

**Teachers' perspectives on professional development for classroom
implementation of the integrated curriculum in Lesotho**

By

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Declaration

I hereby declare that this thesis entitled “**Teachers’ perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho**” is my own work and all sources that have been used in this dissertation are indicated and are acknowledged by means of complete references. This dissertation has not been submitted previously in part or in its entirety for examination for a degree at any institution.

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MG TAFAI

DATE

Dedication

To my mother and my late father, who have always valued education and continuously encouraged me to further my studies. To my guardians (Diana and Robin Green) for their love and kindness, they supported me to further my studies so dearly. To my mother and my siblings for support and taking good care of my beloved son at times when my study distanced us.

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Summary of the study

Despite the fact that Professional Development (PD) programmes have been accepted generally as essential tools for the improvement of education, reviews of PD research constantly point out their ineffectiveness. Lesotho is currently in the process of implementing a new curriculum [integrated curriculum (IC)] in primary schools. Therefore, in the context of a relatively new curriculum such as the IC, it is important to understand teachers' perspectives during its implementation and PD's efficiency.

This study explored primary teachers' perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho. This study used the Desimone's comprehensive framework for evaluating the effect of Continuous Development (CPD). This study further followed sense-making theory (SMT) as a theoretical lens to explore primary school teachers' perspectives on CPD regarding the implementation of the new IC, because sense-making suggests that teachers use their prior knowledge and experiences to interpret and enact their own meaning of reform. The study followed a qualitative approach and used multiple case studies. Semi-structured interviews, lesson observations and document analysis were used to collect data. The collected data were used to generate themes and the data analysis was guided by a five-featured conceptual framework for professional development as well as SMT.

The first set of findings from the first article indicates that the participating primary school teachers' perspectives were that they are inadequately provided with enduring CPD activities, guidance and monitoring to assist them in the implementation of the IC as required by the Curriculum and Assessment Policy (CAP). Inadequate skills and knowledge resulted in the teachers being less effective in implementing the IC, although they had attended the planned professional development workshops and training sessions. The findings suggest that teachers should be provided with more frequent training sessions by the Ministry of Education and Training (MOET) and that there should be follow up activities and monitoring in schools after the teachers' training.

The second set of findings from the second article indicates that although teachers participated in workshops (CPD programmes), the participating teachers indicated that

those programmes had limitations in preparing them to effectively navigate many contextual factors. These factors include lack of materials, lack of the appropriate skills to facilitate/implement learner-centred approaches and limited use of ICT and Continuous Assessment (CASS) in the classroom. These findings point to the need for CPD programmes that comprise support, supervision and training for teachers to incorporate new knowledge into their daily lessons, rather than leave the burdens for them when they return to the classroom.

The third set of findings from article three reveals that the participants' perspectives vary, although they all participated in IC training workshops and regular cluster workshops (CPD programmes) for the implementation of the IC. The CPD programmes changed the teachers' perspectives in different ways due to the different sense-making that the teachers acquired. That is, the participating teachers' perspectives, attitudes, beliefs and the learners' outcomes in the process of the IC implementation were differently shaped (positive for some teachers but negative for others depending on the difference in their sense-making). The findings suggest that CPD practices should, in addition, be focused on the shaping of teachers' perspectives regarding the new curriculum rather than being focused only on instruction and assessment.

Keywords: Integrated curriculum, Continuous Professional Development, Ministry of Education, Professional development impact and teacher change.

Table of contents

Titles	Page
Cover page	
Declaration	I.
Dedication	II.
Acknowledgements	III.
Summary of the study	IV.
Table of contents	V.
Acronyms	VI.
1. Section: Orientation and introduction to the study	1
1.1 Introduction	1
1.2 Background of the study	4
1.3 Context of the study	7
1.3.1 Statement of the problem	9
1.4 Purpose of the study	10
1.5 Research questions	11
1.5.1 Aims of the study	11
1.6 Literature review	12
1.6.1 Continuous Professional Development (CPD) for teachers	12
1.6. 2 Workshops and training	13
1.6. 3 Observation of excellent practice	14
1.6. 4 Cascade model	16
1.6. 5 Coaching/ mentoring	17
1.6. 6 Effects of CPD on teaching and learning	18
1.6 .7 Theoretical framework and Conceptual framework	20
1.7 Overview of research methodology	25
1.7.1 Research paradigm: Interpretivism	26
1.7.2 Research approach: Qualitative	27
1.7.3 Research design: Case Study	27
1.7.4 Sampling procedure: the use of purposive and convenience sampling	28
1.7.5 Data collection	30
1.7.6 Data analysis	34

1.7.7 Credibility, dependability, transferability and trust worthiness	37
1.8 Significance of the problem	40
1.9 Ethics considerations	40
1.9.1 Confidentiality, anonymity and voluntary participation	41
1.9.2 Informed consent	41
1.10 Limitations	41
1.11 Clarifications of the key terms	41
1.12 Outline of the Dissertation	43
1.12 References	44
1.13 List of Tables	
Table 1: Research methodology layout	25
Table 2: Participants' biography	29
Table 3: A brief context research sites	29
Table 4: A summary of the data collection methodology	32
Table 5: Synopsis for the cross- case analysis based on the themes	36
Section 2	
Article 1: Teachers' perspectives on the professional development for the implementation of the integrated curriculum in Lesotho primary schools	
1. Introduction	61
2. Background	61
3. Literature	62
Teachers' perspectives of CPD for the implementation of IC	62
4. Theoretical framework and Conceptual framework	63
5. Methodology	63
6. The Findings	67
Theme 1: Teachers' perceptions on CPD experiences for IC	67
6.1.1 Sub-theme 1: Teachers' perspectives on the content of professional development	67
6.1.2 Sub-theme 2: Teachers' perspectives on active teacher learning	68
6.1.3 Sub-theme 3: Teachers' perspectives on coherence	69
6.1.4 Sub-theme 4: Teachers' perspectives on duration	70

