires critical thinking, problem-solving, reflection, interpreting, analysing, and synthesis (Association for Experienced Learning, 2022). Students should be encouraged to do research to improve their experiential learning. This form of learning will engage learners physically, intellectually, emotionally, and creatively with the content, themselves, and others (Centre for Teaching and Learning, Boston University, 2022). Experiential learning also integrates cross-discipline problem-solving with learning extending beyond a single subject or field of study. David Kolb defined the experiential learning theory in 1971 after drawing inspiration from John Dewey and Jean Piaget (Piaget, 1952; Cherry, 2022). The experiential learning theory published in 1984 defined four cycles: concrete learning, reflective observation, abstract conceptualisation, and active experimentation (Kolb, 1984). This cycle of learning (Figure 4-4) has been employed in tertiary education, workplace, and project management environments worldwide and is acknowledged for its effectiveness in engaged and improved learning. Home education parents employ this learning approach very effectively in various stages of child development for increased results in problem-solving and critical thinking.

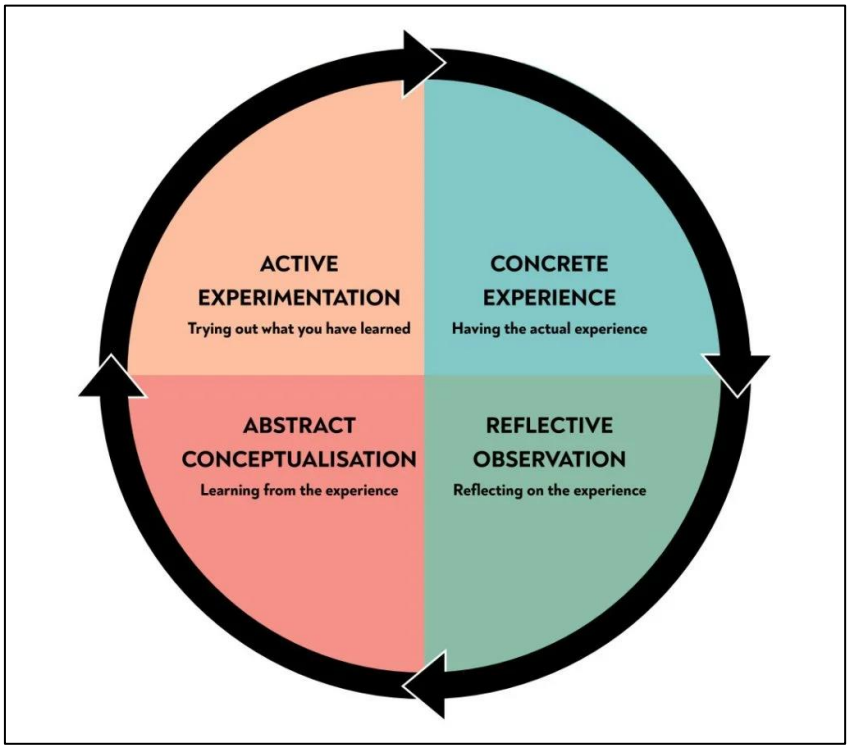


Figure 4-4 Experiential learning cycle (Kolb 1984)

The literature review will now discuss the influence of John Holt in the development of home education pedagogies.

4.3.3.7 John Holt's Philosophy

The influence of John Holt (1923-1958) on the historical development of home education was discussed in section 2.1. The contribution of John Holt, however, to a large degree influenced the progress of home education philosophies and, therefore, interweave with various other pedagogies and home education approaches. The inimitable insights of Holt will be reviewed briefly in this section.

His first book "How Children Fail" (Holt, 1964) petitioned for a shift from content and subject-focused education to a focus on the 'subject itself' and what is happening inside the child. Holt's theory, consistent with Feuerstein and the mediated learning pedagogue, suggests that an intentional mediation focused on facilitating cognitive development is the most effective strategy (Feuerstein & Feuerstein, 1991; Feuerstein, Feuerstein, Falik, and Rand, 2006, Feuerstein, Rand, and Rynders, 1988; Feuerstein & Falik, 2010). Combined with the theories of Tolstoy, DeWey, Vygotsky (Louw, 1990, 1992) and other great philosophical educators, a coherence among these great influencers concentrate on the child as the individual, sacred, and valued object of education. Rousseau (2015) establishes that education relying on the liberty to discover and satisfy desire and curiosity is the key to independent, self-driven learning. Rosseau (2015) provides the foundation for nature, sensory, and experience-induced education as agents of growing independent, self-reliant, sensitive, and thoughtful adults. He suggests that education opposing creative exploration becomes an obstacle to 'self-realisation'.

Any reform in education would need to heed to voices of these historical giants and transform the goals of education towards an individualised approach where natural, curious, and joyful learning is celebrated as advocated by Holt. His argument for engaged and inspired true learning by natural curiosity, exploration, and autonomy, directly opposes the teaching of content-based subjects forced on children. Holt suggests that the natural learning of children, if harnessed, provides the required motivation for growth and learning and that other forms of motivation used in schooling are contradictory to the inherent nature of humans. Holt (1964) suggests that the classroom should be redesigned so that children do not learn from textbooks in a classroom but that the world becomes the classroom. Holt's (1964) criticism of the public school system concentrates on the fixation on processing and remote learning of a fixed body of information (Cochran, 1999). He suggests that the public school system distrust

the natural learning by curiosity inherent to children and in return children distrust the schooling process because it is indifferent to their needs. This foundation of distrust allows rotating back to the title of the book where Holt suggests children fail in the school system due to **fear, boredom, and confusion**. Fear because above all else they are afraid of disappointing the hopes and expectations of the anxious adults around them, confusion because the systems are focused on improving scores of standardised tests, based on content that seem irrelevant and boredom because of the repetitive and mundane nature of content-based learning. Next Holt wrote the book “How Children Learn” (Holt, 1967) focused on the right environment for learning, learning styles and how children instinctively pursue learning (Cochran, 1999). Holt published various other books in the following years on the topics of education, school, and home education. One book significant in the home education community is ‘Escape from Childhood’ (Holt, 1974) The term unschooling was coined by John Holt in the 1970s (John Holt GWS, n.d.) and is discussed next.

4.3.3.8 Unschooling

The unschooling home education approach is an informal child-led approach that focuses on the curiosity, passion, and inquisitive nature of a child, learning about life by experience and discovery (Time4Learning, n.d.). Usually, no formal books or curriculum is used but resources are obtained following the passion and curiosity of the child. Self-directed learning and Unschooling seem similar in many ways with the main difference probably the lack of structure, rules, and planning for school time and curriculum on behalf of the Unschooling format.

4.3.4 Home Education Approaches in South Africa

The most prevalent educational approach followed in South African schools employ the formal instruction based approach utilising the school curriculum (CAPS) which is available in book or online formats. A South African study on home education families by Steytler (2019) included families that utilised the South African CAPS curriculum, although parents deemed the curriculum lacking in academic quality, content-heavy, and not able to develop problem-solving and critical thinking. Parents mostly continued with the school curriculum to allow children to return to school. The study by Steytler (2019) also included families that followed the non-formal eclectic approach.

Various non-formal home education approaches are currently present in the South African home education context and include Eclectic, Classical, Montessori, Charlotte Mason, unit studies, and many others.

Curricula that capture the culture, history, and values of South Africa have also evolved with options for home language instruction for Afrikaans families. The South African curricula include Footprints (n.d.) and Love 2 Learn (n.d.). Many families use American curricula/resources as part of their approach including Math-U-See (n.d.), Learning Language and Art Through Literature (LLATL), Sonlight, Apologia (n.d.), and the Good and the Beautiful (n.d.).

The study by Steytler (2019) found that the South African families not using the CAPS curriculum used variations of the South African Footprints curriculum as well as Sonlight (n.d.), Konos (n.d.), Apologia (n.d.), The Good and the Beautiful (n.d.), Math-U-See (n.d.) and an Afrikaans curriculum called 'Omvattend Afrikaans' (n.d.). One family used a Bible study programme in addition to the variations of the above. Steytler (2019) discussed the flexibility in curriculum usage and that families would often customise the curriculum for the child.

Many families interact in co-ops for support in their approach or in extra-curricular activities including arts, drama, sports, and other interests, for example, camping, sewing, and other skills-related activities. There are also various Facebook, Telegram, and WhatsApp groups for South African families based on curriculum, approach, social activities, or interests.

The theoretical discussion will continue with an overview of the data on how to prepare learners for higher education success.

4.3.5 Conclusion

This chapter reviewed pedagogical home education approaches applied in the home education setting. Figure 4-1 provides a constructed classification of the multiple alternatives available. Many of the approaches have similarities and subtle or enormous differences. The first classification distinguished between formal, non-formal and informal approaches. The formal approaches are all highly structured and include the traditional school curriculum structured according to grades and include assessments. The formal and structured approach can be a book-based, online or a blended approach.

It can lastly also be conducted at a learning centre or cottage school which includes some contact time.

The non-formal approach classified approaches on a quasi-structured approach where the informal approach hosts the Unschooling method of home education which evolved from the John Holt philosophy. The Quasi-structured approach is often implemented utilising one of three criteria: (1) A value-based approach (2) an Individualised approach or (3) a Pedagogical approach. The value-based approach is classified as a religious or faith-based semi-structured method often including a creation-based model. Character-based home education is another alternative to the value-based approach. Other value-based approaches may exist. The individualised approaches focus on the individual (individualised) or customising their own curriculum (eclectic). Other individual approaches focus on the learner's interests (self-directed, student-paced, or unit studies).

The pedagogy approach focuses on a holistic approach based on an academic pedagogy. These include the Literature-based, Classical, Montessori, Charlotte Mason, Leadership Education, and Experiential learning approaches. These approaches are not necessarily used exclusively, and combinations of these approaches are used in some cases.

These different approaches utilised in home education are important for this study, as it seeks to create a deeper understanding of how an individualised home educational approach could prepare learners for higher education in a developing country like South Africa.

The next chapter will focus on theoretical perspectives in relation to higher education success, with specific reference to Student Engagement.

5 Theoretical Perspectives on Preparing Learners for Higher Education

The purpose of this chapter is to provide theoretical perspectives on preparation for higher education student success, with specific reference to *Student Engagement*. This is crucial to contextualise this study theoretically. Thus, the discussion of this chapter will provide important theoretical lenses used in the thematic data analysis of the storied accounts of research participants (see Chapter 7).

As discussed previously higher education success is a concern in the South African context, as research shows the South African education system is failing to prepare learners effectively. One example is the statistics on the 2008 matriculation results, which revealed that only 36.9% of students who enrolled, finished tertiary education after four years at the University of Stellenbosch. The successful completion of higher education rose to a mere 58.1% after six years of study (Van Broekhuizen, Van der Berg & Hofmeyr, 2017). Furthermore, the South African education system has been severely criticised as the country ranks 126th out of 138 countries (World Economic Forum, 2016). What is a serious reason for concern is that this sub-optimal performance is a reality even though the national budget for education in South Africa is proportionally greater than that of the US and UK (Cohen, 2017). The question then remains, what should the education environment look like to better prepare learners for higher education in a developing country like South Africa? To address this question effectively, this chapter will focus on the current body of literature about student success, with specific reference to Student Engagement.

Defining student success

The current body of literature defines student success as a multi-faced construct. Kinzie and Kuh (2017:19), for example, define student success as "increasing the numbers of students from different backgrounds proportionate to their age cohort consistent with national goals for postsecondary attainment who participate in high-quality educational programs and practices culminating in high-quality credentials (e.g., certifications, certificates, degrees) and proficiencies that enable them to be economically self-sufficient and civically responsible post college." This definition underlines the complexity associated with *student success*. However, it is important to understand that this

complexity in defining student success is not a new phenomenon. In the same vein Kuh, Kinzie, Buckley, and Hayek (2006:12) defined student success in the following way almost two decades ago: “Student success is defined as academic achievement, engagement in educational purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, persistence, attainment of educational outcomes and post-college performance”. Thus, these definitions illustrate the complexity associated with defining the concept *student success*.

However, the complexity of defining student success can be simplified by defining it along two dimensions. Firstly, student success can be perceived as the benefits students gain from their respective postsecondary experiences, something that is often linked with the achievement of students’ personal goals. Kinzie and Kuh (2017:19), for example, states that "the phrase ‘student success” broadly refers to students reaping the promised benefits of the postsecondary experience.” In the same vein, Schuh (2023) states that “one dimension is that student success in college is defined as students’ achieving their goals upon embarking on their college career.” What is important about these definitions is that it broadens the conceptualisation of student success beyond the confinements of achieving a qualification. Although obtaining a post-secondary qualification is generally considered as an important objective, students might have broader developmental goals for their higher education. It is therefore crucial to define student success in ways that encompass a wide range of postsecondary benefits and student goals (Kinzie & Kuh, 2017; Menz, 2020). The second dimension along which student success can be defined, refers to a combination of a variety of actions and outcomes relating to both institutions and students. To this end, institutions have a responsibility to create an environment, programmes and support systems that would enable students to achieve desired outcomes (Schuh, 2023). Thus, these two dimensions along which student success are described underlines the fact that student success is understood as a multi-faceted construct in the current body of literature.

Historically student success is often defined by graduation, persistence and academic achievement (Tinto, 1986; Braxton 2000; Braxton, Milem, Sullivan, 2003). Tinto (1975, 1988, 1993) dominated earlier works on the sociological features of student success, describing the transition and integration in college life academically and socially. Higher levels of academic and social integration would increase commitment, persistence and graduation achievement (Bean, 1983). Tinto (1975, 1988, 1993) also commented on parent expectation and how graduation is influenced by parent academic achievement, cultural expectations of higher education and other theories and literature on first-

generation students. Other historical concepts on student success placed focus on student's efforts and the time and effort they spend on academic purposeful activities (Astin, 1977, 1993).

Examining the factors and conditions that relate to student attrition and persistence was included in the edited volume of Braxton (2000) but earlier publications refer to Bean (1983). The summary of dozens of studies on student persistence, satisfaction, attainment and outcomes was also published by the Education Commission for the States (1995). Perspectives during history broadened the student success perspective to include the institution and how it contributes to student success. Academic institutions and specifically the challenges, policies and practices affecting first year students, received attention by Upcraft, Gardner & Barefoot (2005). The Astin (1993) volume combined decades of research by the Cooperative Institutional Research Program (CIRP) on student and institutional characteristics that affect college desired outcomes.

The different facets associated with student success provides various perspectives on how student success is understood from the literature. Kinzie and Kuh (2017) summarises these perspectives in the following five points. Firstly, student success can refer to what institutions do to support students in attaining their postsecondary goals. As mentioned above, this could refer to creating campus environments, programmes, and support systems conducive to students' learning, development, and success (Strayhorn, 2015; Phillips & Horowitz, 2014; Pascarella, & Terenzini, 1991, 2005; Langley, Moen, Nolan, Nolan, Norman, & Provost, 1996). Secondly, student success can refer to the achievement levels of either individual students or specific cohorts of students (Center for Community College Student Engagement, 2013; Finley & McNair, 2013; Johnstone, 2015; Kuh, O'Donnell, & Reed, 2013). Thirdly, student success can also refer to metrics about access to affordable higher education, completion rates, and post-university employment rates (Bailey, Jaggars and Jenkins, 2015). This perspective of student success is often held by national departments of higher education and policy makers. Fourthly, from an institutional level, student success can also refer to retention[1] and completion rates, coupled with the attainment of subject knowledge and the developing of graduate attributes (Phillips & Horowitz, 2014). Institutions are also often focused on student engagement in educationally purposeful activities. Fifthly, certain perspectives on student success emphasise equity in higher education, and to this end

[1] The terms persistence and retention are often used interchangeably in literature. However, in line with Schuh (2023), in this study 'persistence' refers to what students do to advance success, and 'retention' to what institutions can do to assist students in achieving their desired outcomes.

focus on achievement gaps between non-traditional students and students who historically enjoyed greater access to higher education (Witham, Malcom-Piqueux, Dowd, & Bensimon, 2015).

All of the above perspectives on student success are sufficiently substantiated in the current body of literature and enjoy recognition by higher education scholars, practitioners and administrators. This study will however focus on student engagement as the theoretical point of departure for this research study (discussed further in section 5.1). The reader is referred to the various resources above for further information on Student Success at Higher Education at the pre-college, engagement and post-tertiary phases. The next section discusses Higher Education success with the lens towards the South African perspective.

South African Perspectives on Higher Education Success

Scott (2018) reviewed student success in the South African higher education sector, highlighting failure of the current education system to produce graduates ready for social and economic integration. This is despite policy and educational changes in attempts to intervene (Scott, 2018; Sabelo and Legg-Jack, 2022). Scott (2018) argues renewed focus and commitment on student success aligning goals with such outcomes. Scott (2018) recommends the need for a coherent and comprehensive strategy, applying design principles focused on student success.

Academic success at two South African universities were investigated by Thomas and Maree (2021) and reported on factors that affect higher education success, identifying: self-efficacy, parental engagement and support, motivation, peer relationships, time management, emotional wellbeing, language proficiency and socio-economic and social status. Sabelo and Legg-Jack (2022) revealed the following themes related to student success: enabling environment, inclusive education, students as partners, a multi-dimensional approach and assessment for sustainability.

The body of empirical research on higher education success in South Africa can be categorised according to three theoretical frameworks namely: (1) Student Engagement, (2) Human Capability & Human Potential, and (3) Social Realism (diagrammatically shown in Figure 5-1). The literature on higher education success can mostly be classified as one or a combination of these theoretical frameworks. The discussion in this chapter of the current body of literature on the topic of higher education success in South Africa will be reviewed and categorised according to these theoretical frameworks.

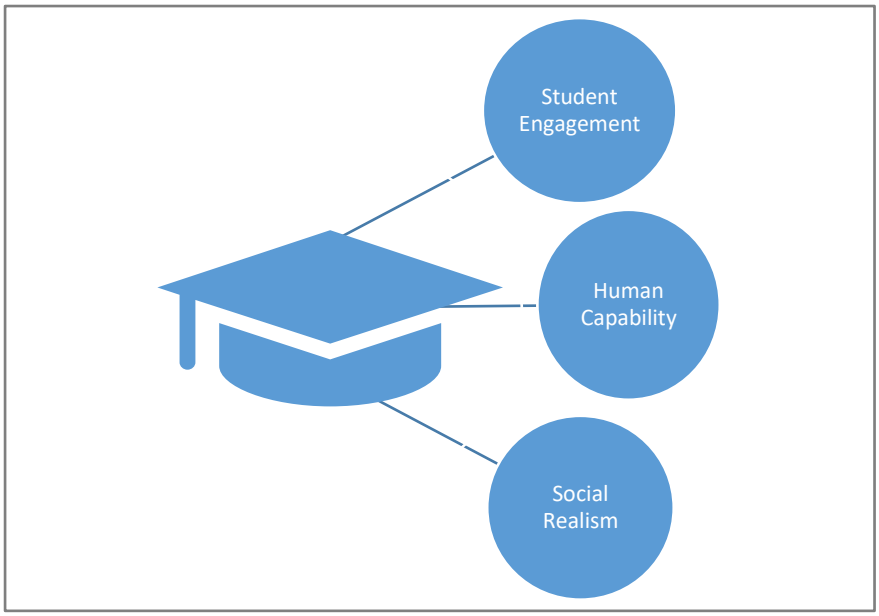


Figure 5-1 Three theoretical frameworks for higher education success in South Africa

The first theoretical framework proposed in the South African context, which will be discussed in more detail is Student Engagement.

(1) Student Engagement

Student engagement is generally understood from two conceptual points. On the one hand, student engagement is concerned with student participation in educationally meaningful activities that directly relate to learning experiences and student outcomes (Strydom et al., 2017:3-4). On the other hand, student engagement is concerned with the ways in which institutions allocate resources and provide access to opportunities that will facilitate developmentally meaningful activities. (Strydom et al., 2017:3-4). In the same vein, Kuh (2009:683) highlights these two aspects of student engagement in the following way: 'the time and effort students devote to activities that are empirically linked to desired outcomes at college and what institutions do to encourage students to participate in these activities." Thus, in short, student engagement encapsulates notions of both: *what students do* and *what institutions do* to establish engaged learning (Kuh, 2001; Kuh, Kinzie, Schuh, & Whitt, 2010). The role the institution plays in facilitating engaged learning is indicated by resource allocation, policies in play in the educational environment, the education programmes, and practices, how learning opportunities are presented and coordinated, and the role an institution plays in student motivation and engagement. Student Engagement is discussed further in section 5.1.1. A short description of Human Capabilities and Capital were provided.

(2) Human Capabilities and Capital

Le Grange (2011) distinguishes between human development, human capital, and human capability notions. Directed by the disparities between rich and poor and how these inequalities affect human development and education, Le Grange (2011) evaluates declining poverty levels, through economic growth. Human capital theory then suggests that economic growth is highly determined by investment in and the quality of education, viewing humans as sources of capital which can, through investment, become creators of economic growth. The theory of human capital is summarised by the words of Theodore Schultz (Schultz,1960:571):

"I propose to treat education as an investment in man (sic) and to treat its consequences as a form of capital. Since education becomes a part of the person receiving it, I shall refer to it as human capital [...] it is a form of capital if it renders a productive service of value to the economy."

The Human capital of a nation is defined as the sum of the valuable parts embodied in its people and includes the combined knowledge, strengths, talents, and skills of a nation (Olssen, Codd & O'Neill, 2004). Human capital is not only what an individual can earn or contribute economically but also what they can do to influence, uplift, and grow their community. This fact is confirmed by the definition of human development as provided by the United Nations Development Programme.

Human Development is defined by the United Nations Development Programme (UNDP, 2020) as developing the richness of human life in stark contrast to the development of the economy as an indirect agent of developing human life. The focus is on free and fair opportunities for all people independent of socio-economic class. The human capability theory was developed by the economist Amartya Sen (1985, 1999) and refers to the freedom and the opportunity to make choices in life to be and to become what an individual chooses. Education, as a social structure, entails developing human capability.

Le Grange (2011), however, discusses the existence of two types of human capabilities: the first refers to internal capabilities such as an individual's intellect, emotional abilities, and work ethic. The second refers to the freedom of opportunities made possible by the political, social, and economic climate. Le Grange (2011:1042) eloquently define the agreement or conflict between these two types of capabilities:

"The distinction is important because a society might provide opportunities for the development of personal capabilities but deny people the opportunity to function in accordance with those capabilities."

The question then is how the education and higher education sphere in South Africa provide freedom and opportunities for internal capability development, but furthermore provide freedom and opportunities to function in those acquired abilities. Differently stated, how can institutions of higher learning remove systemic barriers that hinder access to opportunities for all students, especially to enable them greater freedom and choice? To this end, the human capabilities framework emphasises the transfer of capabilities into actual functioning. Walker, McLean, Mathebula and Mukwambo (2022) provide insight into the human capability sphere of higher education from the South African perspective. The research by Walker et al. (2022) accentuates the challenging climate in South Africa regarding success in higher education. The authors found that learners required substantial material resources to firstly be able to enter higher education and secondly to be able to thrive during the higher education phase. The study shows that learners required not only financial support but also relational and educational support to succeed. Walker et al. (2022) emphasised the importance of higher education in preparing learners to successfully function in life after higher education. Lastly, the research by Walker et al. (2022) also showed that learners who work hard, are motivated and self-driven could succeed in higher education with the necessary financial, social, and educational support. The aspect of motivation, self-driven and hard work as internal characteristics of human potential will be discussed in more detail.

McInerney, Marsh and Craven (2008) advise that student engagement in the learning process is driven by the self-processes of self-concept, self-efficacy, resilience, self-regulation, and motivation, which is linked to human potential. These Internal human potential characteristics, therefore, create a bridge between human potential and student engagement. The term *self-efficacy* was defined by Psychologist Albert Bandura (1977) and refers to a person's belief in their ability to exercise control over their own life and future. The research suggests that these self-processes underpin human potential which in turn enables engagement and, therefore, these concepts are dynamic and interactive (McInerney, Marsh & Craven, 2008).

Self-efficacy is considered the foundation for motivation, resilience, and personal accomplishment (Lopez-Garrido, 2020; Kuh et al., 2006). Bean and Eaton (2000) found that self-efficacy was the property that determined if a student would persevere when faced with social and academic challenges or alternatively give up prematurely. Another

academic term that resembles self-efficacy refers to the term heutagogy. Like self-efficacy, heutagogy is also linked with student success in the literature body. Heutagogy is defined as the "study of self-determined learning" or the idea of 'learning to learn' as discussed by Hase and Kenyon (2000). Blaschke (2012:57) provides the link between heutagogy and human capability:

"In a heutagogical approach to teaching and learning, learners are highly autonomous and self-determined, and emphasis is placed on development of learner capacity and capability with the goal of producing learners who are well-prepared for the complexities of today's workplace."

Blaschke (2012) underlines that heutagogy empowers the learner as an 'agent in their own learning' and that the learner receives the freedom to take ownership and responsibility for their learning. The learning approach is flexible in content, therefore, is defined as an individualised approach that takes into consideration the individual (Blaschke, 2012). Heutagogy as defined by Blaschke (2012) links directly with the individualised approach investigated in this study and heutagogy would, therefore, likely be an outcome of this type of homeschooling approach. Self-directed learning as discussed by Blaschke (2012) relies on asking questions, experiential learning, problem-solving and reflection to make sense of experiences (Kenyon & Hase, 2001). Heutagogy as the functioning of human potential through the processes of higher-order thinking, problem-solving, and reflection then become agents of student engagement and higher education success.

The term lifelong learner is defined as the ongoing process of self-driven learning (Hase, 2009). Hase (2009) discusses various techniques of facilitating reflection and collaborative learning, tightly associating the heutagogical research with the student engagement data discussed in section 5.1. The heutagogical approach correlates well with the individualised home education approach and the data found in this study as discussed later in sections 8.2.7, 8.2.9 and 8.3.1. In more recent work, Blaschke (2021) reveals that lifelong learning requires autonomy, reflection, innovation, critical thinking, and entrepreneurship. In the same vein, Ehlers and Kellermann (2019) defined three dimensions of future skills of which one group, referred to as subject-related skills, included autonomy, autonomous learning, and self-efficacy as some of the top-rated skills required for success in the future workplace. A description of Social Realism as a theoretical base for higher education success was included.

(3) Social Realism

Success in higher education can be attributed, on the one side, to the student's own attributes and efforts. However, on the other side, the **social structures** of education that influence students to succeed are also crucial considerations (Boughey & McKenna, 2021). Similarly, the failures of learners are often attributed to social structures with no individual responsibility rendered. The individual attributes commonly associated with success include hard work, intelligence, being bright or talented, motivation, and aptitude i.e., Human capability. Boughey and McKenna (2021) discuss the dominant theory where students are decontextualised from cultural and social influences with successes and failures solely attributed to individual performance. But every student is formed by a social structure, culture, and history and shaped by experiences in their social construct. In addition, socio-economic, historical, and political social influences stack the depth of social impact shaping the individual's being. Boughey and McKenna (2021) confirm the correlation between a student's socio-economic background and higher education success confirming the influences of social structures towards educational and higher education success. Social structures that affect the higher education success of students in South Africa are social inequality, socio-economic status, language proficiency, medium of instruction, literacy practices, access, and cost of higher education. The data confirmed shortcomings in language in section 7.2.3.3 for many students. Some specific research outcomes related to social engagement are discussed briefly.

Although an internal locus of control is crucial to student success, as indicated above, there are external factors that influence student persistence negatively. For example, Kuh et al. (2006) state that finances, commuting, home and family problems, physical safety, and mental health are all factors that negatively impact student success. These agree with the data presented by Walker et al. (2022) demonstrating the interaction between human potential and social realism. External factors that improve student persistence were parental support, social and community support, finances, and someone that believes in them (a mentor or similar figure) (Kuh et al., 2006). All these factors indicate the importance of social and relational connection, support, and encouragement for individual success.

Many studies have shown a positive relationship between parental involvement and learner academic success (Durisic & Bunijevac, 2017; Van Voorhis, Maier, Epstein, Lloyd, 2013; Henderson & Mapp, 2002). Van Voorhis et al. (2013), for example, found a positive correlation in preschool and elementary grades for literacy and math skills, with family involvement. Studies also show that family involvement influences social-

emotional skills positively (Van Voorhis et al., 2013). Family learning activities such as reading and conversations result in vocabulary, listening, comprehension, and reading skills improvement (Mackenzie, 2015). The importance of social structure in preparing learners for higher education success was also found in this study and results are discussed in sections 8.1.4 and 8.2.8.

Another aspect of social realism found in the data refers to *belonging* – whether to a family, cultural or social group – belonging provides the support and motivation required for growth. Kuh et al. (2006) make an important link between feelings of belonging, value, and acceptance and how they contribute to a sense of an internal locus of control, connection, and self-efficacy. These outcomes again draw connections between student engagement and social realism in higher education success. The research by Strydom et al. (2017) provides insight into the importance of social connection once a learner reaches higher education. The question once again is what influence social and cultural engagement in earlier education phases have on higher education success.

Over (2016) shows that impactful belonging requires long-lasting relationships as opposed to fleeting relationships. Over (2016) discusses how humans seek positive interactions with the focus on *long-lasting relationships*. Young children seek to form and maintain bonds in social groups and a lack of belonging over an extended period has been shown harmful to their well-being. Over (2016) furthermore discusses enhanced achievement motivation in preschool children when they belong to a social group. Exclusion has been shown to increase depression, anxiety, and other mental health conditions. The work by Over (2016) discusses mediation motivation for belonging and whether social skills for creating social belonging can be taught and developed. Secondly, several empirical studies suggest that mediating social belonging is an important part of human development with crucial long-term consequences. Kuh and Love (2000) discuss how the soft skills of communication, negotiating foreign environments, and connecting with others – skills that are formed in the context of socially cohesive groups – are fundamental to long-term success. Thus, for belonging to have a positive impact on student success, it should be underpinned by long-term relations that could have a long-lasting positive effect on student development.

Social realism correlated with higher education success with regards to family educational aspirations. Early planning and parental expectation for higher education show a strong correlation with completion and success in post-secondary education (Perna & Titus, 2005; Swail, Cabrera, Lee, and Williams, 2005; Hamrick & Stage, 2004). Parental academic background also strongly influences learner academic success

(Pennings et al., 2019). The social structure of the family plays a key role in preparing for higher education, providing motivation and the desire to enter higher education, and developing the determination to finish and not give up. This aspect of social realism in navigating learners to higher education success was confirmed in this study and is discussed in section 7.2.3.3.

Family encouragement and support plays a fundamental role in higher education aspirations and completion. Kuh, Kinzie, Schuh, and Whitt (2005) and Kuh et al. (2006) discuss student success when high expectations with the necessary support are established. This strategy establishes accountability and student engagement and graduation rates improved in these conditions. These results correlate with findings by Dweck (2000). Her research found that households where parents had high expectations, with a high degree of support, were the most likely to develop children that would become successful adults. Setting high academic expectations have been shown to encourage students to adjust behaviour to meet expectation (Blose, 1999).

Summary

Student success originates with a focus on the student's individual contribution to their academic journey through time and effort and was defined as academic achievement and successful completion and graduation. This view was broadened and later included how an institution influences and contributes to higher education success. Various research efforts also described how pre-college conditions, i.e. academic preparation, study habits and background influence transition and higher education success. Student success more recently shifted towards post-secondary perspectives which include knowledge, skills and qualities that would result in successful employment and economic contribution to the individual and public economy. In review of student success, the literature confirms a complex construct that involves various role-players beyond the student's individual effort, time and motivation. At the tertiary institution interface, where the student and the institution meet, research defines student engagement from the perspectives of both parties as important contributors to the student success phenomenon.

This study aligns itself with the student engagement theoretical framework specifically investigating the storied accounts of individualised home education families, developing a deep understanding of how this education philosophy influences student engagement at earlier education phases. The discussion in this chapter of the current body of

literature on the topic of higher education success in South Africa will focus on Student Engagement as a theoretical framework for various reasons:

(i) Student Engagement is a well-established, resourced and vastly researched theoretical field with a rich historical development.
(ii) This allows for contextualised empirical data correlation and interpretation imposed to this field within higher education.
(iii) Focusing on a single theoretical framework provides the opportunity to present the narrative with a clear and definitive storyline that links facets of the past, present and future in a directed manner.

Neglecting human capability and Social Realism as theoretical frameworks in the South African higher education context, does not imply that these theoretical foundations are not important. Although they are prominent in the current body of literature, this study will focus on Student Engagement as one of the frameworks for Higher Education Success. More specifically the study focused on interpreting the data for individualised home education as an educational approach to preparing learners for higher education, through the theoretical lens of Student Engagement.

Student Engagement as a theoretical framework will be reviewed starting with the historical development of student engagement and the theoretical links with student success.

5.1 Student Engagement and Higher Education success

In a powerful statement Shulman (2005:38) indicated, “learning begins with student engagement”. The field of student engagement have gained momentum in providing quality feedback with regards to higher education success. An overview of the historical development of student engagement provides context and perspective in pursuit of describing its role in higher education success. This section will first contextualise Student Engagement historically, before an overview of the latest advancements in this theoretical field will be provided.

5.1.1 The historical context of Student Engagement

Early studies on student engagement denote to the educational psychologist Ralph Tyler dating back to the 1930’s when his first studies investigated the correlation between

secondary school curriculum requirements and successive higher education success (National Survey of Student Engagement, n.d.). Consequent studies concentrated on improving teaching practices and further work also investigated improving student retention rates at post-secondary institutions. The correlation between time spent on academic activities and student success followed from these early studies and became the trail breaking efforts on student engagement and student success (Merwin, 1969). Successive work by Tyler (Pace,1980) shed more light on student effort and the time students spent on engaging tasks. Notably Tyler's results showed that students who put quality effort into engaging and who took advantage of the opportunities and facilities available to them, accounted for higher student success rates (Pace, 1998). Particular focus by Tyler on both the process and the product of Higher Education put a new emphasis on the engaging processes at higher education institutions.

Additional to the work of Pace (1980) the work of Alexander Astin (Astin, 1977, 1984, 1999) contributed to the student engagement movement when it was directly correlated with what students gain from college with regards to their effort, or the energy spent on the academic experience. His work verified that academic consequences relate directly with the time and energy a student invest in educational processes. Interestingly the involvement includes academic, social, supplementary and or any other activities related to the topic or content. The notion that motivation contributes to the student engagement was already established but Astin (1984) argued that motivation related to a psychological state whereas involvement implied behaviour and therefore created distinguishing characteristics between motivation and involvement. Remarkably the early work on quality of effort, time on task and involvement became the student engagement framework of the time.

Robert Pace (Pace, 1998) who developed the College Student Experiences Questionnaire (CSEQ) significantly contributed to quantifying student effort and furthermore succeeded in creating personal awareness on the student's account of when, how, and how often they were engaged in meaningful activities, which would lead to higher success rates (Pace, 1998). Engaging tasks that led to higher student success rates included studying, interacting with peers, and applying knowledge to problems or concrete applications or situations. Spending more time on such activities improved student success.

While initial studies (Pace 1980) focused on the role that the higher education environment played in student success additionally to the role of student and academic factors, the broader influence of policies, programs, facilities, student and academic

subcultures as well as the influence of staff at universities and colleges later became important research topics (Astin, 1984). The essential role the institution plays in becoming more effective in building capacity for increased involvement and engagement was especially highlighted by Astin (1984).

Evidently during the 1960s to 1980s the understanding of student engagement evolved to the current view of a bifocal system where both what the institution does for engagement, as well as the effort and involvement of the student form a partnership working together for student success (Pace, 1969, 1980; Astin, 1970, 1977, 1984, 1999). Both entities play a vital role in obtaining student engagement and obtaining student success. If either of these entities fail in their role, student engagement is limited, and student success becomes hindered. Thriving institutions understand and implement the principles of these studies considering both the part of the institution and the student in successful engagement.

Notably the review on student engagement will not be complete without discussing the work of Tinto on integration (of social and academic contexts) as a significant student engagement tool (Tinto, 1975; 1993). Specifically, Tinto (1993) referred to two types of integration that influence student engagement: social integration and academic integration. With social integration the way in which the student perceives interactions with fellow students, lecturers, staff and interactions on an extracurricular level is examined. Particularly the degree to which the student comes to share the viewpoint and attitudes of the social structure, peers, and faculty (Pascarella & Terenzini, 1991). When referring to academic integration, the academic performance of a student is important, but more than that the academic norms of the institution and faculty standards also influence academic integration. The degree to which a student incorporates, adheres, and comply with institution rules and requirements will indicate the level of academic integration, which ultimately influence student engagement (Pascarella & Terenzini, 1991). The conceptual understanding of institutional support especially in creating an atmosphere of belonging and preventing isolation became noticeable during this time.

Work by Pascarella (1985) highlighted the effect of precollege traits and presented the idea that student background directly influences learning and cognitive development. Incorporating student background with quality of effort as the one foundation for student engagement with the institutional environment as the other, Pascarella (1985) developed the ‘general causal model’ establishing the basis for student engagement from both these perspectives. The combined work of Tinto (1975, 1993) and Pascarella (1985) comprehensively provided the foundation for student engagement including the part of

the environment adding onto the earlier student focused engagement practices. Importantly throughout decades of research (Feldman & Newcomb, 1969; Bowen, 1977; Pace, 1979; Pascarella and Terenzini, 1991, 2005) the undeniable conclusion is that students determine their own success when they deny being passive receivers but rather become involved, engaged, take responsibility, and actively participate and pursue their own education.

Another crucial contribution to the student engagement advancement was that of Chickering and Gamson (1987) who conglomerated 50 years of educational research by various authors ("Who's Who in Higher Education Research and Policy," including Alexander Astin, Howard Bowen, Patricia Cross, Kenneth Eble, Russell Edgerton, Jerry Gaff, C. Robert Pace, and Marvin Peterson) into *seven principles of quality undergraduate education*:

(1) Student-faculty contact;
(2) Cooperation among students;
(3) Active learning;
(4) Providing prompt feedback;
(5) Emphasizing time on task;
(6) Communicating high expectations; and
(7) Respecting diverse talents and ways of learning.

Chickering and Gamson (1987) through these seven principles present the type of educational activities students and institutions should be engaged in to promote personal development, effective learning and the likelihood of success. The authors presented the collaboration of these 7 principles as a powerful force for excellence in undergraduate education. Years later these principles were linked to cognitive development and other correlating results by Cruce, Wolniak, Seifert, & Pascarella (2006) in a longitudinal study at 18 institutions. These principles continued to affect global teaching and learning methods (Kuh, Pace & Vesper, 1997, Blaich & Wise 2011).

The seven principles of undergraduate education confirm the importance of the combination of various factors and that student engagement and success is not achieved by any single constituent. The work by Pascarella and Terenzini (1991) identified programme and pedagogical interventions like peer teaching, active participation in discussion, integration across courses, note taking and more effective teaching practices that enhance aspects of these 7 principles. Having the perspective of historical

developments in the field of student engagement, the focus now shifts to the more current views on Student Engagement.

5.1.2 Current perspectives on Student Engagement

Current perspectives on student Success include the graphical conceptual framework as shown in Figure 5-2 presented by Kuh, Kinzie, Buckley, Bridges, Hayek (2006:8). The framework incorporates pre-college background factors, transitioning factors, student and institutional behaviours at the engagement level and post-secondary qualification outputs, which are all linked to student success in some way. The framework depicted in Figure 5-2 was discussed in more detail.

On the left the framework incorporates pre-college experiences which refer to enrolment choices, academic preparation, aptitude and college readiness, family and peer support, motivation to learn and demographics. Next to precollege experiences, before a student can engage, they encounter what is called ‘mediating conditions’ which represent a transitioning phase students need to undergo before successful preparation for Higher Education has occurred. These ‘screens’ firstly consist of remedial courses aimed at improving their college-level academic skills, and secondly refer to financial aid policies that can either hinder or facilitate continued enrolment. At the College or University level Student Engagement is determined by two predominant factors (as discussed earlier): student behaviour on one side and institutional behaviour on the other side. Student behaviour for engagement includes study habits, time and efforts, interaction with faculty, peer involvement, motivation, etc. Institutional behaviours that influence student engagement include the first year experience, academic support, peer and campus environment, teaching and learning approaches etc. On the right, Post Higher Education outcomes that relate to success are displayed. In its most simplistic form, it relates to grades and graduation but more recently student success has shifted towards employment and lifelong learning. In many cases outcomes are related to the economic contribution or the type of professional that was produced. Other outcomes refer to responsible and economic self-sufficient, living productively or life satisfaction. Directly student success refers to the benefit obtained by (a) the individual and (b) greater society because of higher education.

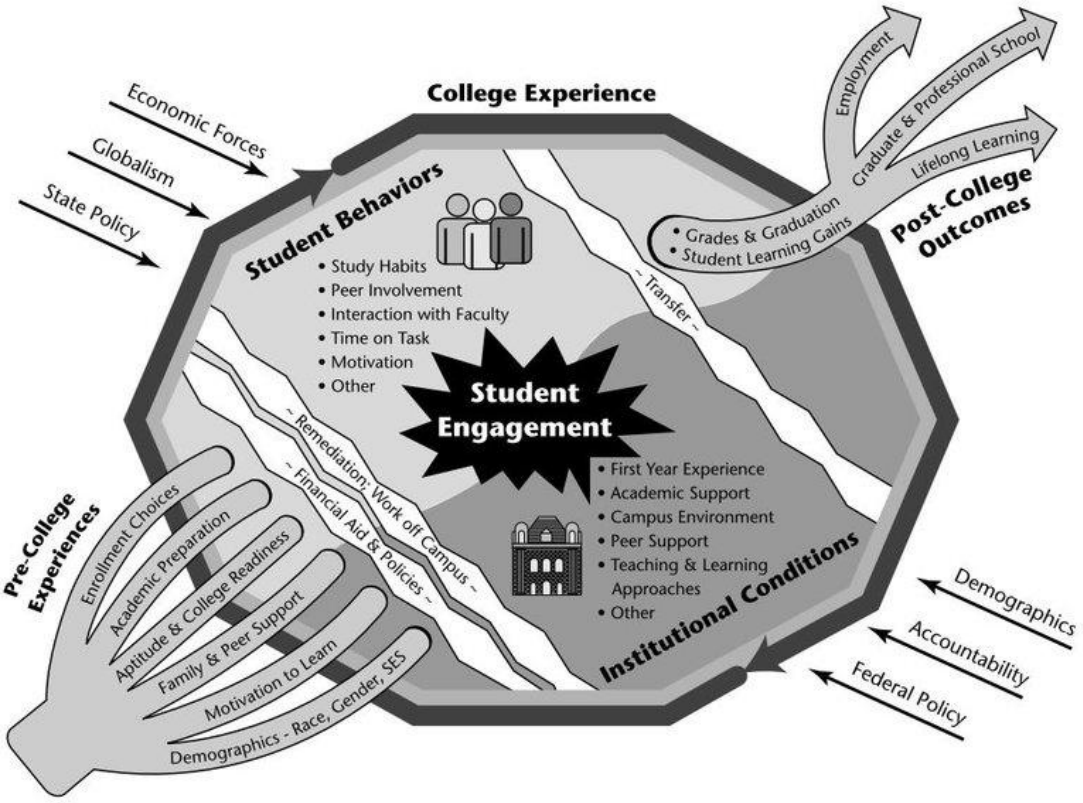


Figure 5-2 Guiding framework for the role of student engagement in student success. Reprinted from Conducting Educational Design Research (p. 11) by G. Kuh, K. Kinzie, J. Buckley, B.K. Bridges & J.C. Hayek 2007. San Francisco, CA: Jossey-Bass. Copyright 2007 John Wiley and Sons Limited.

More recent work on student success shifts towards the advantages of post-secondary education with regards to employment and the economic benefits it generates to the individual and the public economy (Williams and Swail, 2005). Figure 5-2 confirms the many facets of student success and that no single of simplistic model can accurately describe the student success phenomena.

Research on Higher Education success suggest that two of the most prominent features for predicting whether a student will graduate or not, are *academic preparation* and *motivation* (Pascarella & Terenzini 2005). Strydom, Kuh and Loots (2017) propose from decades of research, that **student engagement** is a third controlling factor for determining higher education completion and success (Kuh, Kinzie, Schuh & Whitt 2010; Mayhew, Seifert, Pascarella, Nelson, Laird & Blaich, 2012; Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008). Student engagement is so important to student success because it provides reflection and accountability to higher education success through quantitative measurements and comparison of how students and institutions are performing. Furthermore, student engagement has been empirically linked to the desired outcomes in higher education (NSSE, 2000) and therefore provides the ability to accurately focus on the activities and

experiences that link to these desired outcomes. Student engagement has developed through decades of research to include the many contributions on the account of the student and the institution in establishing effective student engagement. Because student engagement features various fields of psychology, cognitive development, sociology and learning theory, it is correlated with extended and impactful research providing a strong theoretical foundation. (McCormick, Kinzie & Ganyea, 2013).

Kuh, Kinzie, Buckley, Bridges and Hayek (2006) provided a thorough review of the theoretical developments in the field of student engagement. What started as the seven principles of undergraduate teaching (Chickering and Gamson, 1987) evolved and became the current literature base available on effective educational practices, which if implemented by institutions and their staff in their classes, result in more engaged student behaviour (Pascarella and Terenzini, 2005). Where initial thoughts on student success focused on pre-college and background conditions, these ideas shifted to effective educational practices and showed that the nature and quality of first year students' experiences with peers, staff, faculty, on campus and in the classroom are better predictors of success (Gerken and Volkwein, 2000). The campus environment was shown to influence student engagement and success, which refers to how students perceive the campus and class environment. When these environments were deemed inclusive, affirming and non-threatening, with high expectations and support and clear communication of expectations, student engagement as well as learning and academic achievement were positively affected (Education Commission of the States (ECS) 1995; Kuh 2001; Kuh et al. 2005b; Kuh et al. 1991; Pascarella 2001). Kuh, Kinzie, Buckley, Bridges and Hayek (2006) discussed the literature that affects student and institutional behaviour with regards to student engagement.

As discussed previously student engagement firstly refers to the time and effort students invested in the educationally purposeful activities. But more than that Alexander and Murphy (1994) argues that student engagement refers to an individual's investment in their learning process. The second, complimentary part of student engagement describes how the institution facilitates engagement through resources, organization, curriculum, creating other learning opportunities, academic and other support. Furthermore, an institution's activities which result in not only learning and graduation but persistence and satisfaction all designate student engagement (Kuh, 2001).

Theoretically correlating student engagement with student success was discussed by Kuh et al. (2006) and show results from three different Student Engagement surveys: the National Survey of Student Engagement (NSSE), the Community College Survey of Student Engagement (CCSSE) and the College Student Expectations Questionnaire (CSEQ). The questionnaires focus on the degree of participation in activities aligned with learning outcomes, student's persistence and satisfaction. The results from these surveys as discussed by Kuh et al. (2006) summarised the results of which two pertaining to the current study are presented here. Firstly, educationally purposeful activities which engage students is related to better grades and a higher degree of persistence. The second conclusion from the surveys that relate to this study conclude that student satisfaction was highly correlated with the college environments which were perceived as supportive of academic and social needs (Hu and Kuh 2002, 2003b; Kuh and Hu 2001a, 2001b; Kuh, Hu, and Vesper, 2000).

Another factor shown to influence student engagement to a great degree relates to interactions with meaningful adults on campus in- or outside the classroom (Kuh 2003; Pascarella and Terenzini, 1977, 1991, 2005). Interactions with faculty or staff show a positive correlation but even more so if the interaction entails encouragement and support (Fries-Britt and Turner, 2002). Feelings of belonging, being valued and that they "matter" are all strongly related to student engagement (Dayton, Gonzalez-Vasquez, Martinez and Plum, 2004). High quality faculty-student interactions implicate personal attention and the integration of traditional values into the learning environment (American Indian Higher Education Consortium (AIHEC) & The Institute for Higher Education Policy (IHEP) and Sallie Mae Education Institute, 2000). Generally, the more faculty-student contact the more students describe their environment as positive and the higher student satisfaction. Feedback on written work and other assignments can have positive implications but studies have shown that feedback can in some instances feel overwhelmingly critical to students, although intended for academic quality. Out of class experience was linked with positive educational aspirations and with degree completion which is believed to relate to feelings of affirmation reinforcing persistence and graduation commitment (Pascarella and Terenzini 1991, 2005). It is argumented that the positive influence of faculty-student interactions could, to a large extent, be attributed to the advantages of quality interactions with a mentor. On the topic of faculty interaction, it is concluded that quality interaction with staff encourages student to devote greater energy into education focussed actions. Feedback that validates and affirms students could possibly encourage students to higher levels of academic engagement and achievement.

Studies show just as important as faculty-student interactions are for engagement, so is peer interactions. Astin (1993b:398) describes the importance of peer interaction as: "*the single most potent source of influence*". It was shown to influence cognitive, psychological and behavioural aspects of development. Quality student interactions develop knowledge acquisition, analytical and problem-solving skills and self-esteem as well as overall academic development (Kuh, 1993, 1995). Astin (1993b) proposed the following activities to improve student engagement: discussing academic content with peers, working in groups, tutoring other students and then also shows positive effects with peer socialisation activities such as intramural sports, socialising with diverse peers, being selected to student office or groups, and socialising in student clubs or organisations. A powerful tool in student engagement includes tutoring or teaching. Building connections within the student community fosters belonging. Similar interests or aspirations could lead to meaningful student connections which increases continuation. Co-curricular activities were shows to positively influence persistence due to the social connections and cohesion as well as the reinforced academic achievement orientation. It has been shown that co-curricular activities also develop skills and competencies needed for college success (Pascarella and Terenzini 2005).

Feeling a sense of belonging and loyalty goes a long way in facilitating engagement, persistence and academic performance (Tinto 1987, Astin 1993b, Pascarella and Terenzini 1991, Bean and Vesper 1994). Student satisfaction was shown to strongly affect grades with the opposite not being true. Other aspects of student engagement that does not particularly apply to this study was discussed by Kuh et al. (2006) and the reader is referred to the reference for more information on the topics of ‘Experiences with diversity’, ‘First generation students’, ‘Race and ethnicity’ and ‘socio-economic status’. The next section discussed the influence of institutional behaviours on student engagement.

Defining the institutional conditions related to student success are crucial. Institutions can design their environment with the aim of facilitating academic, interpersonal and extracurricular activities which can engage students (Pascarella and Terenzini 2005). These often focus on the resources, programs, practices, teaching and environmental conditions that optimally facilitate learning and engage students (Peter and Cataldi, 2005; Carey, 2004; Kuh et al., 2005; Tagg, 2003; Hoachlander, Sikora, and Horn, 2003; Bailey and Alfonso, 2005; Bauman, Bustillos, Bensimon, Brown, and Bartee, 2005). The literature on organisational activities for engagement are presented under four categories: (i) structural and organisational characteristics, (ii) programs and practices,

(iii) teaching and learning approaches and (iv) student-centred campus cultures. Structural and organisational characteristics were not of interest in this study and so the reader is referred to Pascarella and Terenzini (2005) for more information. Institutional attributes that pertain to the current study refer to smaller classes resulting in more individualised approaches, a more coherent student community, students being known to faculty staff and actively participating in classes, which is not the case for larger classes and lager institutions. Other attributes discussed by Kuh et al. (2006) which does not pertain to the current study include campus residences, structural diversity, organisational structure, institutional mission, programs and practices, learning communities, remediation and student support services.

One student success and engagement classification that relates to the current study refers to student success initiatives. Student success initiatives discuss how skills such as time management, goal setting, study skills, note taking, utilising support services and advising and career development influence student persistence and graduation (Gardner, 1995; Coleman and Freeman, 1996; Helmcamp and Petrie, 1998). Academic support services such as supplemental instruction, tutoring or study groups enhance engagement and persistence (Tinto 2004).

High expectations and aspirations for learning outcomes and student performance produced higher student engagement and graduation rates. When institutions have high expectations for student performance with quality support, accountability and effective communication of expectations, all of these strategies improve academic achievement (Kuh et al. 2005).

Feedback and Validation were shown as institutional enhanced student engagement activities. When institutions support, affirm and enable students these behaviours foster student success (Rendon, 1995, 1999). Individualised components such as one on one interactions, knowing students' names, praise, encouragement and support all enhance validation, persistence and academic achievement. Feedback that is given timely with the focus on support and correction facilitates learning and engaging behaviour (Cross 1987; Kulik, Kulik, and Cohen 1980; McKeachie, Pintrich, Lin and Smith, 1986; Menges and Mathis, 1988).

Another institutional experience that improves student engagement pertains to intellectual stimulation, academic challenge, novelty and stimulating which facilitate growth, development and satisfaction (Volkwein and Cabrera, 1998). Student

engagement can furthermore be effectively facilitated by an enthusiastic, passionate and encouraging teacher who is knowledgeable about their subject (Angelo and Cross, 1993; Pascarella and Terenzini, 2005).

Utilising effective pedagogical practices and integrating these with theories on human learning, emphasises the importance of restructuring teaching towards maximising student learning (Pascarella and Terenzini, 2005; National Research Council, 2000, Barr and Tagg, 1995). Incorporating these changes into teaching and learning strategies places focus on raising academic standards, moving towards problem-focused learning, requiring students to take more responsibility for their learning and emphasising alternative ways of learning. A shift towards a more individualised learning approach where students matter was discussed by Sorcinelli (1991:21): "*Faculty who show regard for their students' unique interests and talents are likely to facilitate student growth and development in every sphere-academic, social, personal, and vocational*". This aspect of teaching and learning is often referred to as a talent development view, which demands institutions to create conditions for learning which embrace the diverse talents, need and learning styles of students.

The passive lecture formal for learning has been shown to contradict optimal learning environments (Barr and Tagg, 1995; Guskin, 1997; Tagg, 2003). The opposite denotes an active and collaborative learning environment which involves the student in the learning process through increased time on task, peer interaction and educationally meaningful activities. Other learning strategies shown to improve student engagement suggested classroom-based problem solving, peer teaching, active and collaborative learning and service-learning. Thinking about academic content, applying knowledge, collaborating and problem-solving increases active engagement. Students describes these types of activities and environments as more fun, dynamic, friendly and non-threatening. Also, they referred to a greater sense of belonging when interaction with peers in classroom activities increased. Active learning environments were linked with more faculty-student contact time, positive campus environment, better student integration and persistence. The literature perspectives by Kuh et al. (2006) were summarised in Table 5-1 below.

Table 5-1 Summary of Student Engagement criteria as presented by Kuh et al. (2006)

Kuh et al. (2006)	Institutional behaviours and actions	Faculty-Student contact
		Educational purposeful activities
		Campus environment
		Co-curricular activities
		Active and Collaborative learning
		Problem based or inquiry based learning
		High expectations and support
		Validation and Feedback
		Academic challenge & stimulation
		Individualised instruction
	Student behaviours and actions	Persistence
		Peer Interaction, teaching and tutoring
		Diverse peer interaction
		Time on task
		Student Satisfaction
		Motivation

The next section discusses the self-determination theory.

Self Determination theory

Because the word *engaged* in the education discipline, by definition, mean being actively involved, the theoretical perspectives on student engagement have to include the literature of self-determination theory. *Self-determination theory* is an empirically developed model of human motivation and personality, that differentiates between autonomous or controlled social environments (Ryan and Deci, 2000). The model incorporates three basic human psychological needs of *autonomy*, *competence* and *relatedness*. Autonomy refers to having free choice and willingly engaging, in contrast to feelings of control or being compelled. Competence refers to mastery and effectiveness, being able to accomplish. Relatedness refers to the need of connectedness and belonging. Ryan and Deci (2000) discuss how learners engage and react proactively vs. the opposite reaction, passive and alienated, based on the social conditions in which they develop, function and learn. Their work, specifically the conditions for natural activity and constructiveness leading to internal motivation are mostly activated by interest, excitement and confidence. According to Ryan and Deci (2000) internal motivation results in enhanced performance, persistence and creativity. Intrinsic motivation furthermore seeks out novelty and challenge due to the natural human desires of exploration and learning. They suggest that children are naturally active, curious, playful and inquisitive. An important pre-requisite for intrinsic motivation refers to the supportive conditions for sustaining and eliciting motivation in contrast to diminishing it, which

suggests that internal motivation will flourish if circumstances permit. Studies show that feelings of competence will not increase internal motivation if not accompanied by autonomy. The research therefore conclude that both competence and autonomy is required for internal motivation actualisation.

5.1.3 South African perspectives on Student Engagement

Student Engagement provides an integrated perspective and understanding of both student and institutional behaviours that influences student success. On one hand it evaluates the time and effort spent by students on academically significant activities. On the other hand, it evaluates the learning opportunities and resources which promote student participation as presented by the Institution.

Since 2007, the South African Survey of Student Engagement (SASSE) – and the associated surveys, *Beginning University Survey of Student Engagement* (BUSSE), the *Lecturer Survey of Student Engagement* (LSSE), and the *Classroom Survey of Student Engagement* (CLASSE) – produced significant empirical evidence on student engagement in South African higher education. In order to create a deep contextualised understanding of student engagement, this study will primarily draw inferences from Strydom et al. (2017). Although other literature sources speak to student engagement in South Africa, the empirical evidence of Strydom et al. (2017) is the most comprehensive and longitudinal to date. The data on student engagement is discussed by Strydom et al. (2017) are presented under the following themes: (1) Academic challenge, (2) Learning with peers, (3) Experience with staff, and (4) Campus Environment. These themes will be discussed in more detail below.

Academic Challenge

It is advocated that challenging learners with intellectual and creative content inspires academic quality thereby improving student engagement. Enhancing student engagement through a culture of academic achievement and high expectations combined with the appropriate level of support and mentoring has shown success in improving higher education success. Strydom et al. (2017) define four student engagement indicators that are associated with an academically challenging environment. These indicators discussed by Strydom et al. (2017) are as follows: higher-order learning, reflective and integrative learning, learning strategies, and quantitative reasoning.

(1) Higher-Order Learning

The contribution of higher-order learning towards student engagement refers to higher-order thinking skills such as analysis, synthesis, and judgement – as opposed to rote memorisation (Kuh et al., 2010). The research data by Strydom et al. (2017:31) indicates that student engagement, with specific reference to engaging students in higher-order thinking skills, was very similar for first year and senior students. This suggests that student engagement, in relation to higher-order thinking skills, is not significantly developed or grown during the higher education time period. This finding is contrary to what would be expected during higher education and reveals an area of concern with regard to student engagement in the South African context. These results could indicate that engaging students in higher-order learning much earlier in life – i.e., during primary and secondary education – is crucial for student engagement during post-secondary education. This study aims to identify ways of engaging students in higher-order learning during early education – i.e., before their university studies commence – which could build the foundation for higher education success.

(2) Reflective and Integrative Learning

Reflection, as an educational practice, was discussed in Chapter 4 under the Charlotte Mason (section 4.3.3.4) and Experiential learning (4.3.3.6) approaches. Strydom et al. (2017) underline the importance of connecting academic work to real-life experiences and to the student's personal life in a meaningful way. In this way, curricular content is transcended beyond the 'here and now' of the immediate learning activities in class to include a larger sphere of application – something that Feuerstein and Falik (2010) describe as the *mediation of transcendence*. Thus, reflective and integrative thinking are educational tools that can be developed and encouraged by lecturers, peers, and institutions. It is shown that the practise of reflective and integrative learning is linked to higher-order thinking and, therefore, also linked to engaged learning (Strydom et al., 2017). The research data by Strydom et al. (2017:32) further showed low mean scores for Reflective and Integrative thinking, suggesting that students did not adequately participate in this technique of student engagement. Therefore, this skill was once again not developed optimally by the time students entered higher education. A slight increase was observed from the first year level to the senior student level, suggesting some growth in this engagement technique (Strydom et al., 2017). It shows that student engagement can be improved and developed if strategies for reflective and integrative thinking can be implemented. This study suggests that these thinking strategies are nurtured in the

type of education environment during earlier education phases and can be developed by employing natural learning phases and the individualised approach (see section 8.2.7).

In his book “Mathematics for Human Flourishing” Su (2020:81) writes: “Pursuing beauty of any kind cultivates in us the virtues of reflection, joyful gratitude, and transcendent awe.” The author confirms that the art of reflection is a skill acquired long before a learner reaches higher education. An art that is lost when education does not include exploration, fascination, play, beauty, freedom, and the other virtues which will be discussed later in this study.

(3) Learning Strategies

Strategies that improve learning include analysing, summarising, meaning making, reviewing notes, and any other tasks that involve actively engaging with the content. The research data by Strydom et al. (2017:34) once again did not find a significant difference between effective learning strategies used by senior students compared to first year students. This discovery again highlights an area of much needed development in the earlier and higher education sphere. This study proposes that learning strategies can be developed during earlier education developmental phases as discussed in Chapter 8.

(4) Quantitative Reasoning

Quantitate reasoning as a student engagement tool refers to the willingness and ability of learners to analyse, understand, judge, and utilise numerical and statistical data. The data results from the study by Strydom et al. (2017:35) on the topic of quantitative reasoning as a student engagement tool also showed low mean scores, as well as similar values for first year and senior students. Quantitative reasoning did not drastically improve during their higher education journey which again is contrary to what would be expected. This could mean that higher education fails to develop the skills of quantitative reasoning or that if this skill is not developed during earlier education, it becomes more difficult to acquire and develop in later developmental phases.

In summary, the theme of *Academic challenge* involves indicators of higher-order learning, reflective and integrative learning, learning strategies, and quantitative reasoning. These aspects are vital to higher education student success. The next theme associated with student engagement is *learning with peers*.

Learning with Peers

The theme learning with peers has two indicators, namely: collaborative learning, and discussion with diverse others (Strydom et al., 2017:29). The theme *learning with peers* refers to students working in partnerships that develop social and interpersonal learning experiences which contribute to mastering difficult academic content. The data results in the South African context indicate an increase in the category of *learning with peers* for senior students, compared to first year students.

(1) Collaborative Learning

The research by Strydom et al. (2017:37) shows that collaborative learning contributes to student engagement, which includes group projects, group preparation for assignments, tests and exams, and executing group practical learning activities Strydom et al. (2017). The empirical data by Strydom et al. further confirmed that collaborative learning improved slightly during the higher education progress.

(2) Discussion with Diverse Others

Strydom et al. (2017) also discuss the advantages of diverse collaboration which improves interpersonal skills and prepares students for the work environment. Diverse community collaboration is especially credible in the South African community. The research results by Strydom et al. (2017:38) reported that 70% of first year students and 68% of senior students reported regular contact with people of another ethnicity, political and religious views. The researchers discuss the importance of students integrating into their higher education institution community with a sense of cohesion and support. The social integration of learners in their higher education institutions plays an important role in engagement on a social and academic level.

The data of this study suggest that peer interaction was an important part of higher education success (see sections 8.1.4 and 8.2.8). Another aspect of collaboration investigates interaction with higher education staff in formal, instructional, and social settings (see section 8.3.2 and 8.4.2). This type of collaboration allows students to observe and learn from specialists – how they think, analyse, and problem-solve.

The next theme, associated with student engagement, is *experience with staff*.

Experience with Staff

(1) Student-Staff Interaction

Strydom et al. (2017) discuss the role of staff interaction in developing and maintaining study engagement. Staff interaction creates opportunities for coaching, mentoring, and imparting a love for learning and a lifelong learning attitude and culture. Strydom et al. (2017) discuss how staff-student interaction can impact the choices students make regarding their educational journey, career, and future plans. The data results from Strydom et al. (2017:40) furthermore show low student-staff engagement by both first year and senior students, although the results did show higher engagement for senior students. Sections 8.4.2 show and discuss the important role of mentors in transitioning to higher education and continued student engagement. The next section will discuss the role of effective teaching practices in obtaining student engagement.

(2) Effective Teaching Practices

Strydom et al. (2017) discuss how clear, organised, and well-prepared content, teaching and explanations improve student engagement. Illustrative, effective, and practical examples that improve understanding of academic content not only improve the quality of teaching but how students engage with academic content. The results from Strydom et al. (2017:41) show a rather high mean score for effective teaching practises for first year and senior students in the South African context. The results indicate a high quality of teaching with regard to incorporating effective teaching strategies which should result in higher rates of engaged learning.

The next theme, associated with student engagement, is the *campus environment*.

Campus Environment

(1) Quality Interactions

The importance of quality relational interactions was discussed by Strydom et al. (2017), highlighting the importance of seeking quality interactions and support from peers, lecturers, support staff, etc. Having quality institutional interactions equip students to find help and support when needed and improves student engagement because students can seek help when they do not understand. The review of the quality of interactions reported by Strydom et al. (2017) suggests that both first year and senior students experienced quality interactions with peers and institutional staff.

(2) Supportive Environment

Institutional support, focused on student success should not only include cognitive and academic support but should be expanded to mental, social, and physical support. The supportive environment criteria investigated the students' experiences about how successfully the institution could provide learning support. The results by Strydom et al. (2017) show that especially first year students experienced support from the higher education institution, but often senior students reported lower levels of support. The data further showed that the support the students were referring to included mostly academic activities like tutoring, peer mentoring, library help, and learning support. The students, however, reported much lower rates of support for non-academic activities suggesting that obstacles to higher education engagement could be attributed to external factors. The data from this study affirmed the importance of academic, family, and peer support (see sections 8.1 and 8.4).

In summary: Empirical evidence on student engagement in a South African higher education context has been gathered since 2007. Strydom et al. (2017) provide deeper insight into this data and what it means in relation to student success in South Africa. In this regard, four themes were discussed, each with its own success indicators. Figure 5-3 below provides a summary of these themes and indicators.

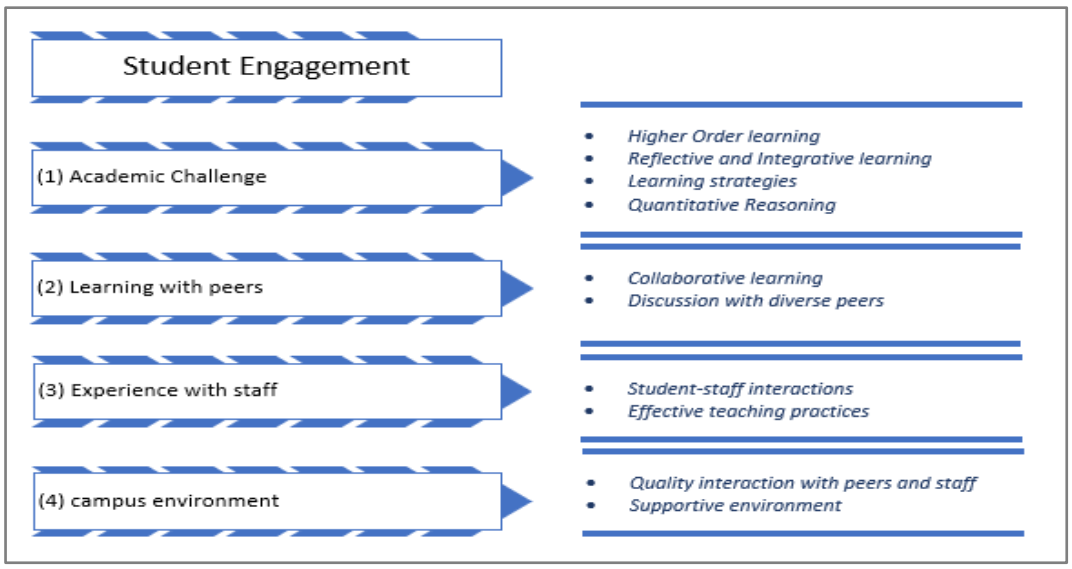


Figure 5-3 Student engagement factors (Strydom et al., 2017)

Quality Academic Preparation

Although not included in the research presented by Strydom et al. (2017), various other research draws the correlation between quality academic preparation and higher education success as discussed in section 5.1.2. The importance of quality secondary education (student background) – as a contributing factor to higher education student success – is substantiated by various studies. If high school grades reflect quality secondary education, several studies provide empirical evidence that high school grades are a strong predictor for success in higher education (Warburton, Bugarin & Nunez, 2001; Gladieux & Swail, 1998; Horn & Kojaku, 2001; Martinez & Klopott, 2003). Furthermore, quantitative studies on the topic of quality secondary education have shown that 87% of students who complete four years of math, science, and English during secondary education, are likely to complete higher education, compared to a mere 62% higher education completion rate if this academic foundation was absent during secondary education (Adelman 1999; Warburton, Bugarin, & Nuñez 2001). Adelman (1999, 2006) furthermore showed that taking advanced mathematics classes including trigonometry, calculus, and algebra was the single best predictor for higher education success. These studies highlight the impact that quality secondary education could have on higher education success – a notion that is crucial to this research study which seeks to create a deeper understanding of how individualised home-based education could contribute to higher education success.

The education of young children – especially childhood pedagogies and preschool quality education – and its influence on secondary and post-secondary academic results, have been investigated by various authors (Bredekamp & Copple, 2022; Early, Maxwell, Burchinal, Alva, Bender, Bryant, Cai, Clifford, Ebanks, Griffin, Henry, Howes, Iriondo-Perez, Jeon, MashburnPeisner-Feinberg, Pianta, Vandergrift, and Zill, 2007). The results do not provide conclusive findings on teacher academic background, teacher training, or classroom quality, because the complexity of early childhood education makes it difficult to draw empirically grounded parallels with secondary and higher education results. However, this study will use qualitative data to address this gap by creating a deeper understanding of how the individualised home education pedagogical approach relates to higher education preparedness.

Other literature on student Engagement in South Africa

A research study by Schreiber and Yu (2016) at a South African University found that student engagement highly correlated with academic performance. However, the results

also indicate that student engagement differs across gender and race and is highly influenced by individual education experiences, integration into higher education, and preparation for higher education academically and socially. These findings are important because it highlights that student engagement – as a particular approach to understanding student success – is crucial, but that various factors influence the impact of student engagement. This means that a deep and nuanced understanding of student engagement in the South African higher education context is vital.

A student engagement survey study conducted at the University of the Free State in collaboration with Universities of South Africa (USAF), investigated student engagement in a longitudinal and inter-institutional study focused on three areas of concern: i) the impact of financial strain on student life, ii) student success rates and iii) graduate attributes related to employability (University South Africa, 2018). The report presents data based on the results of two surveys, the BUSSE (the Beginning University Survey of Student Engagement) and the SASSE (South African Survey of Student Engagement). The data on student success suggest a disconnection between student expectations and actual achievements. The data indicate that students in their first year especially require greater support with regards to perseverance, resilience and determination. The study shows that students are not as well prepared for the challenges they will face at Higher education as they think. Again, a notion towards quality secondary education and preparation for higher education as a key for higher education success was highlighted. The survey emphasised a need for more support, academically and personally.

A holistic approach to wellbeing requires support in other areas where students are struggling e.g. finances, mental health, disabilities, special needs and academic and career advice. The importance of wellbeing was highlighted in the data of this study (see section 8.3.4).

Student-Staff interaction shows a decline from previous results with less than 25 % of students having an opportunity to discuss academic performance with a lecturer and around 20 % citing interaction with a staff member with regards to projects, career plans or work opportunities (University of South Africa, 2018). Questions pertaining to higher-order learning measures advancing on the Bloom taxonomy scale from first year to senior year, with the expectation that students would develop in their ability to synthesise, evaluate and create knowledge and forming new ideas. The results furthermore indicated less than 30 % of students feel they have developed work related skills during their years

of study, indicating the need for more connection between the academic content and the practical application.

Summary

Revising the historical development of student engagement provides a rich and thorough understanding of the principles for higher education success. Early data revealed the importance of the effort on account of the student in spending time and effort on academic tasks. Enthusiastically participating in meaningful tasks which engages the student with academic content results in higher rates of success. Both the motivation and involvement are manifest contributors and student effort, time on task and taking responsibility are crucial aspects of higher education success. In addition to their existing student engagement efforts the data also showed that student background impacts how, when and to which degree students engage and ultimately succeed. Besides personal effort on behalf of the student, research showed that the institution plays an equally significant role in higher education success. Institutions influence involvement and engagement by the programs, facilities and policies as well as the student and academic subcultures that are formed. Staff and interactions with lecturers, academic and non-academic staff also influence student engagement. The essential role institutions play in advancing student engagement became an integral part in the understanding and progressing of student engagement.

Focusing on Student engagement in the South African context draws from the data presented by Strydom et al. (2017) and the representation in Figure 5-3 which offers four principles for student engagement under (1) Academic Challenge, (2) Learning with Peers, (3) Experience with Staff and (4) Campus environment. These agree well with the seven principles discussed in section 5.1.1 presented by Chickering and Gamson, 1987.

The research by Strydom et al. (2017) only reviews data from the entry point to the exit point of higher education. Although the data for student engagement presented by Strydom et al. (2017) was configured for the higher education setting this study attempted to extrapolate the principles to earlier education phases and the home education setting. This process could shed light on the topic of student background and learner engagement in earlier developmental phases. Student engagement at the Educational interface was discussed next.

5.2 Student Engagement at the Educational Interface

The idea of an educational interface suggest that the student is an active participant that reciprocally interacts within and externally with the institution and academic content. Kahu and Nelson (2017) suggests that the educational interface is a psychosocial space of learning experiences and that education is much more than academic content flowing in a single direction but rather that the student experiences learning through multiple dimensions which includes the emotional, the cognitive and the behavioural dimensions. Psychosocial refers to the relationship between individual thought and behaviour and the social sphere. The authors presented the framework for student engagement incorporating the educational interface as displayed in figure 5-4.