6.1.5 Sub-theme 5: Teachers' perspectives on collaborative participation	71
6.2 Theme 2: Teachers' perceptions of the nature of CPD and participation	72
6.2. Theme 3: Teachers' perceptions on IC resources	73
6.3 Discussion	73
7. Conclusions	77
8. Recommendations	78
9. References	78
10. List of tables	79
Table 1: Participants' biography	65
Table 2: Excerpt from extracts of the interview codebook	66
11. List of figures	
Figure 1: Figure 1 represent Desimone's Core conceptual framework for studying the effect of professional development on teachers and students, adopted from Desimone (2009: 185)	63
Article 2: The influence of continuous professional development activities on the teaching of the integrated curriculum in Lesotho	
Abstract	84
1. Introduction	85
2. Background	85
3. Literature review	86
3.1 The influence of continuous professional development activities on educational innovations	86
4. Theoretical framework and Conceptual Framework	86
5. Methodology	87
6. The Findings	88
6.1 Theme 1: Teachers' perspectives on the use of learner-centred instructional strategies in implementing the IC	88
6.2 Theme 2: Teachers' perspectives on the integration of ICT and the use of learning materials	89

6.3 Theme 3: Teachers' perspectives on assessment strategies in the context of IC classroom practice	90
6.4 Theme 4: Teachers' attitudes towards the teaching of the IC and their perceptions of challenges and opportunities	93
6.5 Discussion	95
7. Conclusions	97
8. Recommendations	98
9. References	99
10. List of Tables	
Table 1: Interview extracts about the use of ICT and other Teaching materials.	90
Table 2: Mrs Yellow's assessment segment from lesson plan IP	91
Table 3: Mr Red's assessment segment from his lesson on NW	92
Article 3: Professional development activities that shape the teachers' perspectives on the curriculum project in Lesotho	
1. Introduction	103
2. Background	104
3. Teachers' CPD in the context of national reform	104
3.1 CPD in Lesotho	105
3.2 CPD and teacher change	105
4. Theoretical framework and Conceptual framework	106
5. Methodology	107
6. The Findings	108
6.1 Theme 1: The shaping of teachers' perspectives on the integrated curriculum implementation by the CPD programmes	108
6.1.1 Sub-theme 1: Perceptions on teacher knowledge to implement IC	108
6.1.2 Sub-theme 2: Teacher beliefs on IC assessment implementation	110
6.1.3 Sub-theme 3: Teacher attitudes towards IC implementation	111
6.1.4 Sub-theme 4: Teachers' perceptions of IC learner outcomes	111
6.2 Discussion	113
7. Conclusions	115
8. Recommendations	115

9. References	116
10. List of tables	
Table 4: Mrs Yellow' lesson plan objectives- a segment	112
Section 3: Discussions, conclusion and implications	
3.1 Discussions	
3.1.1 Research question 1: What are the teachers' perspectives on the CPD experiences for the implementation of the IC?	120
3.1.2 Research question 2: How do teachers perceive the influence of CPD activities on classroom practices when implementing the integrated curriculum?	121
3.1.3 Research question 3: How do CPD activities for the implementation of the IC shape the teachers' perspectives on the integrated curriculum project in Lesotho?	123
3.2 Summary	124
3.3 Conclusion	126
3.5 Recommendations	127
3.5 Implications	127
3.4.1 Limitations	129
3.4.2 Personal lessons and reflections	130
3.5 References	130
Appendix 1 -Permission letter to Lesotho primary school teachers.	132
Appendix 2 -Consent forms	134
Appendix 3 -Letter to the primary schools principals	137
Appendix 4 - Letter of clearance from the university	139
Appendix 5 -Letter from the Ministry of Education and Training	145
Appendix 6 - Interview protocol	146
Appendix 7- Observation protocol	147
Appendix 8- Observation field notes protocol	149
Appendix 9- Document analysis protocol	149
Appendix 10- Scheme of work protocol	150
Appendix 11 – Lesson plan protocol	150

Appendix 12- Turnitin report	151
	152

Acronyms

AIDS- Acquired Immunodeficiency Syndrome

CASS-Continuous Assessment

CAP-Curriculum and Assessment Policy

CPD-Continuous Professional Development

EFL-English Foreign Language

EW-English Window

HIV-Human Immunodeficiency Virus

IC-Integrated Curriculum

ICT-Information and Communication Technology

IP-Integrated Part

LCL-Learner- Centred Learning

MoET-Ministry of Education and Training

NCDC-National Curriculum Development Centre

NW-Numeracy Window

OBE-Outcome Based Education

PD-Professional Development

SEU-Special Education Unit

SW-Sesotho Window

SMT-Sense- Making Theory

TCL-Teacher-Centred learning

TPD-Teacher Professional Development

Section 1: Introduction and orientation to the study

1.1 Introduction

As with most organisations around the world, schools are embarking on change processes in order to improve classroom practice and learners' achievements (Kobola, 2007). Curriculum change is defined by Chan and Luk (2013: 56) as a procedure that "... involves changes in the education system, programmes, structures and objectives which lead to changes in approaches to teaching and learning as well as changes in the learners' learning outcomes". In response to the demands of the 21st century world jobs market and the push towards the 4th industrial revolution, nations around the world are now embarking on deep educational reforms. Lesotho is not an exception in this regard. As global countries are focusing on huge economic, political and technological changes, education is not an exception, as it is undergoing a rapid revolution because of the effects of globalization (Bautista & Ortega-Ruíz, 2015). However, due to contextual challenges, not all countries that embark on educational reform implementation record success stories (Aihi, 2011). The literature indicates that teachers' PD is said to be a driving force that necessitates reforms to be implemented successfully in schools (Pring, 2011 & William, 2013). Wei, Darling-Hammond and Adamson (2010) define PD as the activities and processes planned mainly for teachers to enhance their content knowledge, the practice of instruction, and most importantly the learners' achievements. Desimone (2009, 2011 & 2015) affirms that in the US teachers' professional development improves the quality of education.