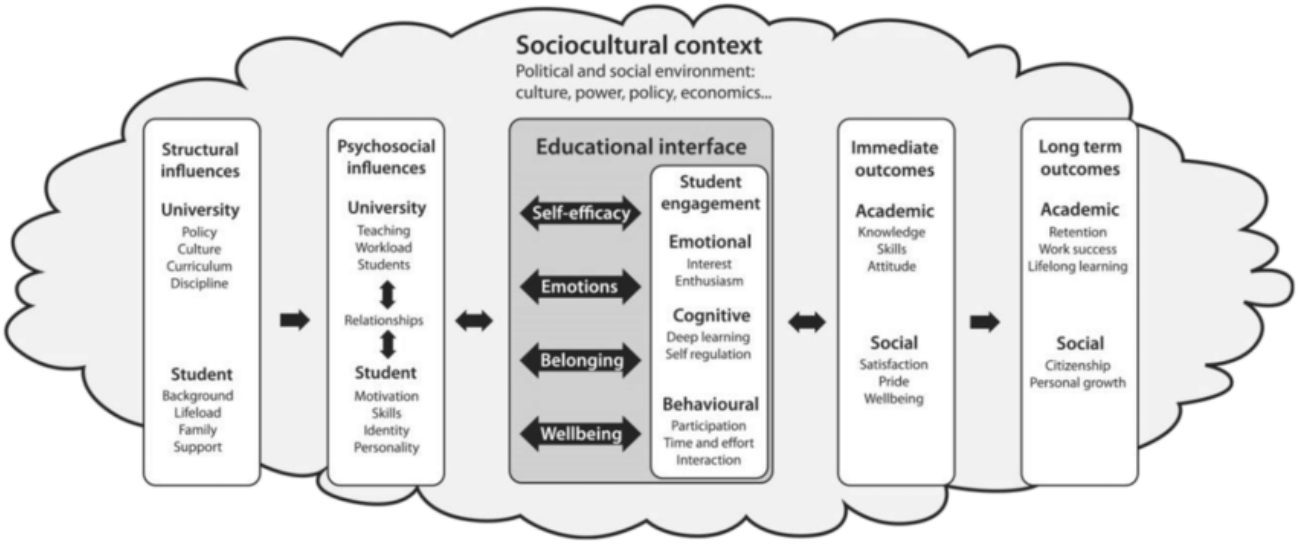


Figure 5-4 Conceptual framework of student Engagement incorporating the educational interface adapted from Kahu and Nelson (2017)

Figure 5-4 shows the bigger context of education happening within a sociocultural context hosting the political, social, cultural, policy and economic climate. Although most of these categories was overviewed and discussed by Kuh, et al. (2006), Figure 5-4 provides a unique graphical representation with unique features associated with the engagement interface.

The figure depicts two entities: the student and the institution/university as discussed previously. Structural influences (left) for the student entails background, life load (stress, trauma, medical), family and support etc. Structural influences (left) for the university entails policy, culture, curriculum, values etc. The psychosocial influence for the student presents identity, personality, skills, motivation etc. and the psychosocial influence for

the University includes teaching, workload, students, staff etc. (Kahu and Nelson, 2017). At the educational interface the degree of student engagement is influenced from the student's point of view by emotional factors such as interest, life experiences, future goals and dreams, enthusiasm etc. Cognitive engagement at the educational interface is influenced by the knowledge and skills the student deems important and useful for their future, and also when skills align with tasks and academic challenge (Kahu and Nelson, 2017). The behavioural aspects of student engagement refer to active participation, time and effort and interaction. Particularly the psychosocial constructs that strongly influence student engagement are academic self-efficacy, the student's perception of their abilities, emotions, belonging and well-being. Each of these are discussed in more detail.

Self-efficacy refers to someone's belief in their ability to achieve something or accomplish a task or goal. It is linked to the cognitive evaluation of personal and or behavioural factors. Self-efficacy is such an important factor of student engagement and achievement because it is linked to motivation, persistence, goal setting and self-regulatory strategies (van Dinther, Dochy and Segers, 2011). Self-efficacy is placed in the engagement interface on account of the complexities it represents, not only of the student's beliefs of their own capabilities but of the traversing institutional and personal influences on self-efficacy. Student engagement and student success is higher for students with high efficacy but the reverse is also true that higher student engagement cause higher self-efficacy. Schunk and Mullen (2012) discuss the role of family, mentors, encouragement and support in strengthening self-efficacy. Other factors such as socioeconomic status have also been identified as factors that influence self-efficacy.

Understanding emotional responses is inevitable in the attempt to understand student experiences. Positive topic related emotions for example enthusiasm, curiosity or interest takes place when life integrated learning takes place (Kahu, Stephens, Leach and Zepke, 2014). Life integrated learning refers to instances when course material overlaps with personal or work interests or experiences. Interface emotions can include the above-mentioned positive emotions or alternatively can also include anxiety, being overwhelmed etc. or social emotions related to empathy, admiration or inspiration. Negative emotions can be amplified by stressors such as finances, lack of access to technology or other items required for higher education, or a lack of understanding from family or friends (Kahu and Nelson, 2017). All of the above can lead to higher levels of anxiety and frustration which can be detrimental to engagement. The force of emotion in influencing engagement confirms the complexities of constructs in the education interface.

Belonging in higher education refers to the individual's connectedness to the institution, staff and peer group. It is affected by the alignment between the student and the institution and the degree to which the student perceives an alignment between personal culture and that of the university. Belonging is considered an interface component suggesting that both the student and the institution influence engagement on this construct. Kahu and Nelson (2017) considers belonging as a direct link to wellbeing and a direct relation to student retention.

Kahu and Nelson (2017) discuss the importance of wellbeing as the last construct on the education interface, where wellbeing is considered a state of being content, happy and comfortable in opposition to stress, anxiety and depression. Higher education is stressful to most students and is also linked to lower academic motivation, engagement and enjoyment. Kahu and Nelson (2017) furthermore discuss the dynamic nature of the education interface and define the four key constructs as mediating mechanisms which increase or decrease the likelihood of engagement and therefore success at higher education. The education interface framework confirms earlier discussions that student engagement is complex and multifaceted and involves multiple stakeholders. Remarkably the discussion on student engagement and the education interface confirms the socio-cultural nature of successful education.

Trowler, Allan, Bryk and Din (2021) provided an update on the student engagement interface presented by Kahu and Nelson (2017). Their model presents a review of the mechanisms presented by Kahu and Nelson (2017) (self-efficacy, emotions, belonging and wellbeing) and suggest an update to the proposed model, specifically for the higher education environment, by incorporating six mechanisms (self-efficacy, emotions, belonging, motivation, resilience and reflectivity). These pathways are included in Table 5-2 with the associated strategies for student engagement. The student engagement mechanisms presented by Kahu and Nelson (2017) is proposed to be more suitable for the school setting with an updated version as presented in Table 5-3 better representing the Higher Education setting.

Table 5-2 Pathways to Engagement (Trowler et al. 2021).

Type of Engagement	Pathway	Strategy
Affective (Emotional)	Emotions	Foster positive emotions
		Regulate negative emotions
Behavioural	Motivation	Establish task value
		Promote mastery goals (rather than avoidance)
Cognitive	Resilience	Promote awareness of student coping strategies
		Foster healthy balance (problem solving, support seeking, escape)
Critical	Reflectivity	Identify student's reflection strategies
		shift student's reflection into action quadrant
Political	Self-efficacy	Build awareness of internal and external resources
		Foster re-appraisal
		Encourage autonomy
Socio-Cultural	Belonging	Foster Peer relationships
		build staff-student rapport
		Nurture congruent values

The pathways represented by Trowler et al. (2021) are linked to mechanisms as shown in Table 5-2. Each mechanism and pathway is shortly discussed.

- Affective engagement is accomplished through the pathway of *emotions*. *Emotional* engagement can be accomplished through curriculum, pedagogy and wellbeing. Regulating negative emotions through re-appraisal are suggested with the aim of short-circuiting negative connections.
- *Behavioural* engagement is accomplished through the pathway of *motivation*, and interest. Motivation refers to the desire, willingness and effort a person is investing towards persistence. Behavioural engagement can be accomplished through task value and the benefits of accomplishment (according to Trowler et al., 2021). The researchers however suggest utilising self-determination theory principles for motivation and propose the introduction of autonomy as the tool for accomplishing motivation and behavioural engagement (Ryan and Deci, 2000).
- *Cognitive* engagement is accomplished through the pathway of *resilience* as suggested by Trowler et al. (2021). Resilience described as ‘academic buoyancy’ by Martin and Marsch (2009) depicts constructive re-engagement after challenges and setback. Resilience is fostered through interpersonal processes such as self-efficacy, autonomy, peer engagement and connection. Strategies for accomplishing cognitive engagement include promoting individual coping

strategies such as problem solving, support seeking, escape and managing a healthy balance.

- *Critical engagement* can be accomplished through the pathway of *reflectivity*. The authors suggest reflectivity because it provides a bridge between learning and experience (Griggs, Holden, Lawless and Rae, 2018). Self-reflection leads to insight, monitoring and improved performance. Reflectivity is needed for self-regulation, metacognition and transformational learning. Rumination is presented as the negative version of reflectivity which refers to a dysfunctional state of self-absorption. Obtaining critical engagement is accomplished through reflection strategies such as depth of reflection, focus of reflection (self-reflection vs. rumination) and adjusting.
- *Political* Engagement is associated with the pathway of self-efficacy. Because self-efficacy is correlated with student engagement (Chang and Chien, 2015; Linnenbrink and Pintrich, 2003) enhancing academic self-efficacy improves persistence, goal setting, self-regulation, motivation and learning. Trowler et al. (2021) suggest strategies for political engagement through building awareness of the internal and external resources available to the student, fostering positive emotions and encouraging autonomy.
- *Socio-Cultural* engagement accomplished through the pathway of *belonging* is correlated with student engagement, persistence and academic success (Kuh et al. 2006). Establishing belonging requires fostering effective peer relationships, building faculty-student relationships and nurturing traditional values (Trowler et al., 2021).

Trowler (2017) developed empirical facets of engagement within the higher education context as shown in Table 5-3 below.

Table 5-3 Facets of student engagement (from Trowler, 2017)

	Congruent engagement	Non-Engagement	Oppositional engagement
Affective *What the student feels*	Interest, Enthusiasm	Boredom, lack of interest	Rejection, repudiation
Behavioural *What the student does*	Attendance, participation with enthusiasm	Skips lectures without excuse	Boycotts, pickets or disrupts lectures
Cognitive *What the student thinks*	Meets or exceeds assignment requirements	Assignments ate, rushed or absent	Redefine parameters for assignment
Critical *How the student thinks (orientation*	Holds own views in dynamic tension with "received" views	Reproduction, "regurgitation"	Engages from a contradictory paradigm
Political *How the student acts (agency)*	Assumes agency toward construction of knowledge	Passive consumer of knowledge	Challenges assumptions about what constitutes knowledge
Socio-Cultural *How the student feels (values)*	Observes protocols of referencing and citation	Plagiarises	Steals, borrows or samples because knowledge want to be free

The proposed adaptation of the Kahu and Nelson (2018) model by Trowler et al. (2021) expands on the development of understanding of the complex nature of the student engagement interface and will probably continue to expand as researchers invest more energy into understanding of this phenomenon. The chapter is concluded with a review of home educated learners and higher education success.

5.3 Home Educated Learners and Higher Education Success

Although little research is available on home education learners entering and completing higher education, some fragments of data was found. Specifically for the South African context no published data was found on this topic. Important conclusions from the few studies available are presented. Galloway (1995) estimates that 50% of home education learners attended college after public school, which is statistically similar to the rate for public school learners in the US. Furthermore, the data showed that home education learners were as prepared for college as their school-going peers. Snyder (2011) confirms that the academic performance of home education learners is comparable to traditionally school-educated learners in the US. A study by Sutton and Gallaway (2000)

investigated how home education, private school, and public-school learners compared with regard to college success and found that the students performed academically comparable once they entered college.

A systemic review of empirical research on home educated learners was conducted by Ray (2017), which included various aspects such as demographics, reasons for home education, academic performance, success at college and adulthood and social development. The study by Ray (2017) found eleven studies out of sixteen with positive outcomes for the home educated in college or adulthood and four studies reported no difference between the home educated and school attending peers.

The study by Snyder (2011) found that home education learners who applied had achieved higher ACT and SAT scores than traditionally schooled and catholic schooled learners. Once admitted to university the home educated learners achieved higher GPA scores throughout freshman to senior levels than public and catholic school candidates.

Cogan (2010) investigated academic performance of home educated learners prior to college, at the first fall, after their first year and after four years. The results confirmed that the homeschooled students achieved a pre-college ACT composite score 6 percent higher compared to the overall score. Home educated learners also earned more college credit prior to their freshman year and reported significantly higher GPA scores for high school. The first fall academic investigation showed a 9.4 percent higher GPA academic performance and a 9.3 % higher performance after their first year of study. The four year comparison continued a consistent 9.4 % higher GPA performance by home educated learners compared to the freshman cohort. Cogan (2010) reported no difference between the retention rates of the home educated learners vs. home educated and four year graduation rates were also similar.

Various other sources of literature confirm that home educated learners academically perform similar or better than traditional school candidates (Sutton & Gallaway, 2000; Galloway, 1995; Jones & Gloeckner, 2004; Wichers, 2001, Clemente, 2006; Gray, 1998). The data confirm that home educated learners can achieve higher education success and perform similarly or better than traditional school graduates.

Notably a study by Holder (2001) discovered that home educated students achieved higher ACT and GPA scores compared to traditionally educated students. The results showed a 9.4 % higher ACT score and an 11 % higher GPA score. The homeschooled students attributed the better academic achievement to the student engagement

practices of self-motivation, ability to learn on their own, self-discipline and good study habits (also found in this study, see section 8.3.1). They furthermore showed to be academically and socially proficient ensuring integration into the institutional environment. The learners admitted to struggling with extensive research and writing, managing time and getting accustomed to class schedules.

Sutton (2002) discuss the high level of self-directed learning that homeschooled students exhibit. He also suggests that these students are courageous, take risks and don't back down when things get hard, suggesting that these students developed resilience and perseverance. Drenovsky and Cohen (2012) reported that home educated college students when asked about their grades reported that they achieved mostly A symbols compared to students who were never home educated, who reporting mostly B symbols at college. Home educated students also rated their overall experience of college as more positive and conveyed lower levels of depression.

Yu, Sackett, and Kuncel (2016) investigated the SAT scores of 732 homeschooled students at 140 colleges and universities and analysed and compared these to more than 800 000 traditional student's results. The study concluded that home educated students who attended college were as successful as their traditionally educated counterparts and that SAT scores could be used to predict retention of all students independent of whether they were home educated or traditionally schooled.

Intriguingly a study by Duggan (2010) investigated student background and found that home educated learners were much more likely to attribute their acquired skills, knowledge and abilities to their previous educational experiences than private or public schooled counterparts. This fascinating statement suggests that home educated learners attributed their college success to their preparation through home education.

With regards to academic performance the data overall show a similar or higher academic performance by home educated learners, most probably due to self-efficacy, self-discipline, autonomy and student engagement principles as discussed.

5.4 Conclusion

The theoretical perspectives on preparing learners for higher education was reviewed in Chapter 5, which commenced with the definition of student success. The historical evolvement of student success was discussed. How this pertains to the South African context was revised, highlighting three theoretical frameworks that govern student success in this context, which are: i) Student engagement, ii) Human capabilities and capital and iii) Social Realism. The correlation between higher education success and the student engagement theoretical framework was assessed, starting with the historical context of student engagement, progressing to recent developments in student engagement. Four themes which govern student engagement in the South African context was considered: i) Academic Challenge, ii) Learning with peers, iii) Experience with staff and iv) Campus environment. Each of these South African student engagement themes was discussed in more detail. More recent work on student engagement at the educational interface and how this relates to higher education success was presented and the chapter concluded with data pertaining to home educated learners and higher education success.

The next chapter will provide the research design before presenting the data obtained in this study and the conclusions drawn from that data.

6 Research Design

6.1 Introduction

The purpose of this chapter is to outline the research design of this study. The literature review in Chapter 2 discussed the international perspectives on home education and was extended in Chapter 3 to give the South African context of home education. Chapter 4 reviewed the pedagogical home education approaches that families utilise while Chapter 5 studied the theoretical perspectives on preparing learners for higher education success, with a specific reference to Student Engagement. The purpose of these four chapters was to contextualise this study both historically and theoretically. Chapter 6 provided the details of the research design of the study.

This study followed a systematic process of inquiry into the storied accounts of individuals who experienced individualised home education in a South African context and the ways in which this approach prepared them, or not, for higher education. According to Patton (2015), research is defined as: “the process of systematic inquiry that entails collection of data; documentation of critical information; and analysis and interpretation of that data/information, in accordance with suitable methodologies set by specific professional fields and academic disciplines.” The emphasis on following a systematic process if further underlined by Patton (2015) who defines the process of conducting research as eight steps starting with identifying the problem or research question (this step is addressed in Chapter 1 of this study). The first step is followed by a literature study positioning the study in the current body of literature and determining what is already known about the problem. In the same vein McMillan (2021) states that prior research should be used in a systematic way that allows for the efficient design of new research, which will answer the research questions in an efficient and logical way. This second step is addressed in this study through chapters 2 to 5, with a specific emphasis on Chapter 5 that positions Student Engagement as the theoretical point of departure of this study. The literature study is followed by setting the objectives and research questions (in this study, this step is partly covered in Chapter 1, but elaborated on in this chapter). This step leads to deciding on a research design and sample/participant design; something that was addressed in this chapter. The data was then collected, whereafter the data was analysed and processed to reach conclusions and generate new knowledge from the data. The findings were documented in chapters 7 and discussed in chapter 8.

The following section will focus on this study's research aim, objectives and questions.

6.2 Research Aim, Objectives and Questions

The research aim, objectives, and questions pinpoint a study in a specific direction and can be used to establish smaller goals and keep the study on track (McMillan, 2021). It also positions the study in the academic sphere and allows the researcher to methodically work towards answering the question.

The effective preparation of primary- and secondary school learners for higher education is currently an immense challenge facing South Africa. This challenge is highlighted by Mlachila and Moeletsi (2019) who – drawing from data from a study by the International Monetary Fund – sates that:

> *"About half of South Africa's students drop out of school before completing secondary education. Among the learners who write the end of high school examinations, about a quarter fail. Moreover, less than 5% of students who start primary school end up with a university qualification."*

This challenge of preparing learners for higher education is further underlined by the fact that, in 2020, only 15% of South Africans between the ages of 25 and 34 had a tertiary qualification in comparison with an average of 47% across other OECD countries (OECD, 2022). Furthermore, more than 40% of all first-year students in South Africa are unsuccessful in completing their degrees (Marwala & Mpedi, 2022). "According to a 2019 government review of the first 25 years of democracy, in the 2010 cohort, 22% of students achieved a three-year degree within three years, only 39% had completed their degrees by the fourth year, and only 56% of students completed their degrees by the sixth year." (Marwala & Mpedi, 2022). Van Broekhuizen et al. (2017) also indicates in their study that a mere 36,9% of students graduated after four years of study at a prominent public university in South Africa. This success rate only increased to 58,1% after six years of study for an undergraduate degree at the same institution. Thus, preparing learners effectively for higher education remains a challenge in South Africa.

This study, therefore, focus on the following primary research question: In what ways, if any, can the storied accounts (past) of different stakeholders in individualised home education, provide deeper insights about preparedness for higher education in a South African context?

The following secondary research questions assisted in answering the above-mentioned primary research question:

1. What are existing international perspectives on home education?
2. What are existing national perspectives on home education?
3. What are the existing home education philosophies and approaches that host and formulate the definition of individualised home education as a unique approach in a South African context?
4. What specific theoretical perspective does *Student Engagement* provide concerning the preparation of learners for higher education success?
5. How could narrative research be used to create a deeper understanding of how an individualised home education environment could prepare learners for higher education?

Considering the research questions outlined above, the primary aim of this study was, therefore, to get a deeper understanding of preparedness for higher education through the storied accounts (past) of different stakeholders in individualised home education in a South African context..

The following research **objectives** was generated in order to achieve the primary research aim:

1. Describe existing international perspectives on home education. This objective relates to the first secondary research question above and was addressed in Chapter 2.
2. Describe existing national perspectives on home education. This objective relates to the second secondary research question mentioned above and was addressed in Chapter 3.
3. Describe the philosophies and approaches to home education which contextualises individualised home education as a particular approach in the South African context. This objective relates to the third secondary research question mentioned above and was addressed in Chapter 4.
4. Describe the specific theoretical perspective that *Student Engagement* provides about the preparation of learners for higher education success? This objective relates to the fourth secondary research question above and was addressed in Chapter 5.

5. Discuss the research design, methodology and method of this study. This objective relates to the fifth secondary research question mentioned above and was addressed in this chapter (Chapter 6).
6. Analyse the storied accounts (past) of different stakeholders in individualised home education and discuss the implications of these results for higher education preparedness in a South African context. This objective relates to the fifth secondary research question and was addressed in Chapters 7 and 8.

The research design will be discussed in the next section.

6.3 The Research Design

This research study can be defined as a qualitative research study from an interpretive perspective and utilised narrative inquiry. The researcher used a snowball method of data collection to select participants and qualitative data was gathered through semi-structured interviews. The method used to analyse the storied accounts of participants was a thematic data analysis process.

The following sections describe each of these aspects of the research design in more detail.

6.3.1 Introduction

The research design determines the way in which data was collected and analysed, with the aim of answering the research question(s) in the most effective way (Saunders, Lewis & Thornhill, 2019). Data is collection and analysed methods are depicted by the research onion of Saunders et al. (2019) shown in Figure 6-1.

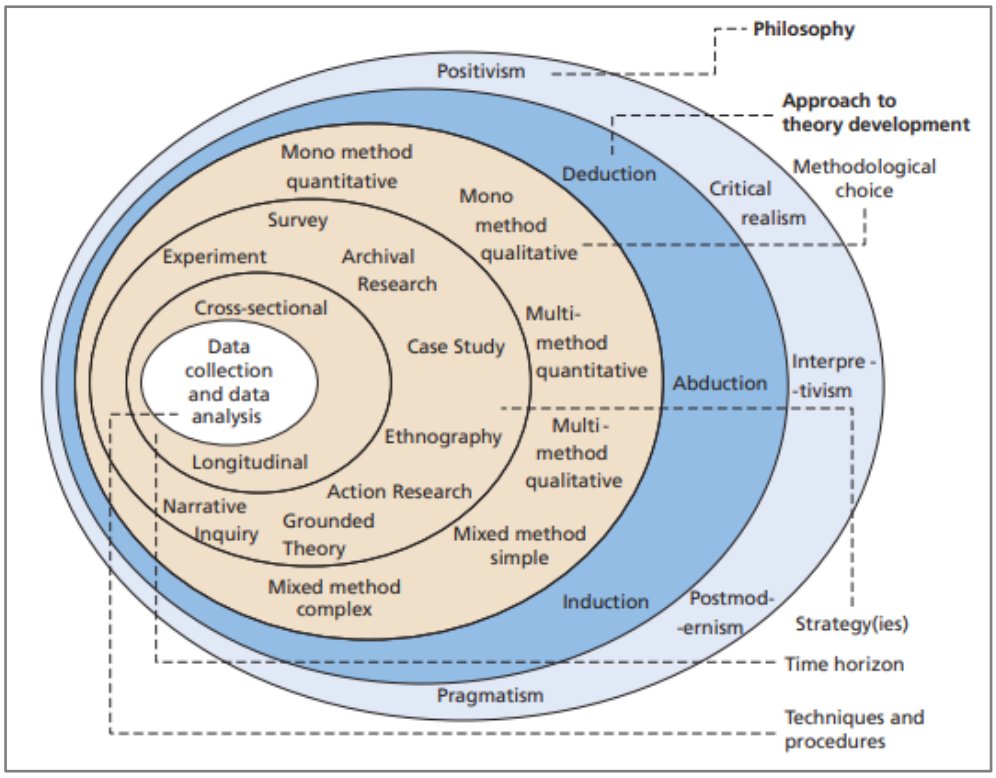


Figure 6-1 The research onion adapted from Saunders et al., (2019)

Figure 6-1 illustrates the various philosophies that can be followed when approaching a research problem. From here the research strategy appropriate to the research question was established and the data collection techniques defined in order to reach the desired outcomes of the research project. Table 6-1 is important for this study as it contextualises the research philosophy, strategy and techniques, and procedures based on the desired outcomes of this study. Firstly, the research philosophy was defined and discussed in more detail, followed by the research methodology, and methods of data collection and data analysis. The techniques and procedures of data collection was considered. Following data collection, the data interpretation strategy and approaches for trustworthiness of data was discussed. Lastly, the ethical considerations were regarded.

The research philosophy which is depicted by the outermost ring of the onion (Figure 6-1) was discussed first.

6.3.2 The Research Philosophy

The research philosophy represents a foundational belief system about acquiring knowledge (Saunders et al., 2019; McMillan, 2021; Patton, 2015). The philosophy includes the values and assumptions inherent to the researcher's view and the extent to which these assumptions and values influenced the research process. The assumptions

that influence the values and beliefs of the researcher were defined as inherent to ontology, epistemology, and axiology (Saunders et al., 2019; McMillan, 2021; Patton, 2015). These assumptions are discussed in more detail:

- **Ontology:** that which represents the nature of reality.
- **Epistemology:** it represents what the researcher views as acceptable, valid, and legitimate knowledge.
- **Axiology:** it represents the value systems that drives the researcher and their view of ethics in the research process.

The five research philosophies as shown in the research onion (Figure 6-1) are: positivism, critical realism, interpretivism, postmodernism and pragmatism. These research philosophies are discussed in more detail.

Positivism refers to a scientific approach with the aim of producing regulatory generalisations, working with facts and numbers and the researcher remains objective (Saunders et al., 2019; McMillan, 2021; Patton, 2015).

Critical realism refers to the desire to explain experiences from a historical, realistic, and principal viewpoint. It acknowledges people's experiences, cultural views, and historical background as their reality. The researcher tries to minimize bias and remain objective but acknowledges social depth by experience (Saunders et al., 2019; McMillan, 2021; Patton, 2015).

Interpretivism develops from the principle that humans create meaning and the interpretive view aims to understand and explain the social meaning of events and interactions. The interpretive research desires to captivate rich and complex social experiences and extract foundational truths. This type of research is aimed at creating a rich, complex, and layered social understanding of context and experience. It is a value-driven approach where the researcher is subjective and invested in the knowing and understanding that results from the research (Saunders et al., 2019; McMillan, 2021; Patton, 2015).

It is important to note that this study is based on an interpretive perspective, as explained in more detail below.

Postmodernism seeks the voice of marginalised and minority groups in contrast to the powerful and majority views at the cost of others. It is value-based research requiring radical reflexive practices (Saunders et al., 2019; McMillan, 2021; Patton, 2015).

Pragmatism relates to a research perspective where the researcher desires to make a difference. This view incorporates data, concepts, theories, and ideas as a way of combining these into practical actions that will improve the problem identified in the research. Pragmatic research is usually value-driven with the researcher, a participant as an agent of change (Saunders et al., 2019; McMillan, 2021; Patton, 2015).

These five research philosophies are discussed from the assumption viewpoints and are shown in Table 6-1 below (Saunders et al., 2019). According to Saunders et al. (2019), a plausible set of assumptions will result in a reliable philosophy, which in turn will strengthen the research methodology. To design a sound research project, the philosophy, methodology, and methods needs to be well-planned and should sustain the research aim, questions, and strategy. The philosophy also incorporates the role of reflexivity on the part of the researcher in the process of exploring and interpreting data.

Table 6-1 The research philosophy types, adapted from Saunders et al., 2019

	Ontology	Epistemology	Axiology	Typical methods
5 Research Philosophy types	(nature of reality or being)	(what constitutes acceptable knowledge)	(role of values)	
Positivism	Real, external, independent One true reality (universalism) Granular (things) Ordered	Scientific method Observable and measurable facts Law-like generalisations Numbers Causal explanation and prediction as contribution	Value-free research Researcher is detached, neutral and independent of what is researched Researcher maintains objective stance	Typically deductive, highly structured, large samples, measurement, typically quantitative methods of analysis, but a range of data can be analysed
Critical realism	Stratified/layered (the empirical, the actual and the real) External, independent Intransient Objective structures Causal mechanisms	Epistemological relativism Knowledge historically situated and transient Facts are social constructions Historical causal explanation as contribution	Value-laden research Researcher acknowledges bias by world views, cultural experience and upbringing Researcher tries to minimise bias and errors Researcher is as objective as possible	Retroductive, in-depth historically situated analysis of pre-existing structures and emerging agency Range of methods and data types to fit subject matter
Interpretivism	Complex, rich Socially constructed through culture and language Multiple meanings, interpretations, realities Flux of processes, experiences, practices	Theories and concepts too simplistic Focus on narratives, stories, perceptions and interpretations New understandings and worldviews as contribution	Value-bound research Researchers are part of what is researched, subjective Researcher interpretations key to contribution Researcher reflexive	Typically inductive. Small samples, in-depth investigations, qualitative methods of analysis, but a range of data can be interpreted
Postmodernism	Nominal Complex, rich Socially constructed through power relations Some meanings, interpretations, realities are dominated and silenced by others Flux of processes, experiences, practices	What counts as 'truth' and 'knowledge' is decided by dominant ideologies Focus on absences, silences and oppressed/ repressed meanings, interpretations and voices Exposure of power relations and challenge of dominant views as contribution	Value-constituted research Researcher and research embedded in power relations Some research narratives are repressed and silenced at the expense of others Researcher radically reflexive	Typically deconstructive – reading texts and realities against themselves In-depth investigations of anomalies, silences and absences Range of data types, typically qualitative methods of analysis
Pragmatism	Complex, rich, external 'Reality' is the practical consequences of ideas Flux of processes, experiences and practices	Practical meaning of knowledge in specific contexts 'True' theories and knowledge are those that enable successful action Focus on problems, practices and relevance Problem solving and informed future practice as contribution	Value-driven research Research initiated and sustained by researcher's doubts and beliefs Researcher reflexive	Following research problem and research question Range of methods: mixed, multiple, qualitative, quantitative, action research Emphasis on practical solutions and outcomes

Table 6-1 provides a clear outline of the five research philosophy types – and their associated ontology, epistemology, axiology, and methods – it is important to note that this study is underpinned by an interpretive perspective (as indicated by the red frame).

Individualised home education is the topic of study and introduces a wide variety of approaches a family could follow because each family could approach it with a unique perspective focusing on the individual learner. In addition, each family will hold their own perspectives, values and social construct introducing multiple meanings to the definition of individualised home education. This approach has not been clearly defined and is interpreted by each home education family with their own lens. With this mutability of realities, meanings, practices and processes the interpretivism philosophy is the only philosophy that could unfold the complexity of this social construct. The Epistemology utilised narrative stories interpreting perspectives to the unique stories with the aim of creating new understanding on this topic. From an Axiological perspective the research topic agrees with the value bound nature of Interpretivism. Additionally, the research is subjective to the study being conducted by a home education mother, utilising the same approach, with the subjectiveness being key to the contribution the researcher unveils. Reflexive interpretation was actively pursued throughout data collection and interpretation as an obligatory source of interpretivism. The typical methods align perfectly with this study utilising a small sample size, utilising in-depth, qualitative investigations. The interpretivism method allowed the necessary freedom for a sizable data scope reaching the necessary richness and depth that would enable truthful and responsible data that truly describe the complexity in social context. The interpretive approach also allowed for a multi-level analysis of events, experiences, and relationships.

The research methodology of this study was discussed next.

6.3.3 The Research Methodology: Narrative Inquiry

The methodology for this study is biographical narrative inquiry, and in this regard the researchers decided on the life history narrative form, appropriate to this study, because of the interest in the stories of these participants that could show how this specific home education model prepared them for higher education. Also, the researchers were interested in the personal stories of families who could describe individualised home education and to consider what could be learned from such an education model. The intricacies of how families executed individualised home education in a unique way were of special interest. Using this type of narrative study guided the researcher to stay attuned to and collect data that relates directly to the stories of participants, especially in relation to their lived experiences during a period of individualised home education (Kim, 2016:120-121). Upholding the methodology of biographical narrative inquiry, with a life

story narrative form, allowed the researcher – like a metaphorical midwife – to bring the storied accounts of participants about their (or their childrens') education experience into life.

Narrative inquiry was chosen as the methodology for this study because it provided a way to create a deeper understanding of the lived experiences of young adults (and their parents) who went through individualised home education and continued to complete their higher education studies in the minimum residential period. "Narrative inquiry is a way of understanding experience" (Clandinin 2013:17). Thus, this methodology enabled the researcher to collect and analyse stories of the experiences that made up the lives of parents and learners that went through individualised home education in South Africa.

Narrative inquiry is a well-established methodology in the field of Education. Smith (2008:65) for example alludes to the fact that narrative inquiry has become a frequently used methodology on Education research. The lived experiences of teachers and learners has become an important source of data to create a deeper understanding of educational environments (Clandinin & Connelly, 2000; Clandinin, 2007, Goodson, 1995; Andrews, Squire, Tamboukou, 2008; Josselson, 2011; Clark. & Rossiter, 2008; Kara & Pickering, 2017). Referring to Clandinin and Connely's (1990) use of the term narrative inquiry in the field of Education, Kim (2016:18) states that "*narrative inquiry embodies theoretical ideas about educational experience as lived and told stories […] narrative educational researchers purport to bring the lived experiences of teachers and students to the forefront as a way to reshape the views on education.*" This overarching goal of narrative research – as a particular methodology in Education research – aligns well with the research aim of this research study, namely, to get a deeper understanding of preparedness for higher education through the storied accounts (past) of different stakeholders in individualised home education in a South African context.

Furthermore, narrative inquiry is also considered to be an effective methodology for research amongst minority and underrepresented groups. Paiva (2008) states that narrative inquiry is often utilised to represent the minority, unknown, oppressed, or ignored social groups (Paiva, 2008). This aspect of narrative inquiry is particularly relevant to this study. In Chapter 2, 3, and 4 the literature study indicated why the home education community can be considered as a minority group that, in some contexts, still face oppression and marginalisation. Furthermore, home education families that choose to follow an individualised approach belong to an even smaller group. Thus, narrative inquiry will allow the researcher to create a deeper understanding of the unique

experiences of home education families in South Africa that followed an individualised approach – and how these experiences prepared them, or not, for higher education.

There are several genres associated with narrative inquiry. Kim (2016:120-121) identifies three broad categories of narrative forms that guide the type of data that researchers could collect, namely: autobiographical, arts-based, and biographical narrative inquiry. The following table outlines each of these genre-categories and their respective sub-categories.

Table 6-2 Narrative Inquiry Genres. Adapted from Kim (2016:121)

AUTOBIOGRAPHICAL NARRATIVE INQUIRY	**ARTS-BASED NARRATIVE INQUIRY**		**BIOGRAPHICAL NARRATIVE INQUIRY**
	Literary Based	**Visual-Based**	
Autobiography	Creative Nonfiction	Photovoice	*Bildungsroman*
Autoethnography	Short Story	Photographic Narrative	Oral History
	Fiction	Archival Photographs	Life Story
	Novel	Digital Storytelling	Life History
	Poetry		
	Drama		

The researcher identified biographical narrative inquiry with Life Story as a particular genre for this study. Life story, as a particular narrative form, focuses on the narrative study of individual lives (Atkinson, 2012; Kim 2016). In using this narrative form the researcher was particularly interested in understanding the lives and lived experiences of the learners (and their parents) who experienced individualised home education in a South African context and then proceeded to complete higher education degrees in the

minimum residential period. Thus, the researcher intentionally did not focus on the entire life story of each participant, but only those segments and aspects of their lives that were relevant to their lived experiences of individualised home education. Points of interest for the researcher were the stories these individuals chose to convey about their respective educational experiences, what they remember of it, and what they wanted others to know about it.

Furthermore, the researcher upheld a portal approach in the application of a Life Story genre. Tierney (1998) indicates that there are two approaches to apply Life Story to educational research namely a portal approach and a process approach (Kim 2016:132). The latter approach places a strong emphasis on the storied narratives and the interpretation thereof – often associated with thick descriptions that are left to the reader for interpretation. However, the former approach – i.e. a portal approach – move from the assumption that the storied accounts of participants provide a portal to understand a larger society represented by the participants – in this case the home education community in South Africa, particularly those using an individualised approach to home education. Thus, with a portal approach individual narratives provide a way to account for the way in which people live (e.g. home educate families upholding individualised home education) (Kim 2016:132-133). The data, therefore, provide deeper insight about the conditions (especially concerning higher education preparation) of these families gleaned from the storied accounts of participants.

6.3.4 Research Method

It was clear from the research problem, objectives and questions that this study would require a qualitative approach to get rich data that will enable a deep understanding of participants' lived experiences. A narrative research methodology was chosen. The methods of data collection and analysis are discussed next.

6.3.4.1 Data Collection

The procedure, criteria, and details of data collection are discussed.

Criteria

A snowball method of data sampling was utilised (Patton, 2015:264-272) in identifying candidates (and their parents) for semi-structured interviews using the following criteria:

i) The candidate successfully completed higher education in the minimum residential period.

ii) The candidate was educated in a home education environment prior to higher education for a minimum of five years.

iii) Individualised Education was utilised as an approach; the criteria are:

- The parents understood/acknowledged and accommodated the uniqueness of the child
- The educational approach was adapted to fit the uniqueness of the child
- The strengths/passions of the child were intentionally acknowledged and developed
- The educational approach was developed as a unique growth plan for that individual

Number of Participants

A snowball method of data collection was followed. Initially, nineteen home educated adults were identified as candidates for the study. The first candidates were obtained through a homeschool acquaintance of the researcher who had a daughter that recently completed studies at the University of Pretoria. She provided information of possible candidates whom she knew and by word of mouth the email addresses for the first nineteen candidates were obtained. Candidates were contacted by email and the information sheet and consent form provided in Appendix A were sent to all candidates together with a registration link to gather the required personal information and to determine if the candidates meet all requirements. The consent form was sent back by participants to the researcher and collected. At this point, the candidates that met the requirements and sent back consent forms were asked for contact information of the home education parent. The home education parents of the suitable candidates (who met all the criteria) were contacted and provided with a registration link for personal information as well as the information letter and consent form. The consent forms were sent back by the participating home education parents. All participants who met the criteria and sent back consent forms, together with the associated parent personal information and consent forms, were interviewed. A total of twenty-one initial interviews were scheduled after the completion of the participant identification process. The data presented in the study includes seven home educated adults and five home education parents with two sets of siblings being interviewed (more information on the selection process is provided below). The average age of the seven home education individuals was 27 years, 63% were male and they home educated for an average of 11 years (see Table 6-2). The candidates finished their studies between 2016 and 2020.

Table 6-3 Home Educated adult participant information (number of interviews in brackets)

Family no	Part No	M/F	Degree Obtained	Year obtained	Participant Pseudonym	Mother Pseudonym
1	1	M	B.Eng. Electric and Electronic	2019	Curious scientist (1)	Encourager (1)
2	2	M	Honours degree in Sound Design and Cinematography	2018	Bright dreamer (1)	Attentive listener (1)
3	3A	F	BEng. Industrial Engineering	2019	Benevolent relator (2)	Lighting fires (2)
3	3B	F	BSc. Consumer Science Food Retail Management	2020	Wise Chemist (2)	Lighting fires (2)
4	4A	M	BEng. Mechanical Engineering	2020	Pilot Braveheart (2)	The world is our Classroom (1)
4	4B	M	BEng. Industrial Engineering	2019	Conscientious Innovator (2)	The World Is Our Cassroom (1)
5	5	M	BEng. Industrial Engineering	2019	Accountable Engineer (1)	Privileged (2)

Initial interviews focused on early memories of home education as the questions aimed to chronologically gather information about the home education journey. Time constraints and the way the questions were structured did not gather sufficient information on the higher education phase, which was identified as a gap. Therefore, a second round of interviews were scheduled with participants that provided the highest number of themes after the first round of coding and whom was available in a short time period. The second-round interviews were conducted with seven participants which included four home education adults and three home education parents (more information on the selection process is provided below). The number of interviews conducted is shown in Table 6-2 above in brackets next to the Pseudonyms. The details of the interviews are discussed next.

Serial interviews are recommended by Read (2018) in circumstances where (i) complex issues are being studied, (ii) when interviews are time constrained, (iii) when exploration change or variation over time, (iv) when participants are reluctant to share information, (v) when working with critical informants. In this study the research was indeed of a complex nature, the interviews were time constrained and intended to explore change over time investigating home education from early years to Higher Education. The researcher's decision to introduce two rounds of interviews is largely based on Rosenthal's (1993:61) suggestion to: "separate the relevant from the irrelevant". Serial interviews allowed storied accounts to represent construction of past, present and future events. This study therefore met the requirements for serial interviewing.

Serial interviews provide various advantages according to Reid (2018) which include verification and cross-checking of data, building familiarity and trust with participants, probing topics from various angles, deeper and more meaningful data and exploring the experiences of participants. The interviews aimed to investigate progression over time and therefore the second interview was more focused towards the Higher Education phase, although the second interviews did indeed provide data for cross checking. The researcher also experienced participants more open and willing to share during the second round of interviews suggesting trust and openness over time and therefore generating deeper and more meaningful data. The serial interviews were therefore successful in gathering the type of data as intended. The next section discussed data collection through interviews and transcribing.

Interviews and Transcribing

The research data were collected through semi-structured interviews (Patton, 2015:432-443). The questions were formulated to enable pragmatic data with the purpose "aimed at getting straightforward answers that can yield practical and useful insights"; something that is significantly important for the aim of this research study (Patton, 2015:436).

The first round of interviews was scheduled with the home education adults and their parents separately at a time convenient for the participant. Online interviews were conducted utilising the Zoom platform and all interviews were recorded with written consent from the participants. The semi-structured first round interviews were conducted with the participants utilising the questions provided in Appendix B. Of the twenty-one interviews, a total of fifteen interviews were selected for transcribing purposes (based on language proficiency, depth of data, and ease of obtaining data). The video recordings of these fifteen interviews were transcribed into text documents utilising Otter software (Otter.ai, 2022). For quality purposes, the transcriptions were reviewed in detail by the researcher to enable accurate transcriptions from the original video. The transcriptions were then loaded onto the NVIVO software for data coding. From the coding and data analysis (described in section 6.3.4.2), seven second round interviews were completed for additional data. The questions for the second interviews are provided in Appendix C. These interviews were also transcribed by the same methods mentioned above.

6.3.4.2 Data Analysis Technique

As discussed in the previous section, the narrative interviews were transcribed after the first set of interviews. The storied accounts of participants were used as units of analysis.

A thematic data analysis process was followed. Thematic data analysis provides meaning and useful results from the storied accounts of participants through rigour and method contributing to the trustworthiness of the data (Nowell, Norris & Moules, 2017).

The thematic data analysis phases, which consist of six phases, as tabulated by Braun and Clarke (2006), were used as a guideline for thematic data analysis. The transcribed documents were printed and read and re-read noting down original ideas as suggested in step 1 by Braun and Clark (2006). Transcribed documents were then uploaded in NVIVO software. Step 2 of Braun and Clarke (2006) is the generating of initial codes using the software. All the transcribed interviews of the first set of interviews were initially coded systematically utilising NVIVO, across the complete data set. The uploaded interviews were coded for themes pertaining to individualised home education (Patton, 2015:541-552). The research focused on the type of environments that were conducive to learner development and success, primarily focusing on how and why development occurred (as opposed to what is developed). Emphasis was thus placed on the process, rather than the outcome. The coding investigated how the educational process aligned with the elements of higher education preparedness. Step 3 from the phases of the thematic analysis entails arranging codes into possible themes. After identifying themes coded extracts are arranged according to the themes, circling back to the data and systematically adding themes. Step 4 from the phases of the thematic analysis entails reviewing the defined themes (i) relative to the coded texts and (ii) relative to the entire data set. The next step required adding or removing themes to best represent the coded themes. After adding all the themes, a thematic map of the analysis was generated. The phases of thematic analysis, step 5, entailed the continuous analysis of the themes and categorising the themes to represent the narrative. The next step was to clearly define the themes and finalise the names for each theme. The final phase, step 6, entails the selection of pieces of text to best represent each theme and relating the themes back to the research questions and objectives. The process of data trustworthiness was discussed next.

6.3.4.3 Data Trustworthiness

Qualitative research as a methodological approach, although placed in a complex landscape, still demand validity, reliability, generalisability and objectivity (Tracy, 2010; Winter, 2000). Although universal criteria for determining validity in the quantitative research field is complicated, progression in this field has established best practices referred to as the “big tent” framework (Denzin and Lincoln, 2008, 2011; Tracy, 2010).

This conceptual framework defines eight parameters for describing qualitative quality which are i) worthy topic, ii) rigor, iii) sincerity, iv) credibility, v) resonance, vi) significance, vii) ethics, viii) meaning. Each of the big tent criteria was discussed in relationship to the current narrative study on individualised home education.

i) Worthy topic

The supporting problem statement and motivation for this study was discussed in section 1.2 which is grounded in the current challenge of preparing learners for higher education in the South African context. The study is positioned in a minority educational field which aims to prepare learners for higher education through individualised home education. The study employs narrative enquiry, attempting to create rich and contextual data from home education families on the individualised approach and determining how such an approach could facilitate student engagement and through this theoretical framework assist in preparing learners for higher education. The study is significant because it is timed at a critical time in the education sphere of South Africa. It also aims to address contextual-, methodological-, and framing limitations in the current body of literature. Student engagement as a strategy for preparing learners for higher education could possibly provide answers, not only to home education families but also to policy makers wishing to address the current crisis in the primary and secondary education spheres of South Africa.

ii) Rigor

This qualitative research study employed an interpretive perspective with the aim of protecting the social construct and complex reality. Data collection was discussed in more detail in section 6.3.4.1 and data analysis in section 6.3.4.2. Recruiting, informed consent, transcribing and coding was discussed in detail above.

iii) Sincerity

Researcher positionality was discussed in section 1.7 and reflects on possible bias, values and how these could influence the data gathering and interpretation. Also, the approaches taken to prevent bias.

iv) Credibility

Patton (2000) implies that credibility requires a thorough overview of techniques and methods ensuring quality data through reliability, validation, and triangulation (Patton, 2000). Triangulation suggests that studies use multiple methods or data collection which

provide cross-data validation. Data validation can be accomplished in numerous ways which include (1) method triangulation, (2) triangulation of sources, (3) analyst triangulation, and (4) theory or perspective triangulation (Patton, 2000). Triangulation, according to Patton (2000), provides nuanced and depths of data that provides richness and immersed insights.

Data validation was accomplished by utilising a triangular approach to the interviews. The first data set is constituted of individuals who were home educated through an individualised home education approach, and who completed their higher education studies successfully in the minimum residential period. The second data set was constituted by the parent(s) who directed the home education of these individuals. These two data sets provide two perspectives on the phenomena of preparing learners for higher education success through individualised home education in a South African context. Interviews of siblings and parents of the same families also created the possibility to compare different perspectives on the same events and experiences. Furthermore, the two rounds of interviews in specific instances allowed for reiteration of events, emotions, and experiences – thus, creating a deeper insight into the lived experiences of these families.

v) Resonance

The findings, because it is theoretically grounded in the student engagement framework, allows for contextualised generalisations about learning environments, activities, skills and quality interactions that could better prepare learners for higher education. The findings become transferable in some instances to the broader home education community. Attempts towards deep, progressive and engaged learning becomes applicable in many educational settings.

vi) Significance

The study finds it theoretical significance in the way it addresses limitations in the current body of literature on home education in a South African context. In this regard the narrative accounts of participants show deep learning and application of multiple student engagement strategies in the home educational setting. The practical significance of this study centres on the way in which it provides deeper insight into practices, environments, life skills and interactions that could improve various aspects of student engagement thereby improving higher education preparation of learners.

vii) Ethics

Ethical considerations was discussed in section 6.3.4.4. The researchers applied principles of voluntary participation, consent to participation and recording of interviews, protecting personal information, protecting the anonymity of participants and truthful reporting of the data and findings.

viii) Meaning

The meaning of the narrative accounts of participants was explored through a thematic data analysis approach. The research results were then compared with the theoretical framework of Student Engagement to gain a deeper understanding how an individualised approach to home education could prepare learners for higher education. Utilising triangulation provided a depth to narratives and specific experiences from different angles and perspectives. Mapping the data on the student engagement theoretical framework provided deep interpretation of the individualised home education environment and how such an environment could successfully prepare learners for higher education.

The ethical considerations of the study were discussed next.

6.3.4.4 Ethical Consideration

Ethics approval was obtained from the UFS General Human Research Ethics Committee (GHREC) with reference number UFS-HSD2020/1755/252. The following ethical aspects were excluded as they are not applicable to his study:

i. Emotional Distress
ii. Personal or cultural Embarrassment
iii. Economic harm
iv. Legal jeopardy
v. Physical pain/harm
vi. Reputation
vii. Harm to relationships
viii. Vulnerable participants (children or elderly)
ix. Sensitive or compromising audio/visual content
x. Conflict of interest
xi. Third party data
xii. Illegal activity

xiii. Payment or inducement for participation

xiv. Deception/concealment or covert actions

The following aspects of ethical concern were identified with information on how risk was mitigated:

i. **Participation:** Participation was voluntary with the provision of a detailed information overview of the research project, the aim of the research study, and what it would entail.

ii. **Loss of work/personal time:** The risk was mitigated by full disclosure of the process and how much time it would entail. Interviews were scheduled at times convenient for participants.

iii. **Privacy and confidentiality:** No disclosure of information to third parties. Secure storage of data/interviews on a password-protected computer with softcopies on a password-protected hard drive.

iv. **Recordings of interviews:** Interviewees provided written consent for recordings of online videos.

v. **Researcher ethical considerations:** Care taken in protecting confidentiality and shield participants from harm. The researcher acted respectful towards the contributions of participants. Data and quotes were reported truthfully and honestly.

6.4 Conclusion

In this chapter, the research problem, aim, and objectives were defined and utilised for the completion of the research design. The philosophy, method, and strategy for data techniques and procedures were defined and reviewed. Data interpretation techniques were reviewed, and trustworthiness of the data was discussed. Thus, this study can be considered as a qualitative research study from an interpretive perspective. Narrative inquiry has been chosen as a particular methodological approach to this study. Data was gathered through two rounds of semi-structured interviews and a snowball sampling method was used. A thematic data analysis process was applied to analyse the data. Ethical considerations were emphasised and applied. Thus, the purpose of this chapter was to indicate how the research design aligned with the research problem and research question. To put it differently, the goal was to use a specific research design to collect and interpret the data such that it would provide a deeper understanding of the research question and subsequently contribute to addressing the research problem. The next chapter discussed the research results that were obtained.

7 Research Results

The research design of this study was discussed in Chapter 6. In this chapter, the research results, and the discussion thereof, was presented and discussed.

Due to the nature of the narrative research, sections of the results contain long fragments of stories/experiences or events. For this study, it is necessary to present the data in this format because it provides context, depth, and layers of meaning that would not be captured if the data was presented in shortened clips.

The storied accounts of families that experienced individualised home education formed the unites of analysis in this study. Thus, data is presented according to the narrative accounts of the five families that participated in this research study. The aim of presenting the research results per family is to underline the importance of the socially situated content of families' respective narratives (Pavlenko 2002). In this regard the researcher wants to acknowledge that the context of each home education family is vital to making meaning of the specific narrative of each family (Phillion & Connely, 2004). However, the narrative context is multi-faceted and, as indicated by Clandinin & Connelly (2000), consists of the following interrelated dimensions: participants, timing and the setting. In this study, these interconnected dimensions relate to the following: *participants* refer to home educated students and their home educating parents; *timing* refers to the years spent in primary education, secondary education years, and higher education respectively; and the *setting* refers to the home environment in which home education took place.

In accordance with the research design, narrative accounts of five different families were analysed through thematic data analysis. The participants consisted of seven home educated adults (that included two sets of siblings) that completed higher education and five mothers of these home educated adults (see section 6.3.4.1). The five home education families are introduced to the reader with assigned pseudonyms for ethical reasons. The data is presented under four main categories: (1) milieu, (2) learning, (3) life skills and (4) quality interactions for each of the five families in the same consecutive order.

7.1 Family 1

Participant Curious Scientist and mother Encourager represents the first family that provided narratives regarding individualised home education.

PARTICIPANTS

Curious Scientist

Participant 1 was a male, who was home educated for 9 years, and finished a degree in Electrical and Electronic Engineering at Stellenbosch University. His father was also an engineer and exposed him to engineering principles throughout his home education. Herewith an introduction to participant Curious Scientist:

> *"We did experiments from; I still do experiments from when we were little. Like, if you wonder about something, you go and test it. […] Yes, do something, to satisfy the curiosity."*

Curious Scientist described his love for science, experiments and expressed an early curiosity for learning. His mother Encourager was introduced next.

Mother Encourager

Mother Encourager homeschooled her three children in the Free State province of South Africa. Her narrative revealed a strong component of encouraging her children in growing their strengths and accomplishing their dreams as revealed in the following extract.

> *"[…] just to encourage them in their dreams or their visions […] but to encourage them, and to be there for them […] But at the end of the day, we must just encourage them and, and go with them and be excited with them, with anything, anything they do and everything they want to do."*

An important aspect of the mother Encourager is revealed in this part of the introduction. As a mother and a 'teacher', she was focused and intentionally aware of her children's dreams and what they wanted to do and accomplish. She defines her role as that of an encourager in helping her children achieve their own goals. This role of the parents will be explored further. The narratives of Curious Scientist and mother Encourager were thematically coded, and details are provided.

THEMATIC ANALYSIS

The narratives of Curious Scientist and his mother Encourager were thematically coded and are presented under the themes (as previously discussed): milieu, learning, life skills

and quality interactions. The sub-themes for the milieu in which home education took place are presented for Curious Scientist and mother Encourager.

7.1.1 Milieu

The theme milieu refers to the personal and social environment in which the family functioned, and home educated. From the data analysis process, four sub-themes were identified from the storied accounts of this family, namely: Happy, warm and safe; Active, freedom and experiments; Outside; and Community.

7.1.1.1 Happy, Warm and Safe

Data from this family indicated that they experienced the home environment milieu as emotionally happy, warm and safe. For example, mother Encourager describes their home education environment as happy, warm and safe with the following quote:

> *"Oh, it would be like cozy, warm, a warm room […] a safe place where you can learn something and will be happy, […] yeah, a safe place."*

In a similar vein, Curious Scientist described his home education years as: "*a lekker*[2] *time […] it was really fun*". What is interesting is that this positive emotional experience later in his life transcended into Curious Scientist's work milieu; something that is evident from the following quote: "*And my work is so lekker, you won't believe it, like, I, I cannot wait to come to work every day. Like it is really, really. I have a lekker job.*" Thus, the storied accounts of mother Encourager and Curious Scientist highlights the importance to create an emotionally happy, warm and safe milieu in the home education environment. From the data it seems that a happy, warm and safe home is an important aspect of a conducive learning environment.

The topic of a warm and safe environment is also present in other families' narrative accounts and will be expanded on later.

7.1.1.2 Active, Freedom and Experiments

Participants described the home education milieu as a space that encouraged active and free experimentation. Participant Curious Scientist provided insight into their learning milieu describing the physical environment in contrast with the typical picture of sitting at a desk and working in books. He contrasts this typical picture with the concept of being

[2] 'Lekker' is an Afrikaans expression indicating pure delight.

active, exploring and experimenting i.e. dynamic. His description of this type of learning environment was cited:

> *"I […] definitely, not sitting at a desk. Yeah, like, get your, get your hands on. We did experiments from; I still do experiments from when we were little."*

The mother's description of their home education environment matches this response really well as shown in the following excerpt.

> *"It's like one picture with a lot of things […] a warm room with a lot of experiments […]. And a learning place, a learning area where you can do anything you want to do."*

The citation from mother Encourager presents a home environment of freedom to explore and experiment and not being limited by anything.

The notion of free exploration in the milieu is further illustrated by the fact that experiments were physically placed or stored throughout the physical space of the house. Although the excerpts above also describe aspects of their learning, focusing on the picture suggest a milieu of active participation, engaged learning, resources, materials and completed projects standing around. It creates a picture of a home where learning materials, activities and experiments would often be scattered throughout the house. The mother of Curious Scientist confirms that their home was usually filled with experiments standing around: "*Because we always, always had a lot of experiments, standing in our house*." Curious Scientist also relates how they used normal household furniture in experiments: "*Then we would build an ear. From furniture*". Thus, what is evident from the data is that the entire home became a classroom of free and active experimentation. Learning was not confined to one room or space, but it expanded into all areas of the physical milieu.

Except for the descriptions of hands-on learning and experimenting, which will be discussed in the next section, we also deduce that learning occurred in various spaces depending on what they were investigating and the type of experiments they were performing. There would typically be materials, resources and experiments standing around suggesting that their learning was not confined to a table with books or even a single room. Likewise learning also often took place outside.

7.1.1.3 Outside

Participant Curious Scientist described playing outside during early years and still learning due to curiosity as shown by the following extract:

"There was definitely a very long time that we did nothing, like nothing, nothing. We just woke up and played outside. Yeah, that same time, we were like building, building an area to school in and stuff like that. But that was a 'lekker' time. Yeah, kids are curious. So, you still learn a lot. I think we did Bible study in the morning, and my mom read books to us and things like that."

Curious Scientist described spending extended periods outside, playing and exploring. In describing their home education memories his mother Encourager depicted memories of their early home education outside:

"…reading and joy outside, climbing trees, they have friends around them."

Most likely spending large amounts of time outside was limited to the early education years and decreased during later education phases. This aspect was not addressed during this family's interviews but will be addressed in later interviews. Another aspect of home education that influences the milieu is the community and how the family was integrated in the home education community.

7.1.1.4 Community

Being a part of a home education community or participating in co-ops for learning activities was presented in the data as shown by the reference of mother Encourager:

"We were, there was a co-op group. Also, we only do homeschooling four days a week. And Fridays, we come together and we share our, our joys and how would you call it, fears, and everything we experienced that week. That was for us as a family, like a debrief. And that was so nice to have someone around us doing the same thing, but in a different way."

For this family participating in a co-op provided support, friendship and community. The community also participated in learning activities together. This aspect of their narratives provides insight into the often-criticised aspect of the lack of socialisation in home education settings. This family did not operate as an isolated unit but was integrated into a larger community that contributed to their experiences. The next section discusses the learning activities employed by Family 1.

7.1.2 Learning

The theme centred on the Learning presented sub-themes of interest and curiosity, love for learning, mathematics and languages, topical or unit studies, experiential learning,

reading, individualised, outings and non-formal home education. These sub-themes were coded to make cross referencing within text easier. Thus, the data presented for the narrative of Family 1 is as follows.

7.1.2.1 Interest and Curiosity

The narratives of Curious Scientist and his mother Encourager revealed that curiosity played an important role in their learning activities, especially during the early learning phase. An excerpt from Curious Scientist provides insight into the role that curiosity played during early education:

> *"If we played for, for instance, we suddenly got an interest in airplanes. My mom would like, suddenly say, Oh, well, okay. So, you're interested in airplanes, well, tell me how your airplanes work? And then it's up to you to figure out how it works. And when you're, when you're, when you're small, curiosity gets satisfied quickly. You don't have to go very deep into something. So that small hunger for curiosity was satisfied almost every time."*

His description indicates that his mother often left him to find answers and figure things out on his own. The passage presents not only an important aspect of curiosity and satisfying curiosity, but also reveals another deeper aspect of curiosity named *heutagogy*.

Heutagogy (see Chapter 5) refers to self-determined learning (Blaschke:2012,2021). Being able to explore and learn through curious engagement where learners are not provided with answers to their questions instantaneously but rather left to find answers and figure things out on their own provides the freedom to develop heutagogy.

What was interesting was that Curious Scientist described curiosity, and satisfying that curiosity, as 'addictive'. The following excerpt describes the positive emotion he associates with curious learning and being able to act on finding answers and solutions to things he wanted to know.

> *"If you wonder you go test it. Yes, do something, to satisfy the curiosity. And that's fun. It's sort of addictive also. Yeah, I would describe it like that. That was the fun part to me."*

The description of Curious Scientist about interest and curiosity was affirmed by the narrative provided by his mother. She described his early curiosity for learning as follows:

"And he was a very curious child. […] For instance, he wrote down in grade 1, he wrote down something about ABS brakes. […]. He always used bigger things. And he was always curious so we used some words that you normally would not use at that age."

Not only does his mother confirm his curiosity for learning from an early age but her narrative shows that he absorbed knowledge beyond what would be expected for a certain age when he was curious about something. Being able to learn when he was interested and curious broadened his vocabulary and knowledge on these subjects substantially.

Additionally, following the interests of children, the data indicates that *timing* is also important. Responding to interest, the moment the interest is expressed, it encrourages curiosity and the learner's attitude towards engagement as expressed by mother Encourager:

"[…] if they want to learn about something, it was not oh, you're gonna learn it next year or over two years, if they want to learn about that or was like curious about that, they do it at this stage, the stage, they are curious about that."

To respond to the child's curiosity and interests at the moment they express the interest, requires a level of *flexibility* on the part of the adult. If the mother can remain flexible and not force a very rigid structure but rather respond to the child's inquisitiveness, it creates an environment of fun and becomes a foundation for building a love for learning as discussed in the next section.

From the data it is inferred that creating the freedom, time and resources for learning about interests, at the moment the child expressed interest, not only opens them up for engagement but creates the opportunity to go deeper and transcend the interest into other disciplines and connected areas of growth. This topic will be discussed again with other participants.

Mother Encourager created a reciprocal learning experience between experimental learning and curiosity as shown by the following fragment of her narrative:

"So, when we make it a practical thing, with a lot of experiments, it causes them to be curious. And then they want to look deeper into things."

Interestingly, mother Encourager suggests that hands-on learning with a lot of experiments awakens curiosity. One would think that curiosity would lead to experiments and hands-on learning activities but based on this quote it is suggested that this process

is rather a reciprocal system where curiosity creates opportunities for experimenting and the engaged learning activities of exploring and experimenting produces more curiosity. This fascinating discovery suggest that these aspects strengthen each other to create a more engaged learning environment.

The narrative of Curious Scientist furthermore provided the following excerpt which shows that parents play an important role in the development of curiosity.

> *"But usually, if something is broken, I will definitely not throw it away. I will take it apart and see what, what it looks like. But if, if that question was kind of leading to show engineering tendencies from this, from a small age, I don't think specifically. I would more, more say it was a general curiosity. Yeah. Curiosity that my parents encouraged."*

Thus, the curiosity that developed within Curious Scientist was encouraged by his parents, as specifically mentioned during his interview. So not only did his parents create an environment of freedom and assign time and resources for exploring but they also encouraged it. From the data, this is an important approach to create a milieu that could prepare learners optimally for higher education. It seems that encouragement and freedom to explore provided by the parents are a crucial aspect of interest and curiosity-based learning. What is at stake is that if parents respond negatively or does not provide encouragement or the necessary support it is possible that children would not respond as positively to learning experiences and the love of learning could not evolve optimally.

With the progression of time into later learning phases, other aspects of curiosity and interest was discovered as mentioned by mother Encourager. Her narrative provided the following excerpt suggesting that quality resources aid in successfully engaging curiosity:

> *"Over the years, when they grew up, I think what I saw, we did that Apologia of Science, and I saw that made them curious that they want to learn on their own."*

In addition to arising curiosity, mother Encourager highlights another aspect of great importance with this quotation. This quote "*want to learn on their own*" suggests that curiosity combined with quality resources caused heutagogy later in the learning process.

The account of Curious Scientist shows that curiosity and interest-based learning was a strong theme in their home education journey. The early learning theme became a lifelong attribute as time progressed. He describes a strong interest and desire to figure things out even as an adult and also how this attribute influenced his career choice.

"But there was engineering and computer science, and maybe forensic science, the STEM fields, not, not, pure mathematics, though, interested me. Like just, I like that. I like finding things out, figuring out how things work."

The excerpt confirms that Curious Scientist, through early awakened curiosity, remained engaged with scientific fields that interested him which influenced his chosen discipline of study.

Mother Encourager shows how effective interest-based learning was in developing lifelong learners, with the following quote of their final home education years:

"[…] they were very curious and they do, they do like courses on the computer on their own. Like, they just informed me that's what they want to do. So, at the end of the day, in [Curious Scientist's] last years, he was studying a lot of things. I was so, it was so stressful because he wants [sic] to do a lot of psychologist's things and he wants to do a lot of computer things… courses. He does a lot of those things in his last years, and it was not, nothing was difficult for him. They don't even see science as a difficult subject. They don't even see maths as a difficult subject. They don't even see anything as difficult. It was just a challenge. They want to learn more so nothing was like a mountain standing before them. They just dig into it and start learning about that."

The quote from mother Encourager shows that Curious Scientist was still curious and interested in various subjects during his final home education years and that he completed elective courses whilst busy with his high school education. More importantly, his mother describes that he was not scared or afraid of learning new or difficult things. Building early confidence and competence with the love of learning removes the fear associated with difficult academic content. The excerpt above provided the first reference to self-efficacy in the narratives of this family. Being curious is an important aspect of developing heutagogy and self-efficacy. The narratives of this family reveal the most significant aspects of curiosity and interest-based learning as the development of engaged lifelong learners, heutagogy and self-efficacy.

7.1.2.2 Love for Learning

The sub-theme called Love for learning was closely linked and intertwined with the previous theme on curiosity and interest-based learning. Although it is presented separately, it cannot be separated from the previous theme in principle as shown by the next piece extracted from the narrative of mother Encourager:

"[…] *because my aim was, they must learn […] every day, there must be something new for them. And they must be excited about learning. And they must be curious, I want (sic) them to be very curious. And they must have a love for learning*."

From the quote, it is clear that mother Encourager had the intent and focus of developing a love for learning. The excerpt furthermore confirms an intentionality around the topic of creating a love for learning. Their early learning, which focused on Bible study and learning about various countries was also associated with creating a love for learning:

"*We love learning around a map, about countries. So that was our main thing, we loved to learn*."

She provided another quote in her narrative on the theme love for learning and in this quote linked this sub-theme to the topic of lifelong learning:

"*[…] every year we would go to the Biochemistry labs and they do a lot of things like Biogas, algae etc. So, they enjoyed everything in a different, in a different field. It's, it's, it's like a lifelong journey. Learning, it never stops for them. And it's not, it's not, they don't want to stick with one say, set of books. They always look for more, or on the computer. They would question things a lot*.'

The narrative suggests that creating a love for learning from early years, built upon interests, could be key in the development of lifelong learners. With the progression of time, Curious Scientist confirmed his love for learning during early high school years, specifically as related to his interest in science:

"I would say it was the beginning of high school, high school age, what is that, 14? Then we received, we got, we used the books that [supplier] suggested, the Exploring Creation series of science books. I absolutely love those books. I will do them now. I will suggest it to anyone, just do them. They are excellent."

The citation by Curious Scientist suggest that quality materials and resources play a significant role in developing a love for learning. He was engaged by these specific science books and found it interesting and challenging. In another part of the interview, Curious Scientist confirmed his love of Chemistry specifically:

"*Chemistry was lekker, I loved it."*

Progressing in time to post higher education, the participant confirmed that he enjoyed his work and expressed his delight in having made the right decision in his career choice:

“And my work is so lekker (fun), you won't believe it, like, I, I cannot wait to come to work every day. Like it is really, really. I have a lekker job. So, it was definitely the right decision.”

The intertwined sub-themes on curiosity and love for learning show that when learners are engaged from a young age by curiosity and interest, a love for learning develops that with quality resources and materials develop into a lifelong journey of engaged and joyful learning. The narratives of both the homeschooled adult and his mother confirmed that he successfully developed a love for learning and the development of a love for science became a career that he thoroughly enjoys.

7.1.2.3 Mathematics and Languages

Data from the narrative account of Family 1 indicates that early home education followed a similar pattern with formal, curriculum-based consequential mathematical and language instruction combined with individualised topics or unit studies (for families 1, 2, 3 and 5). It is important to note that mathematical and language instruction was a priority in all the families that was interviewed – as described later in this chapter. Although a significant fragment of learning occurred in a non-formal manner, in most cases mathematical and language instruction were executed in a consequential and more formal manner following a structured curriculum. Mother Encourager discussed starting early education with math and first language instruction:

“And then they start with maths or a language. First, I did, just their home language, Afrikaans. I saw that was better for them just to have a good reading, a good comprehension. So, the math and the language, we did that […] math and language.”

Mother Encourager reinforces using a formal curriculum and completing these subjects using a layered methodology later in the interview:

“I use formal things for my maths and my languages. I do that layer by layer.”

The narrative of mother Encourager deepens the understanding of how these home education families approached early home education utilising formal, consequential and curriculum based mathematical and language instruction during the early years combined with unit or topic studies as discussed in sub-section 7.1.2.4. She also indicates that early education started with first language instruction with the addition of second language instruction later on, as also discussed by her son in the next quote. Curious Scientist recalls consistent mathematics and language instruction together with reading:

“Yes, there was Math-U-See. Yes, Math-U-See. […] So, we did Math-U-See, I think when I was 10, or 11, there about, language. My entire school career if I can say it like that, was a big aim to avoid language. See how little you can do. So, my mom tried, she read us a lot of books. And she encouraged reading, but, and forced us to write Afrikaans essays, or English passages every now and then. But it was definitely not a regular thing. So, she wanted to do, there was an English program called LLATL. Yeah. It's a, it's a literature focused thing.”

Home educated adult Curious Scientist recalls habitually doing the mathematical curriculum “Math-U-See’ and then recalls English language instruction around age 10/11 with a formal English program ‘LLATL – Learning Language and Art through Literature’, focused on grammar and literature-based language instruction. He does not specifically mention first language instruction, but it can be inferred from his mother’s narrative that Afrikaans language instruction took place at earlier ages, around 8 to 10 years old. As referenced above, participant Curious Scientist remarks not being very interested in languages and often trying to avoid language specifically:

“My entire school career if I can say it like that, was a big aim to avoid language.”

The additional early learning school subjects were often then covered by completing unit studies or topical studies as discussed in the next section.

With the progression of time, the participant Curious Scientist confirms continuing with the Math-U-See curriculum early in high school and the addition of other subjects like science at this stage. The narrative also shows that the high school years became more formal in terms of following a schedule and having to complete a set amount of work:

“Yeah, but there was a schedule to follow. So that was in terms of science, for mathematics, like we continued with Math-U-See. By then we had a good idea how much to do every day, to get through, to get through. English was exactly the same. I think my mom would give us English to do, and we just wouldn't do it. Something like that. And then also, the forcing of the Afrikaans words, forcing us to write Afrikaans essays or whatever. So that went on for, until grade 10, for two years. Yeah. Yeah, we never did homework or anything like that.”

Curious Scientist gives some insight into early high school learning with subjects Mathematics, Afrikaans, English and Science. He confirms writing assignment and through this piece the reader is reminded that he still did not enjoy languages and tried to avoid completing these altogether. The section also shows that with these two subjects specifically, there was an intentional path of growth and development that was not

neglected when the home educated child did not show a strong proficiency for either. The time spent on math and formal schoolwork increased as time progressed, as discussed by mother Encourager when asked about the final home education years:

> *"They do longer hours on their own, on maths, for example, they do a lot of, we don't use a lot of tutors. […] So, I, we do the thing, if you don't understand the thing, you must find out ways to understand it. So, we don't have a tutor to explain it. So, we first find out, is there a way that you can find a way. So sometimes their maths will be longer hours."*

From the statement it is clear that academic work became more and they would spend more time to complete their academic work, especially because they sometimes needed to figure out how things work and find solutions.

This sub-section on mathematics and languages will be broadened by the next section. The complementary academic work during the early education years was incorporated under topical or unit studies as presented in the next section.

7.1.2.4 Topic or Unit Studies

Topical and unit studies played a significant role, especially during the early education phase. It was the means by which subjects such as geography, history, science, social studies and other academic subjects were incorporated as usually covered during primary school. Families approached topical or unit studies in diverse and unique ways. Mother Encourager describes how their family incorporated unit studies in their early schooling:

> *"But then we have […] Bible time. Most of the time, the Bible time was the same thing, or the same topic, around our unit study. […] Bible time and then we pray for a country. So, along the, all the years, we pray for a country. But we don't just pray for a country, we look into the country. What's the attractions of the country, what, where is the country situated on the map? And we, we say okay, if we want to go to the country, what we're going to look at, so we learn a lot of history and geography around the country."*

The passage describes how they utilised Bible study and praying for specific countries as one example of unit studies. Their focus on a specific country would then expand to finding it on a map, finding tourist and cultural attractions and learning about the traditions, culture and history of that specific country. This is one example of how integrated unit studies covered various subjects during primary school ages. Mother

Encourager later in her narrative confirmed that unit studies worked well for them as a family with the following quote:

> *"We love that unit study, so; we do a lot of unit studies."*

Participant Curious Scientist also referred to unit studies during his description of early schooling activities. His excerpt is provided:

> *"Okay, so she like later, I would say by grade 5,6,7, […] she started with the Konos (Oikos) sort of thing. But it's, it's a, it's a character trait based study system. So, they suggest, they suggest books on subjects, but they don't have a curriculum to follow. So, we did that when we were little, for instance, she would say let's, we're going to, we're going to look at the human ear now. Then, we would first go and see what the Bible says about the ear. Like, listen, yeah, be quick to listen, slow to speak. and stuff like that. And then we would build an ear […] like to play, play, like playfully learn. But the character trait to be obedient. And then you would learn about the ear. And how the ear works. I still remember how it works from then. So that's the way I think science was introduced in my primary school, that type of thing. But it was, it was, yeah, it wasn't structured at all."*

The excerpt by Curious Scientist firstly explains the use of unit studies in their home education approach which usually commenced with a connection to that topic in the Bible. This topic was then extended to the fields of science, history and geography as applicable and interesting to the child/ren. Expression of learning entailed building items or experiential exploring of the topic. The participant also confirmed that this way of learning was successful, as he to this day in time can remember how the human ear works because of this specific approach to learning.