There are different forms of PD and different ways in which PD is conducted. Abad (2013) argues that the form of PD that is most commonly used is the traditional model of PD that critically assumes that teachers have inadequate knowledge and/or skills. The traditional model of PD is based on workshops and training, observation of excellent practice, the Cascade model and coaching. These are once-off programmes. The type of PD that involves on-going divergent activities is defined as continuous professional development (CPD) (Srinivasacharlu, 2019). CPD is defined as continuous learning opportunities that are provided for teachers (as well as people involved in the management of schools such as principals and school counsellors) and nurses to enhance their skills, knowledge, expertise and other teacher characteristics (Opfer, Pedder & Lavicza, 2011). However, for the purpose of this study, CPD is

referred to as a process of continuous personal and professional learning for the teacher. It includes "... processes and activities designed to enhance professional knowledge, skills, and attitudes of teachers so that they might in turn, improve the learning of learners" (Guskey, 2000: 16). Meng and Tajaroensuk (2013) argue that teachers' professional knowledge could be updated through the use of efficient CPD in order to meet their needs for enhancing classroom practice. However, when teachers actively partake in CPD programmes, a significant improvement in their instructional practice can take place (Archibald, Coggshall, Croft & Goe, 2011).

CPD is more and more becoming a worldwide practice and is a cornerstone that can be used to ensure that education reforms are effective at any stage (Mokhele & Jita, 2010). Phasha, Keshni and Beckmann (2017) acknowledge the importance of CPD activities by stating that whenever a reform is introduced in schools, an appropriate teachers' training session and an adequate teachers' support programme (CPD activities) are highly needed. Mensah (2016) posits that CPD programmes are beneficial for teacher capacity building in terms of new knowledge and requisite skills that would enable them to improve their instructional practices. Although CPD programmes are strongly encouraged for achieving effective implementation of a new curriculum; they should be "on-going rather than be a series of discrete remedial events to fix teachers' inadequacies" (Dass and Yager, 2009: 13). Therefore, the most effective CPD programmes are those methods that transform in a step-by-step and incremental style, without anticipating there be much to be observed immediately, but facilitating and monitoring teacher practice through support structures to enhance the desired learning outcomes from the learners (OECD, 2009; Shriki & Lavy, 2012).

The present study is aimed at exploring four primary school teachers' perspectives on professional development for the classroom implementation of the integrated curriculum in Lesotho. The researcher adopted the Desimone framework for effective professional development that constitutes five features based on a CPD perspective and sense-making theory (SMT). This framework was used because the literature indicates that the five-featured conceptual framework for professional development works best in education reforms. This framework symbolises the connections among the analytical features of CPD, teacher knowledge and beliefs, classroom practice, and learners collaborating and non-recursive outcomes (Desimone, 2009; Mokhele &

Jita, 2010; Desimone, 2011; Aminudin, 2012 & Mohan, Lingam & Chand, 2017). The five-featured conceptual framework for PD has been used effectively in the assessment of CPD learning activities with the aim of supporting the teachers. Here is a brief description of the five-featured framework for PD:

- (a) **Content focus:** activities that are focused on subject matter content and how learners learn that content;
- (b) **Active learning:** these are opportunities for teachers to observe, receive feedback, analyze learners' work or make presentations, as opposed to passively listening to lectures;
- (c) **Coherence:** "is the content, goals and activities that are consistent with the school curriculum and goals, teacher knowledge and beliefs, the needs of learners, and school, district and state reforms and policies" (Carpenter & Green, 2017: 55);
- (d) **Sustained duration:** the PD activities that are on-going throughout the school year and that include 20 hours or more of contact time; and
- (e) **Collective participation.** According to Hochberg and Desimone (2010), collective participation is related to the number of teachers from one school who participate in the similar PD activities or learning programmes.

(Desimone, 2009: 184, 2011: 215 & 2015: 253)

The current study explores teachers' perspectives regarding CPD for the implementation of the IC since it has been found that once-off PD does not really serve the purpose. It is important to know how CPD is viewed by teachers in the context of Lesotho. This study focuses predominantly on the perspectives of Lesotho primary school teachers concerning the implementation of the IC through CPD and aims to contribute to different authors' perspectives on CPD around the world. Considering that a wide variety of the literature covers different contexts, CPD as a concept is likely to be perceived differently in a variety of contexts. This research focuses on primary school teachers' perspectives and their experiences of the nature of the professional development programmes emerging from the carrying out of the set of courses proposed in Lesotho from 2013, as these have not yet been explored.

1.2 Background

Many countries around the world are undergoing restructuring of their education system in order to meet the ever-changing demands of the 21st century job market (Song, 2012). Curriculum change in some countries has been influenced by political and economic factors (societal challenges). A few countries introduced a new curriculum called the integrated curriculum (IC). Lesotho is one of the countries that have adopted this IC as its new curriculum in primary schools in order to shift from The British education system. The IC is defined as “[a]n approach that aims to integrate teaching across traditional subjects or disciplinary boundaries and/or use multiple disciplinary perspectives. The purpose of IC is to help learners to create and enhance knowledge and understanding” (Dowden, 2014: 18). This study uses the IC definition used in the CAP where IC is defined as,

The holistic vision and management of matters associated with intelligence, maturity, personal and social development of the learner for survival purposes and economic development of the nation, as opposed to the compartmentalised subject-based development (MoET, 2009:15).

The main purpose of the IC is generally to develop a holistic view of learning (Ibraimova, 2017:11) because it is learner-centred and promotes learner engagement (Lam, Alvia-Martin, Adler & Sim, 2013). That is, the IC promotes deeper learning. According to Fullan (2013: 3), deep learning means “[t]he shift from surface learning and covering content to understanding a topic in depth with the learners taking the lead in their learning”. Costley (2015: 4-5) indicates that, in IC, “[t]he learners are taught to think, use and understand new knowledge in terms of real world contexts rather than the discipline that it falls under and it has the potential to positively impact personal teaching approaches as well as relationships with both learners and collaborators”. It was observed that the IC encourages active participation in the classroom and thus enables the learners to enjoy their own learning as they are allowed to take full control over each activity performed in the classroom (Parsons & Beauchamp, 2012). Despite these importances of the IC for learners, it seems to be problematic in many ways. It arguably involves a lot of unnecessary workload that has no didactic significance (Hothem, 2013). The IC also needs more time to make preparations (Crisan, 2014). Generally, the IC is not easy to organise and put it into practice successfully (Brand & Triplett, 2012).

The issue of the IC implementation has been investigated in broader perspectives, from the benefits to the challenges. Therefore, to effectively implement IC, teachers must have an adequate knowledge and clear understanding of various subject areas (Raselimo & Mahao, 2015). The study conducted by Park (2008) found that the literature puts more focus on the learners and how they learn through the IC and appears limited in examining the teachers' experiences. The focus on learners alone further hinders the success of the IC (Harrell, 2010: 158). Harrell (2010) found that "[t]eachers are not competent to teach the integrated science curriculum due to their insufficient content knowledge". This finding by Harrell (2010) indicates that there is a need for adequate IC preparation for it to be successfully implemented. To support this point, Lam, Alviar-Martin, Adler, and Sim (2013: 30) observe that "[t]eachers' inadequate content knowledge in different subject areas prevented them from identifying the key ideas to be covered in teaching the IC". Sen and Ay (2017) revealed that teachers like teaching the IC when they are well trained for integration of the subjects such as Mathematics, Science and Technology. Above and beyond these, IC poses great challenges to large groups. Withstanding, it is suitable only for small groups of learners because the use of participatory methods is possible (Kucharcikova & Tokarcikova, 2016).

Jeevan and Townsend (2013) indicated that it is recognized from several studies that teachers play an important role in the success of school reforms and changes. For this reason, there is a need to equip them with enduring knowledge and skills that will enable them to implement reforms successfully in schools (Mokhele & Jita, 2010). Therefore, teachers, as key actors in education reform, should always be made ready for changes through the provision of professional development programmes (PD).

PD is defined as those activities that are planned to improve teachers' knowledge and skills necessary to improve their teaching practices (Wei, Darling-Hammond and Adamson, 2010). PD is widely recognised as a crucial tool for successful reform implementation, so the time devoted to PD needs to be well used. PD is characterized by a focus on the effective teaching of subject matter and on learners' learning processes (Lipowsky & Rzejak, 2015). PD is an on-going and long-term process with different forms (Loucks-Horsley et al., 2010). The most effective form of PD is Continuous Professional Development (CPD). CPD helps teachers to acquire skills that help them use the latest strategies, models and techniques in teaching in this

rapidly changing world (Srinivasacharlu, 2019). CPD programmes enable teachers to get the opportunity to solve difficulties that may arise during the implementation process of a new curriculum (Lee, 2011). It is necessary for every teacher to be effective in putting into practice the objectives of the new curriculum. However, CPD needs to be monitored and supported in order to determine its effectiveness in promoting change (Desimone, 2009).

Despite the significance of CPD, CPD still has some challenges and obstacles for successful implementation and these need to be addressed (Bubb & Earley, 2013). Bubb and Earley (2013) revealed that in England teachers complained about limited time allocated for CPD. The study conducted by Mastin (2010) indicated that teachers often complain about CPD programmes because they found them inadequate for serving their needs and that there is little effect on learners' achievement afterwards.

The IC was enacted after it was being piloted in 2012, focusing on grades one to three and then it was first implemented in stages from 2013 (Raselimo & Mahao, 2015). It gradually moved to grades four, five, six and seven in 2014, 2015, 2016 and 2017 respectively. According to MoET (2013: 4), “[t]he IC is being implemented in phases, starting from primary school”. Its progression will take place until it reaches Form E (Grade 12). The gradual enactment of the IC could possibly result in different challenges for teachers. These challenges may require immediate action for the realisation of the successful implementation of the IC, whilst allowing teachers and other relevant stakeholders the chance to progressively gain the relevant skills.

Lesotho adopted an IC with the aim of making its education more responsive to Basotho needs (localisation of the curriculum). Raselimo and Wilmot (2013) argue that threats and challenges such as insufficient support and lack of knowledge may hinder the progression of the IC implementation in Lesotho primary schools.

Other IC challenges include lack of staff training; lack of resources and facilities, a possible mismatch between the curriculums taught and assessed and limited training (CPD) (Shankar 2014: 75). The study conducted by Ntsibulane (2018) on *Perceptions of primary school teachers on the integrated curriculum in Lesotho: the implementation process*, revealed that the quality of training across the board was unsatisfactory and that the teachers felt that the trainers were not competent. Ralebese (2018:1) also revealed that in the process of IC implementation, Lesotho primary teachers “practices

were influenced by their limited understanding and the contextual challenges they faced". Ralebese therefore recommends that primary school teachers should be provided with PD“(in-service and pre-service) which focuses on integration and what this entails”. These challenges seem to hinder a successful IC implementation in primary schools in Lesotho, hence, the significance of this study. The present study is aimed at exploring four primary school teachers’ perspectives on professional development for classroom implementation of the IC in Lesotho. The IC is the current curriculum in primary schools in Lesotho. Teachers need to be provided with CPD that will equip them with new knowledge and skills to implement the IC (Lee, 2011). It is necessary for every teacher to be effective in putting into practice the objectives of the new curriculum. However, CPD needs to be monitored and supported in order to determine its effectiveness in promoting change (Desimone, 2009).