The effectiveness of the unit study approach is evident by the earlier references of Curious Scientist to his love for science and how much he enjoyed being able to freely explore and satisfy his curiosity. Also, his love for science developed into self-determined learning where he would often study science resources on his own, delving deeper into scientific subjects.

The sub-theme unit studies merge with the sub-theme of experiential learning which is presented next. Often the sub-themes are not independent or discreet but are interwoven in an organic and supplementary way.

7.1.2.5 Experiential Learning

From the data it seems that the sub-theme of experiential learning was more predominant in the earlier education phases. Mother Encourager provided a very insightful passage on the role and consequences of experiential learning:

> *"They've got a lot of interest in, in science things. I'm not a science mom at all. But at the end of the day, I saw, the more we do practical things like experiments, and we look at the YouTube video, or we go out in the field, we do the practical part first, or we combine it with it, then they remember everything and when we build something, and we learn about it, they were so curious that they read afterwards, long hours, they will sit and they will check out, say for instance, the middle child will check out how does the muscles work. [Name of child], he would say, check out on the computer, things that was never in the curriculum. So, when we make it a practical thing, with a lot of experiments, it causes them to be curious. And then they want to look into things deeper."*

Above, mother Encourager expresses how valuable experiential learning was firstly in stimulating curiosity and secondly in creating the motivation and passion for self-determined learning, also called heutagogy. Another more subtle aspect revealed in the narrative of mother Encourager discloses her lack of in depth and proficient knowledge in the field of science specifically, but that the experiential approach (despite her lack of excellence in this field) succeeded in developing curiosity, heutagogy and a love for the science discipline. This aspect is important for this study which seeks to create a deeper understanding of how individualised home education could prepare learners better for higher education. The data from this narrative could provide a strategy to other home education parents who could also feel inadequate in their training and preparation in academic fields such as math and sciences.

Curious Scientist supports experiential learning with the following description of critical thinking, problem solving and heutagogy:

> *"We did experiments from, I still do experiments from when we were little. Like, if you wonder about something, you go and test it. So, I would still, like wonder like, Oh, I wonder if the boiling point of water changes, if you add salt to it. I will quickly go and boil water with salt and test the temperature difference. If you wonder you go test it."*

Experiential learning it seems becomes an important key for developing critical thinking skills, problem solving skills and heutagogy. The description above was completed by the following quote from Curious Scientist:

"This is […] more like, teach your kid from a small age, in the developmental years, how their body weight works. Jump on rocks, Now you get the fundamental understanding of momentum. From a small age, and if you've missed that, you can learn it but it takes a very, very long time as an adult."

Curious Scientist suggests that experiential learning is the natural learning mechanism for the foundation and early education phases. He suggests that children should be taught principles by using their body, hands and senses. He goes further with a conclusion that experiential learning later in life is much more difficult and takes more time compared to having the experience when it is most suited for optimal learning. Another crucial part of home education learning included reading which will be presented next as a particular sub-theme.

7.1.2.6 Reading

Family reading was not necessarily highlighted separately during the narratives of the participants but was interwoven in the text throughout the narratives. Two specific references by mother Encourager about their reading time were insightful:

"And then we have a reading time, that was our most precious time in our homeschool for the kids. All the kids would love it. So, we took a story, a nice story and they can do anything, or, or have a cup of coffee or something like that. And then we read two or three chapters, it depends, every day."

Mother Encourager also referred to their home education milieu as a room with a lot of experiments and reading as discussed earlier.

'Oh, it would be like cozy warm, a warm room with a lot of experiments, a lot of reading. It's like one picture with a lot of things, reading and joy outside…'

The sub-theme of reading will be further elaborated with the narratives of other families and presented a fundamental part of the home education scholarly activities as presented and discussed later [in section 7.2.2.6 and 7.3.2.6]. The next section will focus on individualised education as a sub-theme.

7.1.2.7 Individualised

When participant Curious Scientist was asked about individualised education, he referred to learning preferences with regards to how information is processed:

"I would say from the start, all of homeschooling was focused on who you are. I can say that because me and my brother, we learn quite differently. He learns visually, I learned by hearing. And my mom would, she would slightly tailor things to show it to him to keep him interested and find something to keep me interested as well."

The quote demonstrates incorporating learning preferences into the home education environment as one component of individualised education. Mother Encourager affirms this sentiment during her narrative:

"So, if you know your child's learning style, and you know the way they learn, that was the biggest surprise for me, that you don't have to push them. They were, they are happy. They learn in a natural way."

Utilising learning preferences as a way of customising home education was therefore extracted as one of the individualised education strategies. Mother Encourager suggests that this strategy allowed for more natural learning that leads to happy children. Learning preferences, therefore, was concluded an important aspect of not only individualised education but student engagement. Mother Encourager also discussed how her children differed in personality, interests and strengths. Another example of unique and individualised strengths and personalities was extracted from the narrative of mother Encourager:

"Not all three children was [sic] the same. They've got different interests. The eldest one he was, [Curious Scientist], he was, he was very interested in science things and in, in editing things and video things and how does it work? He always asked a lot of questions aggh, a lot of questions. I couldn't sometimes answer them. So, if I can't answer them, we find someone, or some way, to answer or to get to the answer. So, he was very scientific orientated. And he was always reading and finding out all the way. […] So, he is a researcher. If I can tell you, he, he turned into a researcher and today, he is busy with his Masters. So, he wants to research everything into depth.[…] The second child, […] he wants to do things, he is a very practical child and when he grew in years, I saw, he was more into business."

Another strong sub-theme that connects with individualised education is curiosity and interest as presented earlier in section 7.1.2.1. Being able to adapt the learning materials, content and resources to align with interests, remains a potent individualised learning strategy that facilitates student engagement. Other aspects of individualised education were identified in other narratives and was presented later in the study [see sections 7.2.2.7, 7.3.2.7, 7.4.2.7 and 7.5.2.7].

7.1.2.8 Outings

Experiential learning included visiting sites, factories, museums or any other facilities that could provide a better understanding and perspective of learning and of life. It is important to note that data from other families' narratives indicates that outings were experienced as a highlight of their home education [section 7.2.2.8 and 7.3.2.8]. This aspect of their home education activities provided not only learning experiences, but also socialisation opportunities as well as fun. Mother Encourager had similar experiences evident in the following words:

> *"We could do a lot of outings with that, even to the university or the real, like a fabric [sic] or something. The real situation, how does it look? Really, it's not just an abstract thing. So, we do a lot of concrete and not a lot of abstract things, or we want to combine a lot of things."*

Additionally participant Curious Scientist confirmed his positive experience of regular outings to interesting places with other home education families:

> *"…like every second week or third week, a mom was on duty to organise an outing to the Coke factory, or the bread factory or the air traffic control or the fire brigade. All these, like a lot of them."*

Participant Curious Scientist provided another reference to their outings ('uitstappies') and described it as fun but additionally that the places they visited was an opportunity to hear from adults about their jobs and that he learned a lot from these experiences:

> *"So the 'uitstappies' and things, yes, that was fun. That basically taught me that people are always keen to talk about their work. You should just be curious about their work, they will tell you. And yeah, you can learn a lot through that."*

From the initial references to outings and visits to places of interest, it appeared that this aspect of home education was an important contribution in the learning experiences of the participant. Furthermore, in aligns with the sub-themes discussed above in the sense that the learning space was not confined to a classroom (or one room) but rather extended into the entire home, outside the home and into the community. It is evident from the data that this approach assisted learners to integrate subject knowledge with life.

The next section will focus on the non-formal aspect of home education as a particular sub-theme.

7.1.2.9 Non-Formal Home Education

For Family 1, their early education non-formal home education was summarised by mother Encourager with the following citation:

> *"So, I must find a way to do it in an informal way, but in a way that we can learn. And the kids enjoy learning. And they want to learn every day, something new, because my aim was, they must learn […] every day, there must be something new for them. And they must be excited about learning. And they must be curious, I want them to be very curious. And they must have a love for learning."*

Various aspects of non-formal home education were emphasised in the above quote. She referred to following an approach that would facilitate learning but would also produce joyful and exciting learning experiences. Furthermore, she attempted to bring novel ideas and knowledge which would produce new things to learn every day. Their non-formal home education approach promoted curiosity and their educational activities were based on that curiosity. And finally, her goal was to develop and sustain a love for learning in her children. The above can only be achieved in a non-structured environment, which was the case for Family 1 as quoted by Curious Scientist:

> *"But it was, it was, yeah, it wasn't structured at all."*

Curious Scientist confirmed developing a curiosity for learning and becoming self-reliant in finding ways to stimulate his curiosity. Because early education included an active and hands-on learning environment, which included experiments, outings and experiential learning, the participant and mother Encourager confirmed achieving a love for learning as discussed in section 7.1.2.2. Mother Encourager reviewed their approach:

> *"So, we do a much more informal base, more informal, but interesting base, so that we can incorporate more things like experiments and those things. We could do a lot of outings with that."*

Their family approached early, non-formal, interest-based, individualised home education by completing formal and layered mathematics and language and integrating other subjects utilising unit studies. Because unit studies were based on interest and curiosity, it engaged the learners through active participation. Their learning was individualised on interest and on learning preferences as discussed in section 7.1.2.7. Their home education was also non-formal in the sense that it allowed for an adjustable pace as discussed by mother Encourager:

"I don't put really, a grade to the age. So, they go, sometimes they are a bit behind, and sometimes they are above their grade."

Non-formal home education for this family did not involve incessant assessment. Mother Encourager discussed having small tests especially in Mathematics but limiting testing so that it was not stressful:

"Like, they know a lot of a lot of things. I think it's like a general knowledge, their general knowledge was good. And just the way they learn, it was not you have to, we don't do a lot of tests. We don't do a lot of formal tests. I do little tests. Their maths was little tests, so I can make sure that the test thing was not so big for them or stressful for them."

Reducing stress by using non-formal or a more informal approach was discussed by mother Encourager:

"So that's why I choose the more informal way. It's, it was less stressful for us at the end of the day."

Curious Scientist confirmed that home education became more structured during high school:

"So, when it became more structured, I would say was the beginning of high school, high school age, what is that, 14."

Thus, the data from Family 1's narrative account links a non-formal approach to home education during the primary school years specifically with a focus on interest, curiosity and developing a love for learning. The early years was linked with a stress free, non-structured approach allowing for active participation, experimenting and outings to create experiential learning experiences. Their home education transitioned to a more formal approach during high school. Transitioning to a scholar phase, the learner became more independent and presented more responsibility and autonomy. Participant Curious Scientist confirmed taking full responsibility towards the end of high school and managing his own time and work as discussed in section 7.1.3.1.

7.1.3 Life Skills

In addition to fostering student engagement through learning activities and experiences, these families were able to establish specific life skills that enabled the participants to succeed at higher education. These life skills were evident from the narratives of participants and mothers. The life skills presented in the narratives of participant Curious

Scientist and mother Encourager are presented in this section. The life skills that influenced student engagement and higher education success are: autonomy and responsibility, age integrated socialisation and character development.

7.1.3.1 Autonomy and Responsibility

The sub-theme on autonomy and responsibility was not very predominant during the early years. It is mostly linked to the freedom to pursue interests and to pursue experiential learning. This theme however becomes very predominant in the high school and higher education phases. Curious Scientist describes how responsibility featured in the early high school phase:

> *"So yeah, we sort of, my mom scheduled a rough estimate, like for you to finish this book, during this year, you have to do roughly this much a day. I used, I sometimes did more, sometimes nothing. So, it was sort of up to me. Yeah, but there was a schedule to follow. So that was in terms of science, for mathematics, like we continued with Math U see. By then we had a good idea how much to do every day, to get through."*

Mother Encourager supported the description of her son on the topic of taking responsibility:

> *"And they, they have to go and see, like, for instance, they have to, divide their work up in sections, sections, so that they can finish by a certain time. So, they have to manage their own work. I was just a guide so that I can see, okay, do you need some extra help? Will you finish in time?"*

Both Curious Scientist and his mother confirmed that the responsibility of how, when and how much schoolwork was completed, became his own responsibility by early high school. His mother described her role as supportive in being available when help was needed and verifying to confirm that the work would be completed on time. He confirmed that by his final schoolyear and final examination he was completely responsible for his own education:

> *"Yeah, and with matric that was 100% on my own. Like, you can do this however you want to. Yeah, the responsibility was thrown in your, in my lap. It wasn't that 'lekker' initially. But I'm quite thankful now if I think back."*

The comment above suggests that taking that much responsibility by grade 12 was not fun at that time but in retrospect was really good for developing him for higher education.

Continuing to higher education, the participant provided more insight into how home education and taking responsibility earlier prepared him for autonomy at higher education:

> *"One other thing I would say, but I give all the glory to the Lord for this is, you take responsibility of your time. It's not, it's not the university's time that, you don't work on their time. It's your time. So, you, do it differently when you think like that. I choose to go to class now. I choose to spend my time like that. And then you work. I wouldn't say I work very hard, but it's a different mindset. So, because things are not, things weren't always scheduled for you. Nobody schedules for you but yourself."*

The piece by Curious Scientist shows an appreciation for practising the skill of scheduling his own work and own time and taking responsibility before entering higher education. He was taking full ownership of his choices and his time. His mindset towards his education shows commitment, effort and autonomy, all related with student success as discussed in chapter 5. Another life skill that was identified as a theme in the narratives of this family related to the topic of age integrated socialisation.

7.1.3.2 Age Integrated Socialisation

The participant regarded socialisation during home education as beneficial for preparation for higher education as it usually entailed age integrated socialisation. The extract from the narrative of Curious Scientist suggests a high degree of student engagement with peers and staff at higher education:

> *"[…] what I find beneficial was that you were not used to this thing of, you only interact with your year group. Like in homeschool you didn't learn that. So, when I came to university, my friends were quickly older people in different year groups. I got to know, postgraduate friends quickly, they are still my very, very good friends from, from first year. So, I would say that's a, that's a big plus, to be able to interact with other ages, you're forced to in homeschool."*

Confirming the statement of Curious Scientist, his mother also commented on this aspect of socialising in the home education sphere:

> *"And even like, what I saw, they can speak with any person anytime about anything. They're not afraid of people, to ask them questions, even if, if they think oh, I'm not sure about the question. So, they're not afraid to ask, ask questions and to challenge people also, sometimes about things. Yeah, so, even if we went, we went to a lot of outings, to the university, it was not a thing."*

The excerpt suggests that being exposed to various environments during home education where he was forced to communicate with people much older and people in authority, caused the participant to not be scared to ask questions and to engage with especially older people. This aspect of home education, if implemented correctly by the mother, certainly succeeds in improving peer and staff engagement at higher education.

7.1.3.3 Character Development

Although character development was not a dominant theme during the narrative of Curious Scientist, he provides a profound statement towards the end of his interview regarding the importance of character development:

> *"I would say my aim would be, not to teach children knowledge. But to teach them character. What does it look like to work hard? What does it look like to be curious and find things out? What does it like look like to help each other. If you build character, character will benefit you for a lifetime. Knowledge, knowledge that you learn at school, you can easily pick that up later."*

The excerpt emphasises the importance of life skills such as working hard, honesty, altruism and other character traits that the participant considers extremely important for successful preparation for higher education success. In a sense, referring to teaching children to work hard related to student engagement from the perspective of time and effort. From an engagement perspective, character building relates also with 'nurturing congruent values' which was presented by Trowler et al. (2021) under the belonging pathway for socio-cultural engagement. The final section of the interpretation of the narratives presents data that relates to quality interactions that influenced student engagement. These sub-themes are presented in the next section.

7.1.4 Quality Interactions

The theme on quality interactions investigates interactions between the participants and the mother as a teacher, the mother and father as parents, siblings and fellow home educated learners as peers as well as any other mentors that influenced how, why and to which extent participants engaged with learning opportunities. The first sub-theme discusses the role of 'teacher'/parent and mentor support and motivation.

7.1.4.1 Parents

Surprisingly, the attitude of the mother in learning experiences influences the level of motivation for learners. Here mother Encourager discusses this aspect of learning:

> *"But when we do it with a good attitude and say, oh, can we learn something, see how it works? If our attitude as a parent, is positive, then we, we motivate them in a way that they don't even know."*

A strong component of attitude towards learning comes from the way the mother engages with the learner. Her attitude can impart passion, positivity and inquisitiveness. Another aspect of how parents respond to a learner was addressed by Curios Scientist in the following section:

> *"I would more, more say it was a general curiosity. Yeah. Curiosity that my parents encouraged. And not that, they didn't subdue it."*

The preceding reference by Curious Scientist suggests that a negative response from parents can subdue curiosity. This quote uncovers a very important aspect of quality interactions with educators which show that their response to the learner's questions, curiosity and interest can either encourage them to develop a love for learning or suppress their natural process for curious thinking. This places a responsibility on the parents in the home education environment to respond with encouragement, positivity and passion to learning experiences which reciprocates in the long term with a love for learning.

Exploring the narrative of mother Encourager revealed another aspect of support and motivation, which she found challenging:

> *"What is [sic] their dreams? And to, and to help them with their dreams. Sometimes it's a dream that we never, we are not comfortable in. It's not in our frame. How must we do it, but just to encourage them in their dreams or their visions, or what they would like. It stretched me a lot. It stretched me a lot, because sometimes there is new things and we are not used to it, or it's out of our framework, but to encourage them, and to be there for them."*

In the extract above mother Encourager revealed that children have their own dreams, which is not necessarily comfortable or familiar to the parents. She reveals that as parents and as their mother her job was to support and encourage them in their dreams even if it was unfamiliar or uncomfortable. She acknowledges that this aspect of support and encouragement stretched her.

The above characteristics of quality interactions was explored further with other families. The role of mentors in the lives of the home educated learners were explored.

Self-efficacy as an internal value seems to transpire directly from one of the parents. The narrative of mother Encourager provided a single reference to this aspect, but more insight was gained on this sub-theme in later narratives. Mother Encourager refers to self-efficacy with the following quote:

"Our kids are able to do anything if you believe in them."

The belief of a parent in the child and the expression of that faith in their character and abilities gets imparted to the child and allows them to achieve much more than children who do not have an adult that can support them in this manner. This is the message that mother Encourager provided in her narrative with regards to imparting self-belief i.e. self-efficacy.

7.1.5 Summary

The narrative enquiry for Family 1 was based on the accounts of mother 1 called mother Encourager and her son Curious Scientist. Their narratives reveal a rich storyline of engaged learning that took place in a learning environment that allowed them to actively explore and experiment in a safe, warm and cozy environment. Their early learning included a lot of play and outside activities. Learner engagement was activated through curiosity and inquisitiveness based on interests of the children. The mother desired to create a love for learning and through this approach successfully established lifelong learners. Quality resources played an important role in creating a love for learning. Their early learning included a more formal component of mathematics and languages which initially focused on their home language (Afrikaans) and later English was added as an additional language. The more informal learning component was executed utilising unit studies which in their case was often centred around a country or specific topic, which was then combined with historical, geographical, scientific or any other related fields which created a rich and integrated learning experience. Learning was furthermore integrated with experiential opportunities of building components, visiting sites or completing activities that provided context, deepened understanding and linked learning content with real life applications. The narratives revealed components of heutagogy with regards to education, initially through curiosity-based learning but also during high school and higher education. Strong references support that the participant developed heutagogy as an internal value. The presence of individualised education experiences presented not only with regards to interests, but quotes show that learning preferences

was intentionally accommodated by the home education mother Encourager. The final analysis on the presence of quality interactions and how this influenced engagement showed that encouragement and support, in this instance from the mother or teacher figure, as well as their attitude and positivity, would influence learner engagement. A final reference by mother Encourager refers to the importance of believing in her children and the study further investigated the topic of self-efficacy as an impartation from an adult figure in their life. Key findings from the narrative account of mother Encourager and Curious Scientist are as follows:

- A love for learning develops when learners are engaged with content through curiosity.
- When a love for learning is developed during early education, it possibly links to developing lifelong learners.
- Quality resources play an important role in developing a love for learning.
- Consistent, layer by layer mathematics and language instruction builds the foundation for high school and higher education.
- Integrated early education that combines history, geography, sciences and social studies through unit studies, successfully builds a foundation for high school subjects.
- Experiential learning was more predominant in early education.
- Experiential learning through experiments, building concrete components, outings and anything that links learning with real world applications successfully engages learners with content.
- Individualised learning in this family focused on learning through curiosity and considering learning preferences.
- Regular outings and visits to places of interest and learning about real life was an important part of home education that was fun and resulted in opportunities for learning.
- Non formal home education was described mostly as a non-structured approach without a formal curriculum and was predominant during the primary education years. Non-formal home education transitioned to a more formal approach during the high school years.
- Autonomy and responsibility start off with the freedom to choose interest-based learning topics and explore freely during experiential learning activities. This sub-topic develops as the child matures to taking responsibility to finishing school related tasks, how and when to complete work and later to scheduling of own workload. By the end of high school, the learner takes full responsibility for all

academic activities, studying and exams and the role of the mother changes to support. Because autonomy is a strong feature, the learner chooses how to spend time and therefore chooses to spend time wisely.

- The family considers age integrated socialisation during home education years as an advantage and a skill that allows for successful peer and staff interactions at higher education where the learners can communicate self-confidently with staff and authorities.
- Character development is regarded as just an important skill to develop as any academic skill with characteristics such as working hard, integrity and responsibility regarded as essential skills for higher education success.
- It is suggested that the mother, her passion and attitude towards learning can influence learners to develop a love for learning.
- A parent or adult who first believes in the child could possibly source and impart the value of self-efficacy.

The next section will introduce the participants of the second family and present their narrative thematic analysis.

7.2 Family 2

Participant Bright Dreamer and mother Attentive Listener represents the second family that provided narratives regarding individualised home education.

PARTICIPANTS

Bright Dreamer

Participant 2 is a male, who was home educated for 11 years and studied Sound Design and Cinematography. He is creative, bright, and describes being easily distracted. Bright Dreamer discussed during the interviews how he learned to manage ADHD and use it to his advantage.

> *"I mean, if I don't know about myself, and the way I think, especially with attention deficit, […] If I'm in a lecture, and I'm starting to think about a whole bunch of different stuff, then I won't catch what the lecturer is saying to me. So, to me, being constantly aware of that, sort of help me to say to myself: Okay well, I know I'm like this, I am easily distracted. I have to constantly focus my attention to make sure that I don't get distracted by this. It is something that is in my personality."*

Mother Attentive Listener

Mother Attentive Listener homeschooled her three children and their family was situated in Pretoria, South Africa. All three children attended and completed higher education. The mother of participant Bright Dreamer was given the pseudonym Attentive Listener. The importance of listening, communication and extra-mural activities was evident from her interview. Her motivation for listening and communication is repeated here:

> *"I think I've also had this situation where one of my boys said that he wanted to go to school. And, and I just, you know, I asked him okay, but what are the reasons? You know, what is it that, because there must be a gap, or there must be a need that, that is not fulfilled. And his, was for specifically more sports. Yes. And, and I think that's where we just, we need to be attentive and listen to their needs. And then as far as possible, try and get a bridge, you know, get something that will fulfil that need."*

Mother Attentive Listener showcases intentionally listening to her children, identifying their needs and finding solutions to fulfilling their needs. The narratives of mother Attentive Listener and her son Bright Dreamer was thematically analysed, and the data was presented using the previous themes for milieu, learning, life skills and quality interactions.

THEMATIC ANALYSIS

The narrative accounts of Bright Dreamer and his mother Attentive Listener provided insight into their family culture, their living and learning environment. The thematic analysis of the data relates to three sub-themes, namely: Intimate, warm, loving family; active freedom and experiments; and outside.

7.2.1 Milieu

The participant Bright Dreamer and his mother Attentive Listener provided insight into their family culture, and living and learning environment.

7.2.1.1 Intimate, Warm, Loving Family

Participant Bright Dreamer described their home education milieu utilising the picture of a close-knit family around the dinner table, talking about what they were learning and the feeling of warmth and love.

“It felt like, yeah, it felt like family. It really felt like we stuck together as a family. And we learn together as a family as well. And it really helped to create a discussion at the dinner table, for example. Because usually when people are in different schools or different careers, they have different topics that they talk about, and some stuff that they can't talk about. Well, with this, we were always together, we were discussing the stuff together. So, we could actually talk together about the stuff at the dinner table as well and understand what the other person was saying. So, if I would give it a picture of feeling, I'd say it's a warm, loving family.”

A significant and heartwarming description that depicts a close family who talked about aspects of their learning around the dinner table. Because they home educated and was engaged in their topics of learning, they would excitedly share things they learned, and it became a tradition of discussing interesting facts around the dinner table. The fact that they experienced learning together caused a common language to develop that forms bonds between the family members. In the same vein, mother Attentive Listener also explained:

"*I have the picture of me, especially in the winter, we sit, where we had this sunspot in my room. They would sit there, and I would read to them books.*"

What is interesting is that Attentive Listener, like mother Encourager from Family 1, uses the picture of the warmth of the physical room, a “sunspot”, to illustrate the emotional warmth of their home school environment. This metaphor illustrates the kind of environment associated with the home education experiences of participants. Thus, the milieu described above confirms coherence, engaged quality family interactions and learning together.

7.2.1.2 Active, Freedom and Experiments

The sub-theme of active exploration and experimentation was discussed by mother Attentive Listener:

“With the science, we always did in fun ways, the experiments and everything.”

Bright Dreamer also confirmed actively engaging in experiments with his brother:

"My brother and I really enjoyed doing science experiments at home. So, she allowed us to create smoke bombs, and play around with different metals and stuff to see what would happen."

Another reference by Bright Dreamer discussed his brother's interest in Legos and mechanical objects and how he would engage in learning activities which involved building with gears, levers and pneumatic items:

> *"My parents made sure he got a lot of Lego with gears, like Lego mechanics, where there's a lot of gears and levers and stuff that you could play with to learn the maths and science behind pneumatic stuff, and gears and the math behind everything."*

The references show that the home education setting of Family 2 involved active participation and engaging learning experiences. The references suggest a love for science and exploring by experimenting with materials and making things and learning by experimenting. References to experiential learning is discussed under sub-theme 7.2.2.5.

7.2.1.3 Outside

Mother Attentive Listener provided two other descriptions of their milieu:

> *"I have been running around barefoot, building little farmhouses and making paths with the cars. We have a little tractor."*

She recalls running around barefoot with the children playing with cars and tractors, making roads and building little farmhouses. Although her description does not include an emotional description, it was evident during the interview that the picture was recollected with nostalgia and longing. The data reveals that this mother has fond memories with her children and recalls this time with her children fondly. The milieu description is depicted with love, joy and fun memories. Another quote from mother Attentive Listener provides another picture of their outside setting:

> *"[…] and then they would play and read and because we are on a plot, they would go into the storerooms and make something electronic or work with wood or [sister] would be in the kitchen baking whatever."*

The passage depicts a large outside yard with storerooms and the boys particularly liked playing outside or building things in the storerooms. Similar to Family 1, this milieu description sketches the picture of a lot of outdoor time either playing or working with wood or other materials and experimentally developing tradesman skills. Like with Family 1, this family expanded the learning space beyond the borders of one room and the house, to include the entire premises outside the building. Thus, the notion of expansive learning had a physical component associated with it in the data.

The following section describes the community of Bright Dreamer and mother Attentive Listener family.

7.2.1.4 Community

A unique aspect of this family's home education environment, different from all the other participating families, is that early home education was conducted in conjunction with two other home education families after removing the children from school, which was discussed by Bright Dreamer and occurred at the end of his first schoolyear:

> *"And at the end of the year, my mom and two other mums decided to break away from school. And the three moms, together started to do homeschooling. And she did some research. One of them was, was actually a teacher at the school where I was. […] So, yeah and then from there, our parents started to homeschool us. Yeah, I think at the beginning, for them, it was a challenge, because they didn't know anything about homeschooling themselves. So, I guess the three moms worked together to find the best curriculum and best structure for the children."*

Although collaboration among home school parents is not uncommon, the quotation above illustrates a much deeper level of collaboration when these three mothers decided to home educate together. From the interview data, it is evident that their collaborative approach entailed planning together, using similar topics for unit studies and participating in some activities/outings together. Most of the home education still happened at their own homes. What is significant about this close collaboration is the impact it had on the development of Bright Dreamer. The children were good friends, which according to the reference of Bright Dreamer, developed into adult friendships also:

> *"And we were really close as well. There were some weeks where the kids would sleep over at each other's houses as well, for one or two nights. So, we were really close. We saw each other at least once a week, which was great, and we are, actually still keep in touch. So, we are still in touch with the other two families, which is good."*

It is interesting to note that the bonds formed in the home school milieu during Bright Dreamer's primary and secondary education remained strong until adult years.

Bright Dreamer confirms that the mothers followed a non-formal approach during the early education phase and often met on Fridays as discussed by mother Attentive Listener under section 7.2.2.8 of learning activities:

"She didn't follow a curriculum at first. […] I think it was on Fridays, where they got together, and they discussed some of the stuff that they did."

The participant and mother confirm that their setting included some co-op activities where the families met regularly, worked together towards similar goals, did activities and outings together, supported each other and socialised creating community and friendships. Thus, Family 2 introduced a unique approach to collaboration within a home education community; something that enriched the home education environment substantially. The next section discusses the learning activities employed by Family 2.

7.2.2 Learning

The learning theme presented the same sub-themes utilised previously which includes interest and curiosity, love for learning, mathematics and languages, topical or unit studies, experiential learning, reading, individualised, outings and non-formal home education. These sub-themes were coded to make cross referencing within text easier. The data for the narratives of Family 2 pertaining to the learning sub-themes are presented next.

7.2.2.1 Interest and Curiosity

Similar to Family 1, interest and curiosity remained an integral part of Family 2's approach to home education.

Bright Dreamer describes their learning with a definite focus on interest-based learning:

"But her focus was also, to guide us into that what we found interesting as children, so for example, I really loved nature and insects. So, she would make effort to have specific classes cut out for us, to investigate the frog, for example. And then in the classes, we would kind of dissect the frog on a picture. Not a literal frog, we always used pictures instead. But so, she would dissect the frog in a picture, and we will see, okay, this is how a frog breathes, this is how a frog jumps. And then she would also make kind of like a thing about where she would try to get stories about frogs and kind of make it fun for it. She would try to follow the direction of the frog for one week and the next week it will be something else like a grasshopper. So, she would try to incorporate that which we find interesting. So, with me that loves insects, she would bring in the insect part. For my brother that loved Legos, she would incorporate Legos or, something with Legos. […] So yeah, I think she tried to approach our education following what we found interesting. For example, she got me a book specifically that

covered all the different types of insects that you can find in South Africa. So that book, I kind of studied through. […] Yeah, so she tried to get us to go into the direction of what our interests were."

Bright Dreamer describes their learning experiences typically being based on their interests and incorporating stories, the sciences related to that topic and incorporating individualised aspects of their learning. This excerpt describes utilising unit studies based on interests and creating individualised learning experiences whilst incorporating various subjects. This description furthermore describes being engaged in learning experiences. He confirmed that this type of learning was especially effective in the following statement:

"Because, especially, since I got to kind of learn, what I found interesting. I found that if I learned something that I find interesting, then I remembered it better than something I didn't want to learn or didn't find interesting. So, I feel like, yeah, it definitely helped to improve our education and direction."

Mother Attentive Listener confirmed the participant's interest in insects, his individual way of learning and intentionally developing learning experiences based on their learning preferences:

"My oldest son was very interested in insects and plants. So, then I'll leave him just to go out and search a meter by a meter and tell me what kind of bugs and insects is in there. And then he had to go and read more about that. Whereas [brother], he didn't care. He would just see the spider whatever and oh yes, it's a spider. We lived on a plot, there is lots of spiders. Uhm, [brother], I would stimulate again, in building things. He had opportunity to work with wood, take a hammer and a plier and nails and just build things. He played a lot with Lego, Lego is very resourceful, he still plays with Legos and he is 25 years old. But that's the engineering brain, we stimulated that."

Bright Dreamer highlighted another aspect of interest-based learning as described:

"And, and, for example, my brother really enjoyed this as he wanted to go into mechanical engineering. My parents made sure he got a lot of Lego with gears, like Lego mechanics, where there's a lot of gears and levers and stuff that you could play with to learn the maths and science behind pneumatic stuff, and gears and the math behind everything."

The quote not only confirms his brother's love of engineering type learning but also that his parents intentionally developed this interest and obtained the resources he required to grow in this area of interest. Thus, the notion of intentionality is an aspect that emerges strongly in the narrative accounts of Family 2. An important aspect of interest and

individualised education requires intentional development and acquisition of the required resources and skills to grow. Furthermore, the narrative accounts of Bright Dreamer and Attentive Listener underlines how intentionality on the part of the home education parent, could translate into reciprocity in the learning process if the intentionality is aligned with the interests of the learner.

7.2.2.2 Love for Learning

Similar to the description by Family 1, this family was also focused on developing a love for learning as discussed by mother Attentive Listener:

> *"[…] by teaching them, giving them the love to try, and get them to love to learn."*

She repeated this aspect of their education again later in the interview:

> *"Because from the start, I taught them to love to learn and they wanted to know things. So, they would go into books and research things themselves. So, they had the love to learn."*

This sentiment of the love of learning could also be picked up in the narrative account of Bright Dreamer:

> "*my brother and I really enjoyed doing science experiments at home*."

In the excerpt above mother Attentive Listener correlates a love for learning with the desire to learn by themselves and therefore creates a link between a love for learning and self-directed learning. The approach to mathematical and language instruction was discussed next.

7.2.2.3 Mathematics and Languages

As was the case with the first family, the narratives of both mother Attentive Listener and her son Bright Dreamer confirmed that mathematics and language instruction was both important and prioritised. Mother Attentive Listener referred to mathematics and language instruction as the foundation of their learning:

> *"My foundation was maths, you must see that your, your maths, and your language is your foundation. So, Math U See is what we did. We follow [sic] that strictly."*

Then mother Attentive Listener continued to discuss how they implemented interest-based topical studies as discussed later under that specific sub-theme. And then later in

the interview she again confirmed the importance of a good mathematical and language foundation:

> *"All of it is just general knowledge but your language and your maths must be a good foundation."*

Participant Bright Dreamer confirms their approach to home education with mathematics and language as a foundation with the addition of studies focused on interests:

> *"Our main goal, I think, her main goals was [sic] to teach us the basics that we're going to need for everyday life, like the basic math and the basic language, because those are important as well. But her focus was also, to guide us into that what we found interesting as children."*

He expands on the initial reference to their approach with detail on a quality math curriculum referring to it as a 'nice' curriculum:

> *"For each of us, we used to do a curriculum, called Math U See, for our maths, which is a really nice curriculum. And so, for that, each of us had our own books, where we would spend maybe an hour doing maths, but in our own book, and for our own grade."*

The participant explains how the three siblings had their own mathematics books, completed mathematics at their own grade level and that they would spend around an hour a day on this activity. From the data it is inferred that this was towards the end of primary school, around grades 7-9, based on where in the narrative this response was provided.

However, what was different for Family 2 in comparison with Family 1, is that the mother Attentive Listener delayed formal mathematical education with her daughter for some time period:

> *"So, as well as another example I can give you is, for instance, my daughter, she's not good with math. She didn't like it at all, although she did very well in her Cambridge year. I would just stop with the maths, for three months, I wouldn't do a math with her. And then I'll try again. And then I would see ah, yes, she's grasping the concept. And then within one week, we will actually catch up that whole three, three months. […] And then because I know also then the language plateau, then they go up, then they hit a plateau, and they can't take in anymore maths or anything. And then suddenly, I can see they're ready again, and then they go, go again."*

An important aspect of education uniquely highlighted by mother Attentive Listener was that learning was not at a constant rate all the time but went through cyclical phases. She discusses how she flowed with these phases and did not push her children to be ready for something that they were not ready for at that moment. She would rather take some time for them to mature and become ready, and then when they went back to that specific concept, she would find that the child was now ready to master that concept. This account suggests that children develop at different rates and that individualised education allows for the freedom to flow with these different rates at which children progress through stages of development. This individualised approach to language and mathematical education is an important result stemming from the data, because it creates a deeper understanding of how individualised home education could enhance learning and development.

7.2.2.4 Topic or Unit Studies

The narrative accounts of Family 2 also strongly suggested the use of topical and unit studies during home education. For example, mother Attentive Listener explained how unit or topical studies were used during the earlier home education years:

> *"So, it wasn't like at school, you've got this little box now we are doing geography, now we are doing history. Now we are doing biology. We would for instance, look at horses, which will teach you obedience, because as I said, we will look into the character traits firstly. And then obviously, if you look at a horse, you can go into the history, where did horses come from, and to South Africa, then that covers your geography as well. And then we will look at the body of a horse. So that's your biology. So, we did it in a really fun way."*

The passage describes how subjects were integrated with other subject topics and moral values while studying a specific topic. From the data it is evident that these could include character and or Bible study activities, science, geography, history and any other related materials or skills.

Like Family 1, Mother Attentive Listener describes their approach to unit and topic studies as fun and a more engaging way of learning:

> *"[…] for instance, I would teach them about fish. And now the age difference is two years and one year. So, [participant] would be eight, [brother] would be six and [sister] would be five years old. So, I'll start teaching them about fish, a lot of reading and pictures and everything. […]. So, [sister] would be colouring in a fish. … [brother] will*

be building sharks or fishes with this Lego. That's my engineer child. […] And then after a few days, when the lesson was over, after a few days in their just normal playing, I can I listen to them, and they can recall facts […] like the floating bladder or whatever type of a fish."

Interesting extractions from the passage confirm firstly unit studies with individualised activities for each child. Secondly, it also underlines how facts and knowledge that was gained through unit studies would be recalled and repeated later during free play; a practise that confirms learning according to De Mille and De Mille (2008). The next section investigates experiential learning as a theme during the narratives of Attentive Listener and Bright Dreamer.

7.2.2.5 Experiential Learning

Similar to Family 1, the narrative accounts of Attentive Listener and Bright Dreamer also indicate that experiential learning happened predominantly in the earlier education phases. The following quotations provide additional information to the initial references already provided under sub-themes interest and topic-based education, that referred to experiential learning activities. Bright Dreamer provided the following quote on the sub-theme experiential learning:

"So, for example, my brother and I really enjoyed doing science experiments at home. So, she allowed us to create smoke bombs, and play around with different metals and stuff to see what would happen."

The participant refers to enjoying engaging in science-based experiments with his brother and experimenting with various metals and chemicals. His reference also mentions the fact that his mother allowed them to experiment and, in all likelihood, provided them with resources to experiment with. This again describes being allowed the freedom and time to experiment, explore and act on inquisitive thinking. The following quote was included under the milieu setting but is repeated here for its contribution towards experiential learning activities:

"[…] and then they would play and read and because we are on a plot, they would go into the storerooms and make something electronic or work with wood or [sister] would be in the kitchen baking whatever."

The mother's words describe the two boys as active, outdoors boys who liked to play, build things and develop their woodworking and electronic skills through experiential learning. Once again, this type of learning firstly requires free time, secondly the

resources and lastly often requires some guidance and encouragement. The next sub-theme investigated the narratives for data supporting the sub-theme reading.

7.2.2.6 Reading

Similar to the first family's narratives, this family demonstrated a strong sub-theme on the topic of family reading. Mother Attentive Listener described cold winter days sitting in a sunspot in her room and reading books to her children:

> *"I have the picture of me, especially in the winter, we sit, where we had this sunspot in my room. They would sit there and I would read to them books."*

Her son, Bright Dreamer, also gave a reference to reading as a family:

> *"One of the things my mom also loved doing, was in the mornings when we got up, so instead of just jumping into doing work, my mom would call us, and the three of us would go to her room and then she would read a book, like, for example, Narnia, or Lord of the Rings, or some of those famous books. And she would read it while we sat there playing with Legos or knitting or doing some, something with our hands to keep us busy. She would read us a chapter while we drank our coffee, and got like, wake up. And then after that, then we would start with our work for the day. So that was also quite fun."*

Both descriptions portray pictures that fondly recalls their reading together as a family. Bright Dreamer specifically recalls drinking coffee while his mom was reading first thing in the morning before the 'school' day would start. He recalls this as a fun activity that he enjoyed. Early education reference to reading was also provided by mother Attentive Listener:

> *"[…] when I just read to them, for instance, Narnia or "Kringe in 'n bos", I think they were they were 12 years, 10 and 9 when I read "Kringe in 'n bos" to them, "Circles in the forest", but the Afrikaans one. When I did just normal reading, they had to do stitch work, or crochet or something that didn't make a lot of noise."*

She describes reading a first language advanced storybook to her three children while they participated in some activity that could be conducted quietly and not disturb the reading. Different from Family 1, mother Attentive Listener interestingly provided another reference to family reading even much later in their home education journey while the children were in high school:

> *"And we read a lot, I actually read to my children until they were 16 years old."*

A fascinating declaration by mother Attentive Listener confirms that they still read together as a family well into high school. This links really well with research on the topic as reviewed in the discussion (see section 8.2.6). The next sub-theme reviewed the data on individualised home education.

7.2.2.7 Individualised

The data that supports individualised home education similar to the data for Family 1 shows a strong focus on allowing children to learn, explore and read in their unique areas of interest. Mother Attentive Listener also showed that she customised unit study activities according to age, preferences, abilities and maturity. She confirmed her intentional focus on her children as unique individuals with the following quotes:

> *"And it was an input into each child's individual attention."*

She repeats the sentiment again later:

> *"It is just to let them be and find more about what they love and want to know more about."*

These narratives of this family showed similarities to Family 1 with regards to the interest-based learning approach and customising learning activities according to each individual learner. Also allowing the freedom to explore and find what they love.

Bright Dreamer highlights how an individualised approach to home education enriched the interaction between him, as learner, and his mother, as educator:

> *"So, for me, it was really nice, because now, I kind of got one on one interaction with my mom, leading me, for example, if I'm struggling with something, then she would constantly make sure that my attention is on the work that's in front of me, and it kind of helped me when I'm having difficulty to understand something."*

Although one would expect the interaction between learner and educator in a home education environment to be more frequent and deeper than in a large classroom, what this quotation illustrates is that an individualised approach to home education could act as a catalyst to enhance learner-educator engagement. Individual interaction and attention and focusing on each child's needs, is an important advantage of an individualised approach to home education as mentioned by participant Bright Dreamer. He discussed how much it helped him to have that individual help when he needed it.

Outings and visits to places of interest was explored in the next sub-theme.

7.2.2.8 Outings

As discussed in 7.3.2.8 and 7.5.2.8 this family similarly utilised Fridays for outings, visits to places of interest, crafts or extra-mural activities as discussed by mother Attentive Listener.

> *"Fridays we never schooled. So, it's actually just a four day week. Fridays we had field trips, and our crafts, and extra murals were on a Friday, or in the afternoons."*

Because Fridays was often used for these types of activities, their 'school week' was only four days with Fridays being utilised for social activities or other learning activities. Participant Bright Dreamer confirmed their co-op meetings on Fridays:

> *"It was on Fridays, where they got together, and they discussed some of the stuff that they did."*

These families sometimes just spent Fridays in their co-op either on outings or to discuss their week, and to socialise.

The next sub-theme investigated the ways in which non-formal home education was implemented in the narratives of Family 2.

7.2.2.9 Non-Formal Home Education

The sub-topic of non-formal home education was characterised by various factors, which was defined and elaborated upon, based on the narratives of the participants and mothers. The first reference towards non-formal home education by Bright Dreamer refers to the flexibility in structure as compared to school:

> *"So uhm yeah, […] I really loved the new adjustment, because of the fact that it was not as structured, it's not like you have to follow these guidelines and rules. So, for me, it was a positive change."*

He later referred to early education being very flexible, unstructured and without a formal curriculum:

> *"[…] basically, what my mom did for us was, she actually gave us like an unschooling kind of way. She didn't follow a curriculum at first."*

He expands on this explanation of non-formal home education later in the interview:

> *"But, yeah, so my mom didn't really follow a curriculum. As far as I remember, she took some stuff from different curriculums where she used some of the elements or*

aspects of different curriculums that she felt was going to help with our learning process. So yeah, and didn't really follow a curriculum."

Participant Bright Dreamer discusses that his mother combined various resources that she incorporated in their home education, which is also referred to as *eclectic* home education [4.3.2.2]. The narrative further develops the sub-topic of non-formal home education during later education phases, with regards to flexibility in time; when they started schooling in the mornings, which subjects are completed at what time and how much is done and when. The following words of Bright Dreamer illustrates this point:

"Okay, for one, we didn't really have a strict time where you would have to get up at a specific time and then start with a specific […] subject at a specific time and then at another time, start with the next subject. So, we were kind of given free reign on managing that."

Similar to the narrative accounts of Family 1, participant Bright Dreamer explains how non-formal home education transitioned to a formal structure during high school which prepared him for higher education.

"Yeah, yeah. Definitely. Like the last three years was a lot more formal. It was, it started to feel like it was starting to go into the direction of university."

The transitioning to a more formal structure during high school was explored further under Autonomy and Responsibility as discussed in section 7.2.3.1.

7.2.3 Life Skills

The life skills sub-themes that were identified during the narratives of Family 2 highlighted a strong emphasis on autonomy and responsibility.

7.2.3.1 Autonomy and Responsibility

Just as was the case with Family 1, Bright Dreamer described their early education as being mostly facilitated by his mom and then as they progressed to high school it would become more and more autonomous:

"Okay, so as the years progressed, in the early years, here from maybe say, grade one up to grade seven, that's mainly primary school, my mom mostly did the education for us. So, she kind of taught us and helped us where she could, […] So, from grade eight to nine, that was kind of the transitioning phase where we started to learn how to work on our own and learn how to read and understand what we read. And then

my mom would still help us every now and then but not as much as she used to in primary school. And then you're in grades nine to 10 that's when we started with Cambridge. […] grade 12, so that's where we started to completely break away from my mom. So that's where we started to learn how to learn on our own. […] So, it started off with my mom teaching us, and then later as we progressed, we started to go on our own."

Bright Dreamer continued with the following piece clarifying the role of taking responsibility for finishing academic work during high school:

"So, we were allowed to figure out, what and how much time do we need for different subjects to finish the work for the day. Or what we also could do is do one subject one day, another subject another day. So yeah, we, we weren't given a strict timeline to do the different stuff. We just had to finish stuff for the week."

Mother Attentive Listener verified that later in the primary school years she would make a schedule with the work that needed to be completed and started giving autonomy to the child to take responsibility for finishing their work. She then also confirmed total autonomy by the end of high school:

"So later, in the primary school year, year or age, I started giving more, I made a schedule for them. So, I would say, Okay, this is what I need you to do for Afrikaans, English, Maths. And then I made a schedule, and they had to comply with that and finish whatever I had for them to do. And that was giving them a little bit of introduction, what, what's waiting for them. So, when, I must say, that their later, high school years, I actually, they, each individual child's last years, I didn't homeschool them, they homeschooled themselves."

The following passage discusses how mother Attentive Listener intentionally developed autonomy and taking responsibility during the younger years as an important skill and how training in this regard developed the skills for full autonomy by the end of high school:

"They knew, this is the roster, this is the schedule, I must complete this. My exam is waiting for me, I must complete all of this in a specific time range. So, because I imported that in the younger years, it was actually easy for them. And for me, just to, they took it all over. I didn't, at that stage, I had to drive them to a few of the tutorials, especially the subjects that is practical. But that's about my input in their later years."

The sub-theme for autonomy and responsibility shows how this aspect of the learner's skills was intentionally developed and grew, ultimately resulting in full autonomy by the

final school years. This aspect of home education is a big advantage for preparing learners for higher education success, because the data indicates how individualised home education could develop autonomous self-directed learners. Age integrated socialisation as an acquired skill for home educated adults were investigated in the narratives of Family 2 and discussed next.

7.2.3.2 Age Integrated Socialisation

An individualised approach to home education could develop age integrated socialisation in learners. Age integrated socialisation is a particular competence which Mother Attentive Listener discussed as an advantage of age integrated socialisation which prepares learners for life:

> *"So, in the school, it's peer pressure, and socialisation is only between all nine year old's. But it doesn't prepare you for the real world out there, because socialisation, now you've got a colleague that 64 years old, you got a new one coming in, that's 22 years old. So, it doesn't mean that school is preparing you for socialisation."*

Mother Attentive Listener furthermore confirmed the communication skills that was developed during age integrated socialising within home education:

> *"They were very easy and comfortable playing with a two-year-old on the floor now. And then we will get into the car and go visit an elderly person that's 89 years old, they could just as well communicate with that person. So, socialisation was not at all a problem."*

In the quotation above, Attentive Listener links age integrated socialisation with the development of verbal communication in a social context. Interestingly, mother Attentive Listener extends the notion of communication in age integrated socialisation even further when she draws a conclusion between playing team sports and learning to communicate. She extends a caution to the importance of developing communication and socialisation skills and confirms the role that parents play in intentional development of socialisation and communication skills:

> *"So, socialisation was not at all a problem. And why I took this, this whole route now, for socialisation is just coming back to the sports, as we taught them, and we gave them the opportunity to be part of a 'span sport', team sport, where they are in a group. They've got to communicate in a group and they know what to do. So that the sports thing, and the socialisation is purely the parents' responsibility to see to it that they*

get the opportunity to have sports and to socialise with other people. Different ages or same ages."

Although participant Bright Dreamer did not discuss age integrated socialisation specifically, his mother made important conclusions regarding the advantages of developing the skills of communicating with all ages. The first important advantage being that it prepares learners for real life. Her narrative reveals the important role parents play in developing communication and socialisation skills. She draws a correlation between playing team sports with learning valuable communication skills that prepare learners for life. She confirms that her children attained the necessary socialisation skills especially through age integrated home education socialisation and participation in team sports.

7.2.3.3 Character Development

The narrative accounts of Family 1 already indicated that character development enjoyed priority attention in the narrative accounts of participants. Although only a short reference by mother Attentive Listener refers to character building activities, it still upholds the importance of character development in an individualised approach to home education:

"I approached the Konos way. So, it is character building. You build character into the children and through character building, you would take a theme and work through that."

This family, similar to Family 1, utilised character-building themes and integrated these with unit studies during early education, e.g. the Konos curriculum. Character building did not present as a predominant sub-theme for Family 2. It could be because only one interview was conducted with these participants and the questions was not guided in this direction necessarily. The narratives of Family 2 also did not provide data for the sub-theme quality interactions. The summary of Family 2 concludes section 7.2.

7.2.4 Summary

The narratives of mother Attentive Listener and her son Bright Dreamer is depicted in a close, warm and loving setting where they as a family often gathered around the dinner table to discuss interesting learning experiences. Their shared learning experiences created a shared language and built strong relational bonds. Mother Attentive Listener recalls playing outside with her three children, running barefoot and building roads in the dirt and playing with cars and tractors. The children, during early childhood, spent a lot of time outdoors playing, building or creating through explorative learning. They also

recall reading early mornings before starting school, while drinking coffee. Winter mornings sitting in a sunspot and reading together as a family was a favourite and fun learning activity. Family reading for them continued well into their high school years. Their narratives include home education as part of a co-op where these three mothers would plan together, went on outings together and formed a community that supported each other while their families formed beautiful friendships that still last. Their individualised approach included a flexible structure with early learning based on character development, mathematics and language instruction and subject integrated, topical studies that engaged the children through curiosity and interest. Education transitioned to a more subject based formal approach during high school and a formal matriculation preparation from grade 10. Mother Attentive Listener was intentional about individualised education customising activities and listening attentively to their needs and finding what they love. She developed autonomy from a young age, encouraged participation in team and extra-curricular activities and provided freedom and resources for interest-based, experiential, individualised home education. Key insights from the narrative accounts of Family 2 are as follows:

- Engaging learners utilising curiosity and interest results in fun learning experiences.
- Topical learning or unit studies was utilised for early learning and are expanded, transcended to other disciplines, subjects and real-life applications to enhance engaged learning.
- Learning and retaining knowledge are more efficient when based on interest.
- Interest-based learning requires resources and materials to enable growth.
- Engaged experiences creates a love for learning which results in self-directed learning.
- Mathematics and language instruction was executed more formally, utilising a grade-based curriculum.
- Children develop and mature at different rates and in some cases need to move faster or slower than grade prescribed resources.
- Knowledge that learners acquired during unit studies or outings, or experiential learning activities would often be recalled during free play activities.
- Individualised home education provided the freedom to explore, experiment and learn by self-directed mechanisms.
- Individualised education includes another aspect of personal attention and being available to help and support.

- The role of the mother changed from primary instructor and teacher to a supportive role.
- Non-formal home education includes various factors such as flexibility in structure, having choices in what to do, how much and when, as well as freedom in planning the day, when to start etc.
- Learners became fully autonomous by the end of high school which was a big advantage at higher education.
- Age integrated socialisation within home education is more representative of real life and therefore better prepares learners for higher education and life after that.

The next section will introduce the participants of the third family and present their narrative thematic analysis.

7.3 Family 3

Participant Benevolent Relator, sibling Wise Chemist and mother Lighting Fires represents the third family that provided narratives regarding individualised home education.

PARTICIPANTS

Benevolent Relator

Participant Benevolent Relator is a female candidate who home educated for 12 years and successfully completed a degree in Industrial Engineering at the University of Pretoria. Her family did a lot of reading, exploring, nature studies and had a lot of fun whilst engaged in non-formal learning activities. She has a sibling that also participated in this study called Wise Chemist. The following quotation introduces Benevolent Relator:

> *"So, my mom is very people focused. So, she has a very deep love for people. And she's very compassionate, extremely compassionate and I think that really rubbed on me. I could never separate my studies from the person, I can, I still cannot separate my professional work in a way from my, from my emotions, and the person behind the professional work."*

Wise Chemist

Participant Wise Chemist is a female who was home educated for 12 years and successfully completed a degree in Consumer Science and Food Retail Management at the University of Pretoria. She loved science growing up and thoroughly enjoys her career in the perfume industry.

"I write research reports for cosmetic products, which I never thought I was going to do. And it fascinates me, it fascinates me to, to read about how the eucalyptus oil, the chemical compounds has [sic] a certain effect on certain diseases and certain things and I would have not seen that, to get to the way, to get to those type of information and knowledge, if I didn't actually go through the higher education process."

Lighting Fires – Mother of Benevolent Relator and Wise Chemist

The mother of Benevolent Relator and Wise Chemist was given the pseudonym Lighting Fires directly quoted from an interview. This mother, a teacher with a postgraduate qualification in educational psychology, discussed her journey of growth and how she altered her course from a formal approach to a non-formal learning approach during the early education phase.

"And then apart from the mathematical skills and the reading, we did what I would call matchbox classes. And I called it that way, because I, oh, I just saw it, as the rest of what I taught my kids, I saw it as just lighting fires in their hearts and their minds."

The results from the thematic analysis of Family 3 follows, repeating the same format as was followed with the first two families, i.e. firstly describing the milieu, then the learning environment, the life skills, and lastly quality interactions.

THEMATIC ANALYSIS

The themes and sub-themes for the narrative interviews of Benevolent Relator, sibling Wise Chemist and their mother Lighting Fires follow. The milieu in which their home education took place was described first.

7.3.1 Milieu

7.3.1.1 Happy, Safe and Loving Family

The narrative accounts of Family 3 indicate a home milieu that is happy, safe and loving. Similar to the mother of the first two families, mother Lighting Fires describes their home education environment as "*a warm environment*". In the same vein, the family's environment was described by Benevolent Relator as a safe place where she could bloom, belong, and develop as a happy and content person:

"Well, I look back on it very, very fondly. First of all, but I think I see, I see the outdoors. I see, me and my family sitting under a tree, reading a book and like its complete

content. There's no, there's no darkness, there's no, there's no insecurities. I really just see myself blooming in my, within my little safe circle, where I could be myself. And there was no judgement. You know, because we're a family and so I think, definitely, I see that very happy, content with being myself. You know, it's a safe place."

The description shows similarities with previous depictions of the first two families' home education settings that is physically and emotionally safe. However, Benevolent Relater introduces a new dimension with the reference to a judgement free environment where she was accepted and could develop into a person who is content and authentic. Because the environment is safe there is no need to 'armour up' as referred to by Brown (2012, 2022) for protection or to develop a masked version of herself. Sibling Wise Chemist made a similar reference to the emotional safety provided by their specific home education environment:

"I think, if I can think of one of my fondest memories, which sort of entails a lot of things, is sitting under the tree with my mum and my brother and my sister. […] While we are sitting and drawing, and it's peaceful, it's very peaceful. And there's so much like love. I want to say, freedom. And freedom because it is safe almost. And because it's, it's, it's, where you feel the most, I don't know, it's like where you feel the most strength, but it's because it's, you can totally be yourself."

Sibling Wise Chemist describes the environment as peaceful and with freedom because there is safety. And then she makes a very interesting correlation between being strong because of her vulnerability – a notion that Brown (2012) describes as showing up and allowing yourself to be authentically and truly seen. It is important to note that both siblings refer to vulnerability, being allowed to be themselves and that it is was safe and a place where they belonged. Wise Chemist also correlated being self-confident because she was never scared to just be herself:

"I was just never scared to just be me. And maybe that's the greatest thing that I can take from my education if I can, can call it that, not only education, but like my upbringing that I was, I was really self-confident."

From these words it is evident that Wise Chemist considers vulnerability and self-confidence as a great result of her home education environment. Her correlation between strength and vulnerability is a very interesting insight, because it provides a deeper understanding how an individualise home education approach could enhance the learning and development of learners.

Thus, the narrative accounts of Family 3 – in line with those of the first two families – indicate a happy, safe and loving home education milieu.

The narrative accounts of Family 3 furthermore indicate how belonging, and vulnerability became an integral part of their home education milieu. Mother Lighting Fires discuss how home education allowed her children the freedom to be themselves and make mistakes:

> *"[…] it was a warm environment, in which I think children learn best. It was an environment where they were allowed to make mistakes without people laughing at them or labelling them. There was no labelling, you know, if a child is not that verbal, not being able to express him or herself very fluently, it was something that they could grow into, you know, over a period of time without being mocked, or, you know, teased. Physically, there was never an emphasis on, on what they would look like. So, I don't think that whole obsession with what people look like and judging people on their outer appearance was ever a big thing."*

In describing their milieu mother Lighting Fires emphasises the emotional safety of an environment where children can grow and develop without labelling, teasing or bullying. Being allowed the time to organically grow and develop areas that they struggled with whilst still feeling like they belonged and were safe. Additionally, from the data, it can be inferred that without the focus on outer appearance, the home educated children could develop self-esteem in a positive and constructive environment. This is important in preparing children for higher education as it contributes to wellbeing, self-esteem and self-efficacy. Furthermore, the mother describes their milieu as the type of environment conducive to learning. The type of setting where a child is allowed to be themselves, authentic with the space to find their uniqueness. In the absence of shame they can develop and grow, without armouring up. Here their authenticity becomes the birthplace of creativity and innovation (Brown, 2012). The narrative descriptions of participants Benevolent Relator, sibling Wise Chemist and their mother Lighting Fires confirmed a home setting that could be described as happy, safe and loving.

The next sub-theme discusses the environment with regards to activities, experiments and the freedom to explore.

7.3.1.2 Active, Freedom and Experiments

Similar with the first two families, the narrative accounts of Family 3 also indicated a milieu that entailed active learning through free experimentation. With specific reference

to the topic of freedom to actively explore and experiment Wise Chemist provided the following reference:

> *"And I would, I would have the freedom to like, when I decided to experiment with random green peppers from my mom's cupboard and then I'll keep my room dark for three weeks and grow weird things under my bed, and it was like, I was encouraged to do that a lot."*

This description of their home education milieu creates a picture, similar to Family 1, where experiments would be an integral part of their home education journey. As mentioned earlier, learning was not confined to one room; it expanded to fill the whole living environment – the house became a big classroom. Creating this type of setting requires concession on the part of the parents with regards to compromising a clean and organised environment and having control over every aspect of learning. It requires letting go and allowing the child to explore freely without inhibition as is evident in the following quote from Wise Chemist:

> *"So, my parents, I think played a big role in that, giving us the freedom to become dirty and play around and do things that we think is fun, and sometimes a big mess up and we would burn things down and break things. But they would still, you know, forgive, and encourage us again to try something crazy."*

From the narrative accounts of Family 3, it is evident that their home was conducive to explorative learning and the parents played a crucial role in encouraging this type of explorative behaviour. Thus, parents who are not intentionally open to provide this type of freedom could inhibit an explorative and experiential learning environment. In the next section the outside learning environment was described.

7.3.1.3 Outside

The learning environment of Family 3 also expanded beyond the perimeters of the house to include the outside area of the premises. References to outside learning was provided by Benevolent Relator discussing sitting under the tree reading or catching bugs. Her description of their outside learning experiences recalls it being fun and exciting:

> *"[…] just being with my siblings, and my mom, sitting under a tree, you know, reading or discussing some topic. I mean, that is kind of often how we, how we learned. We were outside. We were usually often in action. We'd like go and look for a bug, like we're analysing it now and catch it and see what it does. So that was, that was so fun for me, because it's, it was me with my family, we're together."*

This piece describes not only a milieu situated outside but pulls together various aspects of learning experiences including interest and curiosity, experiential learning and the aspect of their family learning together. Positive and engaging learning experiences cannot be isolated from the feelings of belonging and coherence as described by Wise Chemist:

> "*my fondest memories, which sort of entails a lot of things, is sitting under the tree with my mum and my brother and my sister. […] While we are sitting and drawing*".

Other references to learning and reading outside was included under section 7.3.2.6. Their socialising and learning community activities was described under the next section 7.3.1.4.

7.3.1.4 Community

The narratives of Family 3 did not provide information about co-ops or schooling with other families. It did however provide references to various learning and socialising activities and specifically outings together with home education families which was explicitly stated as a highlight for these home educated participants. The reference by Benevolent Relator follows:

> *"So, we would organise a group of homeschoolers, and we would go see this museum. […] But it was also for us a way to, you know, see friends and learn about things, and we did that very often. So that was also probably one of my very fond memories."*

Benevolent Relator recalls going on outings or socialising with friends on Fridays:

> *"On Fridays, we didn't do formal school. […] We just did outings, and we did socialising with friends."*

Sister Wise Chemist had a similar reference to Fridays being a highlight during primary school:

> *"But I, if I think of my early homeschool years, I remember Fridays, because it was always the times when we would, well we saw a lot of friends during the week as well, but that was usually the outings and the fun stuff that we usually did."*

Wise Chemist confirmed taking Fridays for recreational things or socialising or educational activities:

"I can always remember Fridays being time put aside for recreational things. […] Once a month on Friday, we did ice skating, for instance, and we did other things and we, we would literally just socialise with friends for the Friday."

The references show that Family 3 also followed a general 4-day school week and utilised Fridays for outings or socialising with friends. It shows that they often organised visiting places of interest and invited their home education community. Their words suggest fond memories of these events.

The next section will focus on the theme of learning.

7.3.2 Learning

The learning activities for family 3 was presented next with the sub-themes of interest and curiosity, love for learning, mathematics and languages, topical or unit studies, experiential learning, reading, individualised, outings and non-formal home education. These sub-themes were coded to make cross referencing within text easier.

7.3.2.1 Interest and Curiosity

Interest-based education was excellently described by mother Lighting Fires. She called this aspect of their education matchbox classes, because she would expose them to different things and see where it caught fire, which symbolises their curiosity and interest. Whatever ignited passion they would spend more time on and dig deeper into those areas until the interest faded and then they would move onto the next area of interest:

"And then apart from the mathematical skills and the reading, we did what I would call "vuurhoutjie klasse", matchbox classes. And I called it that way, because I, oh, I just saw it, as the rest of what I taught my kids, I saw it as just lighting fires in their hearts and their minds. So, I wasn't really interested in what they would retain, or what they would remember. […] I would work through books on history, or art, or science or whatever it was at that point, the interest of the family. If somebody was interested in astronomy, we would study a book on the planets and go to the planetarium."

Her pseudonym, Lighting Fires, comes from this portion of the narrative, which symbolises the way how she perceived her role in igniting passion, curiosity and creating a love for learning as discussed in section 7.3.2.2.

Daughter Benevolent Relator describes her experience of interest-based learning during the early education phase, which was usually the family learning together:

"But she was very open to us if we expressed something that was interesting to us that if you know, if it wasn't harmful, you know, because you can get things like watching TV all the time, that is harmful, you know, but if it was something that was interesting, and a lot of the times, if it was things that we could do as a family, as a unit. […] So, it was very much a family-oriented thing."

The above description by Benevolent Relator confirms interest-based learning with the additional dimension of learning activities in most instances being together as a family. This reference to the social dimension to interest-based learning is crucial because it creates a deeper understanding how individualised home education could create an environment that is more conducive to learning and development. Another description by Benevolent Relator confirms that interest-based activities usually occurred together as a family and in some cases requires sacrifice by some family members:

"But especially in the exploratory phase, you know, we're a team, we do things together, even if you're not feeling like it today, we're gonna all go and look at the train station, because brother wants to see how it works kind of thing. So yeah, it was, she was very much guided by what we found interesting"

Above references confirm that collaborative interest-based learning played an important role in the early education phase of individualised home education. It is interesting that references to later education phases showed that interest-based education still influenced learning activities for this family as quoted from mother Lighting Fires:

"Then by age 13 or 14, I would start introducing science, […] And that, that I would introduce, well, by the age of 13 or 14. […] And then, the children that's interested in history, or so, I would just add some history, whatever would interest them. I used the Footprints Into the 21st century, as well, as an add on curriculum. I don't really want to call it a curriculum, because it's just a very free way of introducing the South African history to the children. And there was quite a bit of writing assignments and interesting ways of, […] recording your knowledge and what you've learned. So that was also very helpful. But still, I, you know, it would be very dependent on the individual learner on how and how much and how often we would engage in, in formal activities."

The above narrative section provides insight into the early high school phase and the part that interest and curiosity played in this phase. Mother Lighting Fires discussed introducing a more formal science and history at the start of high school with the child's interest still at the core, influencing how much, to which extent and the pace at which these subjects were incorporated. With progression of time to higher education, Benevolent Relator discussed how interest and curiosity still advanced her love for

learning:

> *“And because I had freely chosen to study that, and also, you know, while being a student, I was free, I realised how free I was to explore new avenues. I could, you know, I so often went to different faculties, where if I met someone who was in a different faculty and I'll go and see how they make ice cream from frozen, what was really nitrogen, nitrogen, I would guess. I went to different classes and learned how they do cooking. So that freedom made me very, very interested in in a very broad variety of things, because I was never tunnelled. And I think that, that was very beneficial for me. Because studying at varsity, you have to be open minded.”*

It's fascinating how interest and curiosity-based learning, when developed during the early years, continued as a love for learning even into the higher education phase. These learners engaged with learning, with the advantage of choosing to do so freely and wanting to learn more and enjoying new learning experiences. Interest and curiosity were an extremely effective learning mechanism that facilitates engagement and a love for learning. This interest in learning even translated into the work environment of Wise Chemist after her higher education studies. Wise Chemist describes her work environment in the following piece:

> *“I write research reports for cosmetic products, which I never thought I was going to do. And it fascinates me, it fascinates me to, to read about how the eucalyptus oil, the chemical compounds has a certain effect on certain diseases and certain things and I would have not seen that, to get to the way, to get to those type of information and knowledge, if I didn't actually go through the higher education process.”*

In the description of her work environment Wise Chemist describes being fascinated by the scientific influences in the products and her description confirms how she is still interested and engaged in learning even in the post higher education phase. Interest-based learning closely links with creating a love for learning, which was present in the narratives of Benevolent Relator, Wise Chemist and mother Lighting Fires and is discussed in the next section.

7.3.2.2 Love for Learning

Developing a love for learning was discussed in the narrative themes of Families 1 and 2. For Family 3, a few more references to this sub-theme was presented. Mother Lighting Fires provided the following reference to this topic:

"First, you've got to, I think, you need to have a love for learning. So that was something that I, from the beginning I wanted them to love learning. So that was the first thing."

The mother of Wise Chemist and Benevolent Relator discussed that one of the first focus areas for her was that her children would love learning. The following section from Wise Chemist confirms that a love for learning was successfully developed:

"I think it was the way she taught me to, to study and to learn the things, that made it, I was eager to want to learn and want to learn new stuff or things that was above my head, wasn't scary for me. I was just like okey well, "Hier is die volgende 'challenge."

Wise Chemist confirms that she wanted to learn new things and was not scared of learning new and difficult things. She attributes this property to the way her mother taught them to learn. According to her narrative her mother created an attitude that trained them to bravely take on new challenges. Sibling Benevolent Relator also confirmed a love for learning and how it shaped her career:

"I was very interested in science. I enjoyed it at school. I really enjoyed studying science. And I think that is naturally a very, it's very, yeah, the academic world is, is where, is the home of science in a way. Not necessarily the home, but it's where it's been cultivated, grown and explored. […] I think because I was allowed to explore things very deeply if I wanted to, you know. Because the type of approach that my parents took with us, in educating us, we could, we could dive into the topic, you know, for weeks, and try and understand it deeply. You know, we could, we could go into the, you know, what does a flower look like. We picked some flowers, and we pressed them. And we, you know, if that was something that interest us, we can really dive into it in a way that, you know, to, you know, we can, it was almost scientific in a way. Yeah. And I think that, that's probably where most of my love for science started. And that's why I decided to study, to go to university and study engineering, which is very science focused."

In these words, Benevolent Relator described how she developed a love for science and math, which is why she decided to pursue a career in engineering. Interestingly she relates her love for science back to early experiences in home education where she could dive into her interests as deep as she wanted to and learn about it in a scientific way and that is probably where her love for science was ignited. The description confirms a love for learning that developed through interest and experiential learning in a home education milieu, from a young age that lasted and became a lifelong love for learning. The specific way in which mathematics and language instruction was conducted for this

family was presented next.

7.3.2.3 Mathematics and Languages

Like with the first two families, Mathematics and Language education for Family 3 were prioritised and took on a more structured approach. The narrative accounts of Family 3 elaborated extensively on mathematics and language instruction. Mother Lighting Fires confirm consistent mathematics and language instruction as a 'basic building block':

> *"And, obviously, there are areas that you need to do the building blocks, like mathematics, mathematics, and you know, basic reading skills. You've got to build on the little blocks to get to the end result."*

She furthermore confirmed using formal products for language and mathematics:

> *"So, we had our languages and our mathematics that was in a formal way, although I used, made use of homeschool, friendly products or curricula."*

The homeschool mother reinforced using formal curriculum for mathematics and language but refers to it as products friendly to home education. This statement confirms the freedom to choose the type of resources they wanted to use.

As part of their language component, being able to read was an important outcome. Benevolent Relator referred to being taught to read as one of the first outcomes:

> *"I think her focus was probably to teach us how to teach ourselves. So, she taught us how to read. And that was the first thing I can remember […] And with a little bit of structure in the sense of we could all read well. The girls could all read by the age of eight, my brother was a bit slower than the rest, which was also fine. But we were, when we showed interest in reading, my mom taught us to, to read and you could do basic maths."*

The excerpt above refers to reading as one of the first tools to independent learning, which was prioritised by her mother for this reason. Benevolent Relator provided another reference to the priority her mother placed on early mathematics and language:

> *"Um, she was very, she was quite strict with us on the math and languages, well not really strict, but she really emphasised to us that we must be able to speak and write properly and read and do our math."*

The reference above confirms that the more formal aspect of language preparation included reading, speaking and writing. Persistent and continued mathematics was part

of the more formal part of their home education. Sibling Wise Chemist described their early education as follows:

> *"And during the week, my, my schooling stretched from reading outside on a, on a big blanket, and drawing and doing nature studies, we had Math-U-See, or, ja, we had maths all the way through. So that was something that became part of life."*

She describes reading outside, doing nature studies, but mathematics always being a part of their home education and therefore a consistent element. The next reference to language specifies their first exposure to their home language Afrikaans, and how their mother passionately encouraged specifically reading throughout the early years:

> *"She is very passionate about Afrikaans, so we always had language and we were reading a lot. Even though I wasn't a big fan of it, I was always encouraged with, whether it was some kind of prize, or whatever, if I would read 100 books in the year, I could get some chocolate or whatever, it's crazy what kids would do for anything."*

Changing circumstances for Benevolent Relator and the family showed that her family had to adapt their way of home education during the times that their family welcomed two more babies during her last few years of primary school:

> *"And then when I was around 10 my mother had a baby. So, it was like another spanner in the works. So, she could not pay a lot of attention to us in that time. So, she gave a little bit of it to my dad. My dad did the math with us."*

Wise Chemist also referred to the time their family had another baby and that their home education for that year consisted of math, reading and some interest-based learning:

> *"And the other time she also had one and I think we just did maths and reading again that year so for the rest of the time we did interesting things."*

References by Benevolent Relator, her mother and sibling discussed the challenges they encountered with the arrival of babies in the family and how this affected their home education approach. To a degree their approach was simplified and reduced to accommodate the changing circumstances, but they still focused on mathematics, reading and some interest-based studies during this time. Their father helped with the mathematics during this time period. It is important to note that the dyadic relationship between home-educated mother and home-educated learner, naturally expanded to a triadic relationship when the circumstances demanded it. The role of triadic relationships is a vital insight that could create a deeper understanding how home education families create an environment that is conducive to learning and development.