Teachers are the key actors in determining how the curriculum should be implemented (Berglund & Lister, 2010). Teachers are regarded as agents of change and therefore their views, beliefs and attitudes regarding professional development training sessions may help the authorities to find out whether professional learning through CPD has taken place as intended and whether teachers are successful in applying the skills and knowledge they learned from CPD in their classrooms.

1.3 Context of the study

Educational reforms are affected by a number of changes, either in the environment, the economy or in the society as a whole. These changes threaten sustainable development worldwide and are pressured by factors like the evolving use of technology; such as the 4th industrial revolution and the impact of HIV/AIDS. Lekhetho (2013) argues that independence paved the way for a number of reforms in Lesotho. The CAP of 2009 was introduced in Lesotho primary schools as the most radical education reform in Lesotho. This policy was developed in order to resolve the problem of an irrelevant education system that was adopted from the British. The British education system was practised for many years before and after Lesotho attained its independence from colonial rule. The CAP was designed to be closely linked to assessment and thereby aimed to achieve the main objectives of the current education system.

More importantly, the policy is aimed at addressing the negative impact of social challenges (peculiar to Lesotho) such as the “high rates of unemployment and HIV/AIDS and making the curriculum more relevant to the nation” (MoET, 2009: 4). Therefore, according to the MoET, the Lesotho primary school curriculum “shifted from the traditional curriculum, where the progress of students was measured comparatively, to the modern integrated curriculum where students’ abilities mark individual progress” (ibid). The shift was made in order to do away with the distortion of an examination system type of education reform that disregarded the development of the envisaged skills of the students. The CAP introduces the IC in primary schools. The IC is aimed at “developing core competences, which are intended to enable the learners to apply the knowledge and acquired skills, values and attitudes necessary to address current and new situations”(ibid.). However, the successful implementation of this new curriculum relies heavily on teachers as they are the ones who implement it. Curriculum reforms require teachers to change their teaching practices (the way they plan, teach and assess). In this regard, PD is an important tool for assisting teachers in their implementation of a new curriculum in schools. However, teachers’ views and understanding of the PD need to be taken into consideration because they are the vehicles of the aspired transformation. More importantly, a one size fits all PD may not be helpful as a way of facilitating these reforms (Mansour, EL-Deghaidy, Alshamrani & Aldahmash, 2014). Therefore, it is crucial to provide teachers with various ways of PD in order to change their practices and to offer the required support for their own classroom practices. Hence, this study explored primary teachers’ perspectives on professional development for the classroom implementation of the integrated curriculum in Lesotho. It focused on CPD as one form of PD. This study focused on CPD because development activities equip teachers with new knowledge and skills. CPD also influences the teachers’ feelings and attitudes differently concerning the school curriculum that has been newly introduced to them. Therefore, there is a need to monitor and evaluate CPD programmes so as to comprehend the efficiency and successful processes of IC implementation in Lesotho primary schools.

1.3.1 Statement of the problem

Education systems universally have gone through a number of main restructuring exercises and Lesotho is no exception. Therefore, the education restructuring needs to inform the professional learning programmes for teachers (Atta, 2015).

Notwithstanding, teachers' PD perspectives have been explored to explain the complications of the new curricula in schools around the world. The introduction of the integrated curriculum (IC) followed the number of unsuccessful reforms introduced in Lesotho. Those reforms include the following inter alia; the curriculum diversification of 1974, the national education reform of 1978 and Core curriculum reform of 1984. According to Raselimo and Mahao (2015), these reforms were unsuccessful because of inadequate training offered to teachers in order for them to implement reforms successfully. The failure to implement the reform successfully is still a challenge with this new curriculum (IC). Some studies have explored the challenges facing Lesotho primary school teachers in the process of the IC implementation. The challenges include, amongst others; teachers have different understandings of the IC, teachers' resistance to change and teachers complained about poor training about the IC (Selepe, 2016; Ntsibulane, 2018; Ralebese, 2018).

Based on the above discussion, the major factor that hinders the successful implementation of reforms in Lesotho seems to be inadequate teachers' preparedness to implement reforms. The cascade model is mostly used to prepare teachers to implement reforms by the policy makers (Selepe, 2016) without involving teacher education providers in the preparation of teacher preparedness of reforms. Chere-Masopha, Tlali, Khalanyane & Sebatane (2021) indicated that many studies have found that teacher are not adequately prepared to implement reforms successfully because teacher educators are involved in a limited way in Lesotho curriculum reforms. These authors further indicated that teacher educators training practices do not target to prepare teachers for the reforms introduced in schools. Consequently, the lack of competence in the use of PD for the adequate implementation of IC; teachers' failures or unwillingness to change their teaching practice impose unique challenges for the implementation of the IC. The scope of this study is informed by the significance of the challenges of the IC implementation mentioned above. Therefore, there is a need to understand teachers' feelings, beliefs and attitudes towards their in-service PD for implementation of the IC as the new reform in Lesotho education system. This study explores the primary teachers' perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho. This study assumes that CPD is one of the main factors in attempts towards helping a teacher successfully implement the IC and improve students' achievement in the country.

1.4 The purpose of the study

Successful change in education usually does not take place without some form of PD. Hence more attention should be placed on teachers' support structures because they have a large impact on reform implementation and also on learners' results (Barber, Mourshed & Whelan, 2007). For this reason, this study explored primary teachers' perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho. This study therefore intends to discover teachers' views of the different forms of CPD and how they could reshape their skills in order to enhance their teaching practice when they implement the IC in Lesotho primary schools.

The study also attempts to contribute to the literature about the PD that teachers need for effectively interpreting and teaching the IC. Exploring teachers' experience in PD and understanding the short-comings of these PD programmes may inform the carrying-out of the restructuring and the nature of support that should be offered to teachers. Furthermore, the findings may also suggest a gap for further research that can assist all the stakeholders involved in the process of curriculum reform implementation worldwide.

1.5 Research questions

The main research question of this study: How do primary school teachers perceive CPD opportunities related to the new IC and their influence on classroom practices in Lesotho?

Sub-questions;

1. What are teachers' perspectives on the CPD experiences for the implementation of the IC?
2. How do teachers perceive the influence of the CPD activities on classroom practices when implementing the integrated curriculum?
3. How do CPD activities for the implementation of the IC shape the teachers' perspectives on the integrated curriculum project in Lesotho?

4. How do teachers describe and understand the CPD that they receive for the implementation of the IC and how do they form their perspectives in the context of Lesotho?

1.5.1 Aims

This study explored primary school teachers' perspectives of CPD opportunities related to the IC and their influence on classroom practices in Lesotho. It is intended to discover the teachers' views of the CPD and how it could reshape their skills in order to enhance their teaching practice. It also inspected the manners in which the teachers manifest their thinking and principles regarding CPD in the classrooms.

The main objectives of this study were to:

1. Explore the teachers' perspectives of the CPD experience for the implementation of the IC.
2. Explore teachers' perspectives on the influence of CPD activities on their classroom practices.
3. Explore the CPD activities for the implementation of the IC that shape the teachers' perspectives on the integrated curriculum project in Lesotho
4. Present a description and understanding of CPD that teachers receive for the implementation of the IC and how this forms their perspectives in the context of Lesotho.

1.6 Literature review

Note: perspective and perceptions were used interchangeably in literature and elsewhere in the thesis.

1.6.1 Continuous Professional Development (CPD) for teachers

CPD is defined differently in literature. According to Coetzer (2001: 78) CPD is referred to as "any activities aimed at enhancing the knowledge and skills of teachers by means of orientation, training and support". Day and Sachs (2004:3) define CPD "as all the activities in which teachers engage during the course of a career which are designed to enhance their work". In broader perspectives, Srinivasacharlu (2019: 30) defines CPD as the form of PD that

involves on-going divergent activities (formal, non-formal and informal) that aim at developing the teacher educator's intellectual abilities (cognitive domain), self-confidence, attitude, values, and interest (affective domain) and skills and competencies (psychomotor domain) for improving personality and to carry out the responsibilities of the teaching profession properly in accordance with the changing times and needs of the prospective teachers and society.

However, this study is based on Guskey's definition which indicates that CPD is an on-going process of continuous personal and professional learning for the teacher in the process of change. It includes "the processes and activities designed to enhance the professional knowledge, skills, and attitudes of teachers so that they might in turn, improve the learning of learners" (Guskey, 2000: 16). CPD equips teachers with the required knowledge and skills to implement the changes as intended by the introduced reforms (Desimone, 2011). Darling-Hammond and McLaughlin (2011) maintain that CPD activities are instruments used by the policy makers to disseminate and convey their vision of reform to teachers. Dissemination is done through the use of various professional development activities. Calleja (2018: 6) asserts that there are two distinctive approaches to providing CPD:

.... the traditional training model' and the 'sociocultural model. The 'traditional model' views learning as the acquisition of skills that teachers may take from a course and apply in their classrooms while the 'sociocultural model' values knowledge, teaching and learning as being socially created and culturally enacted.

The sociocultural model is focused on providing knowledge and skills for teachers that are not too distant from the realities of their classrooms. This knowledge and these skills must be related to the teachers' values, needs, expectations, school cultural and social contexts (Eun, 2011).

This study explored primary teachers' perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho. That is, it focused on how CPD models helped primary school teachers implement the IC. Abad (2013) indicates that for many years and even in the present the commonly used form of CPD is the traditional model of CPD that critically assumes that teachers have inadequate knowledge and/or skills. The traditional model of professional development is based

on workshops and training, observation of excellent practice, the Cascade model and coaching/mentoring, amongst others. Below is a brief description of different forms of CPD.

1.6.2 Workshops and training

Workshops and training are seen as the mostly used tools of teachers' professional development in many countries, including Lesotho. Workshops are short educational programs designed to equip teachers with practical skills and up-to-date insight, techniques and new information related to their teaching practice. They are often designed for people who are working together, or working in the same field (Selepe, 2016).

Workshops and training are forms of interactive training where teachers actively participate rather than being only the recipients of information by passively listening to a lecture or presentation (Raselimo & Wilmot, 2013). Workshops and training are both used as a means of equipping teachers with professional development skills and learning about new developments in the field. The teachers' training for the implementation of the new curriculum is presented as workshops that are usually offered to teachers, certain levels before the initial implementation of the programme (Mokhele & Jita, 2010). Teachers who attended training workshops gained skills that enabled them to be more productive and helped them to improve their instructional practice in the classroom. Some scholars found teachers' training workshops to be very helpful regarding their individual skills development, support, providing new information, confidence and change of teaching habits (Lessing and Witt, 2007). For instance, Cutler and Ruopp (1999) revealed that middle school mathematics teachers from the USA who had participated in workshops considered them to be useful because they helped them improve their classroom practice of teaching mathematics.