Wise Chemist commented on the high quality of their mathematics curriculum and the strong foundation is provided in preparing them:

> *"I can say that the things up until that point that my mom sort of structured us with Math U See, was a big help. I think that was like one of the big foundations with regards to maths."*

From the data, it is inferred that consistent mathematics instruction from a young age with quality resources successfully prepared these home educated adults for higher education. From the data it is evident that quality mathematics curriculum is an important aspect of home education.

Mother Lighting Fires summarises their mathematics and language approach in the following piece:

> *"But I only introduced formal English as in, you know, a curricula type of thing, when they started grade five, and we, we used the LLATL: Learning Languages through Literature and Art. That was the program that we used. I won't say we sticked to it rigidly. But that was a guideline for me to introduce English as a formal language. But in the early years, grade one to four, I primarily sticked to Afrikaans as a, as a medium of education. And then, for mathematics, we started with a Math U See, which I started with the alpha. I didn't do the primer, because I don't think kids should really do anything formal before the age of seven, or eight. And so, I started with the alpha and then gradually worked through the levels. It's not a graded curriculum. So, you just work through the levels as the kid progresses. So sometimes, we would do one or two levels in a year. And then other times, we would do have half a level in a year depending on the child's maturity levels, or interest, or just yeah, whatever life was throwing at us. And then apart from the mathematical skills and the reading, we did what I would call "vuurhoutjie klasse", matchbox classes."*

The quotation piece contextualises this Family's home education chronologically, especially in relation to mathematics and language instruction. It established that their family started home education around the age of 7. Primary education included home language instruction and mathematics. By grade 5, an additional English (or second language) curriculum was added. The mathematics was completed level by level and the child progressed at their own pace which would sometimes result in doing more than one level per year or in some instances the child required more time to complete a level. The reference to flexibility in pace becomes another important component of non-formal individualised home education. Thus, the pace at which levels was completed depended on the child's aptitude, maturity, interest and the situation in their family at that time.

The next section discusses how topical, or unit studies was utilised for this family in their individualised home education environment.

7.3.2.4 Topic or Unit Studies

From the narrative accounts of Family 3, it is evident that they also applied topical and unit studies as was the case with the first two families. The sub-theme on topical or unit studies as it was utilised in the non-formal individualised home education of this family, was described by the two home educated participants and their mother. Benevolent Relator provided insight into how topical studies played a part in their home education:

> *"I think her focus was probably to teach us how to teach ourselves. So, she taught us how to read. And that was the first thing I can remember. But other than that, it was very exploratory. In the sense that we would, she would ask us, what would interest us and then we would dive into that a bit more, like we would basically take topical things. She loved to read with us as well. So, we would find something interesting for instance, we would be at Grandma's, then we would watch something on TV on Discovery Channel. And she'd be like, oh, wow, that was now very interesting for everyone. So now we're going to do a week on the history of mining gold, for instance, you know, even if it was sometimes a bit above our, how can I say that, you know, we were young, but if we were interested in it, she would do it. And she, we were very much, most of the education that we did, if you can call it education, was done in a play sense."*

The quotation piece describes interest-based education but also how interest or curiosity in some cases became a topical study for the family. From the data, it is evident that the inspiration for topics came from a wide variety of resources, places and everyday events as described above. The narrative accounts indicated that interest can in many cases be incorporated into unit studies for the family if it is a good fit.

Interestingly the quotation piece describes sometimes choosing topics that might seem too difficult for the ages of the children, but in a playful way the theme was incorporated, and the depth of study adjusted to the maturity and interest of the learner/s. Wise Chemist provides another reference to the difficulty level of topical/unit studies:

> *"[…] we did interesting things like, I think my mom would find a good science book, but very creative and she would just go through all the experiments with us. There was no, so she would start with something like water tension, maybe do an experiment and then we would have a whole lesson on water tension. Not that I would have*

understood it properly, all the atoms, whatever. But she would, she would make it fun and creative. So, I can almost say we did a bit of science, we did a bit of history. She would always work in some kind of South African history into something, with, especially with the books she read to us. And so little Footprints, I think was a big guideline towards a structure that she built out with, and she made it full."

The above section on topical and unit studies show that the lessons was focused on engaging learners through fun and creative activities. It furthermore demonstrates how topics was transcended to other areas or disciplines and connected in the bigger picture of everyday life. The fragment shows that unit studies even though it contained difficult concepts would be presented in a fun and creative way and the children absorbed what they could understand at that point in time. This fascinating way of approaching learning integrates with the previous sections on interest and love for learning, building the mechanism for engaged learning in the early phases. The way in which experiential learning is accommodated in the individualised approach within the narratives of Family 3 was presented next.

7.3.2.5 Experiential Learning

Experiential learning formed an integral part of Family 3's approach to learning. Mother Lighting Fires explains in her narrative the meaning of true learning versus busyness:

"So, I, I really, I really think, I've come to a point where, true learning versus busyness has become my motto in my homeschooling. So, I would always ask myself, when I give something to my kids, is this true learning? Or is this just busyness, […] So for me, I think with the younger two, I would leave them more to explore by themselves, than, you know, to dictate exactly what they need to learn. I think you also start to realise that you feel more confident that kids learn by themselves."

With these words Mother Lighting Fires provided insight about the nature of learning in the early phases and advocate for organic and self-directed playful exploration as a very important aspect of early education. Her narrative indicates that dictating strong outcomes or controlling the learning environment limits learning to a great extent. She elaborated on this topic during her second interview:

"There's, there's a big difference between busyness and true learning. And I wanted to make that shift from just busyness, you know, connecting the bee with a beehive, by taking them out and showing them the bees and the beehives outside. That's true learning. So that was a great shift, I think I should have started that even earlier. Just

chuck out some of the busy books, and just get more involved in true learning and, and true-life experiences. So that, with the two younger ones, definitely, you know, I would just stop. Like yesterday, there was a guy at our house that came to see, you know, whether they can drill a borehole. And, with my older kids, I would stick to: "no we're busy with school, and I must finish the work." Yesterday, I just stopped everything straightaway, and we rushed out and we followed this lady, and this guy for half an hour asking questions. How does the instrument work? Why? How deep can it measure? Do they measure the water with it? So that type of thing. So that's one shift that I made. And then yeah, just the freedom of, you know, just using the time that you have to live and not to, you know, put yourself in a box and think this is, you know, the way the world does learning… school. And that's the way we have to do it. It's your, you can just do it different, just a totally different approach."

One of the most powerful descriptions of experiential learning from mom Lighting Fires describe how she made the shift to prioritise the process of learning as opposed to a mere focus on books and specific outcomes. Making that shift produced the freedom to be open to mediating learning experiences that happen all around them every day. In her narrative account she describes how they abandoned their planned school activities when people arrived to explore drilling a borehole and how they used the opportunity to experientially learn from this real life and exciting event. She advocates for learning from real life experiences rather than just seeing things or hearing about it in books. As an educator, she grew into a more confident experiential learning facilitator and encourages others to open themselves from limited thinking about education and embracing freedom to explore and learn from real life experiences.

Mother Lighting Fires also intentionally exposed her children to people and or experiences where they could learn about interesting careers:

"And then also, you know, we were always trying to, I was trying to bring them in contact with, with exciting and interesting careers and people and, you know, encouraged them to talk to people that got interesting careers, or interesting jobs, so that I can open up their thinking."

True learning as an education philosophy depends on children being exposed to real life places/events and experiences that can enrich their understanding and knowledge (Engeström, 2015; 2018). This family, through their narratives, shed a light on how experiential learning becomes another mechanism for engaged learning. Their family's narratives pertaining to reading were presented next in section 7.3.2.6.

7.3.2.6 Reading

Similar to the narratives of Families 1 and 2, this family also described wonderful memories of early mornings cuddling in bed and reading together or outside in the hammock under the tree:

> *"I think of all the hours that we would read together in a hammock or in my bed. My kids would in the mornings, because we never had to rush off to school, […] they would come to room and cuddle in my bed and we would read stories and books, you know, until it was time to get up and have breakfast and that is one of my fondest memories of having them in my bed and reading the most wonderful books and going on great journeys. There, right there in my bed, we explored the world together."*

Mother Lighting Fires shares memories of their family reading early mornings in bed or outside. She symbolises their reading with going on adventures and exploring the world right there from her bed. She confirms that she regarded family reading as a very important part of their education. Their daily reading routine was confirmed in her narrative:

> *"I was one of the mothers that would read to my kids at least an hour or so a day. And yeah, so very early on, I would start reading to them in English as well. Primarily, I would, I would stick to Afrikaans, but there was also English reading introduced and then obviously, we grow, they grow up in an English society, with TV and whatever. So English was never a foreign language to them."*

The significance of reading in creating a mutual language and creating a bond between family members was discussed previously. Recollections of family reading in all cases responds to positive emotional connections for the participants. This aspect of their learning experience contributes to learner engagement and becomes an integral part of developing a love for learning. Aspects of their education that pertains to the individualised approaches was identified and discussed next in section 7.3.2.7.

7.3.2.7 Individualised

Family 3 also upheld an individualised approach to home education. Aspects of individualised home education was explained by mother Lighting Fires with the first reference describing how content was adapted according to interest of the individual:

> *"I would use the same materials, with all the kids, but I would, for example, just a good example is you know, the World history. We did history of "Story of the World", it's a*

very informal way of teaching children history. It's through a reader that you read to the kids and they learn history through those books. But you know, if I would see that a child, you know, after the first or second volume does not really display an interest, I would not carry on with that individual child with history. And another child, for example, would be interested in the human body and I would then get more books on the human body or explore that more and, you know, give that child the opportunity to, to dig in deeper into the human body and how it works. And, yeah, take them on a dissection course. And yeah, try to actually just blow on that fire that's already starting."

The way in which mother Lighting Fires adapted learning materials based on children's interest, aptitude and maturity becomes one of the basic building blocks of individualised home education. She focused on engaging learners rather than using specific content or outcomes. If a child showed an interest in a specific subject or topic, she would find ways of obtaining more resources and creating learning experiences that provide opportunities for the learner to go deeper into that specific subject. Not only did she individualise the content, but she would also adapt the pace at which they worked when necessary. She verified delaying math (as discussed earlier) or reading when necessary for the child to naturally mature at their own pace:

"[…] my son, for example, only started reading by the age of 10. So, I, I will delay formal education if needed. So, if a child does not show a certain maturity level or interest, I would delay those subjects."

Wise Chemist provided more information on the topic of individualised education and what this philosophy entailed for their family:

"I think because my mum knows us so well. And my mum and dad, because he did the maths mostly, throughout the whole time, I think because they knew us so well, they, like I said, my brother would have lots of history books lined up for him and I would be busy with biology. […] You know, I never felt boxed in, which I think, it helps actually, to individualise that person because they don't feel like, you have to be like a certain someone. […] I had very much freedom to draw. I drew a lot and it was like also, I would, I wouldn't be just given off the whole morning to just draw, but I would be encouraged to: "As jy jou werkles klaarmaak,gaan sit buite en teken". You know, I just go draw when you're done with all your work and that type of thing. Maybe that was a better thing."

Her account of individualised education confirms the freedom to explore subjects and topics they loved and were interested in. In her narrative account, Wise Chemist

discusses not feeling boxed in or constrained but being given a lot of freedom to spend time on her own interests and what she loved. She furthermore explains that some specific outcomes with regards to school still had to be met, but then her time was her own to spend on her own hobbies or interests. The freedom that Wise Chemist refers to is explored further with the account of mother Lighting Fires. She discusses the freedom that was given to the children to follow their own hearts and dreams:

> *"Well, I never, you know, I never wanted them to just be a teacher or an engineer, like mom and dad, I wanted them to have a whole horizon of opportunity. So, if they make that decision one day, whether it be, to be a carpenter, I would never have, opposed any of them to do something other you know, just, they must do a degree, that was never our aim."*

Her account confirms that, as parents, they did not decide the future for their children but allowed them to make their own decisions regarding their careers and future plans. She stated that they never pressured their children to pursue higher education but rather wanted to provide the opportunity if that was what the child wanted to do. Her statement was confirmed in a different part of the interview:

> *"But to, to give them the freedom to be who they are, and not what I want them to be."*

A predominant word throughout these quotations was the word *freedom*. The reoccurrence of the word freedom emphasises the importance of this aspect in individualised education. The individualised home education philosophy requires an environment of freedom to explore, to grow, to develop and for learners to find themselves. Mother Lighting Fires confirm that their ultimate goal for their children was not a specific career or 'place of success' but rather developing their children into well rounded adults who could pursue their own dreams:

> *"Our end, end goal, was to produce, you know, a full, whole rounded adult that's got a, who's in a position to pursue their dreams."*

In their narrative accounts, all members of this family repeatedly described their home education environment as a place of freedom to explore, to love learning, to pursue interest and to be true to yourself.

The next section describes how outings contributed to the home education environment.

7.3.2.8 Outings

Similar to the data presented for Families 1 and 2, the data for family 3 present a strong

presence of utilising outings to create experiential learning experiences as well as create opportunities for socialising and building friendships. Mother Lighting Fires describe her reasons for pursuing regular outings:

> *"And yeah, outings. I did quite a lot of outings, I would say at least one outing a month, I was very, that was something that I really pursued a lot. So it was, it was hands on learning I wanted my kids to do, I didn't want them just to connect the bee with a beehive on a, in a little book, I wanted them to truly see the beehive and understand how bees work and how you get honey."*

The mother reveals her motivation for conducting regular outings as the desire to expose her children to real life experiences where they could see and have sensory experiences of learning. In her quote she discusses how this type of learning helps children to really understand how something works. Adding to this, Benevolent Relator recalls regular outings during the early education phase to various places of interest and she refers specifically to the social aspect of outings.

> *"That was basically the start of homeschooling. It was just a lot of playing, oh, and a lot of outings. That is something that I can very significantly remember that my mother did. We went on a lot of outings, to museums, to the zoo, it was a social event because there was, my mom would always get someone to do something with us."*

Her account of outings recalls socialising with other home education families in addition to the learning experiences of visiting museums, the zoo and other places of interest:

> *"I have very fond memories of going on outings. We had a lot of freedom to just go on field trips a lot. So, we would organise a group of homeschoolers, and we would go see this museum. We would do this and it was a social thing, in a big way, you know. But it was also for us a way to, you know, see friends and learn about things, and we did that very often. So that was also probably one of my very fond memories."*

Another reference by Benevolent Relator confirmed the value of Friday outings:

> *"And definitely Fridays, my mom made the best effort to, to do Fridays in a way that you can never forget them. And it was just because we just shut off on a Friday we did up until like early high school setting putting, we never worked on a Friday it was maybe, we would have worked on a Friday in November, because we wanted to be done with school before December starts, you know, but we would, we would have gone on outings on Fridays, and she would take us to jails or concentration camps or sweet factories or, and that was almost the part that that that some of the highlights,*

you know, and doing it with your, with your family members as well. I think that was fun part as well…"

Benevolent Relator recalls the outings with affection, referring to fond memories of outings. She confirms outings up until the age of about 15:

"I mean, we, every Friday was no school day, up until I was 15. On Fridays, we didn't do formal school. Unless we had to catch up from the week's work. We just did outings, and we did socialising with friends. And that was for me, probably key."

A strong correlation between outings and being balanced is also presented by Benevolent Relator:

"I can always remember Fridays being time put aside for recreational things. […] Once a month on Friday, we did ice skating, for instance, and we did other things and we, we would literally just socialise with friends for the Friday. That was a big part of, I think, getting well balanced, in terms of having a good social, social life, but you know, being a sociable person and personal skills. […] That was really the key for me. And yeah, we did. My mom introduced that throughout the whole time."

Her narrative account presents an important aspect of home education referring to obtaining a balanced life and developing personal and socialising skills. Home education is often criticised for this specific reason, and the account confirms the importance of regular social interaction in developing well rounded adults. In the same vein, Wise Chemist also mentioned Friday outings and how much fun it was:

"But I, if I think of my early and homeschool years, I remember Fridays, because it was always the times when we would, well we saw a lot of friends during the week as well, but that was usually the outings and the fun stuff that we usually did."

The strong presence of the sub-theme on outings presents the significance it holds in individualised home education. It was not only a fun activity but crucial for developing socialising and personal skills. It furthermore, in some cases, complemented the experiential learning opportunities the parents pursued. Outings further expanded the learning environment beyond the perimeters of the home environment into the broader community.

The next section will focus on the data that sheds light on how and when non-formal home education took place.

7.3.2.9 Non-Formal Home Education

The narrative accounts of Family 3 emphasised a non-formal approach to education. Describing the non-formal, individualised home education approach remained a fundamental outcome of this study. One foundational aspect of early, non-formal home education centres on the subject of play and prolonged childhood. Mother Lighting Fires indicates:

> *"For my children, they could just be, they could just be children and I have put a very strong emphasis on an extended, prolonged childhood. I wanted them to be kids as long as they could, because adult life is just, when it starts, it's over. You cannot play again. So, I wanted them to be just children and play as long as they could."*

Play as a fundamental basis for non-formal home education during the early phases are presented throughout the narratives. It was included in this chapter under various sub-themes such as outside learning, experiential learning and interest and curiosity based learning. Its role in non-formal home education was predominant during elementary and early primary school years and is often also associated with learning.

Mother Lighting Fires confirms their early home education years of play, tiny amounts of formal schoolwork and very little stress:

> *"I really think my children had the most stress-free childhood that any child could ever want. You know, there was, we, in the primary years, we, you know, we had three mornings of, two to three hours, maybe, of formal school, you know, where we would sit and do our mathematics and yeah, the, but the rest of the time it was playing and just being, not stressed about schoolwork and homework and any of that."*

Non-formal home education during the early education phase, consisted of large amounts of time being spent playing, exploring and just being children. Mother Lighting Fires wanted her children to experience extended childhood, with little stress and a lot of free time to explore and learn freely during the early school years. Their formal schoolwork consisted of mathematics and language instruction as discussion in section 7.3.2.3. Interest-based learning complimented the formal mathematics and language, which was often also associated with fun and creative activities. Daughter Benevolent Relator confirmed the focus on play philosophy until around the age of 10:

> *"But other than that, it was, we played a lot, probably, until we were about 10. That was basically the start of homeschooling. It was just a lot of playing."*

For this family, another strong focus area of early non-formal home education, in addition

to play, was teaching children to learn independently from a young age. Mother Lighting Fires discussed how she went about teaching her children to find knowledge, what to do with knowledge and how to provide feedback on what they have learned:

> *"I would do things with them. Initially I would sit with them and we would do a project together, going to see where can we get literature on the topic. How do you look for literature, where is the index of a book, ways on how do you start looking for information, taking them through the library. We spent lots of time in the library. Now with internet and Google, it's also much easier, so kids tend to just get to information, but then also, it was one thing to get to information, but to give the information back in a way that is understandable."*

Teaching children to teach themselves relies on being able to get information as the first step. Mother Lighting Fires discussed how she initially went through this process with her children, teaching them to do research and find literature. This process was often integrated with interest-based learning. Additionally, the process of gathering information was followed with processing the information and lastly being able to give it back in an understandable format. From her narrative account it is evident that she would go through this whole process with her children, teaching them the technique as a method of learning. Daughter Benevolent Relator confirms that by the age of 12 she was able to teach herself:

> *"But as soon as I think I was about, from 12 onwards, […] by that time, my mom was at a point where she had taught me how to teach myself. So, she, I think, the beginning phases, she was very, she established, you know, she showed us how to use research if we would find something interesting. She showed us how to use encyclopaedias, you know, and she was really diligent in showing us how to teach ourselves*."

Mother Lighting Fires confirmed using narration and writing for her children to reflect, respond and give feedback on learning:

> *"It was one thing to get to information, but to give the information back in a way that is understandable. So, I always encouraged them to, to write me, narrate to me, initially just verbally, so narration played quite an important role in our homeschool. And then as they started writing, I would ask them to narrate in a written form. I never ever checked spelling on a narrated or language skills. If I could read it more or less, I was happy, because I wanted to encourage them to write freely. So, I didn't want them to sit and think, okay, I know this word, this word, exquisite, but I can't spell it so I am rather not going to use the word, exquisite. So, they had the opportunity to write*

freely to me, I would only, the language that I would ever edit, was the ones that they had to do straight from a textbook, like copy work or dictation or something like that. But other than that, I would never correct the language, just to give them the freedom to write. And without that limitation, somebody is gonna check my spelling or somebody is going to check my, my language, or whatever."

Teaching children to do research was complimented with the methods of analysing the information and lastly how to give back and communicate learning in an understandable way. Mother Lighting Fires provides insight into this technique of teaching and learning. Her excerpt discusses various ways that the child could respond to learning such as narration, writing or other ways. She discusses the importance of encouraging children to write freely without limitations of making mistakes. Her narrative revealed that the technique of narration was encouraged from a very young age and that she was very intentional about listening and responding:

"Then I also think it's important for kids to be able to give back what they've learned. So that was a, that was something that I, from a very young age, I would say from one to three years old, I would listen to their stories, I would listen to what they experienced. So, for me, that's a crucial ingredient of success in life. if you can give back what you've learned, and that starts with a simple, warm response of parents who listens to a child, you know. Might be a story where, they went outside to play with these little army men, and you know, they had a combat situation, because they're actually giving back what they have just experienced and learned, all by themselves. So, as they progressed in the schooling, I always wanted them to give back to me what they've learned. So, it was always a kind of exchange process."

The quoted piece above from mother Lighting Fires underlines the importance of narration as a form of reflection, mental and cognitive development. Fundamental to this process is a mother or adult that really listens and responds to their stories and feedback as part of the exchange or reciprocal process.

She furthermore discussed how she grew as a non-formal home educator and became aware of the fact that less guidelines on how they should respond to learning allowed the children more freedom and creativity in how they express their learning:

"But I think what, what I did more, as I, you know, grew into the whole homeschooling thing is, I would, I would leave them more to do their own thing. I, you know, if I, for example, want them to, for example, we went to the Castle in Cape Town, I would want them to give me a little bit of a report of what they've learned there, so maybe in the beginning, I would tell them, it should be in a two folder, a two page folder with the

two paragraphs and maybe a picture of what they did there. But later on, I learned to give them less guidelines, if I can put it that way. So, to give them more opportunity to be creative."

The excerpt discusses how their mother also grew in her understanding of non-formal home education and became more flexible with regards to giving guidelines on how her children should give feedback on learning experiences. She found that giving them freedom in the feedback process awakened creativity in their expression of their learning.

It has been established that early educational play, teaching children to teach themselves and the feedback learners give on their learning experiences are important components of non-formal home education. A mother or parent who responds to communication and create an atmosphere of exchange, improves a healthy learning environment.

Family 3 had a unique approach to assessment. For example, Wise Chemist explains how assessment was performed in her family's non-formal home education environment:

"So, it was it was like my mum had this, I don't know, if felt like we had freedom in the space that we had. So, it was non, it was non-formal because I never wrote tests until grade 11. Maybe that was one of the big things. I wrote little tests once a week that I gave to my dad, but it was in the back of my test book. That, that was the only type of test that I was doing. Sometimes the tests would be like, I need to read the book and write a summary on it. That was the test. […] That was amazing."

Wise Chemist discusses how their non-formal home education environment did not entail any formal type of assessment until later in high school. There were small tests, reviews and informal type of assessment, writing or narration assignments as feedback on learning. Wise Chemist later in her interview discussed how planning and structure complemented their flexibility in their non-formal approach:

"[…] but in general, well, I think it's because there was so much, I don't want to say movement, around it, but as well as the fact that if we have a goal, let's say we want to go do something on Friday, we would have to put in a few extra more hours during the week. So, it was never like, okay, now we just throw Friday out the window. It was like, No, we have to plan for it. So, it was structured, but it wasn't formal, in the sense that I had to keep to a certain time."

Non-formal home education did not mean that there was no structure or planning. Wise Chemist in the excerpt above confirms that although the approach provides flexibility, it still required self-directed structure and planning around outcomes that they wanted to achieve. The non-formal home education approach was typically followed until around

the ages of 15/16 when the learner would transition to a formal approach for exit examination and higher education access. Benevolent Relator confirms still following the non-formal home education approach by the age of 15:

> *"Oh, and we also introduced science that was also around the time where my mom introduced some formal science curriculum. And by the time I was 15, my core subjects were music, sciences, math and languages. And then, whatever else we found interesting."*

The section confirms that interest-based learning still played a significant role until high school and formal subject based education was only introduced around 15/16 for this family. The non-formal home education approach changed to a more formal approach by age 15/16 as discussed by mother Lighting Fires:

> *"Then by the age of 15, we would start looking at possibilities for, for entering adulthood. […], we were not sold out that the children would study at university. But both, well our older three kids did express the, the, what would we call it, that they would be interested in maybe studying at a university, so we knew that we had to introduce a school Leaving Certificate that would enable them to apply at a university. So, we then started with my eldest daughter exploring avenues to get a formal matric at that point in time. […] So, but they only started at the age of 16 with formal Cambridge, and that was the first time they were actually, yeah, forced to follow a formal curriculum with all the set subjects and deadlines and assessments. But before, prior to that, it was more or less student driven."*

The above excerpts show a non-formal approach until the age of 15/16 and discuss what that approach entailed for this family. By age 16, they would progress to a more formal system that allowed for higher education access.

As a last discussion point on non-formal home education; one of the major advantages of this approach was highlighted by mother Lighting Fires. The flexibility this type of home education creates for travelling was discussed:

> *"We moved to Nelspruit, and we lived in a small little place. And I only took like, one or two crates of homeschool materials, and I could still homeschool in abundance. […] you don't need all that stuff and everything that you think you need. You can homeschool with just a few books and a good library and field trips. So that was the difficult time of having to do, to be there without all my resources, taught me again, to look at education again, in a different way."*

Circumstances of this family required the family to be adaptable and temporarily move

to another town for the husband's work. The mother discussed how she could still successfully home educate having a few books, a library and outings as discussed in section 7.3.2.8. This emphasises the importance of focusing on the basics of education especially in the early years as the recipe for success. This section also points to one of the major advantages of non-formal home education namely the adaptability it produces, which allows the family to travel if their situation requires it. Travelling has been shown as a very successful experiential learning experience as discussed in section 7.4 for Family 4 who travelled extensively while home educating. The next section presents data on how the life skills were developed that enabled home education learners to be successful at higher education.

7.3.3 Life Skills

7.3.3.1 Autonomy and Responsibility

Autonomy and Responsibility emerged as a strong sub-theme in the narrative accounts of Family 3. Taking responsibility for understanding and completing more formal schoolwork during high school became the learner's prerogative as discussed by Benevolent Relator:

> *"[…] but then from around 15 or 16, or maybe a little bit before that, 14 or 15, I had to really start focusing very hard. Like, because I was pretty much teaching myself, you know. I got the materials, and I had to teach myself to get myself through matric. My parents really did support me, but they couldn't, they could no longer, you know, teach me, I had to learn it by myself. They've taught me how to teach myself, but from that, from then on, I had to take responsibility for it."*

Mother Lighting Fires discuss how her children developed time management skills and took responsibility for their planning and task completion by grade 11. Setting their own goals and planning how to achieve these goals developed them into self-directed learners by the time they entered higher education:

> *"I think, one of the main things, I think that I can say is, that they, they were already self-driven learners. So, they had to learn from a very young age to structure their time and their planning. […] if you have home education, you've got to set those goals for yourself, you've got to do all your planning by yourself. […] they had to, you know, kind of self-educate, and then if they would get to a point where they got stuck, we would, you know, maybe in grade 11, grade 12, we would sometimes acquire some*

extra help by the means of a tutor. But that was very selective […] So, I think, I think they were self-sufficient learners, by the time that they entered studies."

Self-directed learning is a crucial skill for higher education success. Because these home educated learners were educated in an environment where this skill could be practiced and developed during high school already, they could transition to the higher education environment and thrive. Participant Benevolent Relator verified full autonomy for the last three years of school:

"Yeah, and then yeah, towards the end, I did a lot of work. Like the last three years of school, was very intense working. I worked very hard. We worked many hours, I would you know, I was at a stage where I could really pace myself and work independently. I didn't really have any help outside […], it was mostly independent, but I knew I had to work hard. Also, I worked long hours and, but it was worth it because I was old enough to manage and cope with it. […] The last three years of, of school was the same way that I studied for varsity pretty much, because it's independent, and you have to pace yourself."

Benevolent Relator describes very little difference between studying during her last three years of high school and through higher education. During both of these phases she worked independently, paced and governed herself. She continued the sub-topic of autonomy and responsibility and how important these skills were for higher education success:

"but I think definitely my mom's focus on enabling us to teach ourselves, because when you're doing higher education, it's much less about being spoon fed, it's more they give you a structure in which to learn. But you have to do a lot of studying, independently of the syllabus, you know, you if you if you don't understand something, you have to go out of your way to find an answer to the question. It's not. Nothing is set in stone when you when you reach tertiary studies even when you reach your higher years, like your final year. You know, the way you study, there's no blueprint, there's no mark sheet. It's about, you know, can you learn yourself? Can you, can you work independently. We had strikes in my first year. So we were working from home for six months, in my first year.[…] I found when we were doing studying through the strikes, we had to go home and study from home, it felt to me like I was back home schooling, you know, because I was doing it independently, working by myself."

Benevolent Relator's narrative repeated the importance of self-discipline and hard work for higher education success during her second interview:

"To be able to be work, you know, disciplined by yourself, which is, you know the, the homeschooling approach that my parents took very much, you know, in line with that. I had to be able to study by myself, you know, from a young age. And that is absolutely, like critical when you're studying higher education. No one would say, I don't think anyone would disagree with me, because you have your materials. You, in first year, maybe less so, but the higher up you go in higher education, the more you have to learn by yourself. "

Sister Wise Chemist confirmed that being able to take full responsibility and seeking answers was an advantage she had at higher education:

"And at Varsity they don't want to hold your hand, they tell you when the test is. If you miss it then you miss the online test, you know, so it took a bit of planning, but I think it really helped me because I, of all the students, I never got mad at the fact that they didn't help me through anything. […] But I was never upset that they didn't help me, because I always knew how to get the help that I needed. And I think one of the things what, what helped a lot was, I was never scared to ask questions and to be curious about it. So, and that's a big part of how my mom wanted us to always want to learn. […] I was never scared to ask questions and ask dumb questions and look very dumb sometimes. But it helped me a lot."

The description of Wise Chemist of being able to work independently and not being scared to ask and search for answers and solutions, confirm the importance of being able to take responsibility for their own success at higher education. Thus, from the narrative accounts of Family 3, it is evident that autonomy and responsibility are important life skills that were instilled during their home education years.

The representation of age integrated socialisation in the data of Family 3 was presented next in section 7.3.3.2.

7.3.3.2 Age Integrated Socialisation

Socialisation is regarded a crucial skill in engaging with peers, staff and any social environment. The following reference by mother Lighting Fires discussed age integrated socialisation:

"So, I think they really caught, you know, a sense of how to, you know, to communicate and interact with people of different age groups at their age level. So, I think that was one great advantage, from a very young age they were able to express themselves and communicate with people from all age groups and all genders."

The extract from this narrative account indicates that the home educated learners of Family 3 were able to successfully communicate with people of different ages, cultural and gender groups. This skill was honed from a young age. Home education is often criticised for the fact that it fails to develop the necessary social skills required for effectively navigating social relationships. This skill to communicate with people from different age groups assisted Benevolent Relator later in life. Benevolent Relator discusses peer and staff interactions at higher education and in her workplace:

> *"I didn't struggle for even a minute to make friends coming into varsity. I have, it's really been a very good platform for me to make connections and, you know, to network, I even see, you know, now when I go to conferences, or when I go to functions, work functions or conferences, I find it so easy to, you know, just talk with people, you know, at Varsity, get notes from someone, you know. And socially that was so important for me as a student because you're not an island."*

The excerpt shows that Benevolent Relator could easily make friends, engage and connect socially. It furthermore shows that she was aware of how important networking and social engagement was and she could maintain healthy relationships.

Her narrative continued in the second interview to discuss how important proper communication skills were in navigating higher education:

> *"Yeah, I think what's important is to have, to have a good understanding of a language at least, because my English wasn't the best. But I had a good foundation in my home language. I had, a language that I spoke all the time, that I could see that people that didn't, you know, just to be able to communicate properly, you know, just those basic communication skills, you know, I think is important because you have to communicate with your lecturers, you have to communicate with you know, uhm, you have to understand what the people want that are giving you your, your outcomes that you have to meet. And if you can't communicate your problems with them effectively, you know, you can't get a solution to your problem. […] I think that was very important for me at least, to succeed."*

Benevolent Relator addresses two important higher education success criteria in the excerpt above. She discusses how good communication skills allowed her to understand what was communicated from staff and therefore she could meet necessary outcomes. Secondly, she indicates how communication skills allowed her to communicate problems effectively to find solutions. Being able to understand what is being communicated to you as a student and being able to effectively communicate what you need are two very important aspects of success at higher education that was emphasised by participant

Benevolent Relator. Thus, the narrative accounts of Family 3 confirm findings in the data of the previous two families that the development of communication skills was prioritised by these families. The skill to communicate assisted learners later in life in higher education and as young working adults. The next section discussed data on the topic of character development.

7.3.3.3 Character Development

Creating an altruistic character and being motivated to benefit others and making the world a better place was discussed by mother Lighting Fires. The excerpt discusses how the parents intentionally developed a focus towards helping others:

> *"[…] to give back to your community. So, because if you, if you just work for yourself, I always say you've got to have intrinsic motivation and external motivation, and you've got to have both of those. And so you've got to have, be self-motivated from within, but then also, you've got to be motivated because of what's going on around you. So, I always wanted my children to help each other, to help people around them, to do, to help their grandparents, to help their friends. And I think if you, if you focus on that also, children choose a career, so that they can make a difference to the world, a difference to mankind, a difference to the community, and in the end, that's, that's a fantastic motivation to excel in life. But if it's only for yourself, you know, I don't know, if I think, you could get or end up getting depressed or self-absorbed and I think that would be my fifth point, is to be motivated to help others, because I can already see, you know, my children at university and beyond they, they want to, they want to serve the people around them. They want to help find solutions for the problems in our country, for the problems in the church, or the problems in the world. If you want to find solutions for problems, then you are, then you are motivated."*

What was insightful was that her daughter, Benevolent Relator, verbalised this same motivation of making a difference in the world:

> *"You know, I wasn't studying because I wanted to be some career woman or whatever. I wanted to make a difference in the world, in a place where I was placed."*

Because Benevolent Relator communicates the desire to make a difference and make the world a better place, it shows that the altruistic character trait was successfully developed in her life. It is inferred from that data that this aspect of her character development most likely influences the way she engages with people around her. True to her pseudonym, Benevolent Relator confirms the desire to do good.

Mother Lighting Fires furthermore discussed the intentional development of various character traits and what was important to them as parents:

> *"So, for me, more important than anything was their characters. I wanted to raise independent young people that would one day fill their place in society, make an impact in society, be independent, not being dependent of the government or anybody else. They should contribute to the economy of our country. They should contribute to their church and to society and the social dilemmas that we have. I didn't want them to become a liability for anybody. I really wanted them to grow up being individualised adults that can proudly be South African. We always also wanted our kids right from the start to, to be proudly South African. So, for us, there was never, you know, talk of you know, getting them an education so that they can leave the country, we want them to stay here if they are able to make a living here, and to contribute to our economy and our social structure of this country. So, character and values was [sic] very important."*

Thus, this family focused on developing independent adults who could positively contribute to the economy, to social structures and society. They wanted their children to be proud South Africans who could confidently address problems in their home country. Her excerpt confirms a strong focus on developing strong character and value systems in their children. Her narrative also placed emphasis on the development of discipline and self-control:

> *"Although I still believe in structure and discipline. I think it's very, it's vital in the times that we live in that children can just, you know, have that type of self-control and discipline."*

The data for Family 3 presented a strong focus on developing altruistic, independent, problem-solving adults who could contribute to society and the economy. Another character trait that was presented strongly in the data pertains to hard work, as presented by mother Lighting Fires:

> *"Because we believe, as a family that if something doesn't come with effort, it's not really, worthwhile you know. You've got to work for something. So, we all always encouraged them to work hard. And to, even though we didn't have a formal curriculum, up till the age of 16, because they only started with a formal curriculum by the age of 16 or 16, we always encouraged them to do their best. We had a saying, in our house, I can say it in Afrikaans, 'n halwe werkie is geen werkie' in other words half a job is no job at all. So, I think, you know, by enforcing that principle that when we do things, we don't do things half, even if you clean your room, you don't do half a*

job, then you'd rather just leave the job. So, I think they were encouraged by that culture in our home."

The excerpt above shows a strong focus on hard work, excellence and creating a culture of doing your best. Wise Chemist repeated the sentiment in her second interview:

"And I think both my parents, they live this out in small ways, in ways that they live their lives as well. But in the way they told us, say, My mom always had a saying in Afrikaans, where she would say: "'n Halwe werkie is geen werkie", meaning that, you know, if you do something half, you could have just left it and my dad would always say: "if you feel like you cannot go anymore, you can go one more time."

Both mother and daughter repeated the saying they often used in their house; not doing things half-heartedly. Her father specifically had a saying to motivate them to keep going when they think they cannot go any further. Wise Chemist additionally commented on the value of excellence and how it specifically motivated her in times when she got tired:

"[…] you get tired as well and you feel like you know, you're not motivated, but you know, getting your mind to back, to you know, we're striving for excellence here. And that's definitely something, both my parents lived by and they taught it in everyday life things, not even in education things, actually mostly in life skills."

The above extract shows that hard work and striving for excellence was modelled by their parents and because that was how they approached everyday life, it was a value that was transferred to their children. The sub-theme of working hard and perseverance was repeated during the second interview of mother Lighting Fires with the following excerpt:

"[…] the ability to work hard, and to push through. I think that the fashion word now as they call it, Grit, and that's the fashion term for it, but it's to try and try again. And when you fail, to stand up and do something again, you know, and not giving up, and not, just to choosing the easy way out. I think that was also something that we've, we've tried to, you know, you know, build into our children from a very young age."

Tenacity as a character trait was intentionally developed by the parents of Benevolent Relator and Wise Chemist. It was communicated, taught and transferred from a young age as discussed by mother Lighting Fires. Her narrative explains how extra-curricular activities was used as a tool to grow perseverance and dealing with disappointment:

"We had like a policy in the house that if you start something, you must at least, six months to a year carry on with that, before you can tell me you don't want to do it. So

sometimes it was a tough six months or a year when they had to carry on with something, but they, I didn't want them to maybe even learn that skill further, I just wanted them to, to persevere and to learn how to deal with disappointments."

Utilising sport and other activities to grow perseverance and building strong character was ultimately a successful approach. Benevolent Relator mentioned how her father enforced this principle and that giving up was just not an option:

"My dad was […] he was like, if you start something, you finish it. It was, it was this, I mean, there was, there is no such thing as giving up you know."

The family established a culture of perseverance, excellence, hard work and not giving up. Both their parents showed a strong emphasis on displaying a tenacious character and they used opportunities to develop these characteristics. These characteristics would prove to be vital during higher education as discussed below.

Wise Chemist provided the following feedback with regards to hard work at higher education:

"The moment you really want to exceed and be successful in whatever you do, you need to put in your own time and do your own hard work to get what you want to get. […] but to really be successful you need to be able to work hard when everybody else is not there. […] but nobody sees those nights when you study till three by yourself at your little desk and it takes, it takes some stamina to do that."

The excerpt above reinforces that Wise Chemist put in the time and effort required to succeed at higher education. How these traits were developed in her home environment significantly influenced her ability to succeed at higher education. The narratives suggest that both the parents played a vital role in developing this aspect of their character.

Benevolent Relator also suggests that her parents to a large degree taught her to persevere. She confirms the importance of perseverance as a character trait for completing higher education successfully:

"Okay, I think the first one most important one is to persevere. I think if you didn't learn to persevere, you will give up somewhere, because it's really hard. […] So, you have to persevere. And that is probably some of the best things that my parents could have taught me, was to just persevere. We don't give up. You don't give up just because something's hard. You give up on something because you have a conviction"

The sub-theme of working hard, perseverance and not giving up was presented in detail in the narratives of this family. Also, how important perseverance is for successful

completion of higher education. Closely correlated with perseverance, participant Benevolent Relator discussed how the character trait of problem solving and refusing to give up assisted in higher education success:

> *"I also saw the same thing with some of my peers, that did very well. People that could, if something seemed really hard or impossible, they could find a way around it. You know, whether it was speaking to the right people about it, whether it was asking the right questions, whether it was just thinking about it harder and longer, or researching or using the resources they have available. So, I think that's something that, that helps, if you, if you have that ability, and you were taught that in your home. I know and I feel , you'll be able to do well in your tertiary studies."*

Being able to navigate difficult situations and looking for solutions while absolutely refusing to give up was discussed as skills required for higher education success. Benevolent Relator suggests that she was taught these problem-solving skills at home. She discusses possible techniques that could be used when faced with a problem, which includes asking someone, doing more research, thinking or working harder or using any resources to your disposal. This insightful extract provides a view on how she approached higher education and problems in general. It is concluded that working hard, perseverance and problem solving are critical skills for higher education success.

A balanced lifestyle as a means to navigating higher education was discussed in the next sub-section.

7.3.3.4 Balanced Lifestyle

The narratives of Family 3 provided another unique life skill feature which was the development of a balanced lifestyle in learners. Benevolent Relator discussed how managing a balanced lifestyle is an essential skill for higher education success. She discussed how important it is to know when to work and when to take a break depending on various factors:

> *"And I think also, yeah, to be able to have a balanced life, to understand what a balanced lifestyle means. And to be able to pursue that for yourself. In a sense that, you know, you must understand that it's not always just work, it's not always just play, it's, there's a balance, you know, because sometimes, you're gonna have to just take a break from your work, and then just go do something with some friends. Just break away, because that's how the brain works. And it's the different places, depending on what you're working on, depending on, you know, your emotional state, depending*

on, you know, how long you have been working. So, I think that is something that I learned from a young age, you know, that there's a balance in life, you know, sometimes we find things, and we dedicate time for fun things, but we must also dedicate time to work, and you need to be able to use that discretion. And I think you need that before starting the higher education already, you need that, otherwise, you're not going to be able to do well."

Distinguishing between when to work, when to rest and when to socialise related to the theme of wellbeing as presented in chapter 5.2. Benevolent Relator discusses the theme of balancing life, referring to this important aspect of distinguishing and integrating what the body and the mind need to be able to function well. Sister Wise Chemist discussed the same topic in her narrative:

"…you must have the ability to, to work hard, and this is the old saying, but to work hard and to play hard at the same time. Because I found myself many times, I'm needing to get myself back on track because I would try to meet both of them. I would want to go play when I actually want to, when I actually should work hard, and then I try it and then it didn't work because when I have to go back to work, I don't have enough time to work hard and then you run out of time. […] being able to differentiate, differentiate between when I should really work hard and when I should really just, just relax as well."

Wise Chemist confirms the data presented by sibling Benevolent Relator on the importance of balancing and integrating work and rest and making wise decisions in this regard. More data on this sub-theme was presented in section 7.4.3.4.

The sub-theme of self-efficacy as a skill for higher education success was discussed.

7.3.3.5 Self-Efficacy

Self-efficacy was a particular sub-theme that emerged from the data analysis of Family 3's narrative accounts. Benevolent Relator reviewed how believing in herself and her abilities to overcome difficult situations truly helped her to successfully complete higher education:

"But you have to believe in yourself, like, I'll be okay. I've been approached for stuff in my life that I felt like it wasn't possible to do, but I believe that I'm able to understand this. And I'm going to put my mind to it. And we're going to try and understand this now. So, I think, this was that mind over matter kind of thing. And I think it has also helped me in the professional world. Sometimes you hit a wall, and you're like, you

know, there's no, there's no way out of this, like, there's no solution. This is the end. You have to believe that you have the ability to think bigger, that if you put your mind to it, you can think of a solution somehow. So, and I think that helped me."

It is important to note how the character trait of healthy self-confidence, as developed during the home education years, assisted Benevolent Relator later in life as a working young adult. From the data it can be inferred that an important aspect of being able to develop problem solving skills, perseverance and courage related character traits, relies on self-efficacy. The above piece describes how the participant was able to overcome obstacles because she believed in herself and her abilities to overcome obstacles and to solve problems. Self-efficacy as a skill for higher education success was discussed further in section 7.4.3.3 and 7.5.3.3.

The next section presents data on quality interactions in the data of Family 3.

7.3.4 Quality Interactions

The theme on quality interactions investigates interactions between the participants Benevolent Relator, sibling Wise Chemist and the mother Lighting Fires as their teacher. It furthermore investigates interactions with the parents, siblings and fellow home educated learners as peers, as well as any other mentors that influenced how, why and to which extent participants engaged with learning opportunities. Peer and staff interactions at higher education was also investigated in the data. The first sub-theme discusses the role of 'teacher'/parent and mentors in support and motivation.

7.3.4.1 Parents

As shown in previous sections on the influence of parents on learner's attitude and success, the narratives of Family 3 supported this notion. Benevolent Relator gave two references to support and encouragement from parents as a sub-theme:

"My parents really did support me"

And later on, she responded with:

"And yes, just the encouragement to keep pushing on…"

The previous quote from Wise Chemist also refers to strong encouragement from the parents to keep on exploring in spite of breaking things or making a mess:

"So, my parents, I think played a big role in that, giving us the freedom to become dirty and play around and do things that we think is fun, and sometimes a big mess up and we would burn things down and break things. But they would still, you know, forgive, and encourage us again to try something crazy."

The data show the parents as strong role model figures, who were engaged in their children's lives and learning. They were intentional about their educational and life skills development.

Mother Lighting Fires discussed how their children adopted their way of thinking with regards to values, money, relationships and religion:

"I cannot say that one of them are exactly like me, or exactly like my husband, but definitely our value systems, I can already see with my three adult children. They're definitely following the same value system as us, you know. The way they think about money, the way they think about religion, the way they think about relationships, the way they think about honouring older people. And it's definitely, it's the way we taught them and the way they were discipled, mentored and so definitely, they definitely have a bit of us, both of me and my husband, obviously."

Quality interactions with their parents imparted characteristics of their parents, which influenced the type of adults they became. Through discipleship and mentoring, their children adopted their value system, their way of thinking with regards to money, relationships, religion and respect for others. The previously cited text also showed that their mother was intentional about exposing them to mentors that could guide them, open up their vision and influence them. The exposure to mentors could also ignite new interests, develop interests and could ultimately influence career choices her children made.

"And then also, you know, we were always trying to, I was trying to bring them in contact with, with exciting and interesting careers and people and, you know, encouraged them to talk to people that got interesting careers, or interesting jobs, so that I can open up their thinking."

The quote above indicates that mentoring in Family 3 was not only focused on the development of character and values, but also had a focus on professional development. The references demonstrates that quality interactions significantly influence the upbringing of children, their educational development, choices they made with regards to higher education and ultimately their ability to succeed at higher education. The next sub-theme shows how mentors influenced the participants presented in Family 3.

7.3.4.2 Mentors

Mentors influenced participants in various ways. One way in which mentors influenced participants were in engaging them with content or materials by presenting it in an interesting and fun way. Benevolent Relator discussed such a mentor in her life:

> *"But one specific person was a lady, one of my mom's best friends. And she, she was, she actually, at one stage where my mom had a baby, she, my mom would sometimes ask her to give us some science lessons and stuff. She had a crazy sense of adventure. Like, she made it, she made work, or school seemed like an adventure. And she was so intentional with us. So, when we were with her, like, it was never just school, it was always with a lesson, there's always a deeper lesson. […] So, we would, we would do you know, school with her and it was like, it was more like a science experiment and arts and crafts. And she would always find some way to make it, first of all interesting. She would bring some food element in and whatever, or we'll try and make the food from a country, Or we would, you know, make the science experiment into something we can, you know, go show off at the church fair or whatever. But she was always doing that. And it almost felt like it was never only about the academics, it was about us and our hearts."*

The excerpt discusses an important mentor in the life of Benevolent Relator who engaged them in science and other learning materials utilising interesting and creative techniques. It is evident from the description that she made a huge impact on the participant, and she recalls their activities with wonder and amazement. She also recalls that the mentor was interested in them personally, caring about them and teaching them deeper lessons about life.

In some cases, participants shared similar interests with a mentor, which ultimately influenced the careers of participants. One such reference by mother Lighting Fires is presented:

> *"[Name] was one of the people that influenced [daughter] to go for a career and, you know, took her with, whenever she was catering and doing big functions. And that had a great influence on her decision of, you know, the career that she, chose. So, I think your, the time that you have, you can, they can have stronger, deeper, and more meaningful relationships."*

Wise Chemist confirmed the role of a mentor in her life who gave her the love for cooking:

> *"But no, she definitely, she made a big impact on me. […] When I was around 10 or*

11, when my mom had her "laat lammetjies" and tannie [name] would always come and take care of us and she would, you know give us Science, but we would make more chocolate brownies than to do science and she just had a big impact on me, because she, she was also not afraid of failure. I think that was one of the big things she taught me and she gave me a love for cooking as well. And in that it was always, I would go try something and then I wouldn't succeed the way she did, you know, she would, she was brilliant, she was a big caterer and everything at the time and she was really good at what she did. And I would always, you know, try to be like her because I felt so as if I could resonate with her, she's loud and outgoing and fun and the life of the party, […] but she had this softness of understanding people and taking the time to take peoples mistakes and, and not judge them by their mistakes, and almost making it into a journey, if I can put it that way."

During the time when the mother of Benevolent Relator and sibling Wise Chemist had babies, there was a lady friend of their mother who would come and do science and baking activities with them. As mentioned above, in relation to the involvement of Family 3's father, the inclusion of another mentor in home education expanded the dyadic relationship between mother and child to a triadic relationship that included another adult mentor. This approach could provide a deeper understanding how home education could prepare students for higher education. Through the description, Wise Chemist shows the impact that this mentor had in her life, exposing her to baking and cooking and igniting that love that influenced her career. She also influenced both participants' characters with her wisdom, love for people and adventurous spirit. Benevolent Relator also gave a reference to mentors who influenced her career choice:

"But also, I was inspired by, there was a specific couple that also studied the specific degree that I, that I chose to study. And just the way that they explained it, and the problem solving. It was, something that intrigued me."

The data presented show that mentors played a significant role in the lives of the home educated adults, whether it was engaging them with learning content, teaching them about life or inspiring them to find new and mutual interests. In some cases, a mentor influenced career choices that participants made. Mentors influenced the participants in a meaningful and significant way.

The next section summarises the data for Family 3.

7.3.5 Summary

Family 3 consisted of two female participants with pseudonyms Benevolent Relator and younger sister Wise Chemist. Their mother Lighting Fires home educated her 5 children of which 3 have already completed higher education. Their family functioned as a unit and learning occurred together as a family during the early learning phases. Their family had two babies while the eldest two was still in primary school, which influenced their educational approach to some degree. It required adaptability, patience and some changes to the model they had implemented. The mother focused on teaching her children to teach themselves through reading, finding resources and literature and how to rework data and give it back in an understandable way. Her focus on true learning and creating a love for learning led her towards the non-formal individualised approach. Their learning was very much interest-based with a focus on experiential learning in addition to the more formal mathematics and language instruction components. Their family also placed a great emphasis on character development, working hard, perseverance and not giving up. All three of these participants completed two interviews, providing more detailed information on life skills and quality interactions. Significant insights from the narratives are listed below:

- The participants described their home as a place where they could be themselves, it was judgement and labelling free.
- Because they were allowed to be themselves, their environment presented safety, belonging, peace and a place of feeling content.
- Their authentic environment which permitted vulnerability, created an environment of creativity and strength.
- Their parents encouraged and provided the necessary freedom for explorative learning.
- Play was the primary source of learning until age 7/8 when some formal activities were incorporated. But play remained a predominant aspect of learning until around the age of 10.
- Their mother wanted their home education to be carefree, without stress and a lot of freedom to learn and explore.
- Their family often read together outside or early mornings in bed, which provided the family with fond memories of their home education environment.
- Their home education environment consisted of more formal math and language instruction from ages 7/8 with the addition of a second language around grade 5. Mathematics was conducted layer by layer using home education friendly

resources and the pace was adjusted to the child's aptitude, maturity and the current situation the family was in.

- Their primary education integrated all other subjects through interest-based learning which included components of science, history, geography, arts, music, etc. The interest-based studies was conducted in a fun and creative way, which improved engagement with the content.
- Narration as a means of giving feedback on learning was considered an important skill to which their mother responded warmly, creating a responsive learning environment.
- A strong focused was placed on engaged learning by following interests and participants were often allowed to pursue interests as deep and as long as the interest lasted.
- Another important skill that was intentionally developed early on was the ability to teach themselves through research and giving feedback on learning by narration or writing.
- Their mother was also intentional about developing a love for learning.
- The participants were not scared to learn new or difficult things because of the way in which they were home educated, they saw these situations as opportunities or challenges.
- Their family welcomed two new babies while the oldest two were in primary school, which caused some changes in their methods of home education. One such example was that their father took responsibility for the mathematics instruction.
- Mother Lighting Fires likened their interest-based studies to lighting a match and seeing when something would ignite passion.
- Their mother focused on true learning rather than keeping the children busy with lists of books. She concentrated on experiential learning experiences that connected with real life.
- Regular outings were one of the tools for creating experiential learning opportunities, but also created opportunities for socialisation.
- Their home education was individualised with regards to content or interest, pace that the child was following and freedom to explore your own interests.
- The children felt that they were allowed to choose their own interests, careers and were never forced to pursue higher education or a specific career.
- Their non-formal structure was changed to a formal approach for higher education access around the age of 15/16.

- The learners were only exposed to formal assessment by grade 10/11.
- By age 14/15 these learners became autonomous and took full responsibility for their own learning. They were teaching themselves, planning their own time and activities, self-disciplined and fully self-sufficient learners.
- Their parents did put effort into character development such as altruism, hard work, perseverance and never giving up and problem solving.
- The learners could easily communicate, make friends at higher education, network and socially interact.
- The data showed that some of the life skills they developed was critical for higher education success. These were self-efficacy, autonomy and responsibility, communication, balanced lifestyle and a tenacious attitude.
- The data furthermore showed that their parents and other mentors significantly influenced their development and their ability to succeed at higher education.

7.4 Family 4

Participant Pilot Braveheart, participant Conscientious Innovator and mother The World Is Our Classroom presented narratives for Family 4.

PARTICIPANTS

Pilot Braveheart

Pilot Braveheart is a male graduate who home educated for 10 years. Their family lived in the Free State in South Africa but moved to Zambia when he was aged 4 and spent 5-6 years in Zambia, where his parents were involved in mission work:

> *"My parents were also traveling a fair bit into Africa and, and that. My parents were involved with some mission work in Zambia. And my dad also worked a bit, did some projects with the United Nations over there. Food distribution and emergency flood relief and those kinds of things."*

He loved everything about flying and spent hours in the aviation milieu:

> *"I, when I was about five years old, I got a chance to fly in an airplane for the first time. This was shortly after we moved to Zambia. And since then, my brain has kind of been stuck in the sky. I have always enjoyed airplanes, and I still do. I'm currently in-Flight school getting my pilot's license."*

They moved back to South Africa which provided other learning opportunities as discussed in section 7.4.2. His father was very involved in their growth and development

and spent a lot of time creating learning and development opportunities as discussed in sections 7.4.4.1. They expressed quite intimate family structures and shared many memories of their family enjoying spending time together. He completed his final 2 years at a Cambridge school.

Conscientious Innovator

Conscientious Innovator is a male who was home educated for 11 years and, as a sibling of Pilot Braveheart, was in Zambia from ages 6 to 13. Their family travelled quite extensively, which created a lot of experiential learning opportunities. Conscientious Innovator is an extrovert who loved robotics, coding and mechanics:

> *"I was actually, I was actually talking to a colleague about it recently as well. How robotics and the, and the exposure to robotics from about 11, when we started robotics, how that has slowly shaped, you know, certainly what I, the things I decided to study, the interests I've had."*

He stayed in the Free State on his own when his parents moved to Gauteng before finishing school. He elaborated on this aspect of his personal narrative as discussed later in this section.

The World Is Our Classroom

The mother of Pilot Braveheart and Conscientious Innovator home educated her three children for most of their school going age. They initially started in a small town in the Free State. Their travels through Africa as missionaries revealed interesting narratives of their home education journey:

> *"During that time, we also did a couple of road trips up to Zambia and school went with us. And we considered the world to be our classroom."*

Their narratives on home education provided a unique contribution to the study; hence the name, mother The World is Our Classroom. Their thematic analysis of their milieu follows.

THEMATIC ANALYSIS

The following themes and sub-themes emerged from the thematic analysis of the narrative accounts of Family 4; i.e. Pilot Braveheart, sibling Conscientious Innovator and mother The World Is Our Classroom.

7.4.1 Milieu

7.4.1.1 Tight, Intimate and Loving Family

From the narrative accounts of Family 4, it is evident that the participants experienced the home school milieu as emotionally tight, intimate and described a loving family. For example, Pilot Braveheart described their home education family as tight and loving. He recalls quality family time with fondness:

> *"I loved spending time with my family, which is something that, you know, that the family structure was quite intimate, very tight. And I look back on the early years of my homeschooling very fondly because of that, spending a lot of time at home and with my family."*

A unique contribution was provided by this family, specifically recalling spending a lot of time together. His mother confirmed being close and highlights mealtimes as significant for their family:

> *"We actually are a very close-knit family. My husband used to come home for lunch every day, we would have our main meal at lunch. Mealtimes are very important times, where we also discuss very controversial subjects and things. We would take something from the news and sort of get people to voice their opinions and so on. So, it was very much family time discussing things. Yeah, we are very, I feel, we are very close."*

These words from mother The World Is Our Classroom affirm being a close family and spending a lot of quality time together. She specifically refers to mealtimes as an important time of having interesting and controversial discussions. This aspect of their home education established an environment of respect for different opinions as discussed by mother The World Is Our Classroom:

> *"I think that we always communicate well, and we don't judge each other for having a different perspective. We think they are open minded and if you, if you feel differently, well, that's fine. You know, we're not going to judge you for it."*

Defining their environment as respectful and non-judgmental also denotes that it was a safe environment to discuss things, being allowed to have different opinions and furthermore created opportunities to develop very good communication skills. Mother The World Is Our Classroom directed towards the value of their family having meals together, even having lunchtimes with their father at home. Mealtimes as a theme was

also denoted by Pilot Braveheart who discussed fond memories of making breakfast together while in Africa, where they had to make a fire to cook breakfast:

> *"I'd say yeah, having, having breakfast together every morning was a very strong memory, actually making breakfast. I think if I can, if I can, I think a lot more around making breakfast. Yeah, everyone participating in their own way, whether it was, whose turn is it to get, because in the early years, we lived in a village where there wasn't real electricity, or really running water, we came up with a system that collected rainwater off our roof and stuff. And it was a lot more reliable later on. But whose turn was it to get up early, and make the fire to cook breakfast on, you know. Those kinds of things, and then having sort of a team communal effort into getting the day going. Yeah. Who gets to grind coffee. We had a little hand grinder. No. No, I still, I still, I'm still passionate about my coffee."*

His description of their morning breakfast routine in Zambia specifically depicts an emotion of connectedness, collaboration, joy, and intimacy in their family relationships. Their milieu speaks of intimate, connected and joyful family bonds and spending a lot of time together. Belonging and vulnerability were also an integral part of the home education milieu of Family 4.

For example, the following account by Pilot Braveheart discusses how different each sibling was and how their parents allowed these different interests and provided freedom for each child to be different:

> *"And that was, it was different to me and compare it with, compared to my brother or my sister. We had different interests, vastly. And each one of us was given freedom to explore."*

Mother The World Is Our Classroom verified their view of embracing vulnerability to be true to self:

> *"The fact that, one thing about homeschooling is, you don't put a child in a box. Each one is an individual"*

Her words indicate that their family valued each member as a unique individual and embraced individuation, providing space for each one to develop into their own authentic person. Her description was confirmed by Pilot Braveheart with the following saying:

> *"But you're not just, not being confined by what other people, the boxes that other people put you in. I think it's probably the most substantial thing."*

He discusses not being defined or limited by other people's opinions or views of you.

Not being confined by your parents to a specific interest, passion or even social or cultural construct, provides the freedom for belonging and vulnerability.

The sub-theme on active, freedom and experimental learning was presented next.

7.4.1.2 Active, Freedom and Experiments

The family presented a unique contribution to this research study which seeks to understand the individualised approach to home education and how it could prepare learners for higher education. Due to travelling and being stationed in remote locations for most of their primary school years, and not having access to good resources, the family utilised a curriculum provider who could send materials and resources to them:

> *"I think one of the reasons we went with the formal education or the formal curriculum, was because we were really isolated. So, my mom, we lived 500 kilometres away from nearest tar road. We didn't have internet, there wasn't even cell phone signal. We had radio's that would communicate to the outside world with a radio emission station. And they would type out the email for us over the radio. And that's how we got news to and from families. So, there was really nothing out there. The Postal Service worked, but it took about six months for books to arrive. I think it was just easier for my parents to just stick to one provider. They gave us quality books and did the research for us. And, and yeah, so that worked out, I think, well for us. They really do hold your hand. So that was I think, quite a pleasant, pleasant curriculum."*

During their primary school years, consistency with their formal curriculum would often not be possible for two reasons. The first being that they were in the car travelling as revealed by Pilot Braveheart:

> *''[…] especially when we travelled, obviously schooling kind of went out the window."*

The second reason why consistent curriculum schooling was difficult was due to long waiting periods for material to arrive to their remote location:

> *"In Zambia, there were times when it was quite awkward, especially the fact that it was before we could rely on things like Internet to provide educational resources. Certainly, the infrastructure in this area that we lived in, you know, internet was, was non-existent. And there was a postage delay. […] And they would always want you to have completed a year's work before they send you the materials for the next year. And there would often be about a three-month delay, after we've posted our exams down to Cape Town, before we got our new material. So, there were times when it*

would be awkward, but what it would mean is that we'd spend a few months focusing on, on other, other aspects of education."

What is evident from the quotation above is that the narrative accounts of Family 4 provide a unique insight about a blended approach between a formal and a non-formal approach to home education. The formal and non-formal parts of their home education will be discussed in depth in section 7.4.2.9. The ways in which their education was individualised will be discussed further in 7.4.2.7. This section will specifically focus on the freedom to actively experiment during home education.

The narrative accounts of Family 4 indicate that their milieu provided unique opportunities to freely experiment, especially during the time they spent travelling and in Zambia. With reference specifically to a milieu of active participation and hands-on activities, experimentation and freedom to explore, the narratives provided the following data.

Conscientious Innovator, for example, referred to building a rocket with his brother which caused a fire:

"My brother in many ways, the same, just completely different in the sense, that he would study my sister's work, because he wanted to build a jet engine. My brother and I set his floor alight with one of his experiments. He was trying to build a rocket in his bedroom."

Pilot Braveheart discussed a lot of hands-on activities, being involved in woodwork and building of things:

"I was always inclined to the technical side of things. So, I would always be building and fixing things, doing woodwork."

The references above affirm hands-on learning and experimenting and building things. The narrative of Pilot Braveheart creates a visual image of a setup with building materials, resources, books for research, wood and all sorts of things lying around. It seems that these types of activities were something the two brothers enjoyed doing together. Pilot Braveheart confirmed explorative time building things with his brother, later in the interview:

"So, we spent a lot of time, just building and playing."

What is unique about the narrative accounts of the siblings of Family 4, is that it indicates how the freedom to actively experiment together resulted in a closer bond between the two brothers. Thus, the references above indicate the strengthening of the relationship

between the two siblings who would often engage in experimental things, woodwork and building projects.

Furthermore, Pilot Braveheart also referred to an interest in computers and computer hardware that he pursued during his high school years:

> *"Like, I've been building computers for years, since early high school. And it was not, it was not something my parents were willing to get involved in. Yeah, yeah. But, they didn't mind me having a space in the house that I literally just collected old computers to put things together."*

From the narratives of the two homeschooled adults their primary and secondary years were filled with non-formal interest-based inquiry into all sorts of hands-on learning, building and experimenting. It was also something they enjoyed doing together. They also enjoyed a lot of freedom in pursuing interests as discussed by Pilot Braveheart:

> *"My parents spent a lot of time in giving us […] the freedom to pursue the things that we were passionate about."*

In conclusion, the references suggest that their milieu included building and hands-on projects utilising wood, building resources, and computers. The freedom to actively experiment together resulted in a closer relationship between siblings. There were working areas where items used for experiments were piled and learners were given the time, space and freedom to explore and learn from these experimental activities.

The freedom to pursue interests were discussed in more detail in section 7.4.2.1. The next sub-theme further explored the topic of outside activities and learning.

7.4.1.3 Outside

The sub-theme of outside learning and activities was not presented strongly in the narratives of this family. The references above discussed building and woodwork which we assume would take place outside. A reference by Pilot Braveheart discussed spending a lot of time outdoors:

> *"Yeah, but yeah, so we spent a lot of time outside."*

Another reference from Pilot Braveheart indicates that when they were stationed in Zambia, they would spend afternoons outside, riding bikes or fishing, etc.

> *"Oh, that was spent playing soccer in the village with the kids, fishing, enjoying the outdoors. Yeah. Yeah, we had everything from canoes to bicycles that could take us*

anywhere in the bush, riding our neighbour's donkeys, because we thought it would be fun."

What is interesting of the quotation above is that outside activities also involved children from the broader community; something that is discussed in more depth in the next section. In comparison with the previous families, the narrative accounts of Family 4 indicate that outdoor play expanded beyond the borders of the home environment into the community and nature. The words from Pilot Braveheart are therefore important because it provides a deeper understanding of the kind of milieu that is conducive to learning and development.

Family 4's community activities are discussed next.

7.4.1.4 Community

Being in a small and remote town in Zambia during primary school, there was no opportunities for outings, socialisation or school activities with other home education families. Their narratives discuss playing with school children in the afternoons as discussed by Pilot Braveheart:

"So, we spent a lot of time, just building and playing and also engaging with the community, because we stayed in, in the early years in Zambia, we stayed in a village, which is in the northwestern province of Zambia. Right in the Lunda heartland as they say. And then later years, we moved to a small town called, Zambezi, but we were always quite engaged with the, with the community as well. So, we spent a lot of time as, as in the afternoons, as, as the as the public school's kind of opened up, and the kids were running around in the village and in the town. We'd go and play soccer and things like that. We got pretty adapted at the local language over there, which was Lunda."

Playing with local school children in the afternoons exposed the children to the native language and therefore they learned to speak other languages due to staying and travelling in Africa as discussed by mother The World Is Our Classroom:

"During that time, we also did a couple of road trips up to Zambia and school went with us. […] Yeah, learning different languages. My children can actually speak five languages."

Being able to travel exposed the learners to exciting and unique opportunities to develop and grow in unique ways. One of these was the exposure to other languages and

cultures. It is important to note that their parents used the environment, community and people they were exposed to while traveling as learning experiences; something that will be discussed further in section 7.4.2.8.

Their home education community setting changed dramatically once again when they moved back to South Africa. Their parents intentionally wanted to change their community and provide other types of experiences as discussed by Pilot Braveheart:

> *"My parents timed it so that certainly, for my older siblings, it would be possible to […] get a better, a bit more exposure, not only to, you know, cultural things, but also, you know, the academics, to meet more people. Get exposed to more people in different fields and things like that before they finished their school and had to you know, start making career choices and stuff like that."*

Moving back to South Africa provided opportunities to develop other interests, get exposure and gain knowledge and experience in other areas that were not available in Zambia. Here they were exposed to coding and robotics as discussed in section 7.4.2.5 through a mentor that also influenced their lives and careers to a large degree as discussed in section 7.4.4.2. Traveling and spending time in Africa produced unique experiences for this family. Although returning to South Africa produced excellent opportunities, it was also a difficult adjustment. Conscientious Innovator provided details on this topic:

> *"But then when I came back, it was really really difficult for me to adjust. I mean, I didn't, you know, a simple board game like 30 seconds is really great, if you've never had a TV, or never had exposure to internet or modern music, or sports for that matter. You weren't used to or know who the things are, people are. And it was really a tough time for me as a as a teenager to try and fit in, adjust. I think that's, a way where the mentor of mine played a big role in, in settling me down a bit. But during this time of returning, I really didn't get along particularly well with my dad. I kind of blamed him for everything that wasn't going right, right with me. Because he took me from a place that I was happy and to bring me to the city that you know, that I couldn't relate to anyone. You know, I had a lot to learn. So, there's a lot, I think, that happened during my life, that shaped me."*

The participant describes how being in a remote location for so long and returning meant that he was out of touch with technology and the social construct. Due to their isolation, he was not familiar with contemporary things, people and places, therefore, playing a simple board game like 30 Seconds was difficult for him. He describes being happy in Africa and blaming his father for having to return and adapt. His excerpt describes

struggling to relate to his community and feeling like he did not fit in with his peer group. Their narratives suggest that traveling and being in Africa was certainly a very valuable experience, but so was returning and having to adapt to the social norms of that time. He ends the excerpt with: "*there's a lot, I think, that happened during my life, that shaped me.*" In the end, it is concluded that all of these experiences shaped him as an individual, and even the move back to South Africa, however difficult, was a necessary and valuable experience that allowed him to be successful. The themes pertaining to learning were presented next in section 7.4.2.

7.4.2 Learning

The theme pertaining to learning presented sub-themes of interest and curiosity, love for learning, mathematics and languages, topical or unit studies, experiential learning, reading, individualised, outings and non-formal home education. The learning sub-themes for Family 4 was presented next. These sub-themes were coded to make cross referencing within text easier.

7.4.2.1 Interest and Curiosity

Being given the time, freedom and resources to pursue interests were very strongly represented in the narratives of this family. The participant Pilot Braveheart described the importance of following their interests with the following words:

> *"So, but, but that goes for, you know, every kind of passion that each one of myself and my siblings and my parents put a lot of effort into giving us the room and the freedom to, to explore those things. My sister was really big into art. She, she's, and she still does she, she, she paints a lot and those kinds of things. Yeah, my brother was a lot more technically inclined, like, like I was as a kid. So, we would always be building things."*

Their parents allowed a great deal of freedom for their children to explore their interests which was different for each child. Sibling Conscientious Innovator described an early interest in farming and how his father made incredible efforts to expose him to learning about this interest:

> *"And so, I once told my dad, I wanted to be a farmer, and he had a couple of farming projects on the go there. And so, he was like, okay, you want to learn to farm, you, you come along with us, we'll go to the rice farms, we'll go to the maize farms and all that sort of stuff. So, there was a lot of freedom to pursue our interests."*

Pilot Braveheart affirms that their parents put considerable effort and attention into nurturing their interests. He describes his early love of flying and how this passion was developed because of the efforts of his father:

> *"So yeah, a lot of time was my, my parents, I think I was, I consider myself quite fortunate. My parents spent a lot of time in giving us, a lot of effort, rather in giving us the freedom to pursue the things that we were passionate about. So as an example, I, when I was about five years old, I got a chance to fly in an aeroplane for the first time. This was shortly after we moved to Zambia. And since then, my brain has kind of been stuck in the sky. I have always enjoyed aeroplanes, and I still do. I'm currently in flight school getting my pilot's license. And as a result, my, my dad put a lot of effort in, in trying to get me exposed to what kind of things aviation and aircraft have to offer. […] In Zambia, it was a lot harder than it was when we came back to South Africa. Where, where I was, my dad made enormous effort to get me involved with different aviation communities. Driving with me to go see airshows far away."*

What is interesting about the quote above is how the passion to fly, as nurtured during younger years, translated into Pilot Braveheart's young adult years. This is significant because it shows how the active involvement of parents to support the interests of children during younger years, could substantially contribute to their development. Pilot Braveheart describes his love of flying and everything aviation related. The excerpt shows great dedication from his father in growing this passion. In the same vein mother The World Is Our Classroom elaborates on the involvement of their father in the development of the children's interests:

> *"So, where the two boys would rather go and play soccer, my daughter wanted to do art. So yes, we did. And my husband actually did art lessons with her. And they grew and developed in that area. The two boys were far more interested in the sciences."*

The above narrative sections confirm the wonderful and intentional involvement of especially their father in developing the children's interests and passions. This is important because it indicates how a healthy triadic relationship between mother, father and child in the home education environment could contribute substantially to the learning and development of the developing learner.

As mentioned earlier, while in Africa there were limitations to the types of outings, visits and interests they could pursue. Coming back to South Africa after spending a few years in Africa, brought about big changes for the family. Conscientious Innovator gave a short description of his experience of moving back:

"So, a whole new world, obviously, we were met with the internet and modern civilization. You won't believe at 13, the fact that hot water came out of a shower was like the coolest thing ever. So, it was quite a big culture shock, when we moved back to South Africa."

Moving back to South Africa, although a big adjustment, also produced new opportunities. Pilot Braveheart discuss the excitement of having access to a library and how he devoured books on aviation and science:

"There was a lot of room given to explore the things that we were interested in. I had read the, the library where we were members of, in Bloemfontein, after coming back to South Africa, we stayed in Bloemfontein for a couple of years. I had read that library books of any, all of the, all the aviation and aeroplane related books and science books. I was eventually taking stuff out on my brother's library card because he was older than me and could get to the other sections of the library."

Sibling Conscientious Innovator shared his brother's recollection of excitement and pleasure they had with the opportunity of having access to a library:

"But there's obviously a lot of other opportunities that came with the move. So, a library, for example, oh my sister and I, hey even my brother devoured libraries, my parents got us library cards. […] we would go through those books, because all of a sudden, it was like this whole new world. We weren't computer savvy or internet savvy; we just devoured the books and stuff that the library had. Now I remember that being a really cool change."

Both siblings shared how much they enjoyed having access to a library and devouring books, which for Pilot Braveheart included anything on aviation, flying or science. From the data, it is evident that they developed a love for learning and was self-driven in their learning process as well as engaged in their topics of interest.

The move back to South Africa also introduced new learning and extra-curricular opportunities as discussed by mother The World Is Our Classroom:

"But when we came back from Zambia, we made an effort. My daughter then had private art classes. All the kids, no, the two older kids wanted to do dancing. […] Pilot Braveheart was more into aeroplanes and he would go off to a [name] airbase and fly airplanes and be a marshal. We tried to, we tried to do as much as possible. Financially having one income is also not, it does also limit you. But we did try to look for things of interest for the kids, especially in the fields that they were in. […] And

*they did micro-electronics as a, on the side, which they both loved. And [*Conscientious Innovator*] started teaching in it as well before he had finished school."*

The quotation above shows how the careful alignment of extra-curricular activities with existing interest-based learning in the home education milieu, could further enhance the learning process. The mother's narrative indicates how she would intentionally look for prospects where the children could attend classes and grow interests that they had. One such interest that impacted the boys' future tremendously was discussed by Conscientious Innovator. He referred to the impact of electronics and robotics classes on him:

"But yeah, it was always an environment of discovery and learning, I think I might have mentioned previously about something that's, that has shaped, ultimately, my career, was the opportunity to do electronics and robotics courses when I was quite young. And that was something, that was highly encouraged by my parents. And the idea of pursuing stuff that that, you know, they can't even help with, challenging yourself to learn something and to develop a new skill and to follow your passions."

The piece presented above develops into a few discussion points on their home education setting. Firstly, he described their home education environment as one of discovery and learning. Their focus, therefore, was on discovering new knowledge in the areas of their interests and passions. He describes learning new skills as a challenging endeavour, which meant that his attitude towards learning new skills, similar to previous discussions on the topic, was one of being challenged and excited. Additionally, the piece again discussed how their parents encouraged them to pursue learning, although they could not necessarily help them with the process. Lastly and very importantly, following and developing his passion, ultimately impacted the career and study choices he made.

Pilot Braveheart confirmed their exposure to robotics and how this interest also influenced his future:

"How robotics and the, and the exposure to robotics […] how that has slowly shaped, you know, certainly what I, the things I decided to study, the interests I've had. And even, we were talking about how that that ultimately shaped me, to be better positioned when it came to engagement with potential employers, towards the end of my studies. And created a lot of interesting opportunities during my studies, for let's say, more exciting vocational work. And yeah, so say, the fact that we had that, that freedom to, to pursue things that we were interested in, to our heart's content, certainly benefited, in the long run."

His description of being exposed to and pursuing robotics and how it influenced his studies, vocational work and career, shows the educational value of creating the freedom to pursue interests. In this case, pursuing their interest in robotics and electronics developed their thinking skills, created opportunities to learn about different careers and helped them to be able to make decisions about their future with more confidence. Pilot Braveheart confirmed the confidence he developed in his decision making of what to study because he could pursue interests to such a deep level:

> *"I think I had, I had a lot more certainty than most, when it comes to, what I was deciding, what I wanted to study. That I think, that's a starting point, I think largely because I had the opportunity to explore interests to such a lot, to such a deep extent"*

Making decisions about higher education is often associated with stress and anxiety and often results in students changing course or dropping out. From the narrative accounts of Family 4 it is evident that being able to follow interests from a young age, and being exposed to an environment that intentionally nurtures these interests, could result in more certainty and a higher probability of post-secondary success. Thus, the data show how interest-based education became a crucial aspect of home education, which contributed substantially to the preparation for higher education.

The next section discusses their love of learning, which is intertwined with this section on interest.

7.4.2.2 Love for Learning

Similar to the previous families, the narrative accounts of Family 4 indicate the nurturing of a love for learning. Another interest of Pilot Braveheart that was not specifically discussed in the previous section, was an exceptional interest and curiosity in science. He described his passion for science during his first interview:

> *"I always tended to work ahead in the sciences. I was always doing the, the next year or the year after, or even the year after that's, work. Because I just enjoyed it that much. It got to the point that my eldest sister, my, my sister, my eldest sibling, when she was doing her last few years of science, I would be helping her with her science. Just because I had that freedom to again, work ahead, as I as I wanted to. So yeah, I was, by the time I went, by the time my sister finished, I was about four years ahead in science. Just because, I just enjoyed it. Yeah."*

He described an absolute love of science and because he could work ahead, he just kept on learning and progressing to higher levels. It is important to note that their home

education environment allowed for the freedom in pace. Pilot Braveheart's brother verified his love for sciences and how he progressed to levels ahead of his age:

> *"And so, my mom would spend a lot of time working on him, just trying to get him to do his maths, to get him to do well the maths and the English and the boring kind of stuff. Whereas the physics, funnily enough, he would just read those books, physics, like I say, he would read my sister's book. There was a classic example, my sister was in grade 10, and my brother was at that stage in grade seven. And he explained my sister's physics problem to her, because he had invested in himself into learning and stuff. He had been through my physics books and stuff like that. And he was allowed to do that."*

The extract revealed that Pilot Braveheart did not share the same passion for other subjects, and these were deemed 'boring'. His specific interest in science and engaging his interest with science books and resources caused him to excel in that specific area. A very important aspect of interest-based learning was revealed in the sections above. A love for learning is developed through providing the freedom to go as deep as the interest will take the learner. The same sentiment was shared by participant Curious Scientist earlier. Not being held back or forced in any way and providing the autonomy over the learning process to the learner, ultimately produced a love for learning. Another portion of the narrative of Pilot Braveheart discussed his love for hobbies he developed earlier and also later in his career:

> *"And I, I'm glad I studied mechanical engineering, I'm still extremely passionate about that. But the fact that I was exposed to such wide things, and I had all these hobbies, that, that involves a lot of programming and a lot of, you know, robotics and things like that. It was, it was the hobbies that I had when I, when talking to my now employer, during interviews, it was the hobbies I had, as a teenager, that, that, that they were excited about. They wanted to me to tell them more about those, you know. So, so, it's yeah, I think, yeah, definitely the, the thing that we were given the freedom to pursue these that opened up doors in the long run."*

The excerpt reveals Pilot Braveheart's love for learning that persisted and is still present in his passion for his work. He reveals that early hobbies and exploring with robotics and coding was the start of that passion and that the most important factor that brought him to this place was the freedom to pursue interests, even into his young adult life. Despite following a more formal school curriculum, this family, through interest-based learning, adopted a blended approach that resulted in a love for learning that influenced not only

their home education and higher education, but even their passion for their work after that.

The mathematics and language instruction as part of their home education was discussed next in section 7.4.2.3.

7.4.2.3 Mathematics and Languages

Like the previous families, Family 4 prioritised mathematics and language instruction. Pilot Braveheart discussed their mathematics and language instruction through the curriculum they used:

> *"So, the curriculum we followed, provided us with very good materials, so it was a lot of work. A lot of focus was put on, especially in the foundational years on the maths and sciences. And, and being able to read and write. And so, a lot of emphasis was put on that. Specifically, maths, more than the sciences, although I always tended to work ahead in the sciences."*

He continued to explain that when they returned to South Africa they had access to a lot more resources and if they kept consistently working on math and languages, they were given a lot of freedom to spend time on other interests:

> *"It was a lot easier to get your hands on educational resources in South Africa than it was in a village in Zambia. That certainly became a, I think, a priority for my parents. The big concern was just making sure we're updating the important in you know, that we could still, we could read and write and keep up to date with where a kid of our age should be in things like maths, and sciences and stuff like that. And if we, if we maintain, we were up to date on those kinds of things, there was a lot of room given to explore the things that we were interested in."*

Because their family utilised a more formal approach, their mathematics and language were provided which they followed according to the structure that the curriculum provided. Experiential learning for Family 4 was discussed next.

7.4.2.4 Experiential Learning

Experiential learning was flourishing in this family's narratives, especially due to their adventures during traveling. Mother The World Is Our Classroom provided the following appropriate segment:

"About 2001, yeah. From there, we spent a few months on the farm with my parents and then headed off to Zambia. During that time, we also did a couple of road trips up to Zambia and school went with us. And we considered the world to be our classroom. So, if we passed any interesting sights or museums, we would stop and make the most of it. The road trips consisted of maths and geography and all sorts of other things. You know, how fast is dad driving? You know? What is the expected time of arrival at the next town, and all sorts of things like that. And also working with currencies. Yeah, learning different languages. My children can actually speak five languages. So, yeah, we just used every opportunity we could to try and expand on their education."

The description of what school looked like during times of traveling includes real life experiences of where they were heading, the roads going there, the speed they are travelling at, calculating arrival times, working with currencies and the geography and mathematical calculations associated with all of these. The description is rich in how their travelling included geography, mathematics, and science. Conscientious Innovator expanded on the topic with the following excerpt relating to experiential learning:

"So, we travelled a lot, really, I am familiar with most Southern African countries, which means I also got exposed to a lot of the history. And that's both, you know, from the early explorers of David Livingston, through to the effects of colonisation, tribalism and the wars, and stuff like that. So, wherever we went, my parents spent a lot of time explaining to us, you know, what was going on, but also putting us in contact with people. They would go look up the old people in the village and, and have them like, explain stories to us. So, there's a lot of focus on history. But then, we were also allowed to pursue our own interests in many ways."

Participant Conscientious Innovator describes how visiting places, the history, the narratives of people who stayed there and every aspect of those experiences became an important aspect of enriching their learning and development. As their mother described it: "w*e just used every opportunity we could to try and expand on their education."* And indeed, the narratives confirm that their parents used every opportunity for them to learn and grow. These narratives reveal how powerful experiential learning are when home education can include such real-life experiences. Another rich experiential and amazing learning experience was revealed by participant Pilot Braveheart:

"Even from a young age, I think, there was something that does stand out. There was a time where, when we were still in Zambia, we had an issue with our family car, which

was a big truck, a Benz Unimog. Yeah, and my dad was away. And there was an issue with a with a fuel system on the truck and my brother and I took it on our own stride to fix it. And we replumbed the entire fuel system on the Unimog. My brother was nine years old and I was six years old."

With these words, Pilot Braveheart describes how real-life problem-solving became part of their home education experience. He describes how the two brothers decided to fix a problem on the car at ages 9 and 6. What is significant about this story is their problem-solving skills, their confidence and having absolutely no fear to attempt or try something to fix a problem. This is an incredible story of courage and how experiential learning grows innovative problem solvers.

The next sub-section describes reading in their home education environment.

7.4.2.5 Reading

Family reading was not a predominant sub-theme in the narratives of this family. A reference to family reading was presented by mother The World Is Our Classroom:

"Uhm, my husband was the one that did the reading with the children. Every night he would read aloud to them. That was, that was daddy, kids bonding time."

The reference above refers to evening reading time during which their father would read stories to the children. This was, however, not mentioned anywhere else in the narratives as a significant memory or learning activity.

The learners, however, presented a strong theme to individual reading especially on topics of interest. Pilot Braveheart commented on diving into topical reading especially during times when they were waiting for resources to arrive:

"And there would often be about a three-month delay, […] before we got our new material. […] but what it would mean is that we'd spend a few months focusing on, on other, other aspects of education. We'd really dive deep into reading and just exploring hobbies and things like that."

As previously presented, after returning to South Africa, the access to a library was something the participants enjoyed. The reference by Pilot Braveheart repeats the topic of developing a love for reading:

"There was a lot of room given to explore the things that we were interested in. I, had read the, the library that we were, […] after coming back to South Africa[…]. I had

read that library books of any, all of the, all the aviation and aeroplane related books and science books."

Brother Conscientious Innovator confirmed the excitement with having access to the library and how they consumed books at that time:

"So, a library, for example, oh my sister and I, hey even my brother devoured libraries, […] we would go through those books, because all of a sudden, it was like this whole new world. We weren't computer savvy or internet savvy; we just devoured the books and stuff that the library had."

It is deduced that although family reading was not presented as such a strong theme as previous families, the learners showed a love for reading and was engaged in reading activities with excitement. The ways in which home education was individualised was discussed in the next section.

7.4.2.6 Individualised

Despite a more formal approach to schooling for the most part, the narratives of Family 4 provided ample evidence of an individualised approach to home education. As was presented previously, one of the first references to individualised home education referred to being allowed the freedom to explore individual interests. The reference was provided by participant Pilot Braveheart:

"I think, I think it's probably because a lot of if it was, was spent in, in, in allowing us to explore the things that were, that were of interest to us. And that was, it was different to me and compare it with, compared to my brother or my sister. We had different interests, vastly. And each one of us was given freedom to explore."

The extract above highlights the very different interests of each learner and how they were allowed to explore these in depth with total support and encouragement. The notion that siblings were not compared with one another points to a culture of belonging and vulnerability. Their mother confirmed this sentiment:

"The fact that, one thing about homeschooling is, you don't put a child in a box. Each one is an individual, so they can progress at their own rate. For example, [Pilot Braveheart] had already read, he's the youngest, he had already read all his sister's physics books, when she was in grade 10. And he helped her with her physics when she was in grade 10, you know. Because that was where his passion was, and he was allowed to do that."

The quote confirms that their parents viewed each learner as an individual. They were allowed to have unique interests, develop at their own pace and grow into their authentic self. Developing their interests at their own pace could be at a faster or slower pace, whichever suited the abilities of the child. Participant Conscientious Innovator discussed the ways in which their education environment catered for individuality:

> *"So, like I said, I think each one was it was definitely customised in our own curriculum. I was the one that got a lot of discipline because of my just, lack of interest, I guess, whereas my sister was left autonomously, and my brother was kind of, he had specific subjects."*

The passage above discussed how their personalities were taken into account in their schooling environment. His sister could work autonomously and liked working on her own, his brother loved learning about aviation and science and progressed in those interests and he (Conscientious Innovator) was not sure what he wanted to do and lacked focus and would often dream or go off course. Therefore, he usually received the most discipline. His brother Pilot Braveheart expanded on this aspect of individualised home education:

> *"So, my, my siblings all have vastly different personalities. My brother is probably the most sort of outspoken in social, or one of the lot, and the things that, that he was interesting, interested in, in, as a results were kind of different with whereas with my sister, she always wanted to work by herself. She was happy to just continue working by myself. If I was working by myself, I would get nothing done. At the same time even working with my brother, I'd end up getting, having him not do his work, because I was always the one that came up with the distractions. So, it was very, my parents were very clever in kind of working around our each individual sort of personality quirks, in finding a way and it adapted over time as, as each of us went through different phases in life. My parents worked really hard in making sure that we could, we could still be productive and still keep learning."*

The extract above from Pilot Braveheart's narrative confirms the earlier reference to their different personality and learning preferences. The piece shows that their parents strategically worked around these traits to get the most from their approach to individualised education. It also shows how some learners prefer to work autonomously from early on, whereas others require more structure, more guidance and support. The mother had to adapt intuitively and manage these strengths and weaknesses and find strategies that allowed the family to successfully execute individualised home education.

The next sub section investigated outings as a learning experience.

7.4.2.7 Outings

The sub-theme of outings, if compared with the narratives of other families, took on a unique form for Family 4. Due to their location in Zambia and extensive traveling, they experienced a wide variety of real-life experiences that serves the same purpose. One example (as discussed earlier), provided by Conscientious Innovator, discussed visits to farms because that was one of his interests:

> *"And so, I once told my dad, I wanted to be a farmer, and he had a couple of farming projects on the go there. And so, he was like, okay, you want to learn to farm, you, you come along with us, we'll go to the rice farms, we'll go to the maize farms and all that sort of stuff. So, there was a lot of freedom to pursue our interests."*

Previous narrative excerpts referred to visits to museums and places of historical interest while on the road, which create the same type of knowledge and learning experiences. Unlike other families, they could not go on outings with other home education families while in Africa. However, their family experienced many similar learning experiences while travelling. The parents were very intentional about utilising everyday life, places and people in their surroundings as learning experiences. These experiences not only improved language, cultural and global awareness, but the learners also absorbed knowledge on places and people, which aids in creating empathy and social engagement skills. More references to travel and experiential learning were discussed in section 7.4.2.5. Outings increase contextual understanding, participation and creates emotional connection to real-life places and events. Through facilitation of student engagement, outings can be used to better prepare learners for higher education.

7.4.2.8 Non-Formal Home Education

This family's story differs greatly from the previous families' narratives, also in relation to a non-formal approach to home education. Their lack of access to education materials for 5-6 years during their primary education, because of their very remote location, caused them to choose a formal curriculum that supplied all the educational materials. However, formal schooling was interwoven with many informal experiential learning opportunities; something that created a blended approach to home education. Thus, the narrative accounts of Family 4 provide a different perspective on a non-formal approach to home education. When they were not travelling and was not waiting for curriculum materials, their primary school years were spent schooling in the mornings and play in the afternoons as mentioned by participant Conscientious Innovator:

"So, while there were [sic] structure in the morning, the afternoons were fair game […] Oh, that was spent playing soccer in the village with the kids, fishing, enjoying the outdoors. Yeah. Yeah, we had everything from canoes to bicycles that could take us anywhere in the bush, riding our neighbour's donkeys, because we thought it would be fun."

Being in a very remote location in Zambia which was probably safe, the children could freely explore, play and spend time outdoors. Afternoons were therefore spent mostly outdoors fishing, riding bikes, canoeing or playing with other kids in the community. Brother Pilot Braveheart shortly affirmed that they spent a lot of time playing and being outdoors:

"So, we spent a lot of time, just building and playing and also engaging with the community"

Play and outdoor activities were a strong foundation of their primary school years. The family also spent a lot of time travelling and then their schooling consisted of non-formal educational experiences as quoted from Conscientious Innovator's narrative:

"My parents, especially when we travelled, obviously schooling kind of went out the window. And that's probably why my mom kept the structure so strictly because she knew that the moment we got in a car, it becomes really hard. But every opportunity that we took when we travelled was, was spent making the most of the environment. And that could be everything from, why did the salt pans exist in Botswana, to how did the Victoria Falls happen?"

The participant Conscientious Innovator talks about their non-formal home education experiences while traveling. During these times their environment became their schooling and whatever was interesting around them became topics of learning. He references the salt pans in Botswana and the Victoria Falls as two examples of such learning experiences. Another reference that expands on this aspect of their non-formal home education was provided by Conscientious Innovator:

"Probably all the road trips. My parents took us to see this probably, I mean, I've been in all kinds of southern hemisphere, African countries. […] I've flown around a lot in small airplanes to different parts of Africa. And then it was never just a trip. My mom would do a lot of work to make us learn out of it. You know, we learned about David Livingston, and his adventures through Africa as an explorer, a missionary. And then we rocked up at a chief's palace. And on the walls, they painted, an encounter with David Livingston. It was there at that chiefs Palace, you know. The locals captured

that as a significant moment. And so, you know, we'd learned something about history of Africa. And we found him in some remote village, we found that the locals have decided to keep that history alive. And so stuff like that, I think was, was cool. And yeah, our parents did a lot to enable us to, to kind of follow interests in that regard. And, and history was a big one for me. So yeah, I think that's probably right. And that wasn't one, that was part of the culture of homeschooling for us. And it was, it would almost be annoying at times, when my mom would make a stop. We just like, we just want to go home. She's like, No, no, we're almost, you know, we've got a detour to make. We have to stop and see this place."

From the data it is evident that sensory interactions with the environment played an important part in the learning of participants, and that visiting and seeing these places were extremely enriching experiences. These sensory travel experiences which was often integrated with narratives from the locals became extremely effective in conveying and absorbing knowledge.

Additional to non-formal home education during times of travel, the family also resorted to the non-formal approach when they were waiting for educational materials to arrive as discussed by participant Pilot Braveheart:

"In Zambia, there were times when it was quite awkward, […] And there would often be about a three-month delay, after we've posted our exams down to Cape Town, before we got our new material. So, there were times when it would be awkward, but what it would mean is that we'd spend a few months focusing on, on other, other aspects of education. We'd really dive deep into reading and just exploring hobbies and things like that. And for me, I was also able to use the resources from my older siblings, which helped a lot."

While based in Zambia and waiting for resources from the curriculum supplier to arrive, the family would also resort to non-formal learning where interest-based reading and hobbies were pursued. The participant referred to diving deep into topics of interest similar to previous families' narratives on non-formal interest-based home education.

Aside from more non-formal home education during travelling and long waiting times for resources to arrive, the pace of progressing with the curriculum was also flexible and they could work faster in the subjects of their interest. As mentioned earlier, participant Pilot Braveheart was very interested in science and developed his knowledge in the field of science at a much faster rate than required:

"I always tended to work ahead in the sciences. I was always doing the, the next year or the year after, or even the year after that's, work. Because I just enjoyed it that much. It got to the point that my eldest sister, my, my sister, my eldest sibling, when she was doing her last few years of science, I would be helping her with her science. Just because I had that freedom to again, work ahead, as I as I wanted to. So yeah, I was, by the time I went, by the time my sister finished, I was about four years ahead in science. Just because, I just enjoyed it. Yeah."

From the data it can be inferred that progressing at a pace that fits the learner's abilities is a very important characteristic of individualised home education. Being able to progress at a faster pace in the subject he enjoyed and was interested in preserves curiosity, fascination and challenge as tools of engagement. My analysis of the data indicates that altering the pace of progression is very closely linked with freedom and autonomy which allows the learner to become self-effected in their education process. Returning to South Africa and becoming older and more autonomous brought more freedom and a less formal approach. This aspect of their home education was discussed by Pilot Braveheart:

"But yeah, as, as the years kind of progressed, my parents sort of started introducing a lot more flexibility where we could kind of decide how we wanted to structure our week "

The participant confirms more flexibility and freedom as well as more autonomy to decide when and how to structure work, hobbies and responsibilities. He expanded on the freedom and the joy he experienced that came with this freedom:

"And I always enjoyed the lots of freedom that it gave me, like, when most people would be at school, I was at Robo class, or if I wanted to start school at four o'clock in the morning, on Friday, so that I can be finished by, you know, 10 in the morning, that's fine. Then I could have the rest of the Friday off, and I can go ride bike and I can go take the dogs to the park and go, play or I could, I could try convince someone to take me to the airport, it was always a big one."

Above, Pilot Braveheart discuss how they were given more autonomy and flexibility to schedule their own time and activities. In these words, he indicates how a non-formal approach to education enabled him to go to robotics class or the airport during 'school' time as long as schoolwork was completed. The freedom associated with individualised home education, as described above, produces motivation for necessary academic tasks with reward of interest-based activities. In this case, the learner was motivated to complete academic tasks to do things that he wanted to, for example, attend robotics

sessions or go the airport. From the data, this technique of initiating internal motivation seems very effective in creating autonomous learners. Pilot Braveheart discussed what school looked like for the last 3-4 years of high school:

> "*Yeah, and, and certainly, by the time I got to the end of my, my homeschooling, put it that way, was, we weren't following any curriculum, per se, I was literally just opening books that I found interesting. Making sure I kept up to date with maths. And yeah, I was really not doing anything formal. Where, where I'd be following a, you know, I need to check off these things. You know, certainly by the, by the time I was in grade 10, my parents were mostly concerned that I was just continuously learning. As long as I was learning something, staying interested. And, and, you know, at that point, I wasn't behind in anything. So, it was. Yeah, it was just, my parents, were just happy to see that I was, I was, I was learning and yeah, keeping busy and out of trouble. Yeah."*

What is interesting is that other families indicated that later grades in high school were generally associated with a more formal approach to education. However, Pilot Braveheart's description of the final years of high school refers to a very non-formal approach focused on engagement, learning and interest; something that is unique to Family 4. If he was interested, engaged and learning new things, his parents were happy. He was years ahead in science and additionally he refers to keeping up to date with math. The rest of the time he was learning based on interest.

The non-formal approach in high school took on an interesting approach for Conscientious Innovator. According to Pilot Braveheart, brother Conscientious Innovator took a year off from school to teach robotics. A section by Pilot Braveheart is provided for following the narrative:

> *"My brother was even given a year off of school to go and work, when he was about when he was 16. He lived by himself in [town], and he was teaching robotics. Because that's what he really wanted to do. He had promised, he'd still finish school before he was, before he was too old, or awkwardly old. Yeah. But, but it was something that he wanted to do. And he negotiated, and my parents were happy with his proposal. And he did that, he took an entire year off doing formal education, and he spent time teaching kids how to build robots. So, you know, we were, we were given a lot of freedom to, to explore individual interests."*

Brother Conscientious Innovator confirms this part of his narrative:

"I think it was definitely freedom, so part of the story I left out is that I decided in grade 11, I was done with school, so I took a gap year before grade 12. […] I worked three different jobs and couldn't pay my own rent and couldn't get a job, a proper job because I didn't have a matric […] but he gave me the freedom to kind of be creative and try at work and try to make a success of it. And when it, when it didn't work, he's like Okay, cool. Now you come back because at that stage I was already 18. […] And I was like, Okay, I'm ready to come back and finish up my school. And then I did that. […] So, there's no pressure on me to follow a specific career path. I think there was an underlying thing, […] am I giving my best at the moment? […] Yeah, so I think, I think that kind of a character trait was always there to give our best but the freedom was there to explore our interests."

The above excerpts show an incredible amount of freedom that was given to participant Conscientious Innovator in allowing him to stay in their hometown alone before finishing school, and to take a year off from school. He describes his father allowing him to make that decision and giving him the freedom to find his own path, and most importantly, staying supportive. These sections focus on an extremely important aspect of individualised home education which provides freedom for the learner to develop authentically into their own person and allows the autonomy over career and life choices even if the parents did not agree. The parents stayed supportive of their son and allowed him to make choices, make mistakes and find his own way. After that experience he could decide for himself to pursue higher education and he was able to put in the hard work that higher education would require. Section 7.4.3 discussed the life skills that developed through individualised home education.

7.4.3 Life Skills

7.4.3.1 Autonomy and Responsibility

Following the sub-theme of autonomy and responsibility, the narratives of this family, similar to other families, show a strong representation of this sub-theme. Mother The World Is Our Classroom discuss developing these skills from early on:

"I think the fact that I never did the work for them, but I always showed them where to, how to get help, […] where to find the answers. For example, I've never made appointments for my children. If they wanted to meet up with somebody, then I would show them where to find the contact details, make an appointment themselves, and they would sort it out. When [Pilot Braveheart] was probably about eight years old, he

had to, as a school project, interview an important person and he opted to interview the DC in town, the District Commissioner. And so, I said okay, well, you'll find her number over there. He phoned her and finally made an appointment, walked to the appointment, interviewed her and did his project all on his own. I actually don't even know where her offices were. So it was, I really sort of, put them out in the deep end, to explore the world, to find answers for their own problems. They were always encouraged to, okay, that's what you want to do, go for it, you know. And if you do need help, you know, I would help them."

The excerpt shows that their mother, from very early on, developed autonomy and responsibility through giving them the freedom to do things on their own, maybe even forced them to do things that might have been uncomfortable. From her narrative it is evident that she wanted her children to look for answers and solve problems on their own. The example discuss how participant Pilot Braveheart made an appointment with the district commissioner in town, walked there, did the interview and came back all on his own. It seems, from the data, that their parents were very intentional about developing autonomy. This is an excellent example of early development of characteristics that grows responsibility and autonomy. References to becoming independent and taking more responsibility for academic work was recalled by mother The World Is Our Classroom:

"Uhm well, as they got older, they become, became more independent. They were able to work more independently. But here, I can say girls are better than boys. My daughter would know what she had to do and get it done. It took the boys just a bit longer to get to that level of maturity, where they could actually continue without somebody watching them."

Their mother discussed how they become more independent as they become older and would start taking responsibility for completing work on their own. In their case, the eldest daughter matured quicker than the two boys, who reached this phase of independence a little bit later. This comment could be unique to their household as these characteristics are influenced by personality, character and academic ability. Nevertheless, the comment on gender differences is interesting because it provides deeper insight how learners develop. Conscientious Innovator discussed how, as they became older, they started to take responsibility for their own work and time:

"So, it was more I think, a discipline thing than a set time, it was quantity based, not hour based. So if we work fast, and many times if there was something exciting coming along, we would motor through the work, and we could, if we finished our

week's work by Thursday, we could have Friday off, type setup and stuff like that, so in many ways, there was no pressure, there was no speed assigned to our work, it was: "Here is your work for the week", you know, you can even split it up. We were allowed to plan our days; we could do all our maths for the week on Monday. And all the English on the Tuesday type of thing, or we could split it up evenly across the week. So, we were given that responsibility and held to account for it. And if we weren't finished by Friday, then we weren't allowed to go play. As simple as that."

The discussion by Conscientious Innovator shows similar characteristics as discussed by previous families. The home educated learners started to take more responsibility for their academic work by high school and became more independent and responsible. They could plan how they wanted to divide their work, when they wanted to complete it and had full autonomy over completion of academic work. Working faster could free time for hobbies or interests, which could be spent as they choose. Pilot Braveheart discussed how this freedom developed autonomy:

"Yeah, so I think, I think the fact that we were given a lot of freedom to kind of plan the way that we did it, did our, did our, schooling, and were able to set our own goals. And it was kind of the fact that a lot of freedom was given, given to us to be self-reliant, to work on our own and still get through the work, meant, that we could develop."

The narrative from Pilot Braveheart confirms planning their own work and schedule, setting their own goals, being able to work on their own and taking responsibility for completing the work. Having to develop these qualities resulted in becoming self-reliant. Providing an environment of freedom is critical for the aim of developing autonomy and responsibility. Pilot Braveheart recalled how much he enjoyed the freedom:

"But there was that sort of freedom, where we were allowed to take it, you know, in our own stride and decide how we wanted to get work done without compromising on getting that work done. So, Yeah, I really enjoyed that aspect of it actually."

Participant Conscientious Innovator communicated the switch over to Cambridge at grade 10/11, as he started preparing for final examinations. By this time, they were functioning fully independently and taking total responsibility for their education and examination results:

"…we switched over to IGCSE and AS. So, we, we, it was up to us now to study on our own time and the ball was in our court at that stage. […] It was literally you have an exam in six months, go through the work, and if you want to do well it is in your hands in many ways."

Full autonomy by the end of high school is similar to the narratives of other families discussed previously. Brother Pilot Braveheart discussed how the discipline and responsibility of independent learning gave him an advantage in preparing him for higher education:

> *"I think the, having a discipline built into you, from a really young age of independent learning makes an enormous difference. Something I've heard so often, is you know, that the lecturer didn't tell me that, or the lecturer didn't teach me that thing or the lecturer didn't this. […] That is so common in university, where students will feel ill prepared or likely weren't given enough and they weren't micromanaged enough. Because they feel out of their depth when it comes to, you know, tests and assignments and things like that. And for me, that, that was never really my experience at university, just because, we are so comfortable sitting down or, you know, asking a friend for help, who knew what was going on, or, you know, taking that in my own stride to make sure I understood what was going on,[…] the lack of micromanagement was not daunting for me."*

Pilot Braveheart argued their early development of independence and responsibility as a significant advantage in higher education. Where others would complain about lecturers not helping enough or giving enough information, they were used to figuring things out and not having all the answers and, therefore, from the data it seems that the transition to higher education was easier. Brother Conscientious Innovator confirmed this sentiment:

> *"[…] if we could finish and make sure that we were done ahead of schedule for a given week, we could have time off. And I think that, that in itself allowed me, when it came to, to varsity, helped me a lot and I've seen, particularly at Varsity, we had a lot of strikes. Now in the first year, it became, a lot of it became the responsibility of the student to, to actually set the pace and work systematically through because there's no longer lectures going on, you had to just keep working. And I think that was very valuable to me. Like, you couldn't, if, if I looked at some of the peers I had coming straight out of school, just being able to homeschool your varsity degree yourself., helped a lot. And eventually, I mean, I think it's in the early years where that really matters. And then, eventually other guys figured it as well. Yeah. But sometimes, it suddenly, it becomes your responsibility to do your own education, or to time your own education."*

Both brothers verify that taking full responsibility for their education better prepared them for higher education and that the transitioning was in fact easier because of this aspect

of home education. Another aspect of home education that prepared him well for higher education was discussed by Conscientious Innovator:

> *"Like I said, my dad left me, at 18, in a different city. And all those things contributed to me, coming to varsity having a sense of responsibility, having a belief that I can do whatever I set my mind to. And yeah, we were taught to study on our own anyways. […] And so I think homeschooling, hands down, prepares you better for, for that kind of studying. […] by third year or final year, you get tested on something twice a semester and if you if you don't make it you know, you were supposed to know the stuff[…], but you know going as homeschoolers, we were also, only tested in our Cambridge exams. If you fail that, then see you next year. Yeah. And, and so Varsity in any sense was home to us. We're actually happy we got semester tests and we had 'hereksamens'. We didn't get that stuff at Cambridge like, but what luxuries are these?"*

The above excerpt confirms being able to study and work by himself because he was already used to this method. To them it felt like a continuation of their home education high school years. He specifically refers to final exams and how if they did not perform in that one exam there was no opportunities to repeat the exam. They simply would have to go home, study again and come back a year later. He discussed that home education in this regard is more comparable to higher education where you are only tested on the work twice in a semester and the final exam and there aren't multiple chances to test how well you know the work, especially by the final years of study. His comment advocates that home education better prepared him for higher education.

The references to the narratives of the participants Pilot Braveheart and Conscientious Innovator above confirmed that the autonomy and responsibility they mastered throughout their final years of home education prepared them very well for success at higher education.

Conscientious Innovator provided another quote showing that they were not forced into any specific path:

> *"And then I even took another gap year. So, there's no pressure on me to follow a specific career path."*

Conscientious Innovator further denoted to the importance of making your own decisions, especially when deciding to go to higher education:

> *"You as an individual, not your parents, you as an individual need to believe that this is what you want to do. […] but I saw people that dropped out and the reason being,*

is that their parents had maybe said to them You know, this is a good area to go into. This is a good field for you, the money is good with this degree. […] and if you're just there because your parents want you there, then you're not going to make it. […] wanting to do it for yourself. Believing in it, as it's your dream, not anybody else, don't do it for anyone else. Because you'll be there one morning, at two o'clock in the morning. And if you're doing it for someone else, you know what, you're going to be close those books and go to bed. You're not going to push through and get the stuff done."

An important aspect of higher education success is emphasised by participant Conscientious Innovator which is the fact that deciding to study and what you study needs to be the choice of the learner and not their parents or anyone else. It needs to be their own dream, as that is the only way they will be able to persevere when things get really tough. This relates back to the topic of GRIT which involves passion and hard work (Duckworth, 2017). A person cannot have GRIT if they are not passionate about what they are studying and the future that unfolds. With passion and hard work towards their own goals a student will engage and probably be successful at achieving their goals. Thus, from the narrative accounts of Family 4 it can be inferred that vulnerability and authenticity are an integral part to prepare students for higher education.

The next section reviews the narratives on the sub-topic of age integrated socialisation.

7.4.3.2 Age Integrated Socialisation

Being able to communicate and engage socially is often a criticised skill for home education children (Kunzman and Gaither, 2013). Participant Conscientious Innovator discussed how his father approached growing this skill in their home education environment:

"[…] and I think this, this genuinely helped me, was my dad was, he would push us, as kids to talk to other people if we wanted to know something. And by that, I mean is, when, when meeting interesting people or meeting scientists or he would even take us to meet like astronomers, or engineers or doctors or something. If we had questions, he would really push us to go and meet this so-called important person and actually ask him questions directly. And that is something that I think, just having that boldness and realising that I'm allowed to talk to older people, people in authority, I guess, meant that I would was not afraid to approach any of my lecturers from the beginning to say, Listen, so I don't quite understand this, can you explain this and, and stuff, where there was genuinely a fear or at least, like I said, towards the end of

Varsity, you know, most people figured it out, but definitely at the beginning, you know, yeah, they would rather be quiet than or understand something, you know, when I would go sit outside a guy's office and wait for him to walk in. […] I think, it helped me, because I wasn't afraid to go find the answers I was looking for, to understand something."

The excerpt from Conscientious Innovator discussed how his father, from a young age, encouraged him to talk to adults and professional people, especially asking questions and engaging in conversation. His father viewed engaging and learning from interesting people as an important skill. From his narrative it is evident how Conscientious Innovator developed the characteristic to be open to engaging with people in authority and professors and lecturers at university and how this boldness helped him to find solutions and ask for help. Brother Pilot Braveheart also discussed age integrated socialisation that influenced how he engaged with peers and staff at higher education:

"So, I had very few friends that were a similar age to me, for example, where you know, I had friends that when I, when I was still, in early days, in high school, I had friends that already finished, finished high school that I'd spent time with on a regular basis. I also had friends that were a couple of years younger than me, and it was very easy for me to, to bridge that, that gap and meet people where they were at. […] And taking that a step further into to transitioning into university. It was, for me a lot easier to engage with, with people, you know, academically more senior than me. I was a lot more comfortable than most. I'm still not, I'm still not an outspoken and, you know, outgoing person, I'm quite, quite reserved. But it was, for me a lot easier to, to coordinate with people, lectures and supervisors and things like that. And to get information that was necessary to finish. It ended up certainly, when that, when we're doing group projects, that I was always the one in charge of getting information from professors and coordinating and speaking with them. And as a result, I, I've become quite friendly with a lot of lecturers, even after I finished my studies, I would often go spend, spend breaks, having, having lunch or having coffee with different professors, and things like that. Just having that kind of, having a kind of attitude where I didn't see people of authority, of authority, authority as a barrier, per se, where I was still able to approach authority, if I can put it that way."

Pilot Braveheart reviewed engaging and socialising with friends both older and younger than himself. He discussed how these interactions developed his socialisation skills and taught him to connect with people of various ages. He then transcends the age integrated socialisation experiences through his home education years to the higher education

phase and describe how these earlier interactions later strengthened peer and staff engagement at higher education:

> *"And in conversely, as in homeschooling, you spend a lot more time with people in different age groups. So sometimes you, you can, and I've seen it that the homeschoolers at the university just had a more comfortable time sitting in a professor's office. And didn't have so much of an issue with dealing with the people in authority, and even in even to a certain degree in the workplace. And it's not out of a point of arrogance. It's just, you're more, more comfortable, sometimes dealing with people in different position to me."*

The passage discusses the advantages of spending a lot of time with people of varying ages and how these interactions developed unique socialisation skills that later proved advantageous in higher education. Pilot Braveheart discuss being able to easily and comfortably engage at higher education and in the workplace.

The data presented above confirm that age integrated socialisation and communication during home education, developed the skills to engage effectively in higher education with peers, staff and people in superiority. It helped these home educated learners to not be afraid to engage with especially older and more superior academic university staff and to comfortably and with boldness seek solutions and answers to problems or things they did not understand.

The next sections provided an overview of character development and higher education success.

7.4.3.3 Character Development

The character trait of altruism as presented earlier for Family 3 was also presented in the data of this family. For example, Conscientious Innovator states:

> *"I studied engineering and then, because I believe that could unlock doors, opportunities for me to not just help people but help communities. […] Yeah, so I wanted to do learn a skill or do something that I believe that can make people's lives better."*

Wanting to help others and make a difference in communities as expressed by Conscientious Innovator shows selflessness as a characteristic trait. Additionally, the data indicated integrity and honesty as valued character traits as discussed by Pilot Braveheart:

"I think, I think integrity in that sense. There's a biblical principle of, of letting your Yes be Yes and your No be No. And leaving it at that and not beating around the bush and not taking people for a spin. […] Yeah, so honesty. Don't try and create false expectations."

Caring for others and wanting to make the world a better place as well as integrity and honesty were revealed as developed and valued character traits by the participants' narratives. Conscientious Innovator discussed the focus his mother also placed on discipline and responsibility:

"She was very strict with, with timing and discipline. […] if we wanted to, let's say, have a day off, or if we wanted to do something else, extracurricular that wasn't perhaps part of our schooling, then she would say it's fine, you know what your deadlines are, meet them, and then you can have the day off. So, there was responsibility thrown on us from very early on."

Their mother placed a lot of emphasis on discipline and responsibility. The sub-themes of autonomy and responsibility were discussed in 7.4.3.1. These character traits were highlighted during the home education narratives as focus areas, which their mother enforced from early on. As discussed earlier, she also very intentionally developed problem solving skills, leaving them to figure things out and solve their own tasks and problems. See the quote from mother The World Is Our Classroom:

"So it was, I really sort of, put them out in the deep end, to explore the world, to find answers for their own problems."

Problem solving skills have proven pivotal as a key to higher education success. The approach of their mother in developing problem solving is an important discovery that shows how important time and freedom in the home education environment are in creating a productive environment.

This family did not measure academic success by marks or grades but rather by effort. Conscientious Innovator discussed how his parents measured his academic success, not by grades but rather by effort and ability:

"Yeah, I think, but the way my parents measured success was never in my grades, it was never in the final result, it was more about how I worked. So, it was, it was, it was the journey, it was: can I turn around and say, I gave it my best."

The section above is another example of individualised education, where the parents recognised the abilities of each child, and their results were measured against ability,

attitude and effort.

Their home education environment was one of excellence and doing your best and that was used as the measuring stick rather than any other external assessment criteria. Working hard as a value was confirmed by participant Conscientious Innovator:

> *"So, my parents really, I think, installed in us a discipline or character trait that really sought to get us or they got us to believe that we could do anything we put our minds to, even if it was hard, it wasn't an excuse. It was just, it just meant that we would have to work harder than someone else might have to. Yeah, I think that played a big role in kind of shaping our education towards the end and so we were allowed to choose our subjects, we were allowed to follow our passions and like, no, it was never a thing of you're too dumb for this or you can't do this. There was stuff that we're gifted in, and they encouraged that. And then the stuff that were interests, but not necessarily natural talents, they encouraged us to just work harder at them."*

Above the excerpt from Conscientious Innovator discussed hard work as a value in their home education environment. He also referred to a value of excellence that influenced decision making later in his life:

> *"In that sense, I mean, that's just one of the many examples but my parents really taught me from young, to kind of, when you, when you commit to something, see it through and not just see it through but do it with excellence."*

Refusing to give up, i.e. resilience, was recalled by participant Conscientious Innovator in another part of the interview:

> *"And that kind of discipline pulled me through and even when you're failing and, or things aren't going so well, or you get a bad semester test, to be able to pick yourself up. And so, I can still, I can still pass it, I can still get through. And as a result, you know, would get up and you'd work harder on that subject and so you would understand it. I think it made us less able to, to be knocked down, if I could put it like that"*

From the data it is evident that Family 4 valued effort rather than results combined with hard work resilience and excellence which promotes engaging behaviour. These character traits were consistently emphasised and became part of the family culture. From the data it can be inferred that this type of valuation promotes a learning and development focused environment rather than just placing value on grades, symbols or exams. The narratives of this family provide a deeper understanding how cultivating a lifelong love for learning through interest requires an environment focused on learning,

engagement, hard work, effort and attitude. Thus, combining these character traits creates a winning recipe for higher education success.

The next sub-theme investigated a balanced lifestyle.

7.4.3.4 Balanced Lifestyle

The narrative accounts of Family 4 underlined the importance of a balanced lifestyle. The sub-theme on living a balanced life was discussed by Conscientious Innovator, who gave the following contribution with regards to this sub-theme:

> *"[…] this is something, I learned a little late, is enjoy it. There's a lot of pressure on people to say, you have to finish by this time, you have to do it. And, and yes, that is, that is important, you know. You need to excel. But if you work yourself into a pulp, you're going to be, you're going to be a stress ball with, you know, you're going to be so stressed, you're not going to be able to think and comprehend new information. And I learned that a bit late in be my first year because I put in so many hours and then I did, I did, stuff like, I joined a frisbee team and then, you know I just did stuff that took me away from my books just for an hour or two a day or I'd cycle, I do something, just something to break away, break away from it. And I did something that, things that I thought were fun and, and that is, I think, really important when it comes to you living that balanced lifestyle. […] Do things that they're passionate about."*

The discussion by Conscientious Innovator confirmed the importance of living a balanced life to improve wellbeing and sustain the ability to engage fully. His insight was that being overworked and stressed reduced wellbeing and engagement plummets as a result; a value he applied in higher education. He discussed only learning this important lesson later during his higher education journey and reflects on strategies he followed to implement more balance. He cycled, joined a frisbee team or engaged in fun activities that could help him break away from his books. Prioritising wellbeing and balance became an important skill in managing higher education success. Self-efficacy as an internal value was discussed next.

7.4.3.5 Self-Efficacy

Self-efficacy was discussed in chapter 5 as an important characteristic for higher education success. The narratives of this family presented self-efficacy as an important sub-theme. Pilot Braveheart discussed how his parents advocated self-efficacy:

"Um, I think in my case, my parents were of the belief that if you say you can't do something, you're probably right. […] I think there was, there was never a time that that myself and my siblings were told that sorry, you can't do this."

From the narrative excerpt it is shown that their parents believed in their abilities and encouraged them to believe in themselves. Conscientious Innovator reviewed how his parents believing in him emerged as self-belief:

"I remember my mom telling me that I was smart, but now I've really met some smart people. They [his parents] believed you know, so even though it was difficult and even though it was hard, there was this belief, that I was capable of figuring it out and it wasn't necessarily that I would finish it, you know, in flying colours or anything, but there was never ever an inch of doubt. When I decided to do something, there was never an inch of doubt that I was incapable of doing it."

Both participants refer to the role their parents played in imparting self-efficacy through the way their parents believed in them. Their parents were of the opinion that achieving goals were mostly just a matter of hard work and not giving up. From the extracts the conclusion was drawn that the parents played a vital role in developing self-efficacy. Participant Conscientious Innovator discussed another aspect of self-efficacy that was influenced specifically by his father:

"I think, without a good relationship with your dad, a kid is, I almost want to say left wondering. I think it plays a big role in setting a kid, a dad plays a big role in setting a kid's feet on the ground and giving them a bit of a foundation to stand on through life."

The narrative piece underlines the important role the father plays in giving a child identity and how a good relationship with his father provided a foundation for him to grow from. He continued the argument later in the second interview:

"I think the best way I can describe it is a foundation that you have, to stand up to face life. Yeah. And when, when you have a firm foundation, you're sure of yourself, you know that the person who raised you knows probably almost everything there is to know about you and if they say you can do it or you believe in and you can believe that, you know. […] I guess, but you know that who you are as a person is worth something. And that's great, what a great way to do it. And I think only a dad has a way of selling this to a kid."

The participant links the relationship with his father and the fact that his father believed in him with establishing identity, worth and self-efficacy. This is a unique perspective

provided by the participant, suggesting that the father plays a vital role in forming self-efficacy – because their father believes in them, they can also believe in themselves.

> *"Like I said, my dad left me, at 18, in a different city. And all those things contributed to me, coming to varsity having a sense of responsibility, having a belief that I can do whatever I set my mind to."*

Conscientious Innovator furthermore discussed how living on his own at 18 in a different city and his father trusting him at that age to take responsibility, encouraged him to believe in himself and the fact that he can accomplish whatever he puts his mind to. What an excellent reference again to the role this father played in affirming and imparting self-efficacy to his son. The sub-section on self-efficacy was concluded with a final reference to self-efficacy by participant Conscientious Innovator:

> *"And so yeah, there was a strive in me to say, okay, I've actually achieved, I've climbed this ladder up to this point. And it's the same thing I think that's driving me now with my Masters, its, you've, you've achieved something. You have to just push yourself a little bit further to continually grow yourself. And yeah, don't mean it, you know, prideful. And there's always this element of like, it's never a certainty, like I said, I did the studies in my first year, and I thought I'd drop out. You know, there's not this certainty around it, but it's the belief that I can actually achieve it."*

The participant refers to a difficult first year at university and not really knowing if he would be able to succeed at his goal and in the end successfully completing his engineering degree. He relates it to later studies for a master's degree and having those same doubts that he recalls from his early higher education phase. And then in his argument he revisits his success at that point and encourages and motivates himself that he has made it that far, and with hard work and perseverance could again accomplish his next goal if he just refused to give up. The piece provides a beautiful and encouraging reflection in the life of Conscientious Innovator and his thought processes, being vulnerable to the doubts and fears that surround every difficult and hard thing he pursued. He challenges that thought process with previous victories and through overcoming these he developed the self-efficacy that could push him to keep growing. The hard work and perseverance needed to succeed through these trying times was developed through his home education environment and especially through the culture his family enforced. His father played an important part in developing these characteristics. The last theme for family 4 reflects on quality interactions that influenced their engagement and higher education success.

7.4.4 Quality Interactions

7.4.4.1 Parents

From the narrative accounts of Family 4, support and motivation emerged as an important sub-theme that enhanced quality interactions. Conscientious Innovator previously described being exposed to programming and robotics and how it influenced his career ultimately. For this section, the focus is rather placed on his words describing his parents' encouragement in pursuing his passion:

> *"When we came back to South Africa, for example, we got into programming and robotics, and in many ways that set the foundation. But there was kind of a thing, our parents would bend over backwards, to enable us to follow some of the passions that we had."*

Encouragement and support are incredibly important for learners to engage and develop their passions. The participant repeated the sentiment of encouragement he received from his parents in pursuing this passion:

> *"But yeah, it was always an environment of discovery and learning, I think I might have mentioned previously about something that's, that has shaped, ultimately, my career, was the opportunity to do electronics and robotics courses when I was quite young. And that was something, that was highly encouraged by my parents. And the idea of pursuing stuff that that, you know, they can't even help with, challenging yourself to learn something and to develop a new skill and to follow your passions."*

Referring to the encouragement and support from his parents on various occasions, he reviews what an important role it played in his life. One would think that this type of support became less important as the learners grew older, but the participant Conscientious Innovator recalled the importance of his father's support while at higher education:

> *"You need to have a support structure. I think there's, there's an element […] to go and stand a bit on their own feet. Try a bit of independence. But there's a difference between just sending a kid off the Varsity and actually, you know, giving them the freedom to start making decisions, but still being there for them when it gets hard […] I moved out of home when I was 17. And now I am starting at 21. So, I'd had a good fair share of independence. But still, with all of that, having those phone calls with my dad when I, when I needed them, just made it possible for me to push through. So having that support structure around you."*

The references presented above confirm that parents play a crucial role in providing support, motivation and encouragement during all phases of development. This foundation of support proved vital also during higher education. At all developmental phases, the support of parents and especially fathers, are critical in pushing learners to believe in themselves and push through obstacles until they achieve success.

The data furthermore showed that the development and impartation of self-efficacy as presented in section 7.4.3.5 played a fundamental role in preparing learners for higher education. Parents who believe in their children and communicate and transfer that belief could develop self-efficacy through quality interactions. The data specifically showed that the father played an important role in developing self-efficacy. The mother on the other hand, was previously shown to develop communication skills, discipline and how to present yourself to the outside world. The data furthermore showed that a culture of working hard, perseverance and refusing to quit was also achieved through quality interactions with their parents. One example by Conscientious Innovator was recalled:

> *"So, my parents really, I think, installed in us a discipline or character trait that really sought to get us or they got us to believe that we could do anything we put our minds to, even if it was hard, it wasn't an excuse. It was just, it just meant that we would have to work harder than someone else might have to."*

From the data it is evident that an important aspect of the ability and desire to work hard to achieve goals is being able to set their own goals and work towards their own dreams. Mother The World Is Our Classroom confirmed that her desire was for her children to find their own authentic dreams:

> *"It was always my desire that my children should explore their own dreams."*

Other examples of the role parents played in quality interactions that influenced the participants, refer to the encouragement and support their parents provided that allowed them to keep pushing towards their goals. Conscientious Innovator provided the following reference to this aspect of quality interactions with his parents:

> *"My parents kept pushing the dream and never, never let me feel like a failure."*

Their individualised approach allowed these parents to see each child as a unique person and to encourage them to achieve their own dreams and potential. Resilience and not giving up was discussed by Conscientious Innovator in an example of a quality interaction with his father:

"I think, like I mentioned earlier, my parents instilled in me a believe that I could do whatever I set my mind to. I remember in first year I actually wanted to stop. It was hard. And my dad's response was like? Did you have a dream? I was like, No, I did not have a dream. Oh good, because unless it's divine intervention, you are not stopping this course. You will finish it. If you don't like it, you can do something else afterwards, but you'll finish what you started. And that was, you know, that was kind of the motto, I could choose what I wanted to do through high school, but I had to finish it. I didn't give up halfway. And so that was definitely carried through, I think, into varsity. And it got me through really tough times. […] I think it made us less able to, to be knocked down, if I could put it like that."

The reference confirmed that the participant might not have pushed through and finished his higher education degree without the support of his father. Another example by Conscientious Innovator confirmed how his father instilled GRIT in them to work through tough times:

"And I would have dropped out if, it was, wasn't for them. In that sense, I would have given up and I wouldn't have finished and ended up in the career that I am. So yeah, I think, you know, that teaching me that I, you know, to "Byt Vas" and just finish it. My dad calls it Grit. It was probably the biggest, one of the biggest things I have learned."

Through persistence his father encouraged resilience, which ultimately resulted in successfully completing a higher education qualification. The participant confirmed that he probably would have abandoned his studies if it was not for these interactions with his father. Another important aspect of interactions with their parents was highlighted by Conscientious Innovator:

"I think and it boiled down to that I mattered to my parents. I think everything, that they did was because they wanted the best for me in every situation."

From the data it is evident that interactions with his parents gave an underlying message to participant Conscientious Innovator which was that he mattered to his parents. They cared about him and everything his parents did was because they wanted the best for him. For the participant to make these conclusions about his parents, their interactions must have conveyed that message. Their interactions affirmed that he was worthy, cared for and that he mattered. This message is extremely important in the individualised home education model, because it conveys a message that provides identity, self-worth and self-efficacy; something that prepares learners better for higher education. Mother The World Is Our Classroom provided the following quote with regards to the father of the participants:

"He, he had very strong ideas of what, what, how we should bring them up and what will be beneficial. I think that he was just super. He really, there weren't any limitations, you know. We could just, you know, he would do everything he could to make sure we could get the best exposure and the best opportunities for our kids."

Her quote confirms especially the important role their father played and how the interactions they had with him fostered characteristics that benefited them and promoted success at higher education and after. Quality interactions with mentors were discussed in the next section.

7.4.4.2 Mentors

The data showed that mentors can have a profound effect on children in terms of inspiring, motivating and developing self-efficacy. In the following excerpt, Pilot Braveheart discuss the influence of mentors on his interests and career choices:

"I've always been big into flying. And this is one of those things that started when we were living in Zambia, we used to fly in these little bush planes to places. But there was one pilot in particular. […] There was a pilot on call. He was basically standing by the emergency exit in the event of like, medical emergencies and stuff like that. […] but he was definitely someone that, that kept a lot of what I hold, and what I'm passionate about, alive. I remember literally as probably an eight, or nine or ten year old, borrowing a phone so I can phone uncle [name]. Because I just wanted to talk about airplanes. […] And he always had time. I mean, he was a busy man. He ran multiple businesses. […] But he always had time to talk about airplanes even to a little nine year old lad."

From the depiction above, it is concluded that mentors in the context of a home education environment can have a profound impact on learners in igniting interest, inspiring and encouraging them to follow their dreams. The interaction between Pilot Braveheart and this pilot was fundamental in shaping him as a person. From the data it is inferred that fulfilling the role of a mentor would require sacrifice in terms of time and effort, which this pilot did for this little boy, much to his surprise. Looking back at these interactions, the participant acknowledged the sacrifice and reflects on the impact it had on his life. Conscientious Innovator also examined the role of a mentor in his life:

"One of the things I did as an extracurricular activity was, I did robotics and electronics, microelectronics. […] He would get me to sign up into all sorts of competitions. […] he really pushed me, to not just do what I like, but to dream. I think a bit more than what

my own parents did, you know. […] And, I mean, I think, he's probably the one responsible for me, to, for me actually becoming an engineer. […] And he was the guy I phoned, when sitting in a hallway, having to make a decision on what I'm going to study. Because I had to reject the one and accept the other offer. But yeah, I think he just, he would, he would just push me to believe more in myself. And to dream bigger. You know, don't just settle for this, because that's what you think you're capable of, but try to push yourself a bit harder."

Conscientious Innovator describes his interactions with the robotics and electronics instructor which developed into a mentoring relationship, where his mentor firstly developed the love for this field but also pushed him to dream bigger. This mentor also encouraged him to push himself to higher levels, to believe in himself and that he was capable of achieving more than he thought. This narrative provides another brilliant example of an adult who not only inspired but also instilled self-belief and made a remarkable impact in the life of Conscientious Innovator. As a mentor, he spent time with the participant, did projects with him and went with him to competitions, etc. His mentor sacrificed time and effort to impart into the life of another human being, which is a noble and worthy cause. When Conscientious Innovator had two offers entering higher education, he requested the help of this same mentor in making a life changing decision. This shows the trust and respect he developed for his mentor. The account proved that mentors could have a remarkable effect on the life of young person by inspiring, motivating, encouraging and growing student engagement.

The summary for Family 4 follows.

7.4.5 Summary

Family 4, originally positioned in the Free State in South Africa, travelled to Zambia for 5-6 years during their early school years, which produced unique experiences and data. While in Africa, they stayed in a remote location without internet, phones, TV or easy access to educational resources. Their narratives have perspectives from before they travelled, during travelling and after returning to South Africa for high school and after that. This family described spending a lot of quality time together and having a tight knit family. Their parents, especially their father, was very intentional about developing their interests and passions, and would take them to see farmers, spending time at the local airport or doing art classes with them. He was very invested, involved and intentional about their development, exposing them to as many experiences as possible. Due to their remote location during the primary school phase, this family opted for a formal

curriculum that could provide the resources they needed. Although they used a formal curriculum, their circumstances, location and approach allowed for many similarities with a non-formal individualised approach. There were often times when they were waiting for resources to arrive, during which they would read and follow interest led development for 2-3 months per year. They were also traveling extensively which created many opportunities for experiential learning. During times of travelling, they would 'school on the road' and used every opportunity as a learning experience and would learn about people, places and anything interesting in their environment. These learning experiences included aspects of geography, science, mathematics and social studies. Significant insights from the narratives are listed below:

- Preparing meals and conversations around mealtimes was described as a special time of bonding. Their conversations were focused on not being judgmental, respecting each other and allowing everyone to have a different opinion.
- The participants were given a lot of freedom to pursue interests and spent time building, woodworking, experimenting and pursuing aviation and flying in the case of one of the participants.
- Their early exposure to a wide variety of topics and interesting experiences created a lifelong love of learning. They showed engaged behaviour through interest, curiosity and autonomy.
- While in Africa and not travelling, their mornings usually consisted of schoolwork, while the afternoons were spent playing soccer with local children or fishing, canoeing and other outdoor activities.
- Mathematics and language instruction was completed through their curriculum supplier and was done in a formal manner.
- After moving back to South Africa, both participants developed a strong interest in robotics and electronics, which influenced their careers ultimately. They were given a lot of freedom and time to pursue and develop this interest.
- Their approach also allowed for them to progress at a faster rate. Participant Pilot Braveheart progressed years ahead of his grade specifically in science, which improved engagement and created a love for learning. Their parents gave them a lot of freedom and autonomy in high school.
- The participants had full autonomy over their academic work by high school, doing their own scheduling, planning and taking responsibility to complete work.
- Their home education was individualised through various approaches of which the freedom to explore interests was just one. They also referred to not being

compared, being allowed to develop your own dreams and interests and being allowed to be different.

- They were allowed to develop at their own pace and their education was customised according to their personalities. Personality traits included being able to work alone, being hyper focused in singular areas, being a dreamer, being distracted and needing discipline and focus.
- During high school their approach became less formal, less structured and more independent.
- Participant Conscientious Innovator discussed being left in a Free State town before he completed school, when his parents moved to Gauteng. During this time, he worked, gave robotics and dance classes and lived independently.
- The participants completed their final Cambridge exams through a Cambridge school which they attended for their final 1-2 years.
- A strong sub-theme was presented on the topic of autonomy where the participants described being self-reliant, setting their own goals, being given the freedom to develop the skills necessary for full autonomy.
- Their mother discussed intentionally developing autonomy from a young age forcing them to make appointments, have interviews with adults and do as many things on their own as possible. She explained this as a technique to develop problem solving skills.
- Both participants agreed that working autonomously already in high school was simply extended at higher education and that they were already used to working this way. They felt that this type of home education environment better prepared them for higher education.
- Age integrated socialisation and being forced to engage with adults from a young age developed their communication and engagement skills. Both participants discussed easily communicating with peers and academic staff.
- Character development identified aspects of altruism, integrity and honesty, discipline and responsibility. Hard work, perseverance and not giving up was a strong value that was communicated and enforced in their home education environment.
- Various references were provided to how their parents believed in them and imparted that believe to them developing self-efficacy. Their father contributed to the development of identity and self-efficacy to a large extent. Self-efficacy was related to GRIT and the ability to push through difficulties.

- Participants acknowledged their parents' encouragement, efforts, hard work and doing anything to help them develop and succeed. Comments from participants recalled that they mattered to their parents and that their parents always wanted to do what was best for them.
- The data also provided a correlation between mentors and the development of self-efficacy and furthermore showed that mentors noticeably influenced the lives of the participants.

7.5 Family 5

Family 5 includes the narrative accounts of Accountable Engineer and mother Privileged.

PARTICIPANTS

Accountable Engineer

Participant 5, with pseudonym Accountable Engineer, loved learning about trains and space and taught himself to read. He was naturally math inclined and self-directed in his learning from an early age. He took responsibility for his education and loved learning and discovering. He studied Industrial Engineering at the University of Pretoria and was pursuing a master's degree in engineering.

> *"So, I was allowed to take responsibility for certain things, which not everybody can do that necessarily. I realise, not everybody has the capacity or wants to take responsibility for things early in their life. But because I was allowed to, because I showed those character traits and was able to do that, I was allowed to do that. So, I think that does definitely take into account my personality for that."*

Privileged – Mother of Accountable Engineer

The mother of Accountable Engineer was given the pseudonym Privileged. She home educated her two children utilising an individualised approach. She provided a lot of freedom for them to play, explore, develop and grow. Her reflections on their home education journey revealed feeling privileged to have been able to do so.

> *"It was such a privilege to do, to do, to have the, have the opportunity to do that. I see it as such a privilege and I never dreamed originally, when I went home to be with the kids, I never realised it would turn out to be like that."*

THEMATIC ANALYSIS

The following themes and sub-themes emerged from the thematic analysis of the narrative accounts of Family 5; Accountable Engineer and mother Privileged.

7.5.1 Milieu

7.5.1.1 Warm, Calm, Relational and Safe

The narrative accounts of Family 5 indicate a warm, calm, and emotionally safe environment. For example, describing their milieu, participant Accountable Engineer depicted a safe and calm setting during their primary school years:

"[…] safe and calm would be […] the words I would use to describe primary school."

From the data, it is evident that his account of primary school years as safe and calm was possible because they followed a non-formal individualised home education approach. Similarly, in another part of the interview he discussed later years in home education as peaceful with a lot of freedom:

"But it was, it was peaceful. […] But yeah, so peaceful and freedom,"

Mother Privileged described their home education milieu as "warm" and "fuzzy" and highlighted having a wonderful relationship with her children, even into their young adult years:

"And the emotion I would say is, warm, fuzzy, we have a relationship with our children that I will not exchange it for anything. We, we can sit around a table and we can talk about things. We, we can have heart to heart conversations."

Utilising the words "warm" and "fuzzy" indicates a feeling of tenderness and love. Similar to previous discussions of other families, mother Privileged also referred to developing healthy and loving relationships with their adult children.

The notion of meaningful relationships included an emotionally close relationship between siblings. Accountable Engineer expressed developing a tight bond with his sister during early childhood:

"So, I had my younger sister, who I would describe as one of, she was my, my best friend in regard of the person I saw the most. So, with regards to that, she would have been my best friend. So, we had a lot of fun together, we were doing interesting things

[…] I'm very close with my sister, because of that, as well. We have a good relationship."

Also, Accountable Engineer refers specifically to his mother being present, looking after him and having a close relationship with her:

"My mom was very present in my life. So, obviously seeing her every day, she was the person that taught me, that fed me, looked after me when I was sick. So, I was very close with her."

His description of his relationship with his father contrasts with previous presentations as this relationship was more reverence and admiration. His father was not very present during his early education years, working long hours and not being involved with home education specifically. The description of the relationship with his father is not necessarily straining but a notion of distance is raised.

"My dad always felt like he had, quite a high expectation of me. But that's also the type of person that he is. […] I would not see him a lot though. Like he was working really hard. It's only when I got older, and he started working like with his own company, that I saw him more. He was more at home from then, and he always did like, very, very cool things. He did electronic engineering for a job, and he eventually moved to like IT. So, I always looked up to him, looked up at him. The stuff that he would do, I'd find super interesting. And in some ways, try and mimic it."

The milieu was depicted by Accountable Engineer as safe and calm during early education years. He furthermore used the words peaceful and freedom for the later time period. It can be inferred from the data that mother Privileged is a calm person who wasn't stressed, talked calmly and was patient and kind, which caused their home education environment to be peaceful. Accountable Engineer described a close relationship with his sister and mother, the relationship with his father during early years was one of admiration. Mother Privileged described their adult relationships as warm and fuzzy with heart-to-heart conversations.

A few excerpts hint towards the sub-theme of belonging and vulnerability. Participant Accountable Engineer, as discussed earlier, expressed having a safe and peaceful home education milieu. His narrative also commented on not having to compete for acceptance and not being compared to anyone else:

"Again, the hint earlier was obviously like I didn't feel like I was competing […] I didn't feel like, I had to compete with, with anybody for that. […] I did get a lot, a lot of attention."

And also:

“I was not compared to anybody else.”

He conversed about his mother being present and always having access to her as well as getting a lot of attention. He revealed not being compared or having to compete for attention. These comments suggest a safe environment associated with belonging. He did however later discuss being cautious to give and share his opinion:

“So, I'm still sometimes now careful to express my opinion of something or my thoughts about something for the fear that someone might be like, but that's not really valid or they don't agree with that or something like that. So, I do still feel that but it's something that I've been, I've become aware of and obviously I'm trying to change or become more comfortable in […] I do think it's more the validation of it being like, okay, cool. That is, that is also an opinion, rather than just, this is my opinion, and you have to go with that.”

The above excerpt from Accountable Engineer suggests some aversion of vulnerability which was not encountered in any of the other narratives. In section 7.3.1.1 participants of Family 5 discussed their discussions and interactions as judgement free. Accountable Engineer’s description above suggests that their family environment probably was not a judgement free setting and therefore the participant was more hesitant to engage for fear of not being validated. These sections provide a valuable insight into providing a milieu that encourages vulnerability, participation, self-confidence and engagement. The participant however still expressed his environment as loving, safe and calm combined with a lot of attention.

The presence of freedom was discussed in the next section which explored the milieu of active, freedom and experiments.

7.5.1.2 Active, Freedom and Experiments

Various references to having an active and busy, hands-on milieu were provided. Mother Privileged offered a reference to experiments, baking and having fun:

“As far as I'm concerned, we played in the kitchen, we did all sorts of experiments. And cleanup is part of play. So that was also fun. Because some things you have to clean up in one way and some things in another way. Some things you can put in the oven and bake it. So yeah, I think, yeah, we brought fun into schooling. And, yeah, I can, I can see the results of that.”

Another example of active learning was provided by mother Privileged discussing interesting ways of introducing mathematics:

> *"But what I did with, with [Accountable Engineer] is very much, yeah, I played games, we played games outside. We played cricket outside and, and, and he would have to count, keep count of his score himself. And if, but we had different rules, if he made a mistake, he must subtract some, some points."*

In describing their milieu, mother Privileged recalled a specific event during their early education:

> *"I can remember the first time I made, I made clay, playing dough. And it was still warm, and very soft, and it was green. And I just put out some things that I bought, like cutters and rollers and like, like syringes that I could stuff into and squeeze, and the two of them sat in the garden under the tree. And they were crying with laughter, having such fun. I remember that, that, and I looked at it, and I thought to myself, if I was now, at an office working, I would have missed this. That was a, that was the very first thought I had, or the furthest back, I can remember."*

Her depiction of playing with fresh green dough, under the trees, using cutters and rollers and all sorts of equipment and the joy and fun and laughter her children expressed in that moment. Mother Privileged's narrative account creates a beautiful picture of happy children. From the data it is evident that home education allowed for an emotionally safe and playful education. This description in her narrative reveals her emotion of how privileged she was to be able to experience these moments with her children. A final reference included in this section refers to allowing her children freedom in how they expressed their learning experiences:

> *"[…] you will do a lot of hands-on stuff. I love making 'lap' books, my children, not really, so they, I allowed them to create their own artwork and, and just ways of, of capturing what they learned in a bit more concrete way."*

The extract shows that early learning experiences did not only allow for one outcome, but there was creativity and spontaneity in how they could express their learning, which was usually done in a concrete way. That means that they could build items, create or use art to create items related to what they have learned. This again points towards the individualised nature of their home education environment. Section 7.5.1.3 expands on their outside milieu.

7.5.1.3 Outside

Outside learning was referenced several times during the narratives of Family 5. Participant Accountable Engineer referenced playing with his sister outside

> *"[…] if we went and played outside, it was just me and her."*

He expanded on outside playing referring to imaginative play and storytelling:

> *"And we'd also, we had very good imaginations. So, it was a period of my life where I would, all I would do, is literally just walk outside, imagining I was like fighting armies, like it's a book that I read, and I was the hero and I was imagining myself in those scenes and scenarios. So, we could play a lot with physical things like, with mud or with Lego, and create these stories that that we had characters and that we lived. We were playing, playing like that."*

His mother confirmed spending a lot of time playing outside during the early learning phase:

> *"We played games outside. We played cricket outside […]"*

Outside play was also used as an incentive for completing schoolwork during primary school years as referred to by Accountable Engineer:

> *"And I remember, it wasn't really homework, but more like, just exercise sheets that I actually had to work through before I could go outside and play again."*

The above references did not portray family reading or learning activities outside. However, what is unique about the narrative accounts of Family 5 is that outside play referred to free play and imaginative play.

The community surrounding Family 5's home education milieu will be focused on in the next section.

7.5.1.4 Community

Socialising and meeting up with the home education community was referenced by both the participant and his mother. Accountable Engineer referred to meeting up with fellow home education families once a month and playing games:

> *"And then outside my home, I had friends at the growth group. […] And we would always play stuff like 'brandbal', or like a spy, which is kind of like, hide and seek. And it was really fun. I always felt like there weren't a lot of kids that were much older than*

me, they were quite a few kids that were younger than me. […] So, I never felt like I had to compete with someone above me, because for most of it, I was one of the older kids and also faster and better with everything. So yeah, I still have one or two people that I know from that, that are still my friends today. We've been friends for more than 16 years, which is really something unique."

His account of their monthly social events recall playing games and having fun. He describes this community as mostly children younger than him, so he dominated activities being stronger and faster than everyone else. The passage also announces still having friends from this home education social group more than 16 years later, which is rather exceptional. Accountable Engineer discussed his social group and regular interactions:

"And I had friends that came over and obviously once a month we went to, like, the growth group. So, I never felt lonely, necessarily. I still had quite a good amount of interaction."

Likewise, mother Privileged discuss the importance of having a community and reflected on friendships that was still present:

"So, my memory of, of, of my homeschool journey is definitely one of gratitude. And of, you cannot do it alone, you need, you need the village, and, and we were a group of friends together, back then, that walked the path. So, gratitude towards them as well. Friendships that some of them will last forever."

Like Family [1,2 and 3], the quotes above confirm that being part of a home education community and having regular interactions is an important aspect of learning and development in a home education setting. Both mother Privileged and Accountable Engineer confirmed still having friends from these interactions many years ago. Mother Privileged furthermore stated that being part of a community is a necessity and one cannot do it alone.

The individualised learning experiences for Family 5 were discussed next in section 7.5.2.

7.5.2 Learning

From the narrative accounts of Family 5, the theme *learning* included the following subthemes: interest and curiosity, love for learning, mathematics and languages, topical or unit studies, experiential learning, reading, individualised, outings and non-formal

home education. Although largely similar to the narrative accounts of the first four families, the data of Family 5 provides some nuanced insights not available in the narratives of the previous families.

7.5.2.1 Interest and Curiosity

Like the other families, Family 5 also utilised interest driven education to establish learner engagement. Mother Privileged discussed utilising unit studies based on interest:

> *"Somebody showed me the Konos idea of unit studies. And I looked at it and I thought, well, this isn't exactly rocket science, with what I can get in the library, and on the internet, we can do our own studies. And that's what we did, uhm, I really worked with interest, interest driven."*

She explained that choosing unit studies was often decided by asking the children what they wanted to learn:

> *"Yeah. So, I think that the way we, we approached schooling to ask them. What would you like to do? "*

Participant Accountable Engineer expanded on learning about interests:

> *"So, a lot of the books, so coming back to maybe the science thing, we didn't do a strict science curriculum. So, a lot of the stuff that we touched on, whether it be history of something specific, like cars, or trains or space, there was a period that I was really interested in space travel, and everything that went along with that. We also had a time when we did trains, so, steam trains, I found very interesting. And what my mom would do is, she would during that, the time, I showed interests, she would go and research and find articles and pictures and some interesting facts about it. And what we would do then, is we would take that information, she would read through it, if it was something that, that I didn't read myself. And we would build like a scrapbook about it, or I would draw pictures with that, or cut out things and create like a collage or something. But the idea was to create something that you could look back and be like, okay, this is what I've learned from it, rather than writing up an essay about it. […] I enjoyed the, the learning of, so listening to and then the creating."*

Accountable Engineer discussed how early learning about his interest in trains and space allowed him to enjoy learning. In his narrative account he expands on how interest-based learning was executed. After choosing a topic, his mother would do research on the topic and find material and resources which was then used to create a collage or scrapbook

or other items that depicts evidence of learning. He expressed disliking writing essays and therefore they looked for alternative ways of reporting learning.