Despite the significance of the workshops mentioned above, some studies indicate the limitations of these workshops. For instance, Swart, Engelbrecht, Eloff and Pettipher (2002: 183) indicate that teachers in South Africa have negative attitudes towards workshops because they feel that they did not help them to implement inclusive education effectively. These teachers articulated that they had not acquired new knowledge and skills that would allow them to appropriately address diversity in their

classrooms. Similarly, OECD (2005) also critiqued that most workshops do not benefit teachers because they seem to be incoherent and isolated from the real classroom environment. These findings indicate that for the workshops to be effective in helping teachers, they should relate well to classroom practice. Workshops should be able to equip teachers with the knowledge and skills necessary to improve their teaching practice. This study therefore intends to discover teachers' views of the different forms of CPD and how they could reshape their skills in order to enhance their teaching practice when they implement the IC in Lesotho primary schools.

1.6.3 Observation of excellent practice

The saying 'practice makes perfect' also applies to educational systems. Teachers are given a chance to monitor their own growth when it comes to CPD skills and knowledge. Teachers are given opportunities to practice changes in their teaching practice. Gall and Acheson (2011) argue that teacher observation is one technique used in the process of CPD. Teacher observation can identify the changes that teachers have acquired and may want to make. The practice is done through the observation of classroom practices. The classroom should have learners, as well as the teacher and an observer. Observers initially include peers, experienced educators, supervisors, principals or government officials. Observers may use observation tools such as checklists or rubrics to record notes about the lesson (Henry & Malu, 2011). These tools enable the observation of the exchange of skills and knowledge as less experienced teachers observe the master-teachers presenting their lessons (Gall & Acheson, 2011). The study conducted by Williams, Baksh, and James (2020) revealed that observations help to develop the supervisee's pedagogical skills, such as lesson planning, improved during the course of the supervision period as documented in both the supervisor's and the supervisee's journals. This finding is supported by a study conducted by Halim, Wahid and Halim (2018) indicating that through classroom observation colleagues collaborate in order to improve their teaching practices, as well as to improve learners' outcomes. The collaboration happens because classroom observations provide teachers with the opportunity to observe a teacher and the learners during the teaching and learning process. These authors articulate that teachers benefit from observation because the feedback from classroom observations is used as a reflection of teachers' teaching practice and acts as an effective of reflective teaching. It also helps them in their CPD.

Nevertheless, a study conducted by Glatthorn (2007) reveals that the observation of excellence in teaching practice could be effective and produce the desired outcomes only when teachers realize its significance (to themselves and their learners). Some studies point out a few challenges emerging from observations. For example, Williams, Baksh and James (2020) reveal that teachers indicated that they had feelings of anxiety and nervousness while under observation in the classroom. They felt that observations added more pressure on their teaching practices, especially while they were being observed. As a result, the teacher and learner behaviours may change due to the presence of an observer (Halim, Wahid and Halim, 2018). This finding indicates that in order for observation to be effective; there should be collaboration between observer and teacher. These authors indicated that the observation process seems challenging, because in most cases it is found that the observers are not often provided with training because of a lack of institutional support, time and interest. Zaare (2012) is of the same view, namely that the process of observation and evaluation requires a high degree of training, analytical skills, professional ethics and objectivity. It is therefore recommended that peers should be provided with training and that a teaching observation initiative should not be a once-off thing, but should continue and be extended in order to produce the best results (Atkinson & Bolt, 2010). This study explored primary teachers' perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho.

1.6.4 Cascade model

The cascade technique is frequently used to communicate knowledge from higher to lower clusters of teachers. This involves teaching a group of teachers to make sure that new knowledge is well diffused from experienced educators to the teachers themselves (Ono & Ferreira, 2010). The cascade technique works best when dealing with a large quantity of participants and when facing a shortage in time and budget.

This technique (Cascade) is mostly used in developing countries. Lesotho is an example of a developing country. The technique enables policy makers to train a considerable number of teachers in a short period of time. Teachers revealed that this technique could work best when certain crucial factors are taken into consideration. The model should consider that the design is based on the final recipient's needs, careful selection of the experts and first-phase trainers. The model should also

consider continuous monitoring of the program to make it well understood as well as being appropriate and including all the needed educational material (Karalis, 2016). This is because it enables training to be done in phases and its progression can be well observed. As a result, more trained teachers can quickly disseminate information to an even larger number of teachers, being their colleagues and friends (Ono & Ferreira, 2010).

Some studies indicate that this model is mostly used in different countries and seems to be effective. For instance, many teachers have been successfully trained using the cascade model in the following countries: in Bangladesh (Dove, 1983), China (Wedell, 2005) and in Nepal (Suzuki, 2011). This model was enabled with the use of existing teaching staff, because of cost-effectiveness and shorter time spans available for training (Engelbrecht, Ankiewicz & Swardt, 2007). Abeysena, Philips and Poppit (2016) also revealed that the cascading model used at Regional English Language Centres (RESCs) in Sri Lanka was successful in transferring knowledge and skills to the grass root level. However, these authors indicated that the cascade model should be done systematically because if the system fails then the training may be wasted.

Dichaba and Mokhele (2012) indicate that even though the Cascade model has been largely acknowledged as a great tool of information dissemination, it seems to have some shortcomings in most professional development training programmes. It does not improve the performance of educators considerably. The shortcomings emanate from the fact that the cascade model involves training the trainers who then have to train other trainers. This process is repeated to lower levels until the target group is reached (Ngeze, Khwaja & Iyer, 2018). Suzuki (2011) argues that through the use of the Cascade model, the intended messages are often altered and their effects are diluted through miscommunication and the different interpretations of the same message. If the message is being diluted, then the teachers at the grassroots level may not get the essence of the main knowledge and skills intended to be disseminated. The dilution of the message may be the result of the lack of confidence of the trainers in conducting the training and the lack of sufficient knowledge and understanding to manage the training process (Engelbrecht, Ankiewicz & Swardt, 2007). Therefore, the Cascade model needs to be reframed by implementers and policy makers such that it would work best for teachers. This study is therefore

intended to discover the teachers' views of the different forms of CPD and how they could reshape their skills in order to enhance their teaching practice when they implement the IC in Lesotho primary schools.