> *"Being able to learn about the things, about things, like for example, steam trains or space, once I had that interest, rather than being forced to learn something that I had no interest about. […] Those were the, like the key things that directed what I learned, when rather than once again, following a structured plan that dictates whether or not I'm doing well or not."*

From the data it is evident that being able to learn about topics he was interested in resulted in more enjoyable experiences. His excerpt above confirms how learning was measured by interest and engagement rather than a specific plan or grades achieved. Another reference by Accountable Engineer confirmed learning about topics that he was interested in at the specific time when the interest developed, rather than at a pre- or post-scheduled time. If a family follows a curriculum, topics would be structured according to the schedule and not according to the interest of the child. Having an individualised approach allows for the flexibility to learn about topics when the child expresses the interest, as recalled by Accountable Engineer:

> *"Also, I was able to learn about things once I showed interest in them, rather than having to pre learn about them"*

This aspect of individualised home education was also discussed in the narratives of Family 1, referring to the importance of flexibility when prioritising interest-based home education. What is important from the data is that if a home educating mother wants to pursue interest-based home education she will need to be adaptable and flexible and attentive, listening to her children and responding to their individual interests. This flexibility and responsiveness become an important part of preparing learners for higher education through an individualised approach to home education.

The next section considered how a love for learning developed because interest and engagement were key features in learning.

7.5.2.2 Love for Learning

Elaborating on the topic of a love for learning, participants Accountable Engineer and mother Privileged provided various quotes to extract more information on this sub-theme. Accountable Engineer revealed enjoying learning but more specifically listening to information on the topics he was interested in and then creatively expressing something on that topic:

"I enjoyed the, the learning of, so listening to and then the creating."

These words from Accountable Engineer open new nuances concerning the love of learning, unavailable in the narrative accounts of previous families. Accountable Engineer connects learning with attentive listening and creativity. The parallels drawn between learning, listening, and creativity opens a deeper understanding how learners in an individualise home education environment could learn.

Furthermore, Accountable Engineer's mother underlined participating in fun activities during early education:

"So yeah, I think, yeah, we brought fun into schooling."

A revelation from Accountable Engineer examined how he did not like language and especially creative writing during his primary school years:

"But the creative pieces that I had to write, wasn't something that I found easy or enjoyed necessarily at the start."

Another reference to unit studies explained how they could creatively express and respond to learning instead of writing an essay, after he again confirms he did not enjoy writing at that time:

"And we would build like a scrapbook about it, or I would draw pictures with that, or cut out things and create like a collage or something. But the idea was to create something that you could look back and be like, okay, this is what I've learned from it, rather than writing up an essay about it. So, because the writing part, I didn't enjoy that much"

Interestingly, Accountable Engineer discovered that he (at that age) preferred learning the English language by reading rather than grammatical work:

"In that way, I'd rather learn by reading than, than dissecting it and learning the components of the language."

What is significant about these words from Accountable Engineer is that it provides a deeper insight on how an individualised approach to home education could enable learners to discover their learner preferences for specific subject areas.

Accountable Engineer furthers the narrative, disclosing how his mother delayed English language and creative writing for some time and created alternative evidence of learning ideas. He confirms that because they delayed this part, which he did not enjoy, he had

time to mature and developed a love for reading. After that, his attitude changed regarding English and creative writing:

> *"So that's why it was kind of pushed out until a bit later, until I actually started reading a lot more and started enjoying that a lot more."*

What is insightful is that Accountable Engineer disclosed in his narrative that by delaying formal English and creative writing, he later matured and started to enjoy these activities. The references above emphasise a very important key to developing a love for learning. Every child learns in a unique and individualised way, and by accommodating these differences they are able to develop a love for learning naturally. From the data it can be inferred that if his mother forced him to complete activities he did not enjoy, it would undermine the theory of developing a love for learning. His mother revealed that he started taking ownership of his schoolwork by age 12 and that he loved the independence and doing research and figuring things out on his own:

> *"So, I think I mentioned […] he was 12 years old when I, when I discovered that he's actually doing his schoolwork by himself. Yeah. And I almost became an overseer rather than the teacher. But he loved It, he actually, he loved doing the research and I left him to do it the way he wanted to do it."*

The excerpt discloses that Accountable Engineer started independent work by the age of 12, which he loved. His mother reveals a particular love for doing research and doing things his own way. Notably, his mother provided an environment of freedom and allowed him the independence "to do things the way he wanted to".

A reference by Accountable Engineer referenced his first formal science curriculum and describes interest and engagement in the content:

> *"I did the General Science one, that was the first time I did Science strictly. So not as by interest with research, it was a curriculum that I followed. And that was really, very well done. So, it was written from a Christian perspective […] Like he went into detail about a lot of concepts, not just explaining, not just explaining what something is, but where it came from, as well. […] So, that was excellent. Like, I don't think I've found content like that ever before. Or afterwards, to be honest. So that helped me a lot. Getting a good foundation, understanding the whole picture rather than just like concepts and trying to link them all together."*

The participant highly rated the Science curriculum he followed, rating it as 'excellent'. His description indicate interest, enjoying the broad foundation and level of detail it provided. His quote suggests that the exposure to this resource was good preparation

for later studies in science. It draws the attention again to good resources being able to catch the attention of the learner being able to ignite engagement and a love for learning.

The next section reviews the mathematics and language instruction utilised by Family 5.

7.5.2.3 Mathematics and Languages

Similar to other families, early learning consisted of Afrikaans language (spelling, reading and writing) as well as basic Mathematics for Family 5. Mathematics as discussed in the following quote from Accountable Engineer:

> *"So, I remember I was taught how to spell, so I think Afrikaans is the first language that I learned and then math as well. So basic addition, or numbers, counting."*

The narratives confirmed initially starting with home language, Afrikaans, which was not completed using a curriculum *as disclosed by Accountable Engineer:*

> *"[…] but the Afrikaans wasn't a structured curriculum. It was more like workbooks, from maybe, that they would use in school, but it wasn't a strict curriculum."*

Early Afrikaans language instruction consisted of basic spelling, writing and reading as referenced by Accountable Engineer:

> *"[…] and then Afrikaans was focused a lot on writing out words and phrases. And then, they were very basic, like sentences that I started reading at that time, like little books, that just had a basic, yeah, one- or two-line sentences."*

Apart from the educational activities on Afrikaans, Family 5 also focused on Mathematics instruction. Mother Privileged revealed how they started with a formal Mathematics curriculum, but she saw that her son was not engaged or interested, and she decided to delay formal mathematics:

> *"Okay, so we decided to do a math program, because that is structural things, building blocks. I know that you have to do math the right way. So, I invested in Math U See, the American program. And so, we started doing Math U See, with the little blocks and everything. And I could see [Accountable Engineer] is not into it, I could see he was not interested at all. So, by page three, I guess, I asked him. Do you want to carry on with this? Or shall we wait a while? And he looked at me and said, he said: may we wait a while?"*

The excerpt supports delaying early formal mathematics as discussed by mother Privileged and how she replaced it with games and fun activities that would keep him engaged while still learning:

> *"And then I invested in games, different sizes dice, and we would play games. And by that stage, he could count. Whenever we were in the car, we would count. I would ask them to count how many people they see next to the road, or how many white cars they see and we were always playing games in the car. […] by the time we started with, with Math U See, he could count and he could do very basic things. But he wasn't, he wasn't right for formal math. So, we played games. The Condominium games, snakes and ladders, whatever, every day we play a game of some sort. […] We played cricket outside and, and, and he would have to count, keep count of his score himself. And if, but we had different rules, if he made a mistake, he must subtract some, some points."*

After delaying their formal mathematics curriculum for a year, mother Privileged reintroduced it with her son, Accountable Engineer, who by this time matured, developed and thrived. The section is quoted from mother Privileged:

> *"But I have to tell you,[…] in the beginning, when we played all those games, we played games for a year, for a full year, almost to the day. Because I looked at the last date, he wrote in his Math U See workbook. And almost a year later, we opened that book again, and I said to him: [Accountable Engineer], do you think we can work in the book now? Are you ready to try, and he said to me, yes, he was wondering when we were going to start working. And from then on, he just flew in math. It was like eating ice cream. It just came so naturally, for him. And again, he did very well with his Cambridge math. He got very high marks, and, and he, he excelled in math at university as well."*

Above, a crucial aspect of individualised home education was uncovered. Because mother Privileged was focused on engagement and interest, she recognised when her son did not initially engage with the mathematics content. She decided to delay formal mathematics instruction and replaced it with fun activities and games that could initiate engagement with basic mathematical concepts such as numbers, counting, addition and subtraction. After waiting a year, she reintroduced the formal curriculum, and by this time Accountable Engineer was ready and flourished not only in his initial mathematics but throughout school, final examinations and higher education. It provides an excellent example of individualised home education that provided the freedom and flexibility to focus on student engagement.

The next section describes the use of topics or unit studies in their individualised home education.

7.5.2.4 Topic or Unit Studies

Like some of the other families who participated in this research study, Family 5 also applied topical/unit studies. For example, mother Privileged confirmed utilising unit studies during their non-formal individualised home education:

> *"Um, well, we did, we did the unit studies. We would bring across a character trait. And we would practice it, and I would remind them of that as well. So, I think the, the, the way I did it with the Konos unit studies idea, or model, if I can call it that way."*

Her quote confirms using a model like Family 1 where the unit study was combined with a character trait that they incorporated. Her narrative provides an example of how unit studies was incorporated and what it achieved:

> *"We really tried the unit, unit study thing. We did a project on horses and we did a project on honeybees. My father used to be an agricultural farmer, so cotton, cotton wool, we did a project on that, on, on mealies, on, you know all the agricultural stuff. So, yeah, we, I think, I gave him a very good general knowledge through the unit studies."*

When using the non-formal, individualised home education model, parents can follow various approaches. This family utilised unit studies in addition to their math and first language instruction, with the notion that unit studies combine other subjects creating a context rich integrated approach. This contrasts with completing subjects detached from each other. Mother Privileged in the extract above affirms that the unit study approach provided a good understanding of various subject fields and created an expansive general knowledge. Another reference to unit studies by mother Privileged discuss choosing topics and how it was implemented:

> *"I think right from the beginning, we, we decided, whenever we did a schooling topic, like for instance, with the horses I asked them: So, it's time to decide on a new topic, what we should learn about? So, let's do an animal this time. What animal would you like to learn about? And horses came up, because they were both totally fascinated and taken with horses. They did horse riding, we watched horse movies. We found a book on a British stable choice horse, that won the national championships four times in a row, or something like that. […] And I really tried to look for, for factual books."*

The extract confirms flexibility in choosing unit study topics and that the children contributed and showed interest. The piece expands on how a unit study was approached and the type of learning activities it included such as reading, visiting places, watching movies and finding very good resources that once again could ignite engagement. The unit study approach was usually followed until more formal subject content was introduced at a later stage and therefore was utilised mostly throughout primary school. References to experiential learning was presented next in section 7.5.2.5.

7.5.2.5 Experiential Learning

Experiential learning formed a part of the learning approach of Family 5. Examples of experiential learning was first discussed by mother Privileged:

> *"We did the […] fish of the sea and plants, and we would do road, field trips and go look at life and walk in the veld and look for the plants and different leaf shapes, all sorts of things."*

She discussed an interest her children had in nature, animals and plants and where possible they would extend their learning to the outdoors to see it in real life. She revealed earlier playing cricket with her son outdoors to do addition and subtraction sums:

> *"We played cricket outside and, and, and he would have to count, keep count of his score himself. And if, but we had different rules, if he made a mistake, he must subtract some, some points."*

The previous example supplied by mother Privileged, deliberated how Accountable Engineer enjoyed doing experiments with flames or pressure, which also reveals how they pursued experiential learning opportunities:

> *"[…] but with Accountable Engineer, we'll do an experiment where there's a flame involved, or where there is air involved or pressure."*

Mother Privileged discussed going on outings and field trips which created opportunities for experiential learning, for example the Pioneer Museum in Pretoria:

> *"We went to Smuts house and we went to Pioneer Museum in Silverton, to find out, that's how people lived. They had to make a fire, they had to grind their mealies."*

Growing older, Accountable Engineer described experimenting with old computers:

"When eventually, I got the opportunity to play with like, the old computer boards, I'd set up the old computers and I'd install and I'd break them and I'd re-install them"

Various examples were provided confirming that experiential learning occurred. Mother Privileged use the following description in her narrative:

"[…] we did all sorts of experiments. […] And, yeah, I can, I can see the results of that."

Her narrative does not explain what she means by the words "I can see the results of that" but it is inferred that she referred to a positive outcome because they did many experiments and experiential learning activities. Reading as a sub-theme was explored in section 7.5.2.6.

7.5.2.6 Reading

Family reading and learner reading provided various references from the participants. Mother Privileged discussed family reading in the early education phase:

"I read them a book. Because you know, reading is actually the foundation of homeschooling. Mommy reads to the children books that they cannot read themselves."

Accountable Engineer discussed starting schoolwork around the age of 6. Early education consisted of Afrikaans reading, writing and spelling, and mathematics through games and fun activities as discussed in section 7.5.2.3. Early reading was referenced by the participant:

"And we started doing schoolwork at the age of six…And then, they were very basic, like sentences that I started reading at that time, like little books, that just had a basic, yeah, one- or two-line sentences."

The participant further discussed his mother reading information related to their unit studies and how they would process the research into a creative informational item:

"And what my mom would do is, she would during that, the time, I showed interests, she would go and research and find articles and pictures and some interesting facts about it. And what we would do then, is we would take that information, she would read through it, if it was something that, that I didn't read myself. And we would build like a scrapbook about it, or I would draw pictures with that, or cut out things and create like a collage or something. But the idea was to create something."

Accountable Engineer provided an interesting description of how he began reading by himself:

> *"So, I started reading by myself. I remember the book specifically. It was "Ruiter in die nag". It was an Afrikaans book, and what would usually happen is, my mom would read for my sister and me. And so, in the afternoons, we would read a chapter or two. And the story got so interesting. My mom couldn't read it fast enough, that I decided I'm going to try and read it myself. Yeah. So, I picked up the book, and I read ahead. I found it, I think, I've surprised myself. It was more, it was easier than what I thought it would be, like I had this block that it would be difficult to read. But the story was interesting enough, and I could read it."*

Accountable Engineer describes how his mother read 1-2 chapters from a book for them and at some point, he was so intrigued about how the book proceeds that he decided to read it by himself. And that was how he started reading, much to his astonishment. After that event he become an avid reader as discussed next:

> *"After that, I read quite a few English books as well. The one series I remember, was Rodwell. It's a book series for children, or teenagers written by Brian Jacques, which was excellent, like it had, the books were always three books written from different points of view. It had rhymes in it that were like deciphered as the story went along. And it had like singing parts in it as well. So, it is very good, actually, disguised to be very good literature in my opinion."*

The above excerpt from Accountable Engineer shows a love for reading and being intrigued by the books, especially the coded parts of a specific series that needed to be deciphered. The description proves engagement in content and learning. A love for good literature was quoted. He describes reading quite extensively between the ages of 9 and 12:

> *"The section of my life, I think from ages 8 to 12 or from 9 to 12. So just before high school, I think that would have been quick and really felt like I spent a lot of time doing, so during that phase, reading and playing computer games. So, time flew. […] I was also only allowed to play games over weekends."*

Reading included factual and fiction books and resource material which mother Privileged read during the early education years. The participant, Accountable Engineer, described starting to read by himself after he was so intrigued by a story his mother was reading and could not wait to hear the rest of the story, so he picked up the book and started to read. He was astonished that it was easier than he thought it would be. After

that his narrative confirms that he developed a love for reading and was an avid reader, especially during primary school. This unique revelation of starting to read provides another example of heutagogy and the natural inquisitiveness of children which promotes learning in the individualised home education context. Next the sub-theme of individualised home education was considered.

7.5.2.7 Individualised

Like the other families who participated in the study, Family 5 upheld an individualised approach to home education. Mother Privileged discussed how her two children differed in their learning preferences. Her daughter loved things with colour and beauty, while Accountable Engineer liked scientific experiments that was full of activity and adventure:

> *"Well, the children are very different. Although there are certain things that we could do together, they were at different levels. Yes, and I could, I could see that, for instance, [daughter] would use colours. […] When [Accountable Engineer] does an experiment, it is like black and white. […] Daughter did this experiment where you put on a plate of milk, you put drops of food colouring. Then the colours just do their own thing, but with [Accountable Engineer], we'll do an experiment where there's a flame involved, or where there is air involved or pressure, and so, you understand what I'm saying, why they were very, very different in their outlook in life, and, and that came through in the schooling as well. And I couldn't, I couldn't use the same technique on both of them. Either one would have folded."*

Her quote reveals how individualised home education was expressed in their home education environment. One child was interested in colour and beauty and the other was interested in scientific things with flames or smoke. As a mother, she noticed and understood that they were unique and accommodating their individualised learning styles would help them succeed. She confirms at the end that if she had used the same technique of learning "either one would have folded". Later, in their evidence of learning, her daughter would usually like to draw or depict things where Accountable Engineer would write about it. Again, an illustration of unique approaches as indicated by mother Privileged:

> *"On school level, that, that came through, because she was the one that would draw a picture and and tell me a story about it. And [name of the son] would write out the story and ask me to read it. So yeah, it was just, yeah, that's the differences."*

Mother Privileged described the importance of freedom to create an individualised home education environment that accommodated strengths and preferences:

> *"And I think that again, is, is the whole thing about homeschooling, it's not a sausage machine. You can do, you can do what you're good at, you've got the freedom to actually excel in what you're good at. You don't have to do what your brother used to do, because that's the way it's done."*

The extracts confirm that every child learns in a unique and individualised way, and by accommodating these learning preferences they develop a love for learning naturally. This individualised approach includes completing activities when they are ready, giving choices with regards to the topics they choose to learn about, learning at their own pace, being able to learn in their organic and preferred style and having autonomy over their learning.

The next sub-theme investigates the theme of outings.

7.5.2.8 Outings

Similar to other families that participated in this research study, Family 5 prioritised outings as part of their learning experience.

Mother Privileged gave the following two references to outings or field trips:

> *"We did the […] fish of the sea and plants, and we would do road, field trips and go look at life."*

Another extract referred to visiting museums and seeing things in "real life":

> *"Yeah, when we went to Smuts house and we went to the Pioneer Museum in Silverton, to find out, that's how people lived. They had to make a fire, they had to grind their mealies. So real life has always been the reality for them"*

In comparison with the narrative accounts of other families, relatively few references to outings were presented in the narratives of Family 5. Nevertheless, the sub-theme did emerge in the data and serves as a confirmation of the presence and importance of outings, as discussed earlier in the narrative accounts of other families.

Non-formal home education, as a sub-theme, was discussed next in section 7.5.2.9.

7.5.2.9 Non-Formal Home Education

As presented in the narratives of previous families, the narratives of Family 5 also presented data on the theme of play, i.e. a non-formal approach to early phase home education. Accountable engineer (as discussed previously) recalled playing with his sister during early education:

> *"During that time, if we went and played outside, it was just me and her."*

Another reference by Accountable Engineer referred to imaginative play, playing with mud and Legos:

> *"So, it was a period of my life where I would, all I would do, is literally just walk outside, imagining I was like fighting armies, like it's a book that I read, and I was the hero and I was imagining myself in those scenes and scenarios. So, we could play a lot with physical things like, with mud or with Lego, and create these stories that that we had characters and that we lived. We were playing, playing like that"*

The above references confirm that early learning consisted very much of outside play, imaginative play and playing with physical things and Lego.

Their mother started with non-formal educational activities at the age of 6:

> *"And we started doing schoolwork at the age of six. So, during that time, in the mornings, I had like, little lessons that my mom taught me that I had to do. […] just exercise sheets that I actually had to work through before I could go outside and play again. So, it felt a bit more like there was more routine, if I can say it like that."*

Their mother started establishing a routine of schoolwork during the mornings when Accountable Engineer was 6 years old. Mother Privileged confirmed that they did not follow a full curriculum up until high school:

> *"I never really invested in a formal curriculum."*

The narrative of mother Privileged confirmed following a non-formal approach with a lot of experiments and play up until the age of 15.

> *"Non formal. Uhm well, I'm never followed up to, up to about 15, age 15, I never follow a strict curriculum. I really, I really looked at what the children needed. Some Math was a curriculum. Yes, I had to follow that, because I understand building blocks. But the rest is definitely just general knowledge. Before then, it is a lot of play. As far as I'm concerned, we played in the kitchen, we did all sorts of experiments. So yeah, I think, yeah, we brought fun into schooling."*

Like the narratives presented by Families 1, 2 and 3, they also followed a non-formal individualised approach which consisted of mathematics, first language and interest-based unit studies up until the age of 15 (section 7.5.2.3). English and Science was introduced towards the end of primary school.

Section 7.5.2.3 discussed how his mother delayed formal mathematics until he was older, ready and more mature. A short piece of mother Privileged's narrative is repeated for clarity:

> *"By the time we started with, with Math U See, he could count and he could do very basic things. But he wasn't, he wasn't right for formal math. So, we played games. […] we played games for a year, […] And almost a year later, we opened that book again, […] And from then on, he just flew in math."*

The reference confirms that their non-formal home education approach was flexible and adapted to accommodate the learner to ensure engagement. Because he did not show engagement with the mathematics books and content, his mother replaced it with games and reintroduced the formal mathematics curriculum a year later. At which point he was ready and as his mother described: '*he just flew in math'*. Adjusting the pace of a subject to accommodate engagement and love of learning was also discussed by mother Privileged in section 7.5.2.3, when Accountable Engineer did not show interest and joy in English creative writing at first. Once again, this aspect of his development was replaced with alternatives and delayed until later, at which point he noted it became more enjoyable. Being focused on engagement and love of learning would in some cases require flexibility in subjects, content and pace but in both instances above, produced desirable results.

His mother further confirmed that he was very proficient in mathematics. See the referenced quote by mother Privileged about how he pursued mathematics, learning independently:

> *"And the day that he moved his math books to his bedroom, at eight o'clock in the morning, I walked in there and I said to him, and now what's happening here? He said, No, I'm busy with math and I said to him, Oh, on your own? He said, well, I've got a math teacher, he's very good. I listen to the video, and uhm, yeah, I'll ask you if I don't understand. And then I realised, okay, I've got a mathematician in the house.*

The above excerpt discussed how Accountable Engineer loved working independently and towards the end of Primary school, started to do mathematics by himself. Accountable Engineer commented on the flexibility in pace and autonomy:

"The fact that I could kind of, not necessarily control, but direct what I learned and when. So, if I could catch up, like certain math modules or certain math chapters faster, I would do them faster. And then I would get praised for that, obviously, but then move on to the, to the more advanced stuff quicker. So it wasn't, if I took a bit longer for a section it was fine"

The above piece confirms both the independence and the flexibility in pace that was available in their non-formal individualised home education environment. Changing the approach to a more formal system at age 15/16 was discussed by mother Privileged with the notion that this is the point that the learner starts looking at career choices and what is needed to get to that place. She discussed changing to the Cambridge curriculum at age 16:

"He was 16, roughly round about. He might have been 15 when we investigated, when we started looking into Cambridge. He was doing, Apologia, finishing off Apology at that stage […]. And we realised, that it's probably a good time to start working towards IGCSE"

Another part of their non-formal home education environment, like the other families, was the autonomy to work how and when he wanted to. This aspect was discussed by participant Accountable Engineer:

"At home, it didn't feel rushed. I was, kind of, obviously, I needed to get the work I needed to do in a day, done in a day. But it didn't feel like I had all these deadlines that I needed to get done. […] the freedom, like I could do, I had a segment of work I needed to do in a day. And I could decide when I wanted to do it. So, I could do it in the early morning hours or in the afternoons, depending on what worked best."

The above segment by Accountable engineer describe freedom to do the work when and how it suited him but additionally he referred to the lack of stress and deadlines, describing his environment as peaceful.

Another interesting aspect of non-formal home education was described by Accountable Engineer:

"I think with the informal part of my education […] the timing of when I learned what, is not in a structured way. So, I got at the end, and I wrote a matric. And I passed with the subjects I required to go study at Varsity. But when I started and when I ended, that was not a prescribed journey that I followed. There were just certain things that I know that I had to get done. […] I always had this idea that I need to progress, but it was never a situation of I'm failing if I don't. I never got that idea […] So maybe that

could be the way I describe my education as informal, being that it is a lot more flexible as to how I developed, rather than it being a path that I was measured against a structured plan the whole time."

He discussed how he reached the end goal of having a matric and being able to go to university but the journey that he followed to get to that point was not structured or determined. It was a unique and flexible journey, which was stress free and produced responsibility and autonomy.

On the topic of how non-formal individualised home education successfully prepare learners for higher education, mother Privileged provided the following proof:

"So, in fact, he might not tell you, but in his first year, he came second overall in his group for that year, or it was a third, and then in the second year, he came second. So, it was a surprise to him, because he didn't think that he was that good a student. But I was, I was so glad when it happened. Because he often said to me, I wonder, if I will be okay being homeschooled and I would say to him Yes, you will be, you'll be okay. Don't you worry. But for him to experience that he can actually compete with, with the top school candidates out there. And in the engineering class, to come second overall. I think, that was a good thing for him to experience."

Mother Privileged revealed in her narrative that Accountable Engineer finished second in his class at university, even though he was home educated utilising a non-formal approach. She discussed how he initially expressed doubt about his ability to do well but to his surprise could compete against the best school candidates. Her revelation supports the question of whether non-formal individualised home education could successfully prepare learners for higher education. The life skills that became important for higher education success was reviewed in the next section.

7.5.3 Life Skills

7.5.3.1 Autonomy and Responsibility

The sub-theme autonomy and responsibility was represented strongly for Family 5 as with other families, which means for all the families, this was an accomplished skill for all the learners included in this study. The way their home education environment was structured provided the freedom to develop these skills, which ultimately presents as key features for higher education success. Accountable Engineer describes the autonomy he had in scheduling his day and academic work towards the end of primary school:

"I had a segment of work I needed to do in a day. And I could decide when I wanted to do it. So, I could do it in the early morning hours or in the afternoons, depending on what worked best. Obviously, my mom did recommend that I do it in the morning, so I can play in the afternoon because no one wants to work at night. […] If I didn't understand something, I could always like go to my mom and ask her about it."

His reference shows that he could schedule his work as it suited him. He preferred working in the morning and having the rest of the day for play or other interests. Another strong reference by Accountable Engineer provided detail on the theme of autonomy and responsibility towards the end of primary school:

"So, the way my day was structured, being that I worked in the mornings and wanted to play in the afternoons, I could work like that. So, I was allowed to work like that. And eventually, she didn't even do the math with me, what I would do, is I would watch the video by myself, read through the teacher manual, to understand the lesson and then do the worksheets and write the test and just have her marked test or show the marks that I got for the test, if I marked it myself. So, I was allowed to take responsibility for certain things, which not everybody can do that necessarily. I realise, not everybody has the capacity or wants to take responsibility for things early in their life. But because I was allowed to, because I showed those character traits and was able to do that, I was allowed to do that."

Being able to take responsibility for mathematics at a young age, from watching the DVD to reading the teacher manual, completing the worksheets and writing the tests, demonstrates the high degree of responsibility exhibited by participant Accountable Engineer. He specifically refers to the freedom his mother provided for him but also that she could only give him freedom because he showed the willingness and character traits required to accomplish it successfully. Mother Privileged discussed another aspect of completing mathematics on his own:

"If I was there to spoon feed him the whole time, the fact that he could discover and work in his own mind, all the things he had to work out, and he would sometimes, he would listen to [name], what's the guy's name that did Math U See? […] he would listen to him three or four times, he would just listen to it. And he would look at the examples and listen to it again. And he'll look at the example and he would work it out in his own head. And I think that was the, the magic. He was allowed to enjoy it, he was working it out for himself. Not mommy trying to force him to understand."

Her narrative extract highlights the advantage of autonomy for the learner, as it allows them to figure out the work in their own way until they understand it. She discusses how

she did not spoon feed Accountable Engineer but provided him with the necessary space and freedom to figure out the work and problems on his own. She did not force him in any way but allowed for a natural problem-solving process to evolve. Accountable Engineer is right in commenting that not all learners have the desire or the ability to function as independently, but he could. Another reference by mother Privileged sheds more light on the topic:

> *"So, I think I mentioned to you, he was 12 years old when I, when I discovered that he's actually doing his schoolwork by himself. Yeah. And I almost became an overseer rather than the teacher. But he loved It, he actually he loved doing the research and I left him to do it the way he wanted to do it, within boundaries of course and, and I think that's why he could carry on with discovering the way that he did."*

The account by mother Privileged discloses total autonomy by age 12 and that Accountable Engineer loved working on his own, doing his own research and discovering. Her account describes how her role became that of an overseer rather than a teacher. Another aspect of autonomy was discussed by Accountable Engineer was the influence of choice on developing of autonomy and responsibility:

> *"I think something else that might have played a role, subconsciously was, I was able to, to kind of choose what, I want I spend time on. So once again, coming back to like the space example. I was interested in space, so I had the opportunity to learn about it. I decided to go study engineering. So, for me, it was once again a similar example, when something difficult came along, something I didn't enjoy. I kind of felt like but I could make the choice then to study this. So, it might have helped me as well to push past things that I felt like, I don't necessarily want to do this, or some of the subjects, I didn't want to do."*

The excerpt above from Accountable Engineer places focus on being able to make choices and facing the consequent responsibility even when it becomes difficult. This raises an important aspect of autonomy and responsibility, especially when it is considered how an individualised approach to home education could prepare learners for higher education. Because he made the choice, he could push himself past obstacles or push himself to complete things he did not enjoy. Accountable Engineer discussed how he developed these skills completing Cambridge and final examinations:

> *"Coming back to the to the Cambridge thing, what we would do there is, we would go through the exam, so they would publish on a website, they would publish what the exam would contain. And then they recommend the textbook for that. So what, what I would then do is, buy the textbook, check the sections, which were required, the*

chapters and then work through them by myself, creating my own summaries. I do know a lot of kids at school, get a lot of things done for them. So summarising work and stuff like that, might have been things that they either buy from other students or get from tutors, not necessarily do themselves. So those habits have helped me, actually, perform quite well in my first year. So, taking responsibility for my own learning, being able to plan and know what I need to do by myself and actually having the discipline of doing that by myself."

What is insightful from these words from Accountable Engineer is that it provides deeper insight how autonomy, developed during school years, prepared the learner for higher education. In the same vein, another reference from Accountable Engineer refers to the higher education phase and autonomy and responsibility:

"So, continuing with the responsibility for my own work thing, I think the biggest, the biggest jump that students have to make from, from high school to Varsity is that you're in a class of 600 people in your first year. And there's one lecturer. So, if you can't follow the study guide, which says you need to do these tutorial problems, and use all the little tests and the timing and stuff, so if you can't take responsibility for your own learning, you will fail. So, the faster you learn how to do that, the better for you. I was already used to that, obviously, from home schooling."

Taking responsibility and autonomously working was highlighted by Accountable Engineer in the quote above as a critical skill for higher education success. He described being used to such a way of working and advises that home education skilfully prepared him for this aspect of higher education. Character development as features which contribute to higher education success was discussed next.

7.5.3.2 Character Development

Character development linked to student engagement was evident in Family 5's narrative accounts. Mother Privileged examined the value of discipline and diligence as character traits for higher education success.

"I think discipline is definitely, discipline is, must be the number one thing and you must be able to be self-driven. If somebody tells you half the story, you should go and find out the rest of it, or if you, if you hear something mentioned, you should be willing to go and do the research yourself. So, I think discipline […] and to be self driven."

Similar to the character development of Family 3, the narrative of mother Privileged presented a strong support for developing discipline and to be self-driven. This sub-

theme was again presented later in the data of mother Privileged, linked with competent planning and time management:

> *"I think, I think to be diligent enough to do, to go and look at your own schedule in terms of when, when is my next test coming up, so I've got to be prepared in time to write it. I've got to book my timing, my social life, my whatever happens beyond sitting in a lecture hall […] and I've got to plan around that, to make sure that I've got enough time to hand in a project or be prepared to write an exam"*

Another aspect of character development was mentioned by mother Privileged. She discussed a conversation with Accountable Engineer, whom at the time was pursuing his master's degree and was also in the process of moving in with a student friend. He discussed how regular gaming could become a distraction. Mother Privileged provided the following section:

> *"He is going to live with one of his student friends, but this chap is still very much into the gaming world. And he said to me, but Mum, I see actually, it's a waste of time. And I'm doing my master's this year. So, and, and I need to work, so, but he's a very good student, which is, which is nice. You know, he is very diligent as far as I'm concerned. "*

An essential aspect of higher education success is discussed in the section above which refers to being diligent, the ability to focus and not become distracted with something like gaming, for example, as well as making wise choices on how to spend time and resources. This aspect was also discussed in the narratives of Family 3. From the data it is evident that these skills become important in preparing learners for higher education.

The next section discussed the theme pertaining to Quality Interactions for Family 5.

7.5.4 Quality Interactions

7.5.4.1 Parents

Quality interactions with parents that influenced student engagement revealed various aspects. The first, as discussed by mother Privileged, was her ability to make learning very pragmatic and fun as she reported in her narrative:

> *"So, the role I played, was very much the beginning years, it was very hands-on. And in fact, today I was in a shop and the guy tried to count out 30 pieces, and I said, well just put it in three packs of 10, and now you can see its 30. And that is the type of thing that I did and it reminded me again of, of the way I taught my children. Just ways*

to make things easier in life […] And so you know, I would say that in the beginning, I was very much showing, telling, guiding along."

The previous section on playing cricket and doing math as well as experiments in the kitchen reveal how she taught her children in a unique, playful, concrete and pragmatic way. This way of teaching was replaced with a more coaching and problem-solving way of thinking as they became older. This change in roles was presented by mother Privileged:

"[…] and then later on, it was more of, so what do you think? Can you think of an option? How can we do this? Let me hear what you think before I tell you. Yes, that was the type of conversations we had."

These words indicate how the mediational distance between mother and child enlarged as the child grew and developed. Furthermore, the quotation above reveals how mother Privileged developed problem and thinking skills by changing into more of a coach and mentor during later years.

Accountable Engineer discussed how he looked up to his father, found his work interesting and would mimic things he learned from his father:

"He was more at home from then, and he always did like, very, very cool things. He did electronic engineering for a job, and he eventually moved to like IT. So, I always looked up to him, looked up at him. The stuff that he would do, I'd find super interesting. And in some ways, try and mimic it. So I would create like old computers with Lego, or when eventually, I got the opportunity to play with like, the old computer boards, I'd set up the old computers and I'd install and I'd break them and I'd re-install them, so that I think, in a lot of ways, I did look up at him and try to be like him. "

The extracts provided mentoring examples presented by the mother and father of Accountable Engineer. Thus, the narrative accounts of Family 5 provide an insightful example how both mother and father could contribute to expand the dyadic relationship between mother and child, towards a triadic relationship that includes the father in a supportive role. The formation of triadic relationships in the home education environment is evidently important to the learning and development of children. The summary of the thematic analysis for Family 5 follow.

7.5.5 Summary

Family 5 presents the story of learner Accountable Engineer who was highly successful at higher education. He was placed second in his Engineering class and was at the time of the interviews enrolled for a master's degree in engineering at the University of Pretoria. Their family followed the individualised home education approach which successfully prepared him and caused him to be highly successful at higher education. His mother focused on engaged learning rather than following a schedule or completing certain grades or books. On various occasions, their narratives revealed delaying formal work on the account of getting her children engaged and their curiosity flamed. One example is provided. The participant initially did not respond to formal mathematics with interest and engagement, so his mother delayed formal mathematics and replaced it with games and playful learning that would still induce mathematical concepts. When his mother re-introduced the formal mathematics a year later, he flourished and flew through mathematics and enjoyed it. The learner showed an aptitude for mathematics and did very well in mathematics throughout primary, secondary and higher education. A love for learning was established through good resources, interest-based education focused on engagement, allowing them to find their own way of understanding and applying the appropriate content and approach for their educational phase. The participant taught himself to read because he was intrigued with a story their mother was reading and could not wait to hear what would happen next. He described being surprised that reading was not as difficult as he expected. The family followed a non-formal individualised approach until the age of 16 when the participant started Cambridge to obtain higher education access. The participant confirmed learning valuable skills from his mother and that she was present and available to help but also provided freedom for him to develop autonomy. Accountable Engineer described looking up to his father, finding his work interesting, and from that inspirational perspective, the participant engaged in activities such as building computers. Their family described loving and relational interactions enjoying heart to heart conversations. Key aspects of the individualised home education were provided next:

- The participant described his home education environment as calm and safe space with a lot of freedom to pursue interests.
- Their early education period consisted of a lot of free and imaginative play, kitchen experiments and learning in a fun and stress-free environment.
- They regularly interacted with a home education community and still have connection with some of these friends.

- Their early educational approach included mathematics, first language and integrated subject unit studies based on interest, similar to the stories of Families 1, 2 and 3. Early learning on unit studies allowed for creatively responding to learning by drawing, creating lapbooks, collages or creating physical items rather than writing essays, which the participant did not enjoy.
- Their individual learning preferences was accommodated in their learning environment.
- They could learn about interests at the time the interest arose rather than according to a pre or post determined schedule.
- The learning environment was individualised based on content, pace and providing independence and autonomy over their learning.
- First language Afrikaans was completed during primary school utilising informal workbooks focusing on the basics of reading and writing.
- Learners could choose the topics of unit studies. During the early years their mother would find resources and do research on topics which they would read together and then they created creative evidence of learning on the topics.
- Unit studies integrated various subjects and aimed to provide a broad general knowledge.
- Towards the end of primary school, formal Science resources was introduced which the participant found interesting and engaged with fully, describing the content as ‘excellent’.
- The participant was an avid reader and spent a lot of time reading between the ages of 9 and 12, showing a particular love for reading.
- Their individualised traits exposed differences in how the participant and his sister learned differently. He liked to learn more about scientific things and completing experiments with smoke or gas, while his sister enjoyed things with beauty and colour. Their mother confirms providing freedom for these different personality traits and preferences.
- The participant loved learning and discovery, doing research, and figuring things out on his own. He started working independently by age 12 and confirms taking autonomy and responsibility for his schoolwork.
- He confirmed that the autonomy and responsibility during home education prepared him for higher education because he was already used to working independently.
- Accountable Engineer revealed that being able to make choices resulted in determination in pushing through obstacles.

- Discipline, diligence and self-driven working was identified as important characteristics for higher education success. Also, communication was highlighted as an important life skill for higher education success and overall social integration.

7.6 Conclusions

The thematic data analysis for the five families was presented in Chapter 7 under the Themes 1) Milieu, 2) Learning, 3) Life Skills and 4) Quality Interactions. A list of all the sub-themes presented and discussed under these themes were presented in Figure 7- 1 below. Chapter 8 discusses the results presented in Chapter 7.

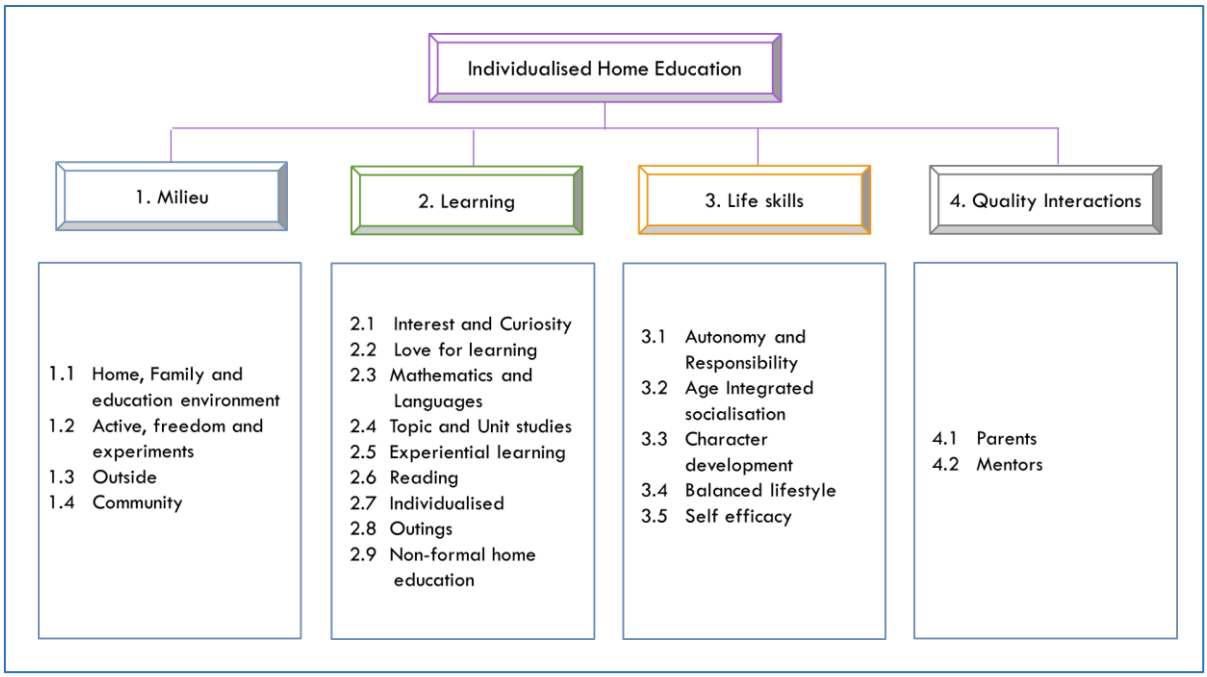


Figure 7-1 Graphical representation of the Themes and Sub-Themes presented in Chapter 7 for the five families

8 Discussion of Results

The thematic results of the narrative studies of 5 families who employed individualised home education were presented in Chapter 7. This chapter will focus on the discussion of the results. This discussion will be conducted through the student engagement theoretical lens and grounded in the literature presented in Chapter 5, and more specifically literature on student engagement as presented in sections 5.1, 5.2 and 5.3. Applying the literature of student engagement to the earlier primary and secondary learning phases and to the home education environment, was done by extrapolating the higher education data to these earlier phases. Students become learners, teachers become mothers and the campus and class environment relates to the home where home education took place. Faculty-student contact will be related to the role of parents or mentors that imparted similar characteristics to these learners as to students in the higher education sphere. Not all aspects of higher education can be implemented in the earlier phase or the home environment, for example, transitioning and integration theories, residences, first year students, etc. The aim is rather to compare the themes and data gathered in this study for home education to the well-defined parameters of student engagement and investigate for correlations between these fields of results. The first section will use the data presented in Chapter 7.1.1, 7.2.1, 7.3.1, 7.4.1 and 7.5.1 on the milieu of the 5 home education families and compare these with student engagement data presented in Chapter 5 related to the types of learning environment that succeeds in effective student engagement.

8.1 Milieu

Encouraging and optimising student engagement requires a specific type of learning environment. As discussed by Kuh et al. (2006): "*The concept of student engagement does not only result from student effort, but simultaneously depends on whether the environment promotes academic and other areas of development. Practices with a high impact on student learning experiences and student engagement in general are not new concepts, however, the strength of the student engagement approach lies in the intentionality or purposefulness of aligning institutional strategies and practices to optimise the educational environment for student learning and development."* Defining the individualised home education environment and investigating how this environment aligns in "intentionality and purposefulness" with optimised learning provided insight with regards to how this environment successfully activated student engagement.

The literature presented in Chapter 5 discussed the type of environments that influence and inspire student engagement, specifically at Higher Education. These principles were incorporated with the data presented for earlier education phases in Chapter 7 and probed for correlations between the data and theoretical perspectives of student engagement. The first sub-theme of the milieu relates to the type of family and home education environment.

8.1.1 Home, Family and Education Environment

The data presented in this study (under sections 7.1.1.1, 7.2.1.1, 7.3.1.1, 7.4.1.1 & 7.5.1.1) described the family, home and learning environments. The pathways to student engagement related to the data presented under this sub-theme, is supported by Trowler et al. (2021) predominantly by the socio-cultural engagement dimension through the pathway of belonging. The data that supports belonging from the narratives referred mainly to their family construct with references such as "*we stuck together as a family*", "*we learned together as a family*", "*close knit family*", "*good relationships*" and "*a non-judgemental*" space. Discussions around the breakfast or dinner table was referenced multiple times with: "*heart to heart conversations*" and "*communicated well*". For example, Family 1 referred to a mutual language that developed because they shared so many experiences together. In the same vein, Family 2 indicated, "*we were always together*" and Family 3 reported, "*it was things that we could do as a family, as a unit.*" Thus, the narrative data suggests that one way of cultivating belonging in a home educating environment is through quality time together and joint activities. In this regard, references to reading together outside, in bed and under the trees were often associated with their socio-cultural engaged learning environment.

An attentive, involved, emotionally warm and present mother who provided love, care, safety and a lot of attention was presented as another feature associated with the kind of home education environment presented through the narrative accounts of participants. Bell, Kaplan, and Thurman (2016) link the notion of belonging to a perspective of inclusion and connection from a socio-cultural perspective. However, in the narrative data strong parallels can be drawn between belonging and a physically and emotionally safe environment. Emotional safety was expressed by participants with references to "*it's a safe place*", "*no insecurities*", "*no darkness*" and "*my little safe circle*". Emotional safety described "*being allowed to make mistakes*", not being mocked or teased, no "*labelling*", or being laughed at when you make mistakes. Not being judged on outer appearance and the absence of a focus on outer appearance also affirmed their environment of belonging.

The data also relate belonging to the notion of not competing or being compared with others for acceptance. Family 4 participants discussed each child being different and having the freedom and opportunities to explore and develop individually. For example, their mother The World Is Our Classroom said, "*you don't put a child in a box. Each one is an individual*". Other narrative accounts indicate, "*I didn't feel like I was competing,*" and "*I was not compared to anybody else*." From the data it was evident that creating an environment of belonging contributed to self-confidence and self-efficacy as presented, "*But you're not […] being confined by […] the boxes that other people put you in.*" Another reference to self-confidence was presented by Family 3, "*I was just never scared to just be me. And maybe that's the greatest thing that I can take from my education if I can, can call it that, not only education, but like my upbringing that I was, I was really self-confident.*"

Strong correlates exist between the narrative data presented above for the home, family and learning environment of participating families, and the notion of belonging as a theoretical point of engagement. Looking through the theoretical lenses of student engagement, the education engagement interface of Kahu and Nelson (2017) presents four mechanisms for engaging students effectively at the interface of learner-teacher interaction, namely: (1) self-efficacy, (2) emotions, (3) belonging and (4) wellbeing. Thus, it is insightful to compare the similarities between the above-mentioned emotional references in the narrative accounts with the mechanisms in the engagement Interface, as suggested by Kahu and Nelson (2017) – especially the third mechanism of belonging (Self-efficacy will be discussed separately under section 8.3.5.). What is important about this similarity is that it indicates how home educated learners, who experience a strong sense of belonging in a home education environment, could be prepared – presumably emotionally – for the later demands of higher education. Furthermore, because these families described their environment as cozy, warm, safe, happy, loving, peaceful and calm, these learners were safe to emotionally engage; a kind of engagement described by Trowler et al. (2021) as affective engagement. References like "*blooming in my safe place*" and "*content with myself*" indicate the nurturing of affective engagement with the environment in which education happen. From the data it is evident that this link between affective engagement and the learning environment transcended into higher education and early work-life. Thus, from a Student Engagement perspective, a home education environment that fosters a strong sense of belonging could contribute to the preparation of learners for higher education.

The narrative accounts of participants make a unique contribution concerning the nurturing of vulnerability, something that could uniquely prepare home educated learners

for higher education. Neither Kahu and Nelson (2017), nor Strydom et al. (2017) or Kuh et al. (2006) make any reference to the notion of vulnerability. Yet, vulnerability emerged strongly in the narrative accounts of participants. For example, Wise Chemist (Family 3) said, "*there is freedom because you are safe,*" and then continues with, "*you are strong because you are safe.*" She elaborated on what safe means and describes it as "*being allowed to be yourself*". The words "*being allowed to be yourself*" denotes to the term vulnerability as described by the world-renowned researcher Brene Brown (Brown, 2012, 2021, 2022).

In her research work and books, Brown (2012, 2021, 2022) defines vulnerability as being authentic and showing your true self to others, allowing yourself to be seen by others, even though you are afraid of what others might think or the fear of being rejected. Shame, as opposed to vulnerability, is defined as the belief that something is wrong with me and that I am not worthy of love and belonging (Brown, 2012, 2021, 2022). Shame results in hiding your true self (not being vulnerable to the outside world) and 'armouring up' with the aim of self-protection. Shame is a place of self-preservation and fear of rejection. Shame causes us to hide our vulnerability believing that it is weakness, when in fact "vulnerability is seen as the ultimate act of courage". Her work relates vulnerability to living a life of courage, compassion, and connection. What is interesting is that Brown (2012) furthermore discusses the importance of human connection as the sole purpose and meaning of our lives and continues to correlate vulnerability with connection and engaged living. Thus, what Brown (2012) does, is that she links – from a conceptual level – the emotional connection associated with a strong sense of belonging, with the notion of vulnerability. This link positions vulnerability as an important characteristic that could prepare learners for higher education. The data of this study indicates how strong family connections and sense of belonging are closely associated with personal, social, and culturally engaging behaviour. Thus, engaged learning is dependent on vulnerability. Brown (2012:61) states the following, "*If we want to be fully engaged, to be connected, we have to be vulnerable.*" Thus, the research work of Brown (2012, 2021, 2022) emphasises the potential importance of an individualised approach to education that could create an environment conducive to vulnerability and engaged learning.

Relating the campus environment presented by Strydom et al. (2017) with the home education environment, allows for some parallels with this literature source. Their description of engagement with the environment is represented with quality interactions and a supportive environment. Quality interactions with parents and mentors will be presented in section 8.4 and the data pertaining to a supportive environment in section

8.4.1. Active, freedom and experiments as a description of the home education milieu will be discussed in the next section (8.1.2).

8.1.2 Active, Freedom and Experiments

With the aim of creating a picture of the individualised home education milieu, a sub-theme was presented in the data (see sections 7.1.1.2, 7.2.1.2, 7.3.1.2, 7.4.1.2 and 7.5.1.2 for Families 1-5) which pertains to active participation, the freedom to explore which included experimentation to a large degree. This section does not focus on the experimental learning activities themselves (see section 8.2.5) but rather on the type of learning environment that nurtured the freedom to actively participate and experiment. The notion of learning through active participation in learning experiences was summarised by Moore and Moore (1994): "*I have found that it is not what he takes in second hand that a child really knows, so much as what he, himself, actually experiences that becomes the foundation of his intelligence. […] I have noticed over the years I've worked with children that they spend a good deal of time 'doing'. The experience they gain from their physical involvement with the environment seem to give them something tangible on which to form their ideas about the world.*" The depiction of the active, freedom and experiment setting is contrasted with content-based learning that often necessitates a learner sitting at a desk working in books. The individualised home education setting presented an alternative, i.e. active and hands-on participation and experiments where learners engaged on a meta-cognitive level.

The freedom to actively explore emerged as a strong sub-theme throughout the data. Family 1 discussed their learning environment with the following descriptions: "*get your hands on,*" "*we did experiments,*" "*a warm room with a lot of experiments,*" and "*a learning area where you can do anything you want to do.*" Similarly, Family 2 described doing science experiments in a fun way and "*I really enjoyed doing science experiments."* Their description also refers to playing and building projects with Lego, levers, gears and pneumatic items. The narratives of Family 3 discuss experimenting with green peppers in her bedroom and exploring through experimentation they: "*would burn things down and break things."* Participants also refer to science experiments with their mother: *"I think my mom would find a good science book, but very creative and she would just go through all the experiments […] she would make it fun and creative."* References by Family 4 pertaining to an active environment stated: "*he wanted to build a jet engine,*" "*my brother and I set his floor alight with one of his experiments,*" "*he was trying to build a rocket in his room,*" "*so we spent a lot of time, just building and playing.*" Their narratives richly describe how they actively pursued learning through play, experiments, building

and projects. Family 5 referred to active involvement with the following references: "*all sorts of experiments,*" "*brought fun into homeschooling,"* "*you will do a lot of hands on stuff.*" Thus, the narratives of Families 1-5 provide powerful and wealthy descriptions of an active and engaged learning environment, where learners are internally motivated to engage with learning.

The notion of internal motivation, associated in the data with active experimentation is important. Deci and Ryan (2000:70), in their self-determination theory, indicate that creating an active learning environment requires the activation of internal motivation: "*The construct of intrinsic motivation describes the natural inclination toward assimilation, mastery, spontaneous interest, and exploration that is so essential to cognitive and social development and that represents a principal source of enjoyment and vitality throughout life.*" The phrase, "*that represents a principal source of enjoyment,"* is significant because it correlates strongly with the narrative data of this study, that variously referenced "fun," "joy," and "laughter" in context with active and explorative learning. Thus, from the narrative accounts of participants, it seems that internal motivation was closely associated with the freedom to actively engage in experiments.

Another very important aspect, without which active learning would not be possible refers to the notion of *freedom* – i.e. time and space to freely experiment. Freedom is referenced throughout the narratives in connection with an environment associated with active learning and experiments. The references that support the notion of freedom provided by Families 1 through 5 affirmed: "*I would have the freedom to like, when I decided to experiment," "giving us the freedom to become dirty and play around and do things that we think is fun," and "And each one of us was given freedom to explore".* The description of the individualised home education environment confirms active engagement and self-direction in many cases. Ryan and Deci (2000) discuss the role of the teacher, or mother in this case, in the following way: "*teachers who are autonomy supportive (in contrast to controlling) catalyse in their students' greater intrinsic motivation, curiosity and desire for challenge.*" Studies suggest that excessive control undermine autonomous motivation (Ryan & Deci, 2000; Bell et al., 2016). Creating an autonomous, active and engaging learning environment, where learners have the time and space to freely experiment, therefore indicates the absence of control and a higher degree of engagement, as shown in the data and discussion above. From a student engagement lens (Strydom et al., 2017:3-4), this means that teachers (or parents) must open opportunities (time and space) for free experimentation, while students must use the opportunities to actively experiment in areas of interest. Thus, from a student engagement perspective, the data confirms that what parents do and what learners do

– also in relation to free experimentation – are both essential. This pattern of reciprocity, fostered during home education years, could establish an important basis for later bidirectional interaction between a student and the higher education environment.

The crucial role of parents also includes encouragement and support. Narrative data presented under the active learning theme confirm the requirement of encouragement and support from their learning instructor as asserted by Ryan and Deci (2000:70): "*The theory argues, first, that social-contextual events (e.g. feedback, communication, rewards) that conduce towards feelings of competence during action can enhance intrinsic motivation for that action.*" Strydom et al. (2017) reported a supportive environment for the "campus environment". Drawing this analogy through to the home education environment resolves that a supportive environment at home encourages active learning engagement. Quotes along this sentiment was provided in the narrative data: "*I was encouraged to do that a lot,*" "*they would still […] encourage us again to try something crazy,'*, "*Curiosity that my parents encouraged."* Parents, or the mother as the facilitator of learning, similar to the role of the institution in higher education, are responsible for creating an environment suitable for learning (Kuh et al. 2010; Strydom et al. 2017). When an environment is created that provides freedom, autonomy, encouragement and support and also the resources, a pattern of active learning is established in an academically engaged learner.

Considering the data presented for the theme active engagement, the reader is brought back to the reference by a participant in Family 3: *"when I decided to experiment with random green peppers from my mom's cupboard and then I'll keep my room dark for three weeks and grow weird things under my bed."* The reference suggests autonomous experimenting that transcended into meta-cognitive thinking, where the participant spends time thinking about the learning experience, making observations and analysing outcomes. This citation relates with the notion of academic challenge (and the development of cognitive complexity) as presented by Strydom et al. (2017). Another example of meta-cognitive active engagement was produced by Family 4: "*he would study my sister's work, because he wanted to build a jet engine."* The reference refers to participant Pilot Braveheart who studied Science books and curriculums years ahead of his grade because he was invested in building jet engines and rockets, which demonstrates the thinking he applied in understanding the theoretical concepts, constructing the experiments, building it and observing the results. The continuous adjustments in the growth trajectory suggests a high level of meta-cognition. These references from the narrative data affirm the effectiveness of the active learning

environment in facilitating academic learning. The autonomy to experiment, combined with interest, provides compelling internal motivation for engaged learning.

Internal motivation can become a strong driving force in learning and development as discussed. Motivation is included as a student psychosocial engagement influencer by Kahu and Nelson (2017) as shown in Figure 5-4. Kuh et al. (2006) affirms motivation as a student engagement contributor, while Trowler te al. (2021) proposed that motivation is the pathway to behavioural engagement, suggesting that motivation is an important key in active learning. Ryan and Deci (2000) however highlight that intrinsic motivation only holds true for pursuits which capture the interest of the learner through the “appeal of novelty, challenge and aesthetic value” which will be discussed further in section 8.2.1.

The individualised home education environment successfully created a milieu for active and engaged learning by providing the freedom for learners to apply autonomy to their learning experiences.

Challenge, novelty and real-life experiences connect the active and experimental learning environment with academic challenge, as presented by Strydom et al., 2017, which effectively advance cognitive development. The individualised home education environment could, in a unique way, successfully prepare learners for higher education success. The data pertaining to the outside setting of individualised home education was presented next in section 8.1.3.

8.1.3 Outside

Outdoor play and exploring were the setting for many of the narratives on home education in the foundation phase. Like setting the scene for a book or movie, the outdoor backdrop was the scenery for many of the early education narratives. This is interesting because the narrative accounts of participating families indicate how the learning environment extended beyond the perimeters of one room (e.g. classroom) or the confinements of the house, to also include outside areas. Thus, the data introduces a sense of expansive learning. From outdoor play to reading or nature studies, a substantial amount of time was spent outdoors in free and imaginative play and exploring. In this regard, there is a strong correlation between the research results on expansive learning and literature earlier presented on the Charlotte Mason approach to home education (see section 4.3.3.4).

The narrative accounts of participants indicate a positive emotional association with outdoor activities. Data pertaining to the outdoor/outside sub-theme is associated with

emotional words such as: "*joy,*" "*enjoying,*" and "*fun.*" Additionally, narratives revealed references to games, play and fun outdoor activities such as climbing trees, fishing, canoeing and imaginative play. From this perspective, the activities were often coupled to emotional affective engagement (Trowler et al., 2021). As much as children enjoy playing and discovering in an outdoor setting, various other skills accompany outside exploring.

Apart from the emotional connection with outside play and learning, which also contribute to socio-cultural engagement through belonging, there are also the physical benefits often associated with wellbeing. There are many advantages for children to spend hours outdoors, from eye development to gross motor skills to more happy kids (Waite, 2017). The research shows that outdoor learning presents tremendous physical developmental advantages as expected (Burnette, 2010). These include more advanced motor skills like coordination, balance, and agility. Although one would expect that outdoor play has many advantages for developing physical health (for example, improved muscle strength, lower BMI index, and improved immune systems), Lieberman and Hoody (1998) state that being more active is not only linked to better physical health but also improved mental health and lower stress. Children diagnosed with ADHD experience fewer symptoms with more outdoor play and have been shown to cope better with the demands of school with outside play and outside learning (Lieberman & Hoody, 1998). Additionally, Waite (2017) confirmed a direct link between school performance and outdoor play and learning. This included improved test scores, student achievement, attendance, and in-school behaviour. Various reasons are presented, including more engaged learning when students learn in and of nature, more hands-on and experiential learning and the use of children's natural intelligences (Burnette, 2010). They practise various other skills like organisational skills and problem-solving. It is also linked with brain development because children will explore, invent, and create.

The data presented for outdoor play and learning connects with wellbeing, as presented by Kahu and Nelson (2017), which is a psychosocial student engagement characteristic. The advantages of outdoor play and activities, however, extend further beyond the emotional and physical engagement practices.

A connection between outdoor play and learning, in relation to academic development, provides an important engagement association. The correlation between outdoor play and learning and academic development is substantiated by the following excerpt from Curious Scientist (Family 1): *"… teach your kid from a small age, in the developmental years, how their body weight works. Jump on rocks, now you get the fundamental*

understanding of momentum." Another reference by Benevolent Relator (Family 3) provides connection with *academic challenge* (which is an important aspect of student engagement): "*We'd like go and look for a bug, like we're analysing it now and catch it and see what it does. So that was, that was so fun for me.*" The references support academic engagement with outside play through academic challenges such as meaning-making, real-life experiences and connection to the learner's life (Strydom et al., 2017). These experiences create opportunities for learning strategies to develop and the learner to develop reflective properties. Reflectivity is suggested as the pathway to critical engagement by the Trowler et al., (2021) engagement model and suggest that such an environment developed critical thinking. The results show that the outdoors provides an excellent opportunity for academic development in learners in addition to the many other known health benefits.

An important aspect of the outside milieu with regards to engagement is the prompting for creative and imaginative activities it presents. The creative and imaginative sub-theme was introduced with the following words from participants' narratives: "*I was imagining myself in those scenes and scenarios*", "*we had very good imaginations*", "*she would like stimulate our creativity like: go outside, go and make little boats. And you know, we would have like a hosepipe running water down and we'd make little boats out of stuff.*" Imaginative play and opportunities to create things, as these quotes indicate, provide another excellent reference to the student engagement topic *Academic Challenge* in the individualised home education environment. According to Strydom et al. (2017) these types of activities develop higher-order learning as well as reflective and integrative learning. Being able to create is a sought-after higher-order academic skill listed at the top of Bloom's taxonomy (1956) and often requested as a 21st century employment skill requirement. Outdoor play and learning were shown to be critical for developing not only academic skills but also social and emotional skills essential for higher education preparation. The outside milieu was shown to provide excellent opportunities for initiating engagement strategies.

The next section discusses the role of the community and how their community environment influenced engagement of home educated learners.

8.1.4 Community

The last piece presented in the narrative accounts about the home education milieu relates to an overview of their community setting. Kunzman and Gaither (2013) discuss the various forms of home education communities that have evolved over time. The data

of this study indicates that although each family provided a unique perspective on how they engaged in their respective communities, they managed to successfully foster peer relationships in their individualised home education setting. Moore and Moore (1994) discuss the influence and importance of support groups, especially for mothers pursuing home education but also as learning opportunities and community building. The individualised home education families of this study prioritised a strong connection with the broader community. Many of these families used Fridays as a particular day to establish close interconnection with a broader home education community.

Family 1 described participation in a co-op home education community during Primary school years, which is described by Kunzman and Gaither (2013) as a group of families who regularly attend communal classes presented by a mother or expert. In this case, the family revealed a 4-day school week and meeting with their co-op every Friday for classes or socialisation. Being part of a co-op provides the opportunity for peer interaction and collaborative learning which is an important aspect of student engagement (Strydom et al., 2017, Kuh et al., 2006).

The home education community described by Family 2 consisted of three families who decided to home educate together. Their collaboration included meeting on a weekly basis, usually on Fridays, and they described doing activities or outings together or socialising on these days. Their narratives reveal copious social interaction.

Like the first two families, Family 3 also used Fridays for educational, recreational or social activities. Their narratives describe '*often'* going on educational field trips, which also presented the opportunity for socialising. Their schooling also consisted of a 4-day week utilising Fridays for other activities or outings, although these were organised in a more casual manner. Regular interaction with their home-education community was evident from the narratives of Benevolent Relator, Wise Chemist and mother Lighting Fires.

Family 4 home educated participants described social interactions with local school children in the afternoons while stationed in Africa. Because they were in a remote location and not surrounded by any other home education families, their community was comprised of a diverse profile. Being exposed to such a diverse community provided various advantages such as learning to speak 5 languages and developing a global perspective. Their narratives also reveal some challenges with peer engagement when they returned to South Africa, describing it as difficult to "*relate*" to the city environment and community.

Family 5 describes being a part of a home education group that met predominantly for socialising where they would play games and was described by the participant as "*really fun.*" Accountable Engineer described ample social interaction with the references "*good amount of interaction*" and "*I never felt lonely.*" His mother also referred to the importance of a "*village*" and "*walking together.*" Their narratives do not provide enough information to make conclusions on educational or academic focused collaboration.

Functioning within a learning community is an important part of peer engagement. Kunzman and Gaither (2013) discussed how home education families rely on their likeminded community to support and maintain educational functions. Three of these families presented data on academic and educational collaborations with other home education families. Social interactions within a home education environment were an integral part of individualised home education with families often employing a 4-day school week during primary school and utilising Fridays for social and or educational engagement activities. What is important to note, from a student engagement perspective, is that collaborative peer learning is considered to be important to engagement strategies (Kuh et al., 2006; Strydom et al., 2017). Thus, intentionally fostering communities where collaborative learning could take place presents an important feature of the kind of individualised home education milieu that could prepare learners for higher education.

The notions of community and belonging are closely interconnected. Trowler et al., (2021) state that in addition to collaborative learning and socialisation opportunities, the community interactions also exhibited features of belonging and socio-cultural engagement. The narrative accounts of participants confirm this connection. The following excerpts showcase narrative pieces indicating features of belonging: "*that was so nice to have someone around us doing the same thing," "we were really close," "that was […] one of my very fond memories," and "you need the village."* The reference denotes special memories, friendships and belonging. Two of these families reamined in contact, with friendships that formed during these early years in their home education communities. Socio-cultural engagement in the bigger community seems important not only for the home education learners but also the mothers as the home education instructors. For either of these parties to be isolated would work against the engagement strategy. The results indicate that fostering communities for socio-cultural engagement is critical for home education families to successfully prepare learners for higher education and life. Section 8.1.5 summarises the findings presented on the topic of the home education milieu.

8.1.5 Summary: Milieu

Data was gathered utilising the narrative inquiry interview data of 5 families who employed individualised home education. The data pertaining to the home education milieu was presented in Chapter 7 (see section 7.1.1, 7.2.1, 7.3.1, 7.4.1 and 7.5.1). The data and discussion were offered in 4 sub-themes for the home education mileu which includes the home, family and education environment (in section 8.1.1), active, freedom and experiments (in section 8.1.2), outside (in section 8.1.3) and community (in section 8.1.4).

The home, family and education environment created an environment of belonging and safety which fosters socio-cultural engagement. Participants described their environment as cozy, warm, safe, happy, loving, peaceful and calm. Mothers were described as loving, caring, warm, emotionally safe and involved, and offered lavish attention. The environment presented as a physically and emotionally safe setting, free from belittling, judgement, comparison or competition, supporting the notion of fostering belonging and secure emotional attachment and development. Connection was acquired in the family through unity, quality time and shared activities such as reading, having conversations around mealtimes and learning together. Through inclusion and the building of strong relational connections, the family successfully created an atmosphere of cohesion. Growing healthy self-esteem and self-efficacy was presented in the data of this study and supports the notion of student engagement at the educational interface, improving with self-efficacy as a student characteristic (Kahu and Nelson, 2017). The perception of vulnerability as a unique engagement factor was proposed from the narrative accounts of home education families. To some extent, a link between self-efficacy and vulnerability could be argued, with learners who develop vulnerability exhibiting a high degree of self-efficacy. Vulnerability as a human characteristic is, however, much more than self-efficacy as it is associated with greater emotional and relational connection, higher degrees of creativity and innovation and a greater sense of wellbeing. The home, family and education setting describe a socio-culturally engaged environment through belonging, safety, family participation and cooperation.

The second sub-theme describes the individualised home education milieu with children playing and learning through active and autonomous exploration, motivated by inquisitiveness and curiosity. The narratives provided ample references to active experimenting by all the families. The references described building rockets, making smoke bombs, setting things on fire, building projects with levers, gears and pneumatic equipment. In contrast to the notion of passive receivers of knowledge, the learners are

involved as "*active constructors and interpreters of knowledge*" as described by Drake and Reid (2020). The active learning environment was linked through the self-determination theory to motivation (Ryan and Deci, 2000), which provides the pathway to behavioural engagement (Trowler et al., 2021). Such an explorative and spontaneous learning environment is described not only as a source of enjoyment, enabling emotional engagement with activities, but is also shown to develop cognitive skills according to Ryan and Deci (2000), suggesting academic challenge engagement through the participative and dynamic environment described above. Active and explorative learning is therefore linked with multiple engagement strategies through emotional connection, behavioural participation and cognitive advancement. Designing, evaluating and analysing learning experiences results in problem solving and critical thinking skills which both connect with cognitive engagement and have been linked to higher education success. Actively participating in autonomous learning experiences is shown as a highly effective engaging behaviour, which was successfully executed in these student-centred individualised home education households.

In pursuit of engagement, the learning environment inevitably needed to provide freedom and autonomy for active participation and exploration in learning. Defining the milieu revealed that on the one side parents need to provide the freedom, space and time for autonomous learning and on the other, students need to actively participate and engage with interests, i.e. the notion of behavioural engagement. Furthermore, the active learning sub-theme showed that encouraging and supportive parents are fundamental in creating an engaging learning environment. Autonomy in their active learning experiences allows learners to act, reflect and think about learning experiences, which is essential for obtaining the cognitive development provided by active engagement. It was inferred from the narrative descriptions of active and autonomous learning, that such an environment is conducive to developing cognitive complexity. Academic challenge as an engagement strategy (Strydom et al. 2017) was activated when internal motivation and interest resulted in autonomous and active learning behaviour. The data presented, on the topic of active learning in a milieu that provided freedom to explore and experiment, proved to be very successful in preparing learners for higher education success with activation of affective, behavioural, cognitive and socio-cultural engagement strategies.

The next theme discussed the learning activities and how the learning activities successfully employed student engagement strategies in the individualised home education environment.

8.2 Learning

In the analysis of the narrative accounts of participating families, learning themes emerged, as discussed in Chapter 7. In this regard, various sub-themes were identified, namely: (1) interest and curiosity, (2) love for learning, (3) mathematics and language, (4) topic or unit studies, (5) experiential learning, (6) reading, (7) individualised, (8) outings and (9) non-formal home education. The following section will discuss the theme of Learning from the theoretical perspective of student engagement.

Strydom et al. (2017:222) summarises student success from an engagement perspective in the following way:

> *"While students' behaviours, agency and motivation are important contributors to their levels of engagement, creating an educational environment that enables students to actively engage in, forms the foundation of student success. Three areas of environmental support […] seem to be especially important: students' views on how supportive their educational environments are; the relationship between students and lecturers; and classroom environments."*

In these words, Strydom (2017:222) confirms the extremely important nature of active engagement for student success and then continues to provide the three categories that enable active engagement, namely: (1) supportive environment, (2) relationship with lecturer (or parent in this case), and (3) the classroom environment (home education environment in this case). Notably, all three these categories emerged from the data as discussed under section 8.1 above, with striking similarities to the theoretical perspectives presented by Strydom et al. (2017). These similarities support various aspects of the home education environment of participating families as effective engagement approaches, which could contribute to preparing learners for higher education success.

As indicated in the previous chapter, the narrative accounts of participating families indicate how the learning strategies employed in the individualised home education environments developed and prepared learners for higher education. The prominence of learning strategies and practices in the data analysis of this study is an important correlation with literature on Student Engagement. Strydom et al. (2017:197) state that: "*The data […] provide a powerful starting point for reflection about teaching and learning practices, and the broader pedagogical environments they take place in. The most significant finding is that effective pedagogical practices matter – particularly when combining student effort or agency, deep learning practices and classroom*

environments." Thus, from a student engagement perspective, a focus on learning strategies and practices could be crucial to prepare learners for higher education.

In Section 8.1, the *classroom environment* was discussed. In this regard, parallels were drawn between the home education environment, as described by participating families, and the kind of environment conducive for preparing learners for higher education success. The data showed meaningful connections between the narrative accounts of families and student engagement literature.

This section will discuss how the learning strategies and practices employed by the individualised home education families could be perceived through the theoretical lens of student engagement. An important aspect of the quote by Strydom (2017:197) above, refers specifically to the ways in which deep learning practices can be achieved. The aim of this section on learning is to discuss how, from a student engagement perspective, the narrative accounts of families provided data pertaining to the teaching and learning practices within an individualised home education approach, and how this approach could potentially support deep learning and academic challenge. In this regard, Pascarella and Terenzini (2005:602) provide an important focus: "*if, as it appears, individual effort or engagement is one of the critical determinants of the impact of college, then it is important to focus on the ways in which an institution can shape its academic, interpersonal, and extracurricular offerings to encourage student engagement*". My premise is that Pascarella and Terenzini's (2005) statement above also applies to the ways in which learners are *prepared* for higher education. Thus, this section of the discussion will specifically focus on the academic offerings and how they could have fostered student engagement and deep learning during the home education years in preparation for higher education.

The discussion will unfold in nine sub-sections, each pertaining to a different facet of learning as per the narrative accounts of families. The first sub-section discussed how interest and curiosity established student engagement.

8.2.1 Interest and Curiosity

Sections 7.1.2.1, 7.2.2.1, 7.3.2.1, 7.4.2.1 and 7.5.2.1 provide the data results for Learning strategies and practices, based on interest and curiosity. The narrative accounts of the individualised approaches upheld by these families demonstrates a high degree of curiosity and interest in their learning experiences. In this regard, strong parallels can be drawn between the data and the inquiry-based learning employed by both the Montessori and Charlotte Mason approaches to home education (section

4.3.3.3; 4.3.3.4), as well as the leadership education approach (section 4.3.3.5). More specifically, Montessori (see section 4.3.3.3) highlights the importance of freedom, choice, and autonomy in learning as discussed in this section. Moore and Moore (1994:36) suggest a great amount of freedom in the home education environment in favour of following interest: "*People work incredibly hard on things they are interested in*". The statement by Moore and Moore (1994) preconceives the connection between interest and behavioural engagement that was exhibited in the data. Thus, the notions of interest and curiosity associated with the narrative accounts of this study, as particular aspects of home education, are deeply rooted in various theoretical engagement strategies.

Curiosity, as an innate attribute inherent to children, is why exploration and discovery are a natural occurrence. The words of Deci and Ryan apply (2000:70): "[…] *children, in their healthiest states, are active, inquisitive, curious and playful*". The data supported features of curiosity and interest with excerpts like: "*he was a curious child,*" "*a lot of room given to explore the things we were interested in,*" "*I really worked with interest driven,*" "*tried to approach our education following what we found interesting.*" Thus, the data confirmed Ryan and Deci's (2000) perspective on natural curiosity, a desire to learn and seek out novelty and challenges.

Parents play a vital part in encouraging interest and curiosity. As was presented in section 8.1.2, home educated children's parents encouraged curiosity as is evident in the following words: "*I would more, more say it was a general curiosity. Yeah. Curiosity that my parents encouraged,"* and "*that was sort of her perspective from the start, to encourage curiosity*." Correlations can be drawn between the encouragement by parents in a home education environment and 'Student-Staff' interaction in higher education (Strydom et al., 2017; Kuh et al., 2006). Like with the narrative accounts of student-parent interactions, the encouragement towards engagement was discussed by Kuh et al. (2006) who showed that validation from a 'staff member' (in this case a parent) improved student engagement, self-efficacy and academic achievement in higher education. Thus, parents can facilitate engaging behaviours by supporting learner's curiosity and interest.

The fostering of interest and curiosity depends on parents' investment. In the data, participants referred to the amount of freedom, time and resources parents offered in pursuing learner's individual interests or in some cases exposing learners to a wide variety of interests (see section 8.2.1). In the same vein, Kahu and Nelson (2017) reference interest and enthusiasm as emotional engagement factors in the education engagement interface. This standpoint of Kahu and Nelson (2017) underlines the

importance of activating interest in learners as an instrument of student engagement. Thus, it is important to note that the data creates a deeper understanding about the responsibility of home education parents in providing the necessary freedom, time and effort for not only exposing learners to a variety of interests, but also intentionally developing the passions they develop over time because these provide valuable engagement opportunities. This discussion should also denote towards the individualised perspective that was presented when conversing on the topic of interest and curiosity. Because every child is unique, pursuing curiosity and interest necessitates an individualised approach, something that will be discussed further in section 8.2.7.

The quality of resources used is a crucial factor to foster interest and curiosity. In the home education setting, engagement was facilitated with quality academic books as discussed by mother Encourager: "w*e did that Apologia of Science, and I saw that made them curious that they want to learn on their own."* Another home educated adult referenced excellent academic resources: "*the Exploring Creation series of science books. I absolutely love those books. […] I will suggest it to anyone, […] They are excellent."* The quotes advocate facilitating academic engagement through quality content. The emphasis in the data on quality resources aligns well with student engagement literature. Strydom et al. (2017), for example, document resources as one of the institutional parameters that influence engagement in the higher education setting. In addition to quality academic materials, the narratives of participating families also revealed other resources that successfully engage students in practical learning activities. These resources included Lego and mechanical parts like gears, levers and pneumatic parts, as well as typical project and building materials i.e. wood, hammer, pliers, nails, etc. A reference by a home educated participant is provided for corroboration: "*My parents made sure he got a lot of Lego with gears, like Lego mechanics, where there's a lot of gears and levers and stuff that you could play with to learn the maths and science behind pneumatic stuff, and gears and the math behind everything.*" The citation shows how the resources not only engaged the learner behaviourally but the connection with theoretical and academic content transcended learning to academic engagement, gathering not only knowledge but also learning strategies as highlighted by Strydom et al. (2017). Thus, quality academic resources and other materials can effectively activate and expand interest and curiosity.

From a student engagement perspective, interest and curiosity, as also discussed earlier in section 8.1.2, cultivates internal motivation that progresses into behavioural engagement. Singh, James, Paul and Bolar (2022:6) confirmed the relationship between motivation and student engagement: "*motivation is an antecedent of engagement. […]*

the study suggests that motivation is a critical factor on work engagement." The positive correlation between internal motivation and behavioural or work engagement was also demonstrated by Luthans and Youssef-Morgan (2017). When compared to the narrative accounts of this study, the link between motivation and behaviour engagement corresponds with the words from Curious Scientist (Family 1): "*Like, if you wonder about something, you go and test it. […] Yes, do something, to satisfy the curiosity. And that's fun. It's sort of addictive also. […] That was the fun part to me."* Curious Scientist's words describe behavioural engagement but also provides strong connection with emotional engagement: "*and that's fun. It's sort of addictive*", or Affective engagement as it is defined by Trowler et al., (2021). In the same vein, Kahu and Nelson (2017) incorporate interest and enthusiasm as emotional engagement factors at the education engagement interface model (see Figure 5-4). Another very interesting reference was provided by mother Encourager of Family 1: *"So, when we make it a practical thing, with a lot of experiments, it causes them to be curious. And then they want to look deeper into things."* This illuminating piece not only correlates with the literature on behavioural engagement, but also provides insights into the deepening of academic engagement in a home education setting. The quote suggests that experimental learning, when applied to interests through reflective learning, creates more curiosity, which could activate more engagement. This reciprocal process between curiosity and behavioural engagement in home education could provide a deeper understanding of how learning strategies might result in deep learning, higher cognitive and academic engagement.

More similarities exist between the notion of academic challenge and the narrative accounts of participants. Strydom et al. (2017) list Academic Challenge as an important aspect of student engagement, which include higher-order learning, reflective and integrative learning, learning strategies and quantitative reasoning. If compared with the narrative accounts of participants, words like "*challenging yourself to learn something and to develop a new skill and to follow your passions,"* and "*I like finding things out, figuring out how things work,*" corresponds well with the notion of academic challenge. More specifically, academic challenge was supported by the following reference relating to STEM subjects: "*nothing was difficult for him. They don't even see science as a difficult subject. They don't even see maths as a difficult subject. They don't even see anything as difficult. It was just a challenge. They want to learn more so nothing was like a mountain standing before them. They just dig into it and start learning about that."* The reference to engaging with mathematics and science, wanting to learn more and not being afraid of anything but approaching it as a challenge provides a potent support for the individualised home education approach in preparation of higher education. This

section particularly supports the approach of effectively engaging home educated learners through academic challenge, specifically in the STEM fields.

A unique and important aspect of interest-based learning is the autonomy it provides not only in the type of content and learning activities but also in how deep learners can delve into a topic. Ryan and Deci (2000:70) indicate in the following words how autonomy, as an additional requirement preceding feelings of competence, could result in increased internal motivation: "[…] *people must not only experience competence or efficacy, they must also experience their behaviour as self-determined for intrinsic motivation to be evident.*" The words "*self-determined for intrinsic motivation*" is interesting, because it correlates with the narrative account of families who participated in this study, i.e. on being able to follow interests, having a choice in the topics of learning and even having a choice in how to report on what they learned. The data, therefore, indicate learner autonomy and having choices in how and with what topics and academic material they engage. Thus, the data and literature, as discussed above, provide important insights into the type of learning that improves engagement, especially through internal motivation facilitated through efficacy and autonomy (see section 8.3.1).

Interestingly, self-efficacy, as per the quotation from Ryan and Deci (2002) above, is also part of the student engagement interface presented in Chapter 5 (i.e. Figure 5-4). However, it is important to note that *autonomy* does not form part of this interface. In this interface (i.e. Figure 5-4) *interest* and *enthusiasm* is categorised under the heading Emotional Connection to the educational interface. Nevertheless, it is significant that the data presented in this study indicate that the specific type of knowledge pursued through interest is not as important as the *processes* it drives and the *development* it induces inside the learner. More important than a specific topic, knowledge or content, learning should result in engagement and creating internally motivated learners. Abbott, Townsend, Johnston-Wilder, & Reynolds (2009) describe education as progressive and deep, when how children learn is prioritised above what children learn.

The topic of interest and curiosity-based learning as employed in individualised home education seems to provide a very important advantage with regards to allowing learners to delve deep into content, knowledge and learning strategies. For example, Benevolent Relator states the following: *"You know, just by, I think because I was allowed to explore things very deeply if I wanted to, you know. Because the type of approach that my parents took with us, in educating us, we could, we could dive into the topic, you know, for weeks, and try and understand it deeply."* Compared with literature on student engagement, the concept of deep learning is prominent in the following words of Strydom

et al. (2017:98): "*Moreover, the gains in learning and personal development students report from their participation in […] 'deep approaches' to learning, which, as opposed to surface-level learning, encompass a deeper understanding of the meaning attached to learning beyond mere memorisation of facts.*" In light of these insights from student engagement literature, deep learning could be considered a great advantage of individualised home education with regards to academic and cognitive development. Similarly, Strydom et al. (2017:168) make a case for deep learning as a pathway to continuous learning: "*In this sense, engagement helps students to develop a capacity for deep, integrative learning, which is the gateway to a lifetime of continuous learning and personal development (Kuh 2003; Kuh, O'Donnell & Reed 2013).*" The concept of deep learning is explored further from a theoretical point of view as well as the data in section 8.5. From the data presented it seems that deep learning might just be one of the greatest advantages of individualised interest-based home education; something that could contribute to preparing learners for higher education.

The narrative accounts of participating families indicate that the interests that learners followed during pre-higher education phases influenced, in some cases, the higher education enrolment and career choices. Pilot Braveheart discussed how his interest in robotics and programming influenced his direction of study: "*How robotics and the, and the exposure to robotics from about 11, when we started robotics, how that has slowly shaped, […] the things I decided to study.*" Additionally, participants also indicated that the ability to explore interests provided more certainty in making decisions with regards to higher education study directions: "*I think I had, I had a lot more certainty than most, when it comes to, […] what I wanted to study. […] I think largely because I had the opportunity to explore interests to such a […] deep extent…*" In the same vein, Kuh et al. (2006) discussed how enrolment choices influenced engagement as a pre-college experience. Students will certainly tend to engage more in study directions when they have an interest and internal motivation for that topic. Therefore, enrolment plays an important role in academic engagement in higher education. The words from the learner above indicate that having the freedom and exposure to pursue interests provided him with more certainty in making decisions with regards to his direction of study. Individualised home education provided unique prospects of engaging in interests at the secondary education phase, which influenced study direction choices as well as employment opportunities.

The next section investigates how a love for learning developed through interest, motivation and engagement.

8.2.2 Love for Learning

The data pertaining to developing a love for learning for Families 1 to 5 was presented in sections 7.1.2.2, 7.2.2.2, 7.3.2.2, 7.4.2.2 and 7.5.2.2. The notion of developing a love for learning in the home education setting was discussed by Clarkson and Clarkson (2001:3): "*Your home can and should be a warm, vibrant place where your children love to learn as freely and as naturally as they love to play.*" The data gathered through these narrative interviews provided many examples of developing a love for learning which is connected with emotional engagement. A very powerful connection was established with emotional engagement with words from the narratives like: "*excited,*" "*enjoyed,*" "*loved,*" "*excellent,*" "*lekker,*" "*fun,*" "*eager,*" and "*glad.*" The word "*joy*" or "*enjoyed*" was referenced more than 50 times and the word "*love*" or "*loved*" was expressed more than 70 times during the interviews presented by these families. Aligned with what Kahu and Nelson (2017) labelled "*emotional engagement*", families referred to the learning process in the following way: "*excited about learning,*" "*I absolutely loved those books,*" "*Chemistry was 'lekker*'," "*I was eager to learn,*" and "*enjoyed it so much.*" These words underline the love for learning fostered in the individualised home education employed by participating families. Nurturing a love for learning was a focus area for these mothers and was developed very intentionally.

A natural consequence to developing a love for learning, through emotional engagement, was the development of an affinity for academic challenge (Strydom et al., 2017). Similarities between the notion of academic challenge, as presented in student engagement literature (Strydom et al., 2017), and the narrative accounts of participating families is evident in the following references: "*they wanted to know things,*" "*they would go into books and research themselves,*" "*I was eager to want to learn and want to learn new stuff or things that was above my head, wasn't scary for me. I was just like okey well, "Hier is die volgende 'challenge."* The desire to learn new things and not being afraid of academic challenges is a wonderful result and skill that was developed through the individualised home education approach.

Another brilliant example of academic challenge and more specifically quantitative reasoning was provided by mother Privileged, who described how mathematics engagement strategies developed: *"And he'll look at the example and he would work it out in his own head. And I think that was the, the magic. He […] he was working it out for himself. Not mommy trying to force him to understand."* According to Strydom et al. (2017) quantitative reasoning is an important aspect of student engagement in higher education. Thus, the similarity between student engagement literature and the data from

this study is important, because it creates a deeper insight about how an individualised approach to home education could prepare learners for higher education. From the data, it seems that the intentional integration of quantitative reasoning and developing of learning strategies fostered a love for learning and was shown an effective way to enhance learning practices in a home education environment.

Creating a love for learning was associated with an aspect of providing freedom and time for learners to figure things out for themselves as previously discussed in section 8.2.1. It furthermore connects with the autonomy theme that will be discussed further in section 8.2.9 and 8.3.1.

Creating a love for learning was an intentional focus by the mother as the learning facilitator. It emerged from the data as a powerful strategy for establishing engaged behaviour and initiates more engaging behaviours due to the positive emotional connection between learners and the process of learning. On a cognitive level, it also acts as a vehicle for acquiring various techniques, strategies and skills associated with learning. Successfully creating a love for learning and engaging behaviour at an early age, throughout the data, suggested that lifelong learning ensued. Thus, from the data it seems that nurturing a love for learning could be a crucial home education strategy to prepare learners for higher education.

8.2.3 Mathematics and Languages

Chapter 7 indicates that the narrative accounts of participating families represented a strong presence for the sub-theme on mathematics and language instruction, especially in the Primary school phase. The data on mathematics and language practices in the individualised home education was presented in sections 7.1.2.3, 7.2.2.3, 7.3.2.3, 7.4.2.3 and 7.5.2.3 for all five families. Families 1,2,3 and 5 followed a more non-formal approach to home education, which consisted of mathematics and language instruction in a more formal manner, combined with non-formal unit studies (see section 8.2.4) as an integrated approach of combining other subjects with a primary focus on interest and engaged learning (as discussed in section 8.2.1). Family 4 followed a formal curriculum due to their remote location and lack of access to resources, which included subject based formal instruction. The importance of mastering basics skills in the primary years of home education, which include reading, phonics, vocabulary, composition, spelling, grammar and mathematics is highlighted by De Mille and De Mille (2008) and Moore and Moore (1994).

It is crucial to note that all the families followed a formal mathematics curriculum which provided scaffolded levels of learning through which learners progressed. Mathematics was considered an important part of the educational foundation and was emphasised and consistently implemented as suggested by Moore and Moore (1994) and De Mille and De Mille (2008). Mathematics instruction forms the developmental basis for what Strydom et al. (2017) label as quantitative reasoning in higher education. Differently stated, mathematics instruction in primary and secondary education lays a crucial foundation for quantitative reasoning in post-secondary education.

From the narrative accounts it is evident that formal, or structured, mathematics instruction started around the age of 6 or 7 depending on the individual learner. Mother Privileged (Family 5) implemented a formal mathematics curriculum initially, but due to non-engagement, delayed it for a year and replaced the curriculum with play and games. Through games and fun activities, mathematical concepts such as numbers and calculations were introduced in a concrete and fun way. Because the focus was on engagement rather than grades or levels or outputs, the activities successfully established student engagement with mathematics. Altering the activities at the engagement interface to establish engagement is an important role of the facilitator, in this case, the mother. When she sensed disengagement, they would alter the course, material or activities to find new engagement strategies. In this case, mother Privileged moved to a reflective and integrative approach which connects mathematics to real life experiences (see Strydom et al., 2017:35). Their narrative reveals that changing the engagement strategy for one year before returning to the traditional books and curriculum resulted in a love for mathematics and excellent mathematics results in Cambridge exams and higher education. The freedom and flexibility made possible through individualised home education allowed families to place the focus on *engagement* rather than grades, outcomes or results. This example from the data demonstrates the importance of student engagement in successfully preparing learners for higher education. The son of mother Privileged, Accountable Engineer was pursuing a master's degree in engineering, at the time of the interviews. This is important because it indicates how a flexible, responsive, and individualised approach in home education with regards to mathematics instruction in primary education years, could enhance both the affection and competence for quantitative reasoning in post-secondary education. Additionally, several other references in the data referred to a change in pace with mathematics or language instruction, i.e. a flexible, responsive and individualised approach. Family 4 provided references to Pilot Braveheart advancing 4 years ahead of his grade with science due to his particular interest, motivation and engagement in this

field. The importance of an adjustable pace in achieving student engagement will be discussed further in section 8.2.7.

In Chapter 7, the analysis of the narrative accounts of the families revealed that language instruction in most cases focused on home language instruction first and introduced a second language 3-5 years later, depending on how the child matured, progressed and demonstrated engaging strategies. In some instances, first and second language instruction was completed with a formal curriculum but in some cases was completed using a variety of resources and focusing on reading, speaking and writing and the basics skills as presented by De Mille and De Mille (2013:99).

Accountable Engineer (Family 5) described starting to read after he could not wait to find out what happened next in a book their mother was reading (discussed further in section 8.2.6). This statement confirms curiosity and internal motivation, which propelled him to start reading, an example of behavioural engagement through the pathway of motivation (as discussed earlier in section 8.2.1). He also described not initially enjoying the formal parts of English, which was also delayed for some time, but after developing a love for reading he later started to enjoy creative writing and grammar more. Teaching learners to read was viewed an important skill in developing independent learning supported by Moore and Moore (1994:103) who describe this aspect by the following: *"Reading is the footpath to secondary information."* There was a focus on preparing learners how to teach themselves and become independent in their learning. If the above-mentioned results from the data analysis of this study is compared with the literature on student engagement, the importance of reading and writing in higher education comes to the fore. Strydom et el. (2017:8) state that "*reading and writing*" is a crucial "*behavioural manifestation*" in the measurement of student engagement. In the same vein Carini, Kuh and Klein (2006) indicate that academic challenge and the amount of reading are important measures of student effort and engagement. What is interesting is that Strydom et al. (2017:31) indicate that "*when students spent more time reading and preparing for class in modules/subjects where they felt challenged, they experienced more emphasis on higher-order learning*." In the same vein, Kuh (2009:12) state that in the conceptualisation of the Nasional Study of Student Engagement (NSSE), the amount of reading and writing students did during the academic year, was of particular importance. Strydom et al. (2017:31) also connects academic writing, in addition to reading, with the development of higher-order learning. The connection between reading, class preparation, academic writing, and higher-order learning is crucial (Kuh, 2009; Strydom et al. 2017) because it underlines the importance of developing reading

and writing competence in primary and secondary education; something that is positively confirmed by the data of this study.

Self-directed learning in mathematics and languages is also vital for the narratives which showed how learners became independent with time and started taking responsibility for their own work as discussed in section 8.3.1. This finding is substantiated by Moore and Moore (1998): "*We encourage you to use proven, largely self-teaching "efficiency" courses.*" Learners in this study reveal how they, especially in mathematics, had to figure out things they did not understand, and how their mother provided the freedom for this cognitive process to develop. The reference signifies acquiring learning strategies required for higher education success (learning strategies is one of the academic challenge engagement strategies of Strydom et al. 2017:33). Not just being given the answers but having the time to figure out things improves autonomy (section 8.3.1), self-efficacy (section 8.3.5) and cognitive skills through student engagement practices of academic challenge.

The narrative accounts indicate that mothers were intentional and persistent in growing mathematics and language skills. Mathematics and language instruction also presented individualised features in how the mother's evaluated personality, maturity, interest and the situation of the family in making decisions on how to grow each learner individually (see section 8.2.7). The narratives confirm how a flexible, individualised home education environment allowed the freedom to focus on student engagement and provide the tools and skills for autonomous learning.

8.2.4 Topic or Unit Studies

Chapter 7 indicates how topic or unit studies were utilised as an integrated learning approach by four of the participating families, especially during the early education years. The results are presented in sections 7.1.2.4, 7.2.2.4, 7.3.2.4 and 7.5.2.4. This approach, as utilised by these home education families, was discussed in section 4.3 of the literature on approaches to home education. Moore and Moore (1994:99) suggest "*content subjects which include social studies, science, religion, […] are usually chosen for projects because they are inexhaustible in their scope and lend themselves to any level of research and study. They form a basis for exciting practical learning about our world, ourselves and our past*". The implementation of '*unit of study works*' and their efficiency was further explored by Moore and Moore (1994): "*things that are learned by experience last longer, and concepts attitudes, values and creativity are lifelong.*" The data supported the unit studies theories presented by Moore and Moore (1994) through

references of remembering content better, having positive learning attitudes and often exhibiting creative expression.

From the data (of Families 1,2,3 and 5), it is evident that families used the unit study approach for various reasons, one of these being the awakening of curiosity and establishing engagement with content and activities. Furthermore, participants explained that unit studies engaged learners on an affective (emotional) level: "*like playfully learn*, "*we loved unit studies,*" "*very exploratory,*" and "*we did it in a really fun way.*" These excerpts from the data show that learners were emotionally connected. This affective dimension in the data correlates with what Trowler et al. (2021) labels affective engagement, i.e. students' affective and emotional reactions to learning. Like explained earlier, the affective engagement created during home education transcended into higher education for many of the participants.

Positive emotions were activated by founding the topics on curiosity and interest as shown by the narratives (see section 8.2.1): "*she would ask us, what would interest us and then we would dive into that a bit more," "but if we were interested in it, she would do it," and "So, it's time to decide on a new topic, what we should learn about?".* Incorporating learners' interests and preferences into learning increases motivation and behavioural engagement (Kahu and Nelson, 2017; Trowler et al., 2021). Curiosity and interest incorporated into unit studies could engage learners through a variety of activities.

Apart from awakening curiosity and interest, unit studies also focused on developing other skills, as explained in section 8.3.3. Mother Lighting Fires received her pseudonym from this excerpt: "*I saw it as just lighting fires in their hearts and their minds. So, I wasn't really interested in what they would retain, or what they would remember.*" Her quote confirms how unit studies were aimed at igniting passion but, on a secondary level, were not aimed at memorisation. Instead, they aimed at developing other skills like character development, problem-solving and critical thinking, which, on a deeper level, connect to higher-order learning practices. Strydom (2017:30) discuss the contradiction between memorisation and higher-order learning in the following way: "*The Higher-Order Learning indicator describes how much students' academic work places emphasis on challenging cognitive tasks such as the application, analysis, judgment, and synthesis of information learned instead of just mere memorisation of facts."* Unit studies focused on engagement and developing skills and higher-order learning practices.

Unit studies utilised an integrated approach to learning. Integrated learning connects different subjects, cutting across disciplinary lines and establishing meaningful

connections between subject areas (Drake and Reid, 2020). The integrated approach utilised in unit studies was described by participants as follows: "*if you look at a horse, you can go into the history, where did horses come from, and to South Africa, then that covers your geography as well. And then we will look at the body of a horse. So that's your biology. So, we did it in a really fun way.*" The integrated, also called interdisciplinary, approach offer advantages as discussed by Drake and Reid (2020), which include developing critical 21st century skills like critical thinking, problem-solving, creativity, agility and adaptability, global awareness, etc. Research further shows that the academic achievement of learners who have been exposed to an integrated curriculum performs at an equal or superior level to other learners, with the additional advantage of internal motivation, enjoyment and higher engagement through academic challenge (Drake and Reid, 2020; Strydom et al., 2017). The integrated approach to learning is shown to be very effective, relevant and suitable, especially for developing graduate attributes now required in careers and real-life applications (Drake and Reid, 2020). Like explained in Chapter 7, this technique applied by the home educating families who participated in this study, was also effective in adequately preparing learners for high school subjects

Unit studies was mostly utilised during primary school and gradually converted to subject based studies around 13-15 years and the implementation of a formal curriculum (Moore and Moore, 1994:43 suggest a formal curriculum after age 12). The references by participants discussed that unit studies provided a very good general knowledge and that transitioning to high school subjects was not difficult after unit studies formed an integrated foundation. It is important to note that unit or topical studies is not the only way in which integrated studies can be accomplished. There are alternatives to this technique that can facilitate integrated learning and develop similar skills. However, the narrative accounts associated with this study indicate how families used unit studies to facilitate integrated learning.

The next section will discuss the data on experiential learning.

8.2.5 Experiential Learning

Experiential learning (discussed in section 4.3.3.6) was employed as an important student engagement strategy in the individualised home education environment. The data on this topic was presented in Chapter 7 in sections 7.1.2.5, 7.2.2.5, 7.3.2.5, 7.4.2.5 and 7.5.2.5. As a learning strategy, experiential learning provides a theory for resolving the distance between how information is collected and how it is used and applied (Kolb,

1984). Active participation in the learning process, especially when connected to the learners' world and real-world applications, results in interaction with experiences and content, which advances the development of critical thinking (Boogu and Sundarsingh, 2019). When students tangibly engage in learning, experiential learning principles are repeated: (1) do, (2) reflect, (3) think, (4) apply; as defined by Butler, Church, and Spencer (2019) and cognitive engagement arises. Experiential learning provides full-cycle and whole person development, resulting in the acquiring of effective skills, logical thinking, problem solving and meta-learning capabilities (Kolb and Kolb, 2017).

Because experiential learning requires the integration of subjects, it provides further opportunities for application of integrated learning in addition to developing life skills (as discussed in section 8.3). Experiential learning, considered a learner centred approach, promotes the cultivation of especially motivation (Kong, 2021; Che, Strang, and Vajjhala, 2021). Research further shows that experiential learning can cultivate interest, involvement and dynamic participation connected to student engagement (Che 2021). Experiential learning proves to be very effective in student engagement by activating cognitive, affective and behavioural student engagement (Kong, 2021). Important to experiential learning, the role of the teacher, or mother in this case, changes from a knowledge provider to a mediator of experience, which is important information regarding the role of the mother in individualised home education. In the same vein, Strydom et al. (2017) discuss student engagement from the academic challenge theoretical perspective and how knowledge applied in real life situations is critical for cognitive development. Real world and practical experiences are extremely valuable in linking theoretical knowledge to experiential knowledge and real-world applications. Compared to the literature on student engagement, *academic challenge* as a student engagement technique was richly represented in this section of the data.

Mother Encourager (Family 1) described doing a lot of experiments, projects, field trips and videos, which was combined to create a holistic learning environment. Her son, Curious Scientist, exhibited strong behavioural engagement during his early education years with regards to experiential learning, as indicated by the following extract: "*teach your kid from a small age, in the developmental years, how their body weight works. Jump on rocks, now you get the fundamental understanding of momentum."* His narrative continued to show strong behavioural and academic engagement, in connection with experiential learning, with the progression of time. The reference to engaged learning, later in his life, is provided: "*if you wonder about something, you go and test it. So, I would still, like wonder like, Oh, I wonder if the boiling point of water changes, if you add*

salt to it. I will quickly go and boil water with salt and test the temperature difference. If you wonder you go test it." The quote also presents a formidable reference to higher-order learning as an academic challenge engagement strategy.

Another example of experiential learning was revealed by mother Lighting Fires through the following excerpt: "*there was a guy at our house that came to see, you know, whether they can drill a borehole. And, with my older kids, I would stick to: "no we're busy with school, and I must finish the work." Yesterday, I just stopped everything straightaway, and we rushed out and we followed this lady, and this guy for half an hour asking questions. How does the instrument work? Why? How deep can it measure? Do they measure the water with it?"* These words of Mother Lighting Fires create a deeper understanding of how an experiential mindset allowed greater flexibility to include learning activities beyond the boundaries of a set curriculum. What is important is that she did not force her children to sit with their books and finish schoolwork when an opportunity for experiential learning like the one above, arose. Her narrative reveals discovering the importance of an experiential learning approach and learning to trust in an education which exposes children to real life experiences which results in engaging behaviours.

Family 4 also presented superb experiential learning experiences with extensive travelling and how these experiences expanded their education. Their travelling through Africa exposed them to rich history, cultural experiences, learning to speak various languages, and narrative stories from native village people. The connection of knowledge to real life examples, people and places provided experiential learning and engagement opportunities. Their narratives presented rich engagement data on behavioural and cognitive engagement (Trowler et al., 2021). Pilot Braveheart presented an experiential perspective when their car broke down and with their father away, the two boys decided that they would fix the car. The siblings, ages 9 and 6, fixed the plumbing on the fuel system and successfully fixed their family vehicle. This experiential learning example presents an example of how problem-solving skills develop under such conditions as discussed by Kolb and Kolb (2017). Upcraft, Gardner and Barefoot (2005) discuss how academic competence through learning opportunities that grow critical thinking, problem-solving and reflective judgement improve student success. Experiential learning is therefore considered an important practice for higher education preparation because it is linked to developing problem-solving, critical thinking and integrative and reflective academic challenge.

The next sub-theme pertaining to learning discusses reading as an individualised home education practise.

8.2.6 Reading

Chapter 7 indicates that reading emerged as a strong sub-theme from the data. The narratives by home education parents and learners described reading in different physical settings such as outside, in the hammock, in bed, or on the couch (see sections 7.1.2.6, 7.2.2.6, 7.3.2.6, 7.4.2.6 and 7.5.2.6). The references to reading during interviews included family and individual reading of a variety of books and resources, which included novels, history and science, other academic books, as well as fiction. Reading as a predominant learning activity was discussed under the various home educational approaches (sections 4.3.2.5; 4.3.3.1; 4.3.3.3; 4.3.3.4; 4.3.3.5). Reading was associated with a strong emotional connection.

The descriptions of family reading times included words like "*one of my fondest memories,*" "*fun,*" "*joy,*" "*peaceful,*" "*all the kids would love it,*" and "*still remember today.*" These moments had a lasting effect on these learners and formed lifelong memories of not only reading but warm, loving, and peaceful times together as a family. The descriptions during earlier phases mostly described the mother reading and the children cuddling in bed or building Lego or drawing while their mother was reading. Family reading was a regular, in many cases, daily activity which continued well into the high school phase (for some families). The data complement the discussion on *belonging* as an engagement pathway towards socio-cultural engagement (see section 8.1.1). Reading was one of the important activities which contributed to feelings of safety, belonging and cohesion. According to Sarah Mackenzie, founder of the Read-Aloud Revival and author of the book 'The Read-Aloud Family' (Mackenzie, 2015), reading holds various advantages from building family connections to growing vocabulary and communication. She refers to another socio-cultural aspect of reading, where shared reading becomes part of a family identity, and a unique language is formed. Life is interpreted through shared vocabulary from books and characters that connect family members.

If the narrative accounts of participating families are compared with student engagement literature, it becomes evident that developing a love for and competence in reading during primary and secondary education years is crucial for higher education success. As indicated earlier, Strydom et al. (2017:46) indicate a "*positive relationship between reading and class preparation and higher-order learning*." In the same vein, the South

African Council on Higher Education (CHE) performed a national study focusing on the dimensions affecting students' lives and their ability to succeed in higher education. Data from this study indicate that competence in reading academic texts is crucial to student success (CHE, 2015:22). Furthermore, Carini, Kuh and Klein (2006) indicate that student engagement develops critical thinking, and, in this regard, they draw parallels between the amount of reading and the development of critical thinking. Thus, the nurturing of reading from a student engagement perspective, as indicated in the data, provides an important foundation in preparing learners for higher education.

In the narrative accounts of participants, reading was strongly associated with internal motivation. Data pertaining to motivation quoted: "*We'd really dive deep into reading*", "*we just devoured the books and stuff that the library had,*" and *"…he was always reading and finding out all the way."* The quotes confirm internal motivation with words like "*dive deep,*" and "*devoured*" displaying actively engaging in reading. Behavioural and active engagement through internal motivation (as discussed by Trowler et al., 2021) was established on the sub-theme of reading. According to Baker, Scher, and Mackler (1997), children with enjoyable literacy encounters at an early age are more likely to read frequently in later years. Additionally, early reading enjoyment was shown to develop motivation for reading a broad spectrum of material, thereby enhancing cognitive and critical engagement. Baker et al. (1997) also found that shared storybook reading increases motivation for reading, which also relates to affective and socio-cultural engagement. In the same vein, Snow (1994) discusses how good literature can fascinate, inspire, and capture the imagination, which becomes a powerful motivator for reading and incorporating behavioural engagement. The narrative data of this study indicate that in the homes of participating families, reading was enjoyable, good books and literature were plentiful and reading was associated with family, love, and warmth, supporting various engagement philosophies.

Character traits and virtue can be communicated and developed through reading (Moore and Moore, 1994). Likewise, Mackenzie (2015) explores how stories inspire children to be brave in the face of adversity and how it gives children perspectives of other people and develop empathy for how others see and experience the world. She discusses how inspirational stories can grow character traits like kindness, empathy, and courage (Mackenzie, 2015). Nurturing of values associated with socio-cultural qualities was included by Trowler et al. (2021) as a student engagement characteristic. Developing character and virtues associated with belonging, connection and personal development was embedded in the narrative data. Character development was explored further in section 8.3.3.

The words of homeschool mother Lighting Fires, revealed during an interview pertains: "*Right there in my bed we explored the world together.*" It talks about journeys taken, worlds explored, and adventures braved, all while in bed reading together as a family. In line with these words from the narrative account of this mother, George Martin states: "*It is said that a person who reads lives a thousand lives, but a person who never reads lives only one*" (Martin, 2011). Additionally, Mackenzie (2015:80) beautifully supports the above statement of how books and characters can draw us into another world of adventure where we can grow and learn with these characters and enrich our own lives from adversities faced and the brave and heroic acts endured by characters. Thus, from the narrative data it is evident that reading not only develops a love for books and the desire to read, but also individual character traits crucial for preparing learners for higher education.

Cognitive and deep academic advancements are both improved with engagement through regular reading activities. Strydom et al. (2017:31) related reading with higher-order learning: "*when students spent more time reading and preparing for class in modules/subjects where they felt challenged, they experienced more emphasis on higher-order learning*." The regular reading exhibited in the data and implemented with consistency becomes a rather easy student engagement practise for home education mothers.

In the narrative accounts of families, it was evident that individual reading was also an important tool in becoming independent in their education journey. Participants reviewed how learning to read and do research were important skills in becoming independent learners, also discussed by Moore and Moore (1994:103). Reading was also a tool for diving deeply into interests, with one example of a learner advancing four grades above his age in science because he was just so interested and engaged. Participants Pilot Braveheart and Conscientious Innovator expressed with excitement and joy the significant role library visits played in their individual growth, when they returned to South Africa, which often consisted of academic resources. The data support academic challenge and engagement through family early reading, individual reading, motivation for reading, and engaging with quality resources through reading.

It is an astonishing discovery from the data that a single daily activity like reading can influence the characteristics required for higher education in such a profound way. The data presented on the sub-topic of reading revealed that in the individualised home education setting, reading was important in many ways for individuals to develop and was linked to socio-cultural, behaviour and academic challenge engagement strategies.

The individualised aspect of learning in the home education setting was discussed next in section 8.2.7.

8.2.7 Individualised

Individualised education allowed for a unique approach, focused on engagement, and advantageous in various ways for preparing learners for higher education. The data presented on the theme individualised home education was presented in sections 7.1.2.7, 7.2.2.7, 7.3.2.7, 7.4.2.7 and 7.5.2.7 and incorporated various home education strategies as also discussed in section 4.3.2. Theoretically, individualised home education has been recognised and recommended for decades already as discussed by the Moore family (1994:14) under the topic of customised curriculum: "*Your curriculum should be tailored to your child and provide him with much more time to pursue his interests than workbooks.*" Clarkson and Clarkson (2001:26) discussed home education as an opportunity to freely choose a variety of curriculum items "*personally tailored to address each individual child's needs, interests, capabilities, and learning style*." Likewise, individualised learning presented in the narratives of these families revealed the topics of (1) interest, (2) depth of study, (3) personality and learning preferences and (4) individualised pace and learning outcomes. The first aspect of individualised home education that improved engagement, was the fact that learning was principally interest-based as discussed in more detail.

(1) Interest

The data reported a great amount of freedom and support that was granted to learners to pursue individual interests and remain engaged through curiosity (as discussed in section 8.2.1). Education was, therefore, firstly individualised in providing the freedom to pursue topics the learner was interested in and that engaged their curiosity. The notion of *interest* is linked to student engagement by various authors (Amzil, Tagdimi and Aammou, 2023a, 2023b; Ryan and Deci, 2000; Kahu and Nelson, 2017). The freedom and flexibility provided by individualised home education allowed mothers to personalise educational content and activities to the interests of learners, which improves engagement through novelty, curiosity and motivation. This affective dimension, created by fusing interest with teaching and learning, is something that prepared learners effectively for higher education. Individualised home education as related to depth of study was revealed in the data of these families.

(2) Depth of Study

Deep learning was presented in the narrative data and associated with increased engagement and deep learning practices. Ebert-May, Brewer, and Allred (1997) discussed the role of educators in emphasising the process of grasping knowledge and content but pursuing depth rather than covering as much content as possible. Smith & Colby (2007) introduced the theoretical notion of high-quality learning being synonymous with deep-learning approaches and how low-quality learning is often compared with surface level learning. Dovač, Nome, Jensen, & Skreland, (2023) provide a theoretical overview of how deep learning developed as a progressive learning strategy. Their review provides an assessment of the evolving theories on deep learning (the theoretical clarification and operationalisations) and why deep learning should be implemented in education philosophies, and how deep learning can be implemented and assessed. León, Núñez, & Liew (2015) provide the link between deep learning and autonomous self-directed learning as well as internal motivation, which was strongly presented in this study (8.2.1 and 8.3.1). The relationship between internal motivation and the acquiring, organisation and retainment of knowledge was discussed by León, Núñez, & Liew (2015) and the link between internal motivation and dynamic behavioural engagement as discussed by Trowler et al. (2021) explains the data as revealed with regards to depth of study.

From the data it is evident that the depth of study was phase dependant and individualised. Curious Scientist discusses how a young learner's curiosity will be satisfied quickly: "*when you're small, curiosity gets satisfied quickly. You don't have to go very deep into something. So that small hunger for curiosity was satisfied almost every time*." With time and progression through educational phases, learners mature, and curiosity deepens to higher levels of academic challenge. Mother Lighting Fires described personalising the depth of study: "*give each child the opportunity to follow the interest and, and also, to go as far or deep as they, as they were interested in the subject*." Her description states how the depth of study was still focused on interest, therefore activating internal motivation and behavioural engagement as discussed in section 8.2.1. Pilot Braveheart, as time progressed, discussed the advantage he had in pursuing interests to a deep level: "*I had the opportunity to explore interests to such a lot, to such a deep extent.*" He is also the participant who pursued his interest in science to several levels above his grade. It is argued that individualised home education presents a huge advantage in allowing learners to pursue interests as deep as they desire. Curiosity naturally matures and pulls them to deeper levels of engagement with learning material, if given the autonomy to choose their area of learning (Ryan and Deci,

2000). León, Núñez, & Liew (2015) established correlations between deep learning, autonomous self-directed learning and internal motivation, as also presented and substantiated by the data of this study. This engagement strategy accomplished the academic challenge goals of higher-order learning, reflective and integrative learning, learning strategies and quantitative reasoning (Strydom et al., 2017) through student engagement. In the end, it seems that mastering learning strategies, which could be applied to any field, might be equally important as covering the academic content of subject areas.

Next, the individualised engagement approach discussed how personality and learning preferences were accommodated in individualised home education.

(3) Personality and Learning Preferences

Correlations exist in literature between personalised learning preferences and student engagement. For example, Amzil, Tagdimi and Aammou (2023a, 2023b) indicate the positive effect that personalised learning, specifically when modified to a student's learning preferences, could have on student engagement. Learning styles and the effect on student engagement showed that learners with a preference for visual learning (Tobias, 1994) showed higher classroom engagement linked to behavioural, cognitive and emotional engagement compared to auditory and kinaesthetic learning preferences (Halif, Hassan, Sumardi, Omar, Ali, Aziz, Majid, Salleh, 2020). The elements of student motivation investigated achievement, recognition, relationship with peers and lecturers, which was all shown to influence motivation. Halif et al. (2020) concluded that "*Motivation is probably one of the most important factors that educators can consider prioritising in order to enhance learning*." Motivation, as a pathway to behavioural engagement, is therefore concluded extremely important to classroom engagement but was also shown to be influenced by learning preferences. Madhu and Bhattachryya (2023) describe four learning styles which include self-supportive (independence), contextual (comfort in familiar environment), associative (need for structure and guidance) and collaborative (preference for group activities). The results confirm that accommodating learners' individual learning preferences can improve learning experiences and academic outcomes, suggesting that these learning preferences also influence optimal engagement strategies. Examples of such preferences were revealed in the data presented by the narratives of the home education families.

The narrative accounts indicate that participating families customised learning by the type of learning experience that grabs the learner's attention – i.e., engages the learner to a greater extent, for example, artistic expression or gathering data or experimenting

and extracting scientific laws. This study's narrative data shows that learners preferred specific types of learning experiences that improved how they engaged with the learning process. An interesting discovery from the data was that learners also showed a preference for the learning environment, some preferred to work alone while others desired to work together. In some cases, learners could work independently from a youthful age while others required help and focus from a parent until much later. Their ability to focus, the speed at which they completed tasks and their end goal of completing tasks all differed. Mothers were extremely flexible, intuitive, and adaptable in their approach to the individual, their strengths, interests, and learning style. Clarkson and Clarkson (2001:22) discuss how the home education environment is ideally suited for individualisation: "*Each child is an individual. Home education focuses on the development of the whole person, responsiveness to individual learning needs and desires.*" The focus of individualised learning remained on facilitating engaged learning, personal growth, and enjoyable learning experiences, which was the winning strategy for successfully preparing learners for higher education.

How individualised home education personalised the pace of learning was discussed in the next section.

(4) Individualised Pace and Learning Outcomes

Individualised home education provided flexibility in adjusting the pace and learning outcomes. Dlamini, Maharaj and Dunn (2021:110) who reviewed home education practices in South Africa, concluded on adjusting the pace as an individualised practise which was considered one of the advantages of home education: "*Parents stated that they opted for home-schooling because they believed that children are unique and should be afforded the opportunity to develop at their own pace.*" Clarkson and Clarkson (2001:21) discuss the custom approach to the pace of learning: "*Your homeschool […] has all the potential to be an ideal learning environment for your child. You can balance control and flexibility to meet each child's individual learning needs. You can determine readiness for and pace of learning, holding off or jumping ahead of grade level without concern."* Introducing a flexible pace in a school setting is often associated with a competency based educational (CBE) approach, utilising individualised and flexible pacing which provides learners with the opportunity to achieve mastery at their own pace. Authors agree that the CBE would foster deep learning and meaningful engagement (Colby, 2019; Harrington & Green, 2021; Pane et al., 2017; Walser, 2021) but implementing CBE has proven very challenging in traditional school structures (Sutherland, Strunk, and Nagel, 2023).

The references in this study confirm the unique opportunities individualised home education provided for adjusting to the learning needs of the individual, also with regards to the pace of progress. Adapting the pace to suit the learner was presented several times in the data of this study, which in some cases required a faster pace, aimed at providing a challenge or a slower pace when the learner was still maturing to a development phase (as discussed in section 4.3.2.4). Adjusting the pace was showed to be an extremely successful tactic in ensuring engagement with content, especially when presenting important foundational academic building blocks such as math and languages (see section 8.2.3), which provides unique opportunities for academic challenge and deep learning. Concentrating on engagement was a very important aspect of determining the resources, the pace and the types of topics and activities that ensured continued student engagement. During primary education the way in which learners responded to educational experiences was flexible, giving opportunities to be creative, promoting autonomy and creating enjoyable experiences. They could choose to draw, write, create a lapbook, poster, model, video, presentation, etc., which emotionally engages the learner with activities, content and experiences. One of the most affected aspects of engagement through individualised pace was behavioural engagement through motivation. This provides another excellent example of an individualised home education environment facilitating affective, behavioural and cognitive student engagement.

The role of parents (section 8.4.1) and the environment (section 8.1) in the individualised home education setting was discussed in more detail in these sections. How outings contributed to individualised learning engagement was discussed in more detail.

8.2.8 Outings

Regular outings and field trips were presented from the narrative data in 7.1.2.8, 7.2.2.8, 7.3.2.8, 7.4.2.8 and 7.5.2.8. Compared with home education approaches (Chapter 4), the narrative accounts of *outings* from an academic point of view link with Maria Montessori's attachment to reality (see section 4.3.3.3) as well as Leadership Education's foundational love of learning phase, discuss the role of field trips in creating a love for learning (De Mille and De Mille (2013):146, section 4.3.3.5). Outings also create opportunities for experiential learning as discussed in sections 4.3.3.6 and 8.2.5. Incorporating field trips was discussed by Moore and Moore (1994) as one of the characteristics for shaping children in the home education setting. The data provide for visits to the museum, library and other places of cultural interest.

Yellishettya and Patilb (2018) investigated the impact of field visits and experiences on student engagement of mining engineering students. Their results reported that field visits influenced learner's participation and student endearment, suggesting that field trips and practical experience positively influence emotional and behavioural engagement. Outings (or field trips) were referenced in this study in several narrative reports of participants and was associated with positive emotional connection.

Outings were usually arranged on Fridays as revealed by various narratives: "*Fridays we had field trips, and our crafts, and extra murals were on a Friday."* It is something they did often: *"and we did that very often,*" and it was associated with a lot of positive emotions: *"fun," "it was key for me," "that was also probably one of my very fond memories," "can never forget them," and "some of the highlights."* Regular outings, usually on Fridays, related to socio-cultural engagement because these experiences often entailed a socialisation component. Descriptions in the narrative accounts of the socialisation part of outings are recalled: "big social things," "*it was a social event because […] my mom would always get someone to do something with us," " we would organise a group of homeschoolers," "see friends and learn about things," and "… it was a social thing, in a big way."* Affective or emotional engagement was furthermore presented but cannot be isolated from the socio-cultural engagement component but rather we suggest that outings create a synergistic amalgamation of affective and socio-cultural engagement.

Outings created opportunities for learners to see and experience real world applications and careers. Strydom et al. (2017:35) links real life experiences with reflective and integrative learning, consequently outings present an important cognitive engagement opportunity. In the same vein, McCormick, Kinzie and Gonyea (2013) make a case for the real-life application of numerical and statistical knowledge in higher education, and Madiba (2014) indicate that student success is also dependent on what happens outside the classroom. Thus, when participants confirmed, in the following words, how they have experienced these outings creating opportunities to see real life applications, it creates a deeper understanding how home education could prepare learners for higher education: *"The real situation, how does it look?" "it was hands on learning,"* "*we went to Smuts house and we went to the Pioneer Museum in Silverton, to find out, that's how people lived. They had to make a fire, they had to grind their mealies. So real life."* Their descriptions of places they visited included universities, Coke, bread, and sweets factories, museums, the zoo, air traffic control centre, fire brigade etc. and established an important way of thinking – i.e., to link academic content to real-life applications. In addition to seeing and learning about real life applications, it was also an opportunity to

learn about careers as referred to by Curious Scientist: "*That basically taught me that people are always keen to talk about their work. You should just be curious about their work, they will tell you. And yeah, you can learn a lot through that."* Individualised home education provided the opportunities to go on a wide variety of outings, which exposed the learners to real life applications and careers, providing perspective and the opportunity for cognitive, behavioural, socio-cultural and affective engagement to ensue.

Section 8.2.9 discuss how non-formal home education were represented in the narratives of these families.

8.2.9 Non-Formal

Non-formal individualised home education refers to a specific approach that home education families pursue. Moore & Moore (1994:22) described it as follows: "*True homeschooling is tutorial, handmade, customized to each child. Such parents respond to their children in a loving, informal way, a balance between systemic structure where needed and a great deal of freedom for youngsters to explore*." Following a non-formal home education structure is encouraged by various authors who provide suggestions on how to employ such an approach successfully (Moore and Moore, 1994, 1981, 1975; Clarkson and Clarkson, 2001; MacKenzie, 2015). Four of the five families interviewed in this study employed a non-formal individualised home education approach up until the high school phase of home education placing the learner at the centre of learning (see sections 7.1.2.9, 7.2.2.9, 7.3.2.9, 7.4.2.9, 7.5.2.9). The notion of only incorporating formal curriculums until much later was discussed by Moore & Moore (1994:44): "*children normally are not mature enough for formal school programs until their senses, coordination, neurological development and cognition are ready. Piagetian experiments have shown repeatedly that cognitive maturity may not come until close to age twelve*." Moore and Moore (1994) discuss how home education during the early phases should focus on mastery of the basic skills – i.e., reading, writing, spelling and arithmetic as employed by these families (section 8.2.3).

Non-formal home education allows for individualised interests to be incorporated into educational activities to a high degree, (see section 8.2.1), especially through unit studies (see section 8.2.4) and projects improving motivation and behavioural engagement. The non-formal home education (as employed by four of the five families) presented specific characteristics during the interviews, which enhance student engagement. The approach following by the one other family was described in section (7.4.2.9, Family 4) who incorporated a more non-formal approach during high school. The categories discussed

pertaining to the non-formal approach of individualised home education included (1) prolonged play, (2) educational approach, (3) method and structure, (4) assessment, and (5) autonomy.

(1) Prolonged Play

Early education was described as joyful and playful learning and was filled for the most part with informal educational games, experimenting, exploring, reading, and nature studies, which agrees with the pedagogical approaches of Montessori, Charlotte Mason, Leadership Education and Experiential Learning (sections 4.3.3.3; 4.3.3.4; 4.3.3.5 and 4.3.3.6). Play influence speech development, self-awareness, self-regulation and cognitive processes as shown by Vygotsky (1987, 1986, 1978). Parker, Thomsen, and Berry (2022) describe how play, which is experienced as joyful, socially interactive, meaningful and actively engaging can foster emotional, social, cognitive and creative skills through active or behavioural engagement. The data presented by the home education families presented a large component of play during the primary education phase especially. Priority was given in the early years to a lot of free time to PLAY, explore, natural non structured learning, and having fun (see section 8.1.2). From outdoor play, in the trees, exploring, building things, to reading or nature studies.

More specifically, prolonged play as a philosophical approach to home education was presented by mother Lighting Fires: "*For my children, […] they could just be children and I have put a very strong emphasis on an extended, prolonged childhood. I wanted them to be kids as long as they could, because adult life is just, when it starts, it's over. You cannot play again. So, I wanted them to be just children and play as long as they could."* She described, for the duration of primary school, playing for most of the day, creating a stress-free environment. Other narrative accounts that indicate the prioritisation of early education play, are as follows: "*a lot of play,*" "*played in the kitchen,*" and "*played outside with my sister.*" As discussed earlier (see section 8.1.2 and 8.1.3), play can be associated with emotional (affective) engagement as shown by Parker, Thomsen, and Berry (2022) because it strongly links with positive emotions. Similarly to their results, the data support actively engaging with learning experiences through play. Ellis, Horne, Bloodworth, Nielson and Ely (2022) indicate how play-based learning could enhance student engagement, specifically in mathematical learning. Similarly, Nguyen, Tuan, Phuong (2024) indicate how universities could enhance student engagement in the learning process through introducing games; something that could also lead to enhanced social skills. This is in line with the narrative data of this study that indicate how play also noted the presence of siblings or friends and, therefore, presents also a socio-cultural

engagement component. Along with a strong focus on play, the participants referenced having a stress-free childhood. Mother Lighting Fires provided the following quote: "*the rest of the time it was playing and just being, not stressed about schoolwork and homework and any of that."* Other references to reduced stress was presented: "less stressful," *"it didn't feel rushed,"* and "*peaceful.*" Thus, play, as a particular approach to education during the early education phase, was an important part of physical, emotional, behavioural and cognitive development. The mothers focused on uninhibited play and a stress-free childhood. The educational approach that constitutes non formal individualised home education was discussed next.

(2) Educational Approach

Families 1,2,3 and 5 followed the same approach to non-formal individualised early home education (see sections 7.1.2.9, 7.2.2.9, 7.3.2.9, and 7.5.2.9). Such an approach focuses on developing mastery of language and mathematics during the early education years but delaying formal learning until much later (Moore and Moore, 1994, 1981, 1975; Clarkson and Clarkson, 2001; MacKenzie, 2015). Families do not buy a full curriculum but rather select various resources which is customised according to the student-centred approach.

The individualised non-formal home education consisted of mathematics, language and integrated curriculum unit studies as a primary school approach and was implemented around the age of 6 or 7 but still provided a lot of freedom and flexibility with regards to pace, interest and engagement (see section 8.2.3). Up until the age of 10 or 11, school consisted of 2-3 hours of academic content, a maximum of 4 days per week (see section 8.2.8 about Fridays being used for outings, socialisation, co-op meetings or recreational purposes), and the rest of the day was spent in explorative play and learning. Mother Lighting Fires confirmed using such an educational approach: "*You know, there was, we, in the primary years, we, you know, we had three mornings of, two to three hours, maybe, of formal school, you know, where we would sit and do our mathematics and yeah, the, but the rest of the time it was playing."* Such a non-formal approach is theoretically supported by home education resources such as Moore and Moore (1975, 1981, 1994), Clarkson and Clarkson (2001) and Leadership education (De Mille and De Mille, 2013). The non-formal home education setup created high levels of student engagement by employing outings or field trips (see section 8.2.8), experiential learning opportunities (see section 8.2.5) and regular reading (see section 8.2.6), which was all shown to positively influence aspects of student engagement. Creating joyful, intriguing and purposeful learning experiences facilitate emotional and behavioural student

engagement through affection and motivation (Ryan and Deci, 2000; Trowler et al., 2021). Facilitating experiences that require thinking and deep learning in the non-formal home education approach create opportunities for cognitive development and academic challenge engagement (Dovač, Nome, Jensen and Skreland, 2023).

Utilising mathematics, language and unit studies in the early years was complimented with additional language and science resources towards the end of primary school. Families 1,2,3 and 5 referenced incorporating a second language around age 10/11 and transitioning to more formal science and other subjects around the age of 13, still utilising good academic resources. Introducing more formal components around the age of 10-12 was discussed by Moore and Moore (1994), which encourages engaging academic challenge and behavioural engagement. Such an approach was also discussed by De Mille and De Mille (2013) with progression to what is called the transitioning to scholar phase. Mothers were intentional about teaching their children to learn independently, working towards autonomy and heutagogy. The learners transitioned to a more autonomous learning environment by high school as discussed in section 8.3.1, which changes the engagement strategy to political engagement through the pathway of self-efficacy. This is in line with Trowler et al. (2021) who defines Political engagement as a position of power and defines the extent to which a learner accepts agency in contrast to passively consuming.

For these families, a formal curriculum working towards final examination were incorporated around ages 15 or 16 with the focus on meeting prerequisites for entering higher education. The last three years of high school would place a strong focus on academic challenge as an engagement method, developing especially analysis and quantitative and reasoning skills (Strydom et al., 2017). During high school, a lot of freedom was still provided to pursue interests and develop skills in various areas of interest, thereby still applying motivation, behavioural engagement as well as political engagement (Trowler et al., 2021). The method and structure of non-formal home education was discussed as another aspect of non-formal home education.

(3) The Method and Structure of Non-Formal Home Education

The non-formal home education approach provides a flexible structure without rigidity during the younger years, transitioning to full autonomy during the high school phase (Moore and Moore, 1994, 1981, 1975; Clarkson and Clarkson, 2001; MacKenzie, 2015). Moore and Moore discuss how delayed schooling provides the time necessary for cognitive skills to develop. This, combined with the how and why of learning, provides deeper cognitive development. The method and structure of non-formal home education

emphasises deep learning as discussed by Moore and Moore (1994:55): "*If you want bright and balanced children, you must help them be thinkers, […] the ability to think things through maturely and consistently.*"

The non-formal home education methods (because it is based on fascination, interest and endearment) utilise the joy of emotional engagement and the motivation of interest and curiosity as behavioural engaging agents during the early education years, transitioning to academic challenge and political engagement during the high school phase. The non-formal home education method was reviewed by participants: *"it was not structured," "did not follow guidelines or rules," "did not follow a curriculum,"* and "*I'm never followed up to, up to about 15, age 15, I never follow a strict curriculum.*" Participant Accountable Engineer, when asked about their home education, described non-formal home education as follows: "*the way I describe my education as informal, being that it is a lot more flexible as to how I developed, rather than it being a path that I was measured against a structured plan the whole time."* These families did not follow a specific structure, subjects or rigid times for completing activities. They also did not follow grades based on age. Such an approach is further discussed by the Leadership Education model referring to the love of learning phase (De Mille and De Mille, 2013).

The non-formal approach changed to a formal curriculum around the age of 15 or 16 as confirmed by Bright Dreamer (Family 2): "*Like the last three years was a lot more formal. It was, it started to feel like it was starting to go into the direction of university."* With the change to a more formal and structured approach, there still was the autonomy of working when and how they desired. Family 4 followed a more formal and structured approach, but also expressed a great amount of autonomy in when and how they completed more formal schoolwork. Autonomy is linked to political engagement because the learner takes a position of power and accepts agency over educational activities as augmented by Trowler et al. (2021). The non-formal individualised home education approach provides a lot of freedom with regards to structure, not being regulated by age or grade or assessment criteria, which was shown to develop autonomy in learning. The discussion moves to the role of assessment in non-formal home education.

(4) Assessment

The families who followed the non-formal individualised approach, referenced very little formal assessment during primary school. Assessment in a traditional sense have been judged as a depersonalised, scientific process aimed at uniformity and fairness (Shepard, 2000). Chen and Gardner (1997) links traditional assessment with surface learning and memorisation, urging for renewal towards a multiple intelligence and

personalised reformed view on assessment. Biggs and Tang (2011) examine how the test-scores contradict the notion of deep learning since it limits motivation and augment superficial learning. Their work on deep learning reveal how tests, scores and grades promote external motivation and valuation, which undermines the concept of internal motivation and the setting of personal goals, which promotes deeper understanding and meaning. Family 1 describes utilising very little assessments: "*And just the way they learn, it was not you have to, we don't do a lot of tests. We don't do a lot of formal tests. I do little tests. Their maths was little tests, so I can make sure that the test thing was not so big for them or stressful for them."* Family 3, Wise Chemist described assessment during their non-formal approach as follows: *"So, it was non, it was non-formal because I never wrote tests until grade 11. […] Sometimes the tests would be like, I need to read the book and write a summary on it. That was the test. […] That was amazing."* The reference describes no formal tests or exams until grade 11. Assessments before then consisted of small math tests or alternative ways of assessment like writing a book review or narration. Other references to assessment commented on math tests or spelling tests. The data focused more on this aspect of education for the last three years of high school and the higher education phases. Formal assessment was not prioritised in the non-formal individualised home education environment up until much later in high school. This approach supports student engagement based on the principles of an education that promotes understanding and meaning, deep learning and internal motivation (Biggs and Tang, 2011).

(5) Autonomy

The non-formal learning approach shows a strong correlation with autonomy during all learning phases. The Charlotte Mason principles, with reference to the themes of self-education in section 4.3.3.4 applies. Correlation between the data also relates to the Maria Montessori approach (as discussed in section 4.3.3.3) on the themes of independence and initiative, freedom, and self-discipline. Early learning provided autonomy in choosing topics of learning, activities and experiments that ignited passion, curiosity and fascination. Later phases developed compelling data in support of taking full autonomy over completing schoolwork and preparing for final exams. This was confirmed with references: "*learn how to work on our own,*" "*really pace myself,*" and "*work independently.*" The reader is referred to section 8.3.1 for an extended discussion on autonomy in the non-formal home education setup. All the families showed a strong focus on developing the skills required for independent learning as well as problem solving and critical thinking, referring to the development of cognitive engagement strategies. They were taught reading, writing and research skills for independent

learning. An example from benevolent relator supports the focus on developing independent learning skills: "*she was really diligent in showing us how to teach ourselves.*" This role of the mother in facilitating autonomy in learning leans on the discussion by Moore and Moore (1994:88): "*the teacher or parent […] a facilitator – a leader in the educational program. The child is the active agent, working out his own thought connections, which lead him to the concepts and understandings he needs.*" Non-formal individualised home education provides freedom for the process described above where learners, as active agents, work out their thoughts, understand how these thoughts connect, and develop a deeper understanding of concepts. Therefore, it strongly correlates with political engagement. They become agents of learning, powerful in their own learning experiences with the help of a purposeful adult (Trowler et al., 2021).

The data showed that learners became totally autonomous in learning between ages 12-15, but with strong references to independent learning even in earlier phases (see section 8.3.1). Participants discussed freedom, especially in high school with regards to planning their own work breakdown, schedules and choosing when and how to work. This aspect of individualised non-formal home education was discussed in more detail in section 8.3.1 as critical to higher education success. Autonomy provides a strong link with individualised home education, exhibiting compelling relations with student engagement practices, especially political engagement as theorised by Trowler et al. (2021). A summary of the individualised home education learning philosophy was provided next in section 8.2.10.

8.2.10 Summary: Learning

Learning in the individualised home education setting was discussed utilising nine sub-themes as listed: (1) interest and curiosity, (2) love for learning, (3) mathematics and language, (4) topic or unit studies, (5) experiential learning, (6) reading, (7) individualised, (8) outings and (9) non-formal. Each sub-theme presented and discussed how the data supports student engagement perspectives. These are presented in sections 8.2.1-8.2.9. A summary of these sections follows.

(1) Interest and Curiosity

The first sub-theme that emerged in the narratives of home education families, relating to learning activities, referred to interest and curiosity. Placing interest and curiosity at the centre of learning activities creates an inimitable student-centred education approach. The data showed how natural curiosity, a desire to learn and seek out novelty and challenges creates distinctive student engagement opportunities. Encouragement

and support of parents towards engaging behaviour was shown to improve interest-based learning and therefore parents can influence learner engagement in the same way that lecturers influence student engagement. As discussed in section 8.1, interest-based learning also require a lot of freedom, autonomy and time in choosing topics, type of activities and how they prefer to engage. It is an individualised process, which requires relinquishing control from the parent's perspective. Parents have a responsibility in creating an individualised environment condusive to interest- and curiosity-based learning, which facilitates engagement and commitment., This involves exposing learners to a wide variety of interests and fostering intentional growth and development in interests that develop over time. Engagement through individualised Interest and curiosity founded learning was connected in the data with high quality resources. Presenting learners with resources that encourage engaging behaviour can challenge learners from an academic perspective, similar to how quality academic content engage students at higher education (Strydom et al. 2017). These resources include quality books but also materials for projects, building, engineering and applications, etc. Facilitating interest-based learning is linked to academic, emotional, and behavioural engagement. From the data it is concluded that the specific interest or topic (accumulating knowledge) is not as important as developing behaviours that drive development of engaging practices and therefore facilitates growth inside the learner.

Another aspect of individualised interest-based learning that promote engagement refers to depth of learning. By allowing learners to explore interests as deep as they have curiosity and motivation for, initiates academic challenge as an engagement theory, which was determined as one of the most advantageous features of individualised home education. Interests did in some cases influence study direction and career choices and, therefore, holds other advantages such as more certainty in enrolment and career choices, due to a wide exposure to a variety of disciplines. Founding individualised home education on learners' interest showed numerous advantages for higher education preparation, as it facilitates affective, behavioural and academic engagement.

(2) Love for Learning

The sub-theme concerned with developing a love for learning was strongly connected with emotional engagement because the mothers as learning instructors employed a fun and joyful approach to their home education. The data showed that these learners were curious, interested and eager to learn – i.e., actively engaged in contrast to passive receivers. Difficult content and subjects were seen as a challenge and just motivated learners more to "figure things out" suggesting a high level of cognitive engagement. The

data show that learners developed strategies for learning, quantitative reasoning and integrative learning through fun learning experiences that kept focusing on creating a love for learning. A love for learning during early learning established lifelong learning attributes as derived from Charlotte Mason (discussed in section 4.3.3.4). Creating a love for learning through active, individualised, and interest-based learning was proven a powerful engagement strategy.

(3) Mathematics and Languages

All families implemented an individualised approach to their home education. Families 1,2, 3 and 5 implemented formal mathematics and some components of language instruction combined with non-formal integrated unit studies during early school years, starting around the age of 6 or 7. Family 4 followed a fully formal and structured curriculum during primary school, which included their mathematics and language components. Crucial to defining individualised home education is the incorporation of formal mathematics, following scaffolded learning, with learners progressing through levels. It was a prioritised educational activity, implemented consistently as a necessary foundation for developing quantitative reasoning.

The non-formal and individualised approach to home education affected mathematics instruction in the early years when obvious disengagement arose. Family 5 delayed formal mathematics instruction and replaced it with mathematically infused games and play for a one year period, after which the learner showed maturation and engaging features with the more formal structure. This specific learner showed autonomy in pursuing mathematics education around the age of 12 and accomplished excellent higher education marks, finishing second in his engineering class at higher education. Similar examples of engagement focused individualised education were presented with language teaching and other educational activities, showcasing what is most likely the greatest advantage of an individualised home education approach i.e. the flexibility in adapting the education strategy to prioritise engagement. Language teaching in some cases utilised formal curriculum components, while in other cases, it was completed in a more non-formal manner. Language teaching focused predominantly on home language instruction for the first few years and was complimented with second language teaching at a later stage, around age 10/11. Reading and writing, as crucial aspects of independent learning, received intentional attention and effort in the home education environment. These aspects of language teaching are linked to academic engagement and especially the time and effort spent in reading and writing of quality content relates to student engagement, higher-order learning and higher education success. Because

these aspects were highly valued and intentionally and successfully developed, these learners were prepared for engaging behaviour at higher education.

(4) Topic or Unit Studies

Unit studies was employed during the primary phase as an education tool by the four families who followed a non-formal approach to home education. Unit studies are particularly successful in activating behavioural engagement because it uses curiosity, fascination and interest as attraction which established motivation. As discussed with the love for learning sub-theme, the affective engagement established during primary and secondary phases often succeeds in developing lifelong learners. Following a unit study approach is also linked to effective development of other skills such as problem-solving, creativity and critical thinking, both essential skills for higher education success. The unit study methodology theoretically employs an integrated curriculum approach, meaning various subjects are integrated in a cross-disciplinary way. Integrated curriculum resembles real life problems and applications and as such relate to reflective and integrative engagement (Strydom et al. 2017). The narrative accounts associated with this study indicate how families used unit studies to facilitate integrated and engaged learning, not limited by disciplinary boundaries. Unit studies are just one of the ways in which integrated learning can be incorporated in the education environment, in the case of these families it was shown effective in activating engagement and preparation for subject-based learning at high school, and ultimately for higher education success.

(5) Experiential Learning

Creating a bridge between knowledge and real-world applications is why experiential learning experiences are so vital (Drake and Reid, 2020). It requires the active involvement and participation in the learning process built upon real life applications or problems. In addition to evolving reflective and integrative engagement through real world situations, experiential learning is also linked to emerging logical thinking, problem solving and cognitive development. Experiential learning assists in cultivating interest, involvement and engagement and, therefore, plays an important role in preparing learners for higher education success.

(6) Reading

Associations with reading in the narratives depict wonderful memories of cohesion, belonging and joy (as discussed in section 8.1.1). During early education, family reading was an almost daily activity and in some narrative recollections continued well into high school. Reading assists especially in the early years with growing vocabulary and

communication skills. Participants utilised reading as a learning strategy with their enthusiasm expressed with words like "*dive deep,*" and "*devoured.*" Because reading is associated with motivational, cognitive and critical engagement, it becomes a significant engagement strategy in the individualised home education model. Mackenzie (2015) discusses the many advantages of reading additional to the academic improvement which includes character development such as empathy and courage. Trowler et al. (2021) included nurturing congruent values under socio-cultural engagement through belonging, which was also represented in the narratives of participants.

Reading as an engagement technique is very successful in establishing a relationship through belonging and motivation. As an engagement strategy it was incredibly effective in supporting the individualised home education and successful preparation of learners for higher education.

(7) Individualised

The various techniques employed by home education families allows for incorporating individualised aspects to a unique extent. The data presented that the home education environment was specifically individualised with respect to i) interest, ii) depth of learning, iii) personality and learning preferences and iv) pace and outcomes. Each of these aspects allowed for the education philosophy to be adapted to the individual and related with engagement in a distinctive manner.

Interest as an engagement technique was discussed in section 8.2.1 and improves student engagement on principles of motivation and behavioural, affective and academic challenge engagement. With enough freedom from parents, learners could engage to a deep level with content and knowledge as stated: "[…] *because I was allowed to explore deeply in a scientific way.*"

Depth of learning was discussed as an important feature, especially in keeping momentum with interest-based learning and creating a love for learning. Depth of study activates engagement on all aspects of academic challenge, which include higher-order learning, reflective and integrative learning, learning strategies and quantitative reasoning (Strydom et al., 2017). The data suggest that the specific content or field of study is less important than developing the engagement strategies for deep learning. When learners acquire the engagement strategies for academic challenge, it can be applied to various fields of study. Individualising learning based on personality and learning preferences purposefully increase attention, enjoyment and motivation.

Individualised home education provides extraordinary opportunities for adapting activities and experiences to learner preferences. The data provided examples of learners who prefer to work alone, other who are easily distracted and need more focus and some who prefer to work together in family context. Preferences also included more aesthetic or artistic expressions, creative opportunities or scientific and data driven activities. The technique predominantly establish motivation, behavioural and affective engagement (Trowler et al., 2021). Individualised home education ultimately provides unique prospects for engagement through a student-centred approach.

Being able to adjust the pace was shown highly effective in individualised home education. Examples were provided of modifying pace to accommodate the learner, either delaying formal instruction due to non-engagement or autonomously advancing at a much faster pace for challenge and motivation of academic depth. Adjusting the pace was showed to be a very effective in ensuring engagement with content, especially when presenting significant foundational academic building blocks, e.g. mathematics and languages. Outcomes of especially unit studies during primary school provided freedom in how a learner chose to respond to learning with a variety of options from narration, drawing, artistic expression or writing. Offering of autonomy and choice in responding to learning increases motivation, excitement and level of engagement. Providing adaptability in pace and outcomes further increases student engagement through individualised home education.

(8) Outings

Regular outings were presented in the data of these home education families. Several references to a 4-day school week and outings and socialisation on Fridays were recalled. The narrative pieces recalled outings with descriptions of fun, being remembered with fondness and referred to as highlights of their home education, probably because it also reported a strong socialisation component. A definitive positive emotion could be attributed to regular outings with other home education families, presenting affective and socio-cultural engagement through these activities. Because outings often represented real life scenarios, workplaces, and contextual applications, it provided real-life perspectives which presents prospects for developing reflective and integrative academic challenges (Strydom et al., 2017). Outings proved to be an important feature of the individualised home education environment which could facilitate academic student engagement and particularly socio-cultural engagement which is very important in the home education setting.

(9) Non-Formal

Non-formal individualised home education was employed by four of the five families interviewed during this study. Various features presented in the narratives indicate what a non-formal home education environment entails. These features as discussed in section 8.2.9 are i) prolonged play, ii) educational approach, iii) method and structure, iv) assessment and v) autonomy.

In the non-formal specific approach, a great emphasis was placed on extended play and providing an education that provided a lot of free time for explorative and imaginative play. The early education years were filled with joy, wonder, inquisitiveness and allowed long periods of unstructured time allowing for games, reading, exploring and experimenting. Play shows strong physical, mental and emotional connections improving wellness and behaviour of learners, including those with learning challenges. Designing the educational approach for prolonged play creates a stress free, peaceful and care-free environment for the primary school years. Extended play as an educational approach promotes engagement through emotional connection, socio-cultural engagement and academic challenge, specifically reflective and integrative processes ensue.

The non-formal individualised educational model consisted of a more formal mathematics and first language foundation combined with integrated curriculum unit studies inspired by interest. This approach (implemented at 6 or 7) was primarily utilised during the primary school years, supplemented with a second language around age 10 or 11 and more formal science curriculum or resources towards the end of primary school. Unit studies approached a topic from a multi-disciplinary perspective integrating various subjects, resources, people and outings or field trips. Unit studies were intended to cover a variety of subjects traditionally introduced in school such as history, geography, life and physical sciences, with the aim of providing a good general knowledge and experiential learning opportunities as discussed in sections 8.2.4 and 8.2.5. The non-formal individualised home education also incorporated a four-day school week leaving Fridays for socialisation, co-ops, outings, or academic field trips. The non-formal approach was shown effective in enabling student engagement from a socio-cultural, behavioural, cognitive, critical, political and academic challenge perspective (Trowler et al., 2021, Strydom et al., 2017, Kuh et al. 2006). The approach included learning important skills for independent and autonomous learning (as discussed in section 8.3.1). The non-formal approach to home education changed to a more formal system in high school.

Family 4 followed a more formal curriculum for the primary school years, which included education materials and a flexible pace as discussed in section 7.4.2.9. A non-formal approach was forced during travelling and times when they were waiting for materials. Their approach was still highly individualised, interest driven with a strong focus on developing autonomy. Although Family 4 did not follow a predominantly non-formal approach during the primary school years, their home education employed abundant individualised examples with a move towards a more non-formal approach during high school.

The non-formal approach did not enforce a rigid structure. They did not follow a specific task oriented, time or subject specific schedule until high school when transitioning to a formal system. Primary school activities were not based on age or grade but rather on behavioural engagement through interest and curiosity. Providing freedom with regards to structure allowed mothers as the teaching facilitators to implement a student-centred, active and engaged education environment.

An important aspect of non-formal home education referenced in the narratives of these families revealed the absence of extensive testing or exams during Primary School, in some cases until grade 10 or 11. Small spelling or mathematics tests were referenced as well as other assessment methods such as writing a book review or narration. The absence of formal tests and exams were not reflected in the narratives as a disadvantage but rather participants valued the stress free primary school environment. The last 2 to 3 years, which required formal tests and exams, were described as similar to and good preparation for higher education.

Raising independent and autonomous learners was something these home education families aimed for. Training for autonomous learning started from a young age; teaching learners reading, writing and research skills as foundational aspects. Independent learning ensued somewhere between the ages of 12 and 15, which included autonomy in planning, scheduling, time management and taking responsibility. Autonomy in the individualised home education environment was expanded on in section 8.3.1.

8.3 Life Skills

The thematic analysis of the data resulted in the identification of various life skills associated with higher education success, which was revealed in the lived experiences of the individualised non-formal home education families. These skills were reported in sections 7.1.3, 7.2.3, 7.3.3, 7.4.3 and 7.5.3 for Families 1 through 5. The data was

reported and discussed under the following sub-themes: (1) autonomy and responsibility, (2) age integrated socialisation and (3) character development. The narrative accounts of participants in Chapter 7 discuss how these life skills contributed to their preparation for and success at higher education.

Autonomy and responsibility as a sub-theme will be discussed through the theoretical lens of student engagement in the next section 8.3.1.

8.3.1 Autonomy and Responsibility

The results for the theme of autonomy, responsibility, and heutagogy was presented in sections 7.1.3.1, 7.2.3.1, 7.3.3.1, 7.4.3.1 and 7.5.3.1.

The data presents examples of independence and autonomy already during primary school. The example from the data of an 8-year-old making an appointment, interviewing a person of interest, and giving feedback on the interview for a school activity is an excellent example of the level of autonomy already provided at the foundation phase (section 7.4.2.5). Another learner discussed taking full responsibility for his mathematics towards the end of the primary school phase (section 7.5.3.1). The reference "*I had to be able to study by myself from a young age,*" confirm the development of independence from early on.

Developing autonomy as a particular student engagement characteristic can only be achieved when a parent relinquishes control (Ryan and Deci, 2000) and places the student in a position of power as an agent of their own learning – i.e., political engagement, as defined by Trowler et al. (2021). Moore and Moore (1994:88) consider such a learning process: "*Learning is essentially something the child does for himself. Though he needs a more experienced adult available for feedback, guidance and stability, the teacher or parent is not to see himself as pouring facts into an empty head. Rater he/she serves as […] a facilitator – a leader in the educational program. The child is the active agent working out his own thought connections which lead him to the concepts and understandings he needs. Depending on the quality of the process, he also develops attitudes toward learning, his own values, and his type of creativity – lessons which are more likely to stay with him for life.*" Positioning the learner as an active agent sets the stage for characteristics of competence, autonomy, self-determined learning and internal motivation (SDT; Ryan and Deci, 2000). The autonomous learning features presented in this study is underpinned by Trowler's behavioural and political engagement. The notion of autonomy or heutagogy is not included in the student engagement model of Strydom et al. (2017) but motivation is presented by Kuh et al.

(2006) as a student characteristic for engaging behaviour. Similarly, Kahu and Nelson (2017) includes motivation as a psychosocial student characteristic at the engagement interface, but the absence of autonomy or heutagogy is evident. Kahu and Nelson (2017) incorporates participation, time and effort and interaction as behavioural engagement components.

The narrative accounts of participants indicate that independence and autonomy advanced in the home education environment over time with plenty of references to this attribute developing during high school: "*as they get older, they become more independent*", "*from grade eight to nine, that was kind of the transitioning phase where we started to learn how to work on our own",* and *"the last three years of school, […] I could really pace myself and work independently.*" What is significant is that participants specifically referred to autonomy as a crucial skill for higher education success, noting that home education prepared them well in this regard: "*I had to be able to study by myself, you know, from a young age. And that is absolutely, like critical when you're studying higher education."* Pilot Braveheart (Family 4) affirmed how developing autonomy prepared him for higher education: "*I think the, having a discipline built into you, from a really young age of independent learning makes an enormous difference."* Conscientious Innovator proposes that home education better prepares learners for higher education success, primarily due to the independent learning skills that are developed*: "And so I think homeschooling, hands down, prepares you better for, for that kind of studying."* Thus, the majority of participants felt that the independence and autonomy that developed during individualised home education prepared them exceptionally well for higher education success.

Time and effort are two aspects closely associated with the development of autonomy and responsibility. Strydom et al. (2017) and Kuh et al. (2006) perceive time and effort as crucial to student engagement and student success; a perspective that shows strong similarities with the data findings of this study. Participant Benevolent Relator discussed the importance of putting time and effort into learning during high school as a great advantage entering higher education: "*towards the end, I did a lot of work. Like the last three years of school, was very intense working. I worked very hard."* Accountable Engineer also discussed how putting in the time and effort towards the end of high school was advantageous for higher education success*: "buy the textbook, check the sections, [..] the chapters and then work through them by myself, creating my own summaries. […] So summarising work […] those habits have helped me, actually, perform quite well in my first year."* The references confirm that learners actively engaged with content, putting

in time and effort during high school already and developing student engagement characteristics, which they all confirmed prepared them better for higher education.

Other competencies that participants revealed in relation with autonomy and responsibility included time management and being able to plan and schedule their work. Mother Lighting Fires explained: "*they had to learn from a very young age to structure their time and their planning,"* and Conscientious Innovator conferred: "*We were allowed to plan our days; […] So, we were given that responsibility and held to account for it.*" If compared with literature on student engagement, strong similarities emerge. Strydom et al. (2017:61) state that "*time management is one of the main priorities that a first-year student faces*." Thomas and Maree (2021) related time management to student success in the South African context. Furthermore, the notion of time management also indirectly relates to academic influences under "knowledge, skills and attitude" as presented by Kahu and Nelson (2017). In the narrative accounts of participants, it is evident that all the participants referenced taking responsibility for their education during high school and how planning and scheduling of work as well as time management proved useful for higher education success. Thus, both the data and student engagement literature suggest that developing structuring, planning, and time management skills during high school prepares learners very well for higher education success.

Setting and achieving goals is an important aspect of developing autonomy and responsibility. The narrative accounts of participating families indicate the following: "*if you have home education, you've got to set those goals for yourself", "the way that we did it, […] and were able to set our own goals. And […] a lot of freedom was given, given to us to be self-reliant, to work on our own and still get through the work, meant, that we could develop."* A powerful quote by participant Pilot Braveheart discusses how setting their own goals, and being given the freedom to become self-reliant and responsible was an important part of their development. This sentiment is strengthened by Biggs and Tang (2011), maintaining that student's learning abilities and potentials should be strengthened by allowing them to set their own goals, as this process creates deeper understanding and meaning to learning experiences. According to Geitz, Brinke and Kirschner (2015), goal setting with the aim of mastery rather than performance facilitates deep learning experiences. Many references in the data were provided by home educated adults with reference to own planning, scheduling and responsibility for completing work. These experiences contributed to the development of important skills necessary for higher education success. The strong presence of setting and achieving goals in the narrative accounts of families correlates strongly with Trowler et al. (2021:772) on motivation and behavioural engagement. In the same vein Strydom et al.

(2017:69, 132, 200) make a case for supporting higher education students in setting and achieving academic and career goals. Thus, in developing the competence to set and achieve goals during primary and secondary education, participating families prepared students for higher education.

Self-teaching and figuring things out provide important references in the data pertaining to the development of autonomy and responsibility (see sections 7.1.3.1, 7.2.3.1, 7.3.3.1, 7.4.3.1 and 7.5.3.1). For example, Mother Privileged discussed "*he could discover and work it out in his own mind,*"and "*working it out for himself.*" The references in the data correlate with the quote presented in the introductory paragraphs of this section from Moore and Moore (1994:88): "*The child is the active agent working out his own thought connections which lead him to the concepts and understandings he needs."* These references point to challenging academic work, individualised in nature, which developing learning strategies and student engagement. Having the freedom, time and space to figure things out, struggle with it, problem solve until they understand. The notion concerning self-teaching and figuring things out correlates with what Strydom et al. (2017:16, 29-33) referred to as academic challenge – i.e., the notion that academic work must be challenging as opposed to merely memorising information. Academic challenge involves, among other things, higher-order learning which includes challenging cognitive tasks (Kuh et al., 2010; Strydom et al., 2017:30-31). Thus, the fact that participants experienced their home education as academically challenging (figuring things out) provides deeper insight how an individualised non-formal approach to home education could prepare learners for the challenging cognitive tasks associated with higher education.

The discussion of this section was very rich in comparative data with student engagement literature, creating a better understanding of the skills that prepared learners for higher education. It provided various student engagement characteristics which were developed in the individualised home education setting suggesting that this education approach could prepare learners for higher education, utilising these principles and methods.

The data furthermore confirmed that i) learners decided to enter higher education (they had a choice), ii) they were pursuing higher education for themselves and not for someone else, and iii) they pursued areas of interest in their higher education discipline, which allowed for higher levels of student engagement through goal setting and internal motivation. Various references by participants discussed the importance of making their own decisions regarding these decisions, which is vital for higher education success.

The data presented under this theme also show that the learners received high degrees of emotional and financial support from parents, which link with the supportive environment offered by Strydom et al. (2017). This sub-theme pertaining to autonomy and responsibility provided important key skills, which was developed in the individualised home education environment and these skills proved invaluable for higher education preparation.

The next section discusses data on the benefits of age integrated socialisation on student engagement and higher education success.

8.3.2 Age Integrated Socialisation

As indicated in Chapter 7, various participants stated that age integrated socialisation during their home education journey provided an advantage in obtaining skills that proved to be very useful at higher education (7.1.3.2, 7.2.3.2, 7.3.3.2 and 7.5.3.2). Age integrated socialisation refers to regular social interactions with peers of varying ages, which developed the ability to comfortably socialise with different age and peer groups as well as in various social settings. Riley and Riley (2000) describe how regular age integrated contact creates mutual respect, understanding and produces an environment of comfortable interaction with age integrated peers. Participants in this study described age integrated socialisation in their home education communities as a big advantage. One participant described it as “a big plus” because it developed the inter-generational communication skills required for higher education interactions. The ability to communicate inter-generationally is important because Kuh et al. (2006), Strydom et al. (2017), Trowler et al. (2021) and Kahu and Nelson (2017) all highlight the necessity of student-staff interactions to enhance student success. These literature sources confirm that student-staff interactions correlate with improved student engagement and higher education success. Furthermore, these authors discuss strategies of improving interaction between students and academic staff because of the associated advantages in engagement and achievement. It is therefore significant that participants indicated how the exposure to social settings, that required and developed age integrated socialisation skills, developed the competence to comfortably interact with lecturers, academic staff and even easily making friends with post graduate students and lecturers (7.3.3.2 and 7.4.3.2). From the narrative data it is evident that socialisation with peers and staff was not a problem for these home educated learners which they attributed to age integrated socialisation during their home education years. Thus, it can be inferred from the data that parents have a responsibility to create opportunities for socialisation and both age

segregated and age integrated interactions, which proved to be very valuable to prepare learners for higher education.

The discussion of the research findings above contradicts literature which suggests that home educated learners often lack the social skills required to be successful in life. Fineman and Shepherd (2016), for example, indicate that home education does not allow learners to develop the necessary social skills. Although this could be true for families who choose to be isolated or live in remote areas where socialisation opportunities are scarce, the results of this study show the opposite. In line with Neuman and Guterman (2017a, 2017b) and Kunzman and Gaither (2013), the results of this study indicate that the correct learning approaches and learning environment in a home education setting could develop the social skills necessary to advance learners socially, academically, and professionally. Thus, the data in this section suggests that the non-formal home educated learners not only acquired the necessary social and communication skills but rather had an advantage in higher education because they developed their social skills in an age integrated community, which represents normal social setting to a higher degree. This allowed them to comfortably communicate with lecturers, mentors, and other authoritative figures at higher education. The home educated learners, during the interviews, suggested that their school-going peers were not as comfortable in this type of social environment.

The next section will present a discussion of the character development as part of their non-formal individualised home education setting.

8.3.3 Character Development

The data on character development revealed various aspects of character and value instruction that was important to these families. The data was presented in section 7.1.3.3, 7.2.3.3, 7.3.3.3, 7.4.3.3 and 7.5.3.3 of Chapter 7. The data corresponds well with the philosophy of Charlotte Mason in developing habits for responsibility and virtues that will keep a child on target (4.3.3.4). Maria Montessori incorporates character traits in her philosophy of love and service. Her teachings create a correlation between freedom and discipline, suggesting that children who are not forced are more likely to comply. Various other authors have shown the value of character training (Putri, Harto, and Moecharam, 2017; Lintner, 2011; Campoy, 1997; Edgington, 2002). Fullan and Langworthy (2014) connected deep learning with the holistic idea of human flourishing referring to character development, communication, critical thinking, creativity and imagination, collaboration

and citizenship, which just further supports the notion of holistic and whole person education.

Some families incorporated character development through unit studies or found alternative ways of incorporated character development into educational activities and daily life. Participant Curious Scientist considered character training more important than knowledge as "*my aim would be, not to teach children knowledge. But to teach them character. What does it look like to work hard?*" He suggested teaching children to work hard instead. The time and effort students spend on educational purposeful activities was shown important to student engagement as discussed in Chapter 5 (Kuh et al., 2006). Similarly, Trowler et al. (2021:771) confirms the relationship between motivation and persistence: "*Motivation refers to the desire, willingness and effort a person is investing towards persistence*." Hard work, effort and perseverance were highly valued by the home educated adults for higher education preparation and was intentionally developed and encouraged by the home education parents as an important life skill. Conscientious Innovator (Family 4; 7.4.3.3) noted how his parents measured intent and effort rather than grades or any other outcome. The value of doing your best was presented by various participants and directly influenced what learners accomplished (7.3.3.3; 7.4.3.3, 7.5.3.1). These characteristics of hard work, perseverance and persistence relate to student engagement practices of time and effort, persistence and motivation (Kuh et al., 2006; Strydom et al., 2017, Kahu and Nelson, 2017). Interestingly, persistence has been linked to belonging and social-cultural engagement by Masika and Jones (2016) and Thomas (2012). Establishing a connection between persistence and belonging creates an important synergy indicating that the individualised home education environment, milieu, life skills and quality interactions cannot be viewed as separate ideas but rather integrate to form a holistic educational model that enables student engagement on multiple levels.

Various references refer to the level of difficulty they encountered at university, which presented doubts about finishing higher education (7.3.4.1, 7.4.4.1). Participants reflected on how encouragement and the notion of perseverance helped them to push through these difficult times. Hard work, excellence, and not giving up were practised through life events, chores, sports, academics, and other occasions that allowed the opportunity. Angela Duckworth in her book "GRIT: Why passion and resilience are the secrets to success" discuss the research on GRIT and growing GRIT (Duckworth, 2017). She defines GRIT as the combination of passion and perseverance towards intrinsic long-term goals (insert reference with page number(s)). Passion develops through interactions with the outside world that can ignite interest. Repeated interest exposure

can develop passion, which provides the intrinsic motivation to do the hard work it takes to become better and learn more, which is the perseverance part of GRIT. Duckworth (2017) confirms that GRIT is enhanced by especially extra-curricular activities. The research confirms that deliberate effort and practise towards obtaining goals is effective in enhancing GRIT (Duckworth, 2017). Parents that motivate learners to work hard in achieving goals over a long time are fundamental in developing GRIT (Duckworth, 2017).

The notion of GRIT strongly correlates with the concept of persistence in higher education. Student retention, progress and persistence toward graduation are important aspects of higher education student success (Strydom et al., 2017:12). In the same vein Kinzie, Gonyea, Shoup, and Kuh (2008) make a case for student persistence from a student engagement perspective. Thus, in motivating learners to do their best and working hard, as per the narrative accounts of participants, home educating parents were nurturing characteristics vital for engagement and higher education. These characteristics are fundamental to prepare students for higher education and the data suggest that practising these skills from a young age is ideal. Parents play a vital role in enforcing a culture of hard work, perseverance and resilience. The successful development of these skills in the home education environment was a crucial attribute of higher education success.

Other character traits referenced in the data, pertaining to higher education preparation included discipline, diligence, responsibility, integrity, honesty and being self-driven. Time management and being able to focus and not become distracted was also mentioned and discussed in section 7.5.3.1.

Mother Lighting Fires discussed how their Family focused on the long-term outcomes of developing independent people who could impact society and influence and contribute to their community. Interestingly, both her children as well as other participants referred to altruistic character traits, having a desire to make a positive contribution to the world around them. Duckworth (2017:273) concludes that GRIT is not the only character trait required for success. She asserts that morality, especially honesty, integrity and trustworthiness, are deemed the most moral characteristics for achieving success. Congruent values as highlighted by Trowler et al. (2021:770) discuss that fostering congruent values result in socio-cultural engagement through belonging.

Although character development was not presented as themes by all the families, there were repetitive themes that was offered. The most important of these probably refers to the notion of hard work, perseverance and not giving up, which participants directly

related to a required characteristic for higher education success. The next section considers the data presented in the narratives pertaining to a balanced life.

8.3.4 Balanced Life

Chapter 7 shows how participants of Families 3 and 4 underlined living a balanced life as a crucial skill for higher education. The participants referred to taking a break from continuous studies, doing things for fun and knowing when they needed to rest as conferred by a participant: "*... it's not always just work, it's not always just play, it's, there's a balance."* Developing the skills to distinguish when to study, work, rest and when to do things for fun or exercise, was highlighted by some participants as important for student success. These activities relate to wellbeing, presented as an engagement characteristic by Kahu and Nelson (2017:7) at the student engagement interface presented in Figure 5-4. Maintaining health and wellness is presented by Upcraft, Gardner and Barefoot (2005) as a first year student success criteria. Kuh et al. (2006) present five characteristics linked to living a meaningful life: *"They are self-awareness, autonomy, confidence, social competence, and sense of purpose. These outcomes contribute to one's sense of self-worth and wellbeing and affect the quality of interactions with others."* As established by Kuh et al. (2006) wellbeing is important as an inherent characteristic for developing meaningful peer and staff or teacher interactions and, therefore, relate to socio-cultural engagement characteristics. Emotional wellbeing was found as a factor that affects student success at South African universities (Thomas and Maree, 2021).
Living a balanced life and prioritising what is needed for wellbeing was presented by some of the participants as an important skill in managing higher education stress and would indirectly influence student's ability to engage and therefore succeed.

Section 8.3.5 discuss the data presented on the topic of self-efficacy.

8.3.5 Self-Efficacy

As discussed in Chapter 5, *self-efficacy* refers to a person's belief in their abilities to be successful and achieve their goals (Bandura, 1977). Self-efficacy is important for higher education as it is shown as the single most valuable property in determining if a student would give up or persevere when faced with challenges (Bean & Eaton, 2000). Self-efficacy is also considered the substance for motivation, resilience, and accomplishment (Kuh et al., 2006). A reciprocal relationship between student engagement, student success and self-efficacy was proposed by Schunk and Mullen (2012). From this conclusion, the relationship reveals how higher student engagement can result in higher

self-efficacy and student success, but similarly higher self-efficacy can result in higher student engagement and achievement. Thus, improving engagement or self-efficacy would improve student achievement and success and the reciprocal property. Trowler et al. (2021:772) provides a possible link between self-efficacy and political engagement through student agency, since self-efficacy directly influences goal setting, self-regulation, persistence and motivation.

The presence of references to self-efficacy in the data is an important discovery. The data pertaining to self-efficacy was reported in the data of families 3 and 4 under sections 7.4.3.5 and 7.5.3.5. The narratives of Family 4 were especially rich in data on references pertaining to self-efficacy. Participant Pilot Braveheart referred to their parents never telling them that they could not achieve something, and they were often reminded of this fact and encouraged to push through difficulties knowing their parents believed in them. The data suggest that self-efficacy is a quality that was largely imparted by their parents and that the source of self-efficacy is a parent that first believed in them. Conscientious Innovator provided the following quote: "*the person who raised you, who knows probably almost everything there is to know about you and if they say you can do it or believe in you, you can believe that*." A parent who believed in them and who communicated that belief was able to impart self-efficacy to their children.

Self-efficacy is linked to academic achievement and school success (Usher, Li, Butz, Rojas, 2019) but also with student engagement at the educational interface (see Figure 5-4). Thomas and Maree (2021) related higher education success at South African universities with academic self-efficacy.

The narratives specifically referenced the role of their father in establishing self-efficacy and identity (Whitney, Prewett, Wang, Chen, 2018). Conscientious innovator suggested that a father plays a significant role in providing such a foundation for a child (7.4.3.5). Although it could be expected that the active involvement of parents in children's lives would have a positive effect on their development, the data of this study indicates that the dual parent-teacher roles assumed by parents in a home education environment, magnifies the developmental impact of parents' involvement. Multiple references in the data (see section 8.4.1) suggest that an adult who is intentional can develop specific characteristics and virtues in a learner. This once again confirms the importance of socio-cultural learning where the individual is noticed, acknowledged, and intentionally developed, with not only quality academic content but the necessary internal virtues such as responsibility, identity and self-efficacy. Upcraft, Gardner and Barefoot (2005) suggested, in line with the narrative data, that exploring identity development showed to

contribute to especially first year students' academic success. Allen and Kern (2019) discuss that children with a healthy self-identity are more open to new learning experiences, take more risks, tend to think critically and question things, perform better academically, are more driven and experience satisfaction when they achieve things. Kahu and Nelson (2017) suggest that healthy relationships are at the core of identity and that family connection and cohesion are fundamental in identity formation for children. Identity formation was distinguished by Trowler et al. (2021) as a political engagement strategy that "*relates to the student's agency."*

The next section summarises the data presented on the skills that enables engagement and higher education success.

8.3.6 Summary: Life Skills

Life skills presented in the data of individualised home education families, which influenced higher education preparation and success, revealed sub themes of 1) autonomy and responsibility, (2) age integrated socialisation, (3) character development, (4) balanced life and (5) self-efficacy which were discussed in sections 8.3.1-8.3.6.

Student engagement through autonomy and responsibility showed strong representation in the data which is correlated with political engagement because the learner is positioned as the agent of their own learning and with behavioural engagement because the learner is dynamically and intrinsically motivated towards achieving their self-determined goals. The data confirmed early autonomy in interests and activities and full independence and autonomy during the more formal high school phase, which required more time and effort in academically engaging activities. Learners also commented on being able to plan and structure their work and developing time management as a skill during the final years of home education, providing an advantage at higher education. Autonomy also included references by learners on developing learning strategies, being able to figure things out, struggling and problem solving signifying academic challenge engagement.

Integrated socialisation and inter-generational interactions were revealed by participants as a major advantage of home education, which positively contributed to 'student-staff' engagement strategies. The data supports the notion of home education developing competent socialisation skills through purposeful learning approaches and environments. Participants revealed comfortably communicating with lecturers, mentors and authoritative figures which was developed through early integrated and inter-generational interactions.

Data pertaining to character development that resulted in skills for higher education success highlighted effort, hard work, persistence and refusing to give up. From a student engagement perspective, these characteristics, through motivation, results in behavioural engagement with academic meaningful activities. They also foster political engagement, positioning the learner as an active agent of their own learning. These character traits were linked with higher education success by the participants of this study and the data furthermore supported the effective development of such character traits through individualised home education. These characteristics was linked to GRIT defined as combined passion and perseverance towards achieving long term goals. The data suggests that character development is highly influenced by parents and how motivating and purposeful parenting can actively develop character traits that support higher education success.

Character development further provided data on other character traits such as honesty, integrity, discipline, responsibility, diligence and altruism. Such character qualities were shown to positively influence social-cultural engaging behaviour.

Living a balanced life was discussed by participants as a contributary factor in higher education success, affecting student engagement.

Self-efficacy refers to a person's belief in their own abilities and is considered as one of the most important properties for engagement and higher education success. It was identified as an important life skill characteristic in the data pertaining to higher education success. Because self-efficacy positively associates with persistence, motivation and goal setting, the student, as an agent of their own learning, is proposed to interact through political engagement. The data provided a strong correlation between self-efficacy and quality interactions and feedback from parents, strengthening the importance of how parents interact with their home educated children. Identity development was discovered in close association with self-efficacy in the data, which affirmed the conclusion of how family connection, belonging and cohesion is fundamental in self-efficacy and identity formation.

The next section reports on quality interactions in the data that influenced higher education preparation and success.

8.4 Quality Interactions

Quality and reciprocal interactions between a developing person and his/her educational environment, remains an important mechanism for learning and development.

McCormick, Kinzie and Gonyea (2013b) and Strydom et al. (2017:5, 7-8) demonstrate, from a student engagement perspective, how quality student-staff interactions on the campus environment could enhance success. Similarly, the narrative accounts of participants in this study show that in the earlier education phases, quality interactions with parents and mentors could influence learners' engagement and academic achievement which continued into the higher education phase. The narratives of individualised home education families provided data pertaining to quality interactions with parents and mentors and how such interactions influenced learner and student engagement and success at higher education.

The role of parents in such quality interactions were discussed in section 8.4.1.

8.4.1 Parents

The data for the influence of parents with regards to quality interactions, which influenced student engagement was discussed in section 7.1.4.1, 7.3.4.1, 7.4.4.1 and 7.5.4.1 of Chapter 7. The data presented four foci related to quality interactions with parents which were i) support and motivation, ii) self-efficacy, iii) intentional development, exposure and creating opportunities and iv) character, values and skills development. These foci are discussed individually below.

(1) Support and Motivation

Family support was shown essential for higher education preparation and persistence. In this research study, the parents played a significant role in encouraging and motivating engagement, resilience and GRIT. The encouragement for engagement was presented by a participant: "*And the idea of pursuing stuff that that, you know, they can't even help with, challenging yourself to learn something and to develop a new skill and to follow your passions.*" Various references were provided, especially with regards to the role their parents or father played in helping them push through and not give up at higher education. An example by a participant supports this notion: "*it was, wasn't for them. In that sense, I would have given up and I wouldn't have finished and ended up in the career that I am."* Participants referenced the importance of the support and motivation their parents provided throughout childhood and especially in helping them to not give up during tough times at higher education. This support ultimately contributed to their success in higher education. Parental engagement and support were reported essential to academic success at two South African universities, reported by Thomas and Maree (2021).

From a student engagement perspective, Kuh et al. (2006) described the campus environment as a contribution of the institution that influences student engagement. A supportive campus environment was also presented by Strydom et al. (2017), which in the context of this study, refers to a supportive home education environment. Parental support assists in creating an environment of belonging and draws learners to socio-cultural student engagement (Trowler et al., 2021).

Although not part of student engagement theory, the notion of reciprocal interaction between parents and students as a support mechanism, could enrich the educational environment, which is strongly supported by Bronfenbranner's bioecological systems theory, i.e., the way in which two microsystems (e.g. the home setting and educational setting) interact to form a supportive mesosystem (Bronfenbrenner 1979; 2005). Parental encouragement and support assist learners in the home education environment and students in the higher education environment towards higher levels of engagement, persistence and learner/student success.

The role of parents in growing self-efficacy was discussed next.

(2) Self-Efficacy

Self-efficacy and how it relates to engagement and higher education success was discussed in section 8.3.5. However, the data presented a unique correlation between self-efficacy and quality interactions with parents. For example, Conscientious Innovator said: "*they got us to believe that we could do anything we put our minds to," and "my parents instilled in me a believe that I could do whatever I set my mind to."* The quotes support the inference that self-efficacy is linked to quality interactions with parents or more specifically, in some instances, quality engagement with the father, as discussed in section 8.3.5. In this regard, attitude-behaviour theory by Bean and Eaton (2000) related self-efficacy with student success indicating that students with high self-efficacy, when faced with academic and social challenges, reported a higher degree of perseverance.

The role of parents was emphasised by Dweck (2000), which when related to the home education environment, provides valuable information about what parents can do to help learners succeed. Her research discusses how parents can help their children believe in their own abilities denoting to self-efficacy. Furthermore, the importance of modelling, talking about effort, taking advantage of learning opportunities and providing positive feedback was highlighted (Dweck, 2000; Strydom et al., 2017)

Trowler et al. (2021) describes self-efficacy as the pathway to political student engagement, where political represents a position of power and refers to the student taking a position of power and agency in their engaging behaviour towards educational activities. Formation of self-efficacy and identity enabled students to exhibit more confidence in their abilities to succeed and displayed higher persistence. The narrative data of this study confirm that quality interactions with parents influenced student engagement behaviour and ultimately impacted their performance in higher education positively.

Another aspect of quality interactions with parents relate to intentional development, exposure and creating of opportunities.

(3) Intentional Development, Exposure and Creating Opportunities

The narrative accounts, as discussed in Chapter 7, indicate that purposeful actions by parents presented opportunities of growth and development. The mission of parents in interest development was illuminated by De Mille and De Mille (2013:162): "*If the child develops a love, […] do whatever it takes to support it. One of the best ways to do this is for parents to find out what their children are interested in and begin to study it*." In the same vein mother The World Is Our Classroom provided the following words with regards to their father's purposeful activities: "*He really, there weren't any limitations, […] he would do everything he could to make sure we could get the best exposure and the best opportunities for our kids."* Another example from the data was provided by Pilot Braveheart: "*And as a result, my, my dad put a lot of effort in, in trying to get me exposed."* Thus, quality interactions with parents, which again referred to specifically their father investing in creating such opportunities and often participating in activities with them, show the tremendous effort of these parents. Perna and Titus (2005) present how parent aspirations and support foreshadow higher education success. The narrative data shows how parents' involvement and having their children's best interest at heart, provided strong motivation for the home educated adults to succeed and reach for their dreams. This strongly correlated with a supportive campus environment as an engagement tactic as discussed by Strydom et al. (2017).

Quality interactions by these parents in creating opportunities for development and growth in interests and passions links with student engagement through support, belonging and motivation, which associates with a supportive campus (home) environment (Strydom et al., 2017). A supportive environment created opportunities for learners to, through exploration, learn more about their interests which later could influence enrolment choices and supported engaging behaviour at higher education. The

role of parents in character, value and skills development through quality interactions was posed.

(4) Character, Values and Skills Development

The narrative data of this study indicate how parents played a pivotal role in developing character traits that enabled engagement and positively impacted learners' higher education, as discussed in section 8.3.3. If compared with the literature on different home educational approaches, this aspect of character development during the foundation phase of education was discussed in the Leadership Education approach under section 4.3.3.6. Strong parallels exist between the narrative accounts of families focusing on character development and the Leadership Education and Moore home education approaches (De Mille and De Mille, 2013; Moore and Moore, 1994). From the narrative data, it is evident that these repetitive moments of exposure where parents came alongside learners to mentor and guide them, helped these learners in preparing a toolkit for managing life and real-world challenges. If compared with the conceptual framework of GRIT (Duckworth, 2017) the long-term focus on growing GRIT was key to developing strong, independent problem solvers with resilience. Furthermore, the role parents played in developing character traits like hard work and perseverance was highlighted and is associated with student engagement theory through motivation and behavioural engagement. The data also indicate that other character traits such as integrity, respect, honesty, working hard and not giving up were highly prized by these families. In this regard, the Centre for Parenting Education (Krisbergh, 2022) confirm a significant proportion of childhood learning occurs through observation and imitation of especially their parents and main caregivers. Mother Lighting Fires discussed how their children were discipled and mentored, adopting their value system and their ideas with regards to money, religion, relationships and respect. Krisbergh (2022) underlines the crucial role parents play in the transfer of a value system, empathy, and moral reasoning skills. Data was presented that support how quality interactions with parents provided support and motivation which influenced learners' ability to succeed at higher education. Intentionally exposing their children to opportunities for development influenced higher education preparation and success. Data showed how parents were crucial in igniting self-efficacy and developing other character traits, values and skills linked to higher education engagement and success, which include persistence, perseverance, hard work and GRIT.

The role of mentors in guiding and motivating learners to pursue higher education was inferred from the data and discussed in section 8.4.2.

8.4.2 Mentors

The data presented from the narratives of the home education families (see sections 7.4.4.2 and 7.5.4.2) showed that mentors played an important role in the learning and development of learners. From a student engagement perspective, Kuh et al. (2006) and Strydom et al. (2017) emphasise the profound influence mentors have on student engagement in the higher education sphere. Kuh et al. (2006:95) conferred how mentors influence engagement, persistence and achievement: "*Students who find something or someone worthwhile to connect to in the postsecondary environment are more likely to engage in educationally purposeful activities, persist, and achieve their educational objectives."* Similarly, Strydom et al. (2017:75, 170) state that "*high-impact activities include interventions such as […] tutoring and mentoring programmes*" and that "*academically gifted, academically average, and capable but academically underprepared students all deserve to have […] mentors […] that support, challenge, encourage, and help them realise their full potential to lead satisfying, productive lives.*" Additionally, when compared with different approaches to home education, the Leadership Education philosophy (discussed in section 4.3.3.5) discussed the role of mentors in igniting passion and transferring a love for their field of interest, which correlate very well with the data presented in this sub-theme. Thus, a substantial body of literature underline the importance of mentoring in the learning, development, and success of learners.

If compared with the narrative data of this study, strong similarities emerge that support the importance of mentoring in preparing students for higher education. In most cases, mentors were people who related with these learners on a common interest, or hobbies and the mentor was, therefore, fundamental in the process of learner motivation and behavioural engagement. Pilot Braveheart recalled the role of such a mentor in keeping his passion for flying thriving: "*definitely someone that, that kept a lot of what I hold, and what I'm passionate about, alive."* The mentors, in many cases, motivated the learners to pursue interests further and to keep on growing in that specific skill or subject.

The data further showed how mentors influenced career choices of two of the participants: "*I think, he's probably the one responsible for me, to, for me actually becoming an engineer."* And another reference was brought by mother Lighting Fires: *"And that had a great influence on her decision of, you know, the career that she, chose. So, I think your, the time that you have, you can, they can have stronger, deeper, and more meaningful relationships."* The quote by mother Lighting Fires indicates how mentors in some instances fostered deeper and more meaningful relationships with

participants than just the sharing of a hobby or interest. The notion of meaningful mentor relations is something that Strydom et al. (2017:39) also underline in the following way: "*Students learn first-hand how experts think about and solve problems by interacting with staff members inside and outside of instructional settings. As a result, staff become role models, mentors, and guides for lifelong learning."* The quote from mother Lighting Fires confirm that mentors influenced these learners in such a profound way.

Just as a parent can impart self-efficacy the data revealed how mentors could fulfil a similar role. Participant Conscientious Innovator provided the reference: "*he would just push me to believe more in myself. And to dream bigger. You know, don't just settle for this, because that's what you think you're capable of, but try to push yourself a bit harder."* This quote highlights the crucial role of mentors in children's lives, especially in cases where parents might not be able to fulfil this role. Finding quality mentors could impact learners in a deep and meaningful way. The narrative interviews suggest that the parents of the home educated learners intentionally looked for mentors that could contribute to developing of interest and improved student engagement.

8.4.3 Summary: Quality interactions

Recapitulation of the narratives of the individualised home education participants feature the interactions with parents and mentors as significant contributions to engagement practices and higher education success. The quote by Kuh et al. (2006:12) pertains: "*This view is consistent with a social networks perspective that college students' relationships with faculty and staff and peers as well as family, friends, and mentors contribute to student satisfaction, persistence, and what students gain from college.*" Drawing this quote into the earlier education sphere the excerpt by Kuh et al. (2006) relates the student to the learner and staff to parents as the educational facilitators. The fragment from Kuh et al. (2006) show how parents and mentors impact persistence in earlier developmental stages before higher education, and what learners acquire from academic engaging activities. Section 8.4. substantiates this argument by the data presented in section 8.4.1 for quality interactions with parents and 8.4.2 for quality interactions with mentors.

The data concerning quality interactions with parents was discussed in four themes, namely: i) support and motivation, ii) self-efficacy, iii) intentional development, exposure and creating opportunities and iv) character, values and skills development. Support and motivation in creating an optimal learning environment was discussed in section 8.1. It reappeared as a sub-theme in relation to quality interactions with parents that directly

affected higher education preparation. This is expected because various authors indicate the role of quality interactions in promoting engagement behaviour and higher education success (Strydom et al., 2017; Kahu and Nelson, 2017; and Kuh et al., 2006). The data indicate how parental support prevented the discontinuation of studies before completion. It showed that parents played a particularly important role in motivating engagement, resilience and GRIT, relating to the theme of persistence.

Parents, and especially fathers, were positively associated with developing self-efficacy and identity formation. The data indicates that parents can instil positive self-belief in their children through quality interactions, which is theoretically correlated with student engagement and higher education success.

Parents were very intentional in creating opportunities for growth and development and providing experiences to engage learners in purposeful activities. The narratives reported how parents actively and intentionally pursued learning prospects, which motivated learners to strive for excellence and success. These quality interactions arranged by parents, link with topics in student engagement literature, e.g. motivation, belonging and family support (Kuh et al, 2017; Strydom et al., 2017; Trowler et al, 2017). Exposing their children to a wide range of experiences improved their ability to make enrolment choices which indirectly improves engagement as learners knew their interests and could make choices that align with their passion.

The focus of these parents on developing characteristics that nurture moral values and life skills needed for higher education proved invaluable in the home education environment. One of the most alluded characteristics pertain to hard work, perseverance and persistence. These attributes correlate with topics in student engagement literature such as time and effort, motivation and resilience incorporating behavioural and cognitive engagement mechanisms. Traditional values pertaining to altruism, honesty, integrity and respect were referenced in the interviews as qualities for higher education preparation. Transferring values and characteristics for success to children was discussed by Krisbergh (2022), which showed that moral reasoning skills and empathy are also transferable through parenting and mentoring. The data support this notion of transferring skills, character traits and values that influence engagement and higher education success.

Home educated learners described the impact of mentors in their lives as significant and life changing. The data revealed how mentors stimulated, motivated and inspired learners, often in areas of intersecting interest or hobbies. Student engagement and success literature discuss how mentors during the higher education phase influence

learners to engage, persist and achieve their educational goals. In the same vein the data demonstrated that mentors could influenced these home educated learners during the schooling phase by inspiring engagement with academic challenge. Mentors also influenced enrolment and career choices and acted as life mentors who were consulted when learners were making important life choices. Furthermore, the data revealed that, in the same way parents can transfer self-efficacy, mentors can. This is a very important revelation in the data, verifying those mentors can not only motivate and inspire learners but also transfer values and characteristics that have the ability to improve engaging behaviour and ultimately higher education success.

8.5 Holistic, Integrated and Deep Learning

The holistic approach to learning integrated by these families did not only focus on cognitive or intellectual development but an all-round advancement of physical, emotional, moral, aesthetic and spiritual development, integrated with the perspective of intellectual development as requirements for excellence in education. Such an integrated and holistic approach has been advocated by scholars as a vital part of quality education (Stone, 1988; Miller, 1999; Hermes & Rimanoczy, 2018). Bentz (1992) provided the notion of emotional, physical, social, intellectual and personal processes being truly imbedded in deep learning experiences.

Advancements in the definition of quality education have evolved to equate high-quality learning with deep learning, in contrast to content-based or surface learning, which is considered low-quality education (Smith and Colby, 2007). The whole-person and individualised approach, as incorporated by these home education families, successfully produced feelings of enjoyment, curiosity, wonder, motivation and creativity. This synergizes with the optimal peaks of *involvement* or the “flow” process described by Csikszentmihalyi and Csikszentmihalyi (1988). Through the lens of student engagement, “involvement” indicates one of the critical aspects for learners to willingly engage in their learning experiences as discussed in section 8.1.2. To optimally engage, learners need a connection to the deeply imbedded aspects of learning, such as social, emotional and physical connections to their experiences, as represented in the data of this study.

Because interest and curiosity played a fundamental role in their education strategy, learners showed a high level of enjoyment and emotional engagement with learning (8.2.1, 8.2.2). They chose to participate and were involved in their learning experiences (8.1.2, 8.2.2, 8.2.5) with a very high degree of internal motivation. The data also confirmed socio-cultural engagement with learning (8.1.4, 8.2.8), which contributes to

more enjoyable experiences and emotional embedding of student engagement. Emotional feedback on completion of tasks and satisfaction is correlated by Biggs and Tang (2011) with deep learning which results in intrinsic motivation, challenge and meaning. Deep learning as a student engagement activity was discussed by Strydom et al. (2017), contrasting deep and surface learning: "*Universities promote student learning by challenging and supporting students to engage in various forms of deep learning that requires more than the mere memorisation of information*."

Dovač, Nome, Jensen and Skreland (2023) define deep learning as the process of advancing human thinking to elevated levels of cognitive abstraction through 4 mechanisms: (1) seeking meaning and understanding, (2) creating patterns and connections between seemingly unconnected fragments of knowledge, (3) integrating knowledge to other subject areas and (4) deep understanding of complex concepts. These mechanisms of facilitating deep learning were well addressed in the data of this study, specifically with regards to autonomous learning (8.2.1, 8.3.1), unit studies (8.2.4) and experiential learning (8.2.5), which intentionally focus on integrating content beyond defined disciplines or boundaries forming the connections emphasised by Dovač et al., (2023) above.

Dovač et al. (2023) discusses how deep learning as a mechanism of student engagement is: "*easy to retain, difficult to forget, intrinsically motivating and efficient,*" which was exactly expressed as such in the data presented by this study. It seems that the concrete connection of meaning with learning employed in the studies presented here is fundamentally important to deep learning strategies. Dovač et al. (2023) discusses one of the main theories of deep learning entails scaffolding of concrete knowledge to higher levels of cognitive and abstract concepts. The data presented in this study mastered the phase dependant learning from concrete to abstract through various strategies of phase dependent, individualised student engagement.

Deep learning was linked to other cognitive processes (Dovač et al., 2023): intrinsic motivation, analytic skills, cross-referencing, imaginative reconstruction, holistic and independent thinking and higher levels of cognitive abstraction. The individualised home education approach provided unique opportunities to facilitate deep learning as a student engagement mechanism through a whole person development perspective. In addition to abstract and cognitive thinking, Fullan and Langworthy (2014) connected deep learning with the holistic idea of human flourishing, referring to character development, communication, critical thinking, creativity and imagination, collaboration and citizenship, which just further supports the notion of holistic and whole-person education. Other

aspects presented by the data was included in the study of Smith and Colby (2007) linking deep learning with motivation (8.2.1 and 8.2.2), teacher-learner interaction (8.4.1), learner-learner interaction (8.1.1, 8.1.4), nature of feedback (8.1.1), the learning environment (8.1), identity (8.3.5) and perception of meaning, which all presented as aspects of the individualised home education environment. What was particularly executed successfully in the individualised home education approach was the connection of learning experiences to the learners' world and their knowledge of it (Fullan, Quinn, McEachen, 2018).

The Norwegian Directorate for Education and Training (2018, 2021b) incorporated progressive learning in their education philosophy utilising six principles. These principles are reviewed and connected to this study by cross referencing.

(1) Learners take a more active role in their learning which was adopted as their learning approach by the families in this study (sections 8.1.2 and 8.3.1).

(2) Learner's practise what they learn in unfamiliar situations.

(3) See relevance and contexts, think in new ways. Instil wonder, creativity and curiosity. A strong correlation with wonder, creativity and curiosity was found correlated with interest-based learning and autonomy as discussed in section 8.2.1 and 8.3.1. Relevance and context were explored through outings (section 8.2.8) and experiential learning (section 8.2.5).

(4) Transfer knowledge or content in other situations, contexts or disciplines and finding solutions to problems. Unit studies specifically provided opportunities for integrated knowledge acquisition (section 8.2.4) and to create connection between areas of study and experiential learning discussed learners practising solving real life problems (section 8.2.5).

(5) Develop connections across subjects and reflect on learning experiences. Unit studies specifically provided opportunities for integrated knowledge acquisition (section 8.2.4) which aims to create interdisciplinary connection between areas of study. Reflection on learning experiences were extensively represented in the data and discussed in relation to active learning (section 8.1.2), outdoor learning activities (section 8.1.3), interest-based learning (8.2.1), mathematics and language instruction (section 8.2.3), experiential learning (section 8.2.5), Individualised home education (section 8.2.7) and outings (section 8.2.8).

(6) Formulate questions and seek answers collaboratively. Socio-cultural learning was presented in the data of this study (section 8.1.4, 8.2.8 and 8.3.2), which in the home

education environment is predominantly associated with the family connections and less collaborative learning occur in an age segregated setup.

The connection between the results of this study and the corresponding theory of student engagement provides profuse support for the notion of individualised home education as an educational approach for successful higher education as presented by the narratives of these five families.

CONCLUSION

The narratives of five home education families provided rich data on how individualised home education could be utilised as an educational approach in the South African context, preparing learners for higher education. The results of the thematic analysis were presented in Chapter 7, and revealed four themes which describe the individualised home education approach, stemming from the narrative accounts of participating families: i) the milieu, ii) learning, iii) skills and iv) quality interactions. In this chapter (Chapter 8), the data results were compared with the body of literature, as presented in Chapters 2, 3, 4 and 5. Chapter 6 addressed the question of rigor and credibility providing information on sampling, data collection and interpretation. Next in Chapter 9 conclusions are drawn from the data and discussion relating these back to the research questions stated in Chapter 1. The limitations of the study are presented based on the narrative research of these five home education families. Implications for future work was presented in Chapter 9 which discuss how future work could address shortcomings of this study.

9 CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter provides a final summary of the research study. Conclusions are presented by a short introduction, reviewing the research questions and how this study answered each of these. The outcomes and contributions of this study follows, before providing more information on the limitations. The implications of this study, based on the outcomes, are presented along with further research suggestions.

9.1 Introduction

The preparation of learners – in primary and secondary education – for higher education remains a challenge in the South African education sector. The under preparedness of many students entering South African universities currently contribute to high drop-out rates and sub-optimal completion percentages. In many ways, student success in higher education depends on the preparation of learners during primary and secondary education.

Thus, the aim of this study was to investigate how individualised home education could prepare learners for higher education in a South African context. To date, several limitations in the current body of literature make it difficult to derive any concrete generalisations about how individualised home education could contribute to higher education student preparation, especially in the context of a developing country like South Africa. In this regard, empirical evidence about individualised home education must be recorded, as little is known in the current body of literature about this educational approach in a South African context. To address these gaps, this study utilised the thematic analysis of qualitative data through narrative inquiry to produce deeper insights about individualised home education in South Africa and how this approach could prepare learners for higher education. In this regard, student engagement was chosen as a specific theoretical point of departure.

This study is significant because it provides a deeper understanding of how the challenge of preparing learners for higher education in the South African context could be addressed by focusing on student engagement practices. The research results of this study provide clear, practical, and significant insights into the type of education environment that could be conducive to preparing learners for higher education,

something that links this research study to a broader set of problems concerning higher education student success.

The research questions and answers will be discussed next with detail about the type of education environment.

9.2 Research Questions

The research questions as defined in Chapter 1 are reviewed below and a description is provided of how this study addressed these research questions. The secondary questions were discussed first which interlaces into the primary question.

Secondary Questions:

Question 1: What are existing international theoretical perspectives on home education?

Chapter 2 focused on the international theoretical perspectives on home education providing the international context to this study. Historically home education precedes any formal or institutional school setting and was a socio-cultural process within a community. Education entailed learning about home, family, survival, and everyday life. Recent interest and growth in home education numbers, especially in the United States, has sparked renewed interest in home education globally. The modern home education setting looks quite different from its historic origin, although it is often still grounded in a socio-cultural learning space. Empirical data from the modern home education movement indicates that this approach to learning and development is still effective under certain conditions.

Data on home education remain limited worldwide, but currently, the United States provides most of the empirical data available on various aspects of home education including demographics (section 2.3), reasons for home education (section 2.4), academic performance (section 2.5), and home education adults (section 2.6). The reasons why families choose home education include the following: a concern for the school environment, the quality of academic instruction, moral or religious reasons, and special needs or mental illness. The academic performance of home educated learners is especially of interest to determine whether home education can provide adequate academic preparation for higher education. The data on the academic performance of home educated learners suggest that home education learners perform equally or, in some instances, better than their school-going peers. The literature suggests that several factors influence academic performance, which include parent involvement, social

structure, family support, and parent academic background. The literature shows that home education, under the right circumstances, could academically prepare learners for higher education and in these cases, home educated learners often perform at the same level or, in some cases, higher than school-going peers. The national perspectives on home education were reviewed briefly.

Question 2: What are existing national theoretical perspectives on home education?

Chapter 3 provided the national theoretical perspectives on home education. Home education in South Africa, as was the case worldwide, was the predominant education form until the 19th century. Schools in South Africa were initially built and operated by missionaries and churches but later became state-governed entities (as discussed in section 3.1). Home education ceased to exist by the late 19th century with only a few rare and exceptional cases. With the political changes in 1996, home education was legalised and started to steadily grow after that with an estimated number of 300 000 in 2021 (see section 3.2). This number remains low in comparison with school-going aged children and, therefore, remains a minority group in the South African education context. A specific segment in the home education community in South Africa, opt for a social-cultural engaged setting to a considerable extent, returning to some of the ancient roots of education. Research data in the South African setting shows that families opt for home education as an alternative form of education for similar reasons provided worldwide (as discussed in section 3.3), which are (i) concern for the school environment, (ii) better academic instruction, (iii) religious or moral influenced education, (iv) special needs or mental health. Limited empirical data exist for the South African home education setting, especially on academic performance and higher education entry (see section 3.4). This is a gap in the current body of literature concerning the South African home education sphere that might be addressed as the numbers keep on growing annually. Changes in the education sphere, which include the Bela Bill threaten the freedom currently experienced by home education families in South Africa (see section 3.6). There is a substantial need to gather empirical evidence about the degree to which these changes will impact the South African home education climate in the future. In South Africa, as elsewhere, there are various approaches to home education which will be overviewed next.

Question 3: What are the existing home education philosophies and approaches that host and formulate the definition of individualised home education as a unique approach in a South African context?

Chapter 4 provides theoretical perspectives on various approaches to home education. The literature provided insight into the home education philosophies typically pursued by families. One of the biggest classifications between approaches distinguishes between a formal and a non-formal approach. The formal approaches emulate the traditional school environment and consist of highly structured content, subjects, and assessments (as discussed in section 4.2). This approach can be a book based or an online-based curriculum, or alternatively can use a combination of the two referred to as blended learning. The other approach is a non-formal home education setting which could employ a quasi-structured or a non-structured approach (section 4.3). The non-structured approach presents the Unschooling method of home education. The Quasi-structured approach is usually implemented with a value-based approach or an Individualised approach or alternatively with a specific pedagogical approach. The value-based approach (as discussed in section 4.3.1) would often include a character-focused educational philosophy or a religious or faith-based approach. The individualised approach (as discussed in section 4.3.2) places the focus on the home educated learner and entails adjusting the home education to their strengths, learning preferences, and interests. Some of the approaches have many similarities and families can also use two or three approaches simultaneously. Any approach that makes use of a customised curriculum can also be referred to as eclectic home education, meaning that various resources are combined to create a customised curriculum. The individualised approach can accommodate gifted learners or special needs learners by adjusting the content and pace. Other individualised approaches can focus on self-directed learning or the unit studies approach. The home education approach (discussed in section 4.3.3) focuses on following the philosophy of a specific academic philosophy such as literature-based home education or the classical approach. Similarly, the approach can make use of the Montessori or Charlotte Mason philosophies. The Leadership and Experiential learning approaches are two additional methods that home education families can adopt. The methods are not exclusive and can in some instances be used simultaneously or incorporate aspects of two or more of these philosophies. The home education method often changes with developmental stages of learning. This study investigated how an individualised approach could prepare learners for higher education, but furthermore aims to define more deeply what the individualised approach looked like for those families that participated in the study.

Question 4: What specific theoretical perspective does student engagement provide concerning the preparation of learners for higher education?

Chapter 5 provides theoretical perspectives on higher education success. Historically, student success was often associated with degree attainment and academic achievement but more recently student success has evolved to include the broader complexities associated with success. The understanding of student success now stretches beyond access, academic achievement, retention, and degree attainment to include skills and competencies that influence post degree performance, attainment of personal goals as well as employment, proficiencies that enable economic independence and civic responsibility. Student success is influenced by both what institutions do (providing developmental opportunities and support) and what students do (engaging in academically significant activities) that contribute to success. Kuh et al. (2006) developed a comprehensive graphical conceptual framework which displays the complex nature of student success incorporating pre-college background factors, transitioning factors, student and institutional behaviours at the engagement level and post-secondary qualification outputs, which are all associated with student success.

Historically student success was attributed to academic preparation and motivation predominantly, but more recent developments include student engagement as a determining factor for higher education success. Student engagement incorporates the same notion of a bifocal system where both what the institutions does to facilitate engagement as well as the student's efforts and involvement towards engaging behaviour are included. Student engagement provides a strong theoretical foundation because it features aspects of psychology, cognitive development, sociology and learning with an extensive foundation in fundamental research. Where initial thoughts on student success focused on pre-college and background conditions, these ideas evolved to effective educational practices and showed that the nature and quality of students' experiences with peers, staff, faculty, on campus and in the classroom are better predictors of student engagement. Student engagement strategies include pathways and mechanisms of engagement (Trowler et al. 2021), which include: Affective, Behavioural, Cognitive, Critical, Political, and Socio-cultural student engagement. Literature pertaining to student engagement in the South African context entails academic challenge, peer learning, and positive and engaging experiences with staff and the campus environment (section 5.1). These engagement practices, when incorporated successfully contribute to higher education success.

Question 5: How could narrative research be used to create a deeper understanding of how an individualised home education environment could prepare learners for higher education?

Chapter 6 provides deeper insights into why narrative research was well suited for this research study. Narrative research focuses on capturing the storied accounts, often of minority groups, extracting meaning from the lived experiences of people. Thus, narrative research enables researchers to unfold human experiences with layers of depth creating meaning, whilst describing and interpreting the events, emotions, and social structures embedded in the storied accounts of participants. Narrative research is known to produce rich, layered, and complex data. The technique is very suited for this study as it successfully gathered rich data, provided layered and complex construct, and provided the opportunity to create meaning from the data. It allowed the researchers to define the philosophy of individualised home education and allowed the researchers to investigate how home education learners and parents experienced individualised education. It also provided the prospect to investigate how this type of home education prepared learners for higher education. The life-story, narrative interviews were approached with a historical perspective starting with the recollection of their earliest memories of home education and progressing through natural phases, asking participants to describe how their home education journey changed through the phases. This technique where participants reflect on their experiences and the events that occurred usually provide the opportunity for rich stories which accomplished the same goal in this study.

Primary question: In what ways, if any, can the storied accounts (past) of different stakeholders in individualised home education, provide deeper insights about preparedness for higher education in a South African context?

The research results, presented in Chapter 7, and the discussion of these results in Chapter 8 provide deeper insights into how individualised home education could prepare learners for higher education in the South African context. The data analysis resulted in four themes which describe individualised home education, pertaining to higher education preparation: (1) milieu, (2) learning, (3) life skills and (4) quality interactions. The home education milieu was described by four sub-themes which includes the home, family and education environment (in section 8.1.1), active, freedom and experiments (in section 8.1.2), outside (in section 8.1.3) and community (in section 8.1.4). Learning in the individualised home education setting was discussed utilising nine sub-themes as listed: (1) interest and curiosity, (2) love for learning, (3) mathematics and language, (4) topic or unit studies, (5) experiential learning, (6) reading, (7) individualised, (8) outings

and (9) non-formal. Each sub-theme presented and discussed how the data supports student engagement perspectives. These were presented in sections 8.2.1-8.2.9. The data for Life skills was reported and discussed under sub-themes: (1) autonomy and responsibility, (2) age integrated socialisation and (3) character development. Quality interactions provided an overview of how parents and mentors can influence student's abilities to engage and assist in preparing learners for higher education and help them succeed.

The key outcomes of this study could be summarised in the following way:

- From the storied accounts of participants, this study provides a detailed and contextualised representation and definition of individualised home education in the South African context.
- The study provides qualitative evidence, utilising the elements of student engagement, for how individualised home education as an educational philosophy could prepare learners for higher education in a South African context through the following rudiments: i) milieu, ii) learning, iii) life skills and iv) quality interactions.

9.3 Significance of the Study

This research study is practically, theoretically, and personally significant.

The *practical significance* of this study centres on the conceptual framework it provides to families and educators who choose to school their children through an individualised home education approach. The conceptual framework stemming from the research results provides specific characteristics about the structural and operational aspects needed to create an environment that is conducive to learning, development and success. Education environments, including home education, are complex systems that cannot be addressed through easy models. It is, therefore, crucial to create a deeper understanding of educational environments before educators and administrators rush to implement practical solutions. In this regard, this study provides deep insights – in an empirically grounded way – about how an individualised approach to home education could be used to create a conducive learning environment.

The *theoretical significance* of this research study centres on the fact that it provides a new conceptual understanding of home education in the context of a developing country like South Africa. In this regard, this study addresses three limitations in the current body of literature (see section 1.2.2). Firstly, very little empirical research is available about

how individualised home education could enhance higher education student preparation in the context of developing countries. Many studies are based on data from developed countries, predominantly in the Global North, and it is questionable if the results of these studies are applicable to the contextual challenges of developing countries in the global South, particularly South Africa. Thus, the empirical evidence in the current body of literature is underrepresented by two-thirds of the world, i.e., populations in developing countries. This study has contributed, although in a limited way, to address the contextual limitation. In this regard, this research study that uses the thematic analysis of qualitative data (through narrative inquiry) to provide empirical evidence from a South African context about individualised home education, and how it could create an environment conducive to learning, development, and success.

Secondly, this study also addresses some methodological limitations in the current body of literature. Many research studies about the developmental impact of home education (especially the individualised home education approach) primarily focus on its short-term effects, i.e., the immediate effect on learning and development during primary and secondary education. However, the methodology of these studies often fails to allow the evaluation of the long-term consequences of this educational approach – specifically with regard to higher education preparation. This research study used narrative inquiry to help addressing this gap, i.e., to create a deeper understanding of the long-term effect of individualised home education, especially in relation to higher education preparation.

Thirdly, the kind of research questions that were asked in studies to date, leaves a gap in the current body of literature. This framing limitation becomes evident if consideration is given to the many empirical studies that already address questions about the impact of home education on the learning and development of learners in various contexts and in different age groups. Furthermore, important questions were already addressed on the different approaches to home education, and how these approaches could – in some cases – prepare students for higher education, especially in specific academic fields. However, an overall silence exists in the current body of literature about how individualised home education, through the theoretical lens of student engagement, could create an environment that is conducive to learning, development and success. The research results of this study (Chapter 7), and the discussion thereof (Chapter 8), assist to address this framing limitation. Furthermore, a gap exists in the current body of literature regarding questions about comparing home education environments with student engagement as a theoretical framework for higher education student preparation; something that Chapter 8 focused on. To this end, this study provides a

framework for how the individualised home education through the elements of: i) milieu, ii) learning, iii) life skills and iv) quality interactions could prepare learners for higher education success.

This qualitative research study (from an interpretive perspective) also has *personal significance* for the researcher. Initially educated in the Engineering field and involved in higher education teaching, she was introduced to the problems of higher education failure rates and the lack of quality academic preparation. Her interest in preparing learners for higher education already germinated, she became a home education parent to her own boys and experimented with the individualised home education approach. This facilitated the change in mainstream research from engineering to education. This study became the creative energy in her own home education journey which brought forth a new dedication to education research in the field of individualised home education as a higher education success story.

9.4 Limitations

This study was conducted using narrative interviews with a small minority home education group in the South African context, which places limitations on the research.

- Firstly, several contextual limitations exist in the current study. Data was collected in a South African context and does not necessarily represent all home education settings in the context of developing countries. Furthermore, the participants could be considered to belong to a middle to high socioeconomic group. Thus, the data does not represent the bigger South African social and economic realities.
- Secondly, some methodological limitations are associated with this study. The research employed narrative research gathering qualitative data, which represents the lived experiences of a relatively small group. However, this study does not provide any quantitative data on a large scale, making it difficult to draw generalisations applicable to the large home education environment in South Africa and other developing countries. Furthermore, the data set only represents families who employed individualised home education and does not represent the bigger home education community in South Africa regarding different pedagogical approaches. Additionally, the data set is also limited in the sense that only successful home educated adults who completed higher education, and their parents, were interviewed. This study, therefore, does not provide data on

the lived experiences of all home education learners in the South African home education and higher education setting. Thus, due to the nature of the study, a small number of participants contributed, which limits the statistical representativity.

- Thirdly, this study is exposed to ideological limitations. This study upheld a particular perspective on home education, namely individualised home education. This perspective is limiting considering other conceptions of home education. Furthermore, this study does not include perspectives on how public schools, and private schools, prepare learners for higher education success.

9.5 Possible Implications

The following recommendations are made based on the significance and limitations of this research study outlined above.

9.5.1 Policy

This research study underlines, in an empirically grounded way, the value of home education and how it could prepare learners for post-secondary studies. The conceptual framework developed through this research study provides important insights that could inform the reconfiguration of policies about home education in South Africa. This is important to further enable evidence-based decision-making in education on a provincial and national level.

On a secondary level, research of student engagement at the primary and secondary levels education levels provides stakeholders – parents, families, learners, teachers, lecturers, support staff, prospective students and institutional leaders - with critical information on preparing learners for higher education through student engagement.

9.5.2 Practice

The results of this research study should be distributed to home education families, organisations and foundations in South Africa. It is important to share this research with a widespread network of home education families.

Furthermore, it is recommended that the research findings be shared with Centres of Teaching and Learning at universities and colleges in South Africa. What is at stake is that the post-secondary education sector in South Africa remains uninformed about the

valuable contribution that home education can make towards higher education preparation.

9.5.3 Further Research

A deeper and more nuanced understanding is needed about how home education could assist to advance student success in post-secondary education. Thus, the researcher suggests that:

- Quantitative research should be conducted with a more substantial and representative data set that would enable the identification of general patterns concerning the ways in which home education prepares learners for higher education success.
- Future studies should explore how other home education approaches in developing countries prepare students for higher education success.
- Future studies should compare home education environments (that are considered to be optimally conducive to learning, development and success) with similar environments in public and private schools.
- The study suggests that student engagement in the foundation phase is crucial to developing student engagement in the higher education phase. The question remains how student engagement in the foundation phase link with student engagement in the higher education phase. Also, which elements of student engagement can be developed in the foundation phase and to which extent. Future studies should address this research question.

9.6 Conclusion

Higher education student success remains an important focus across the world, but especially in the context of a developing country like South Africa. Yet, very little empirical evidence exists on how an individualised approach to home education could create an environment that is optimally conducive to learners' learning, engagement and development, and how it could contribute to post-secondary student preparation. This research study provides new insights, unavailable in the current body of literature, about how individualised home education in South Africa could contribute to prepare students for higher education.

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Appendix A. Information Letter and Consent Form

UNIVERSITY OF THE FREE STATE
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YUNIVESITHI YA FREISTATA
UFS UV

RESEARCH STUDY INFORMATION LEAFLET AND CONSENT FORM

DATE:2020/11/18

Date of research project: January 2021-December 2021

TITLE OF THE RESEARCH PROJECT:

Preparing learners for Higher Education success through Individualised Home Education in South Africa: A Narrative Research study.

PRINCIPLE INVESTIGATOR / RESEARCHER(S) NAME(S) AND CONTACT NUMBER(S):

Dr J. Morkel – Principle investigator	*Jacqueline.morkel@gmail.com*	*074 663 5615*
Dr W.P. Wahl	*WahlWP@ufs.ac.za*	*051-401 2819*

FACULTY AND DEPARTMENT:

Faculty of Education / Higher Education

WHAT IS THE AIM / PURPOSE OF THE STUDY?

The aim of this research study is to determine the ways in which non-formal individualised home education prepared learners for Higher Education. This research study is important because many home education families choose a non-formal educational approach, but very little is known about the non-formal home education methodology followed by South African families. The narrative of these families could create a better understanding of the ways in which an individualised non-formal approach develops learners. The narrative of these families will be evaluated to obtain information on how this approach could better prepare learners for Higher Education success. This study is important in order to create a deeper understanding of the type of learner environment required for optimal growth and development of learners.

WHO IS DOING THE RESEARCH?

The principle researcher of this research study is Dr Jacqueline Morkel in fulfilment for the requirements for the degree PhD in Higher Education at the University of the Free State (UFS). Dr. Morkel is a Home educator herself and is particularly interested in the field of non-formal individualised home education. Her study will investigate how this approach could create unconventional education environments that are more conducive to the learning, development and success of learners.

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HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This study has received approval from the Research Ethics Committee of UFS. A copy of the approval letter can be obtained from the researcher.

Approval number: UFS-HSD2020/1755/252

WHY ARE YOU INVITED TO TAKE PART IN THIS RESEARCH PROJECT?

You were chosen to participate in the research project because you: (1) Recently completed a first Higher Education degree (2) Were home educated in a non-formal individualised environment (3) Reside and completed your education in South Africa. This study utilises purposive sampling, which means that we were purposeful in the way in which we have chosen participants. Approximately 15 participants and their parent(s) will partake in this study.

WHAT IS THE NATURE OF PARTICIPATION IN THIS STUDY?

This is a Narrative Research Study that entails multiple interviews. Each participant will participate in the following activities during this time: (1) Complete an online personal information form. (2) Supply academic results for the completed degree. (3) Supply academic results for completed Secondary Education. (4) Participate in multiple interviews providing detail on the non-formal home education environment (approximately 45 min. each)

CAN THE PARTICIPANT WITHDRAW FROM THE STUDY?

Being in this study is voluntary and you are under no obligation to consent to participation. There is no penalty or loss of benefit for non-participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason. However, please note that once participated in an interview this data cannot be withdrawn from the research study.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

There are no benefits for taking part in this research project.

WHAT IS THE ANTICIPATED INCONVENIENCE OF TAKING PART IN THIS STUDY?

You might be inconvenienced by the time required by multiple interviews. Although we do not foresee any social-emotional harm through this project, the researcher will recommend Counselling and support to any participating candidate who indicates such a need.

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WILL WHAT I SAY BE KEPT CONFIDENTIAL?

High levels of confidentiality of information will be maintained. Only the two researchers who are directly involved in this research project will have access to your personal information, and this information will not be shared in any way during the reporting of the results; no one will be able to connect you to the answers you give in the data, any publications, or other research reporting methods such as conference proceedings. Please note your answers may be reviewed by people responsible for making sure that research is done properly, including the Research Ethics Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records. Your anonymous data may be used for other purposes, e.g. research report, journal articles, conference presentation, etc. Privacy will be protected in any publication or reporting of the information and individual participants will not be identifiable in such a report. Please keep in mind that it is sometimes impossible to make an absolute guarantee of confidentiality/anonymity.

HOW WILL THE INFORMATION BE STORED AND ULTIMATELY DESTROYED?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Hard copy format of the information will be destroyed through a shredding machine. Although all measures are taken to ensure the confidentiality of the information, it is important to note that a risk still exists for the breach of confidentiality. This risk is mitigated by the measures described above, i.e. secure storing of information; limited and secure access to information; and anonymity in the reporting of results.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICPATING IN THIS STUDY?

You will receive no payment for participating in this research project. No harm or negative side-effects are foreseen for individuals participating in this research project.

HOW WILL THE PARTICIPANT BE INFORMED OF THE FINDINGS / RESULTS OF THE STUDY?

If you would like to be informed of the final research findings, please contact Dr J Morkel at Jacqueline.morkel@gmail.com or 074 663 5615. The findings are accessible for a period of twelve months directly after the last day of participation. Should you require any further information or want to contact the researcher about any aspect of this study, please contact Dr Morkel at the above-mentioned telephone number or e-mail address. Should you have concerns about the way in which the research has been conducted, you may contact the Dean: Prof Loyiso Jita at +27(0)51 401-2245 or at < motaungsk@ufs.ac.za >.

Thank you for taking time to read this information sheet and for participating in this study.

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation. I consent to recording of all interviews for the purpose of transcribing.

I have read (or had explained to me) and understood the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study. I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable). I am aware that the findings of this study will be anonymously processed into a research report, journal publications and/or conference proceedings.

I agree to the recording of all interviews.

I have received a signed copy of the informed consent agreement.

Full Name of Participant: _____

Signature of Participant: _____ Date: _____

Full Name(s) of Researcher(s): _____

Signature of Researcher: _____ Date: _____

205 Nelson Mandela Drive/Rylaan, Park West/Parkwes, Bloemfontein 9301, South Africa/Suid-Afrika
P.O. Box/Posbus 339, Bloemfontein 9300, South Africa/Suid-Afrika, T: +27(0)51 401 9111, www.ufs.ac.za

Appendix B. Interview 1 Questions

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RESEARCH STUDY Questions Interview 1

DATE: 2020/11/15

Date of research project: 2020-2021

TITLE OF THE RESEARCH PROJECT:

Preparing learners for Higher Education success through Individualised Home Education in South Africa: A Narrative Research study.

PRINCIPLE INVESTIGATOR / RESEARCHER(S) NAME(S) AND CONTACT NUMBER(S):

Dr J. Markel – Principle investigator *Jacqueline.markel@gmail.com* *074 663 5615*
Dr W.P. Wahl *WahlWP@ufs.ac.za* *051-401 2819*

FACULTY AND DEPARTMENT:

Faculty of Education / Higher Education

Questions for Interview 1

1. **Can you tell me about when you first started Home Education?**
2. **Can you tell me how your home education evolved over the years?**
3. **Why would you describe your home education as non-formal?**
4. **Why would you say your home education was individualised?**
5. **How do you think your home education setting prepared you for higher education?**

Appendix C. Interview 2 Questions

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RESEARCH STUDY Questions Interview 2

DATE: 2020/01/20

Date of research project: 2020-2021

TITLE OF THE RESEARCH PROJECT:

Preparing learners for Higher Education success through Individualised Home Education in South Africa: A Narrative Research study.

PRINCIPLE INVESTIGATOR / RESEARCHER(S) NAME(S) AND CONTACT NUMBER(S):

Dr J. Morkel – Principle investigator	*Jacqueline.morkel@gmail.com*	*074 663 5615*
Dr W.P. Wahl	*WahlWP@ufs.ac.za*	*051-401 2819*

FACULTY AND DEPARTMENT:

Faculty of Education / Higher Education

QUESTIONS INTERVIEW 2: PARENTS

1. **Could you describe the role you had in your child's life and how it allowed them to be successful in their higher education and after that?**
2. **Could you describe the role of another significant mentor in your child's life and how that impacted who they are today?**
3. **If you could share knowledge/wisdom that you now have about home schooling with your younger self, what would that be?**
4. **Please describe the most significant moment/s in your child's life / family's life that shaped who they are today?**
5. **How would you say was your child inspired to pursue higher education?**
6. **What are the 5 most important properties according to you that will make you successful at higher education?**
7. **What is some of the fondest memories you have of your homeschooling years?**

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QUESTIONS INTERVIEW 2: LEARNERS

1. How would you describe the role of your mother or father and how it influenced you to be successful in your higher education and after that?
2. Could you describe the role of another significant mentor in your life and how that impacted who you are today?
3. If you could share knowledge/wisdom that you now have **about home schooling** with your younger self, what would that be?
4. Please describe the most significant moment/s that shaped who you are today
5. How were you inspired to pursue higher education?
6. What are the 5 most important properties according to you that will make you successful at higher education?
7. What is some of the fondest memories you have of your homeschooling years?

Appendix D. Ethics Statement

This study has received approval from the Research Ethics Committee of UFS.

Approval number: UFS-HSD2020/1755/252.

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA

UFS UV

GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

25-Feb-2021

Dear Dr Jacqueline Morkel

Application Approved

Research Project Title:
Preparing learners for Higher Education success through Individualised Home Education in South Africa: a Narrative Research Study.

Ethical Clearance number:
UFS-HSD2020/1755/252

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Reviewer 1: Please note the miss spelling of Connely and Clandinen. Should be Clandinin.

Reviewer 2: The researcher has attached all required documents. Additionally, the recommendation is based on the fact that, the study is conducted outside the schooling system and solely depends on the participants.

Yours sincerely

Dr Adri Du Plessis
Chairperson: General/Human Research Ethics Committee

AdPlessis

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Appendix E. Language Editing

This research study was submitted for Language Editing. Refer to Certificate Number WOS4882mb.

WISE OWL Solutions
Just a phone call away!

Wise Owl Solutions
41 Birdland Street, Langebaan, 7357
083 633 7130
marianne@wiseowlsolutions.co.za

CERTIFICATE OF EDITING

Paper Title: Preparing learners for Higher Education success through Individualised Home Education in the South African context

Author: Jacqueline Morkel

Date Issued: 23 July 2024

Certificate Number: WOS4882mb

This certificate confirms that the paper listed above was edited by one or more expert English editors. The following issues were corrected: grammar, spelling, punctuation, sentence structure and phrasing. The author may accept any of our comments or suggestions upon receipt of the document we edited. If you have any questions or concerns, please contact Wise Owl Solutions at marianne@wiseowlsolutions.co.za.

Neither the research content nor the author's intentions were altered.

Marianne Blomerus

Appendix F. Turn-it-In Report

Document Viewer

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