1.6.5 Coaching/ mentoring

'Coaching and mentoring' are used interchangeably so that coaching and formal mentoring are similar in nature but different in name (Joo, Sushko, & McLean, 2012). Teaching is a life long journey that needs support so that teachers can adjust to the changing times. It is therefore argued that teacher mentoring is an essential tool to be used to guide and support teachers to cope with any transitions. Hobson, Ashby, Malderez & Tomlinson (2007: 207) define mentoring as

the one-to-one support of a novice or less experienced practitioner by a more experienced practitioner, designed primarily to assist the development of the mentee's expertise and to facilitate their introduction into the culture of the profession and into the specific local context.

Washburn-Moses (2010) maintains that mentoring refers to the development of teaching excellence (Fletcher, 2012). Most of the teaching aspects (teaching resources, teaching methods, classroom activities and classroom inspections) are covered by the mentoring process. The mentee and mentor are anticipated to do the work intimately. There is a close monitoring of the development of the mentee by the mentor and school leaders should hold the mentor responsible for the development of the mentoring process. For instance, in teaching practices, teachers discuss their teaching experiences together. They share both success and challenges regarding their teaching practices as well as the ideas and ways that could help them deal with these challenges (Salleh & Tan, 2013). As a result, the open and honest sharing and appraisal by all participants empowers them to use their relationship for growth and the development of both mentor and mentee (Asghar, 2010). A study conducted by Ali, Wahi and Yamat (2018) in *A Review of Teacher Coaching and Mentoring Approach* indicated that the teacher coaching and mentoring approach effectively develop teacher competences and ultimately lead to an improvement in learners' achievement. Similarly, a study conducted by Dewi (2021) revealed that teacher pedagogy was able to rise using a mentoring-coaching approach.

However, the coaching approach has some challenges. One of these challenges is that the mentors need to be well equipped with the knowledge and skills (be given a course, guidance and mentoring manual) of mentoring which often seem to be lacking, in order to guide them in providing quality and structured mentoring (Albakri *et al.*, 2021). This study therefore intends to discover the teachers' views of different forms of CPD and how they could reshape their skills in order to enhance their teaching practice when they implement the IC in Lesotho primary schools.

1.6.6 Effects of CPD on teaching and learning

Generally, CPD activities develop teachers' knowledge, teaching skills, attitudes and can help them enhance their teaching practice (van Kuyk, Deunk, Bosker & Ritzema, 2016). It is observed that the development of teachers' skills and their standard of knowledge matters most, as they are the agents of change in schools and are also an important aspect from an economical perspective (Geldenhuis & Oosthuizen, 2015). Therefore, there is a big need to provide teachers with CPD programmes that equip them with new skills and knowledge in order for them to cope with the curriculum reforms resulting from rapid technological and societal changes. Harris, Cale, and Musson (2011) present that teachers indicated their satisfaction with the CPD programmes that they had attended. Teachers claim that the programmes have helped them to immediately change their perceptions of physical education in a positive way. In a study conducted by Garet (2012), teachers indicated that CPD programs fail because they do not have a direct link to teachers' classroom practice. Primarily CPD programmes are needed in order to assist teachers to translate knowledge and skills into their teaching practice. Therefore, the CPD could improve teaching and learners' achievements only if teachers are able to apply new knowledge and skills acquired from CPD interventions programmes to their classroom instruction. Wei, Darling-Hammond, and Adamson (2010) point out that a number of teachers' CPD do not meet the starting point necessary to create well-made consequences for their practices and for learners' outcomes. There should be a link between teachers' learning and their instruction in the classroom in order that the aims of CPD may be attained (Helms-Lorenz, van & Maulana, 2015). There is also a need for CPD to comprise of support, supervision and training for teachers to incorporate knowledge into their daily lessons, rather than leave that heaviness to them when they return to the classroom.

In order for the CPD to have a constructive effect on both teachers and learners, it is necessary for teachers to be given authority to further promote all the necessary elements such as subject matter content and technologies that could promote better teaching standards. CPD should give them a significantly better approach to develop the school environment and their classroom practice and that could promote quality learner outcomes (Korkko, Kyrö-Ammala, & Turunen, 2016; Girvan, Conneely & Tangney, 2016; Witte & Jansen, 2016). Main and Pendergast (2015) argue that CPD contributors are required to be thoughtful consultants who use feedback from CPD recipients to direct and develop the delivery of their CPD. The effectiveness of CPD is said to be measured by the use of a framework for effective CPD, such as that proposed by Desimone (2009). This is an effective way for the main characteristics of teacher CPD that may identify the potent relationship between CPD, teacher efficacy and learning outcomes in the context of a major reform in schools (Desimone, 2009).

1.6.7 Theoretical framework and conceptual framework for understanding professional development

A conceptual framework is defined as the model that guides the researcher on the method of gathering data before he/she can embark on a study. It assists the researcher to arrange and locate the topic and to relate it to other key ideas and concepts that have been researched (Maxwell, 2011). This study used the Desimone (2009) framework for effective professional development and sense-making theory (SMT). The study used this five-featured conceptual framework for professional development by Desimone to explore Lesotho primary school teachers' perspectives on the CPD opportunities related to the IC and their influence on classroom practice. Desimone's (2009: 189) framework constitutes a five-featured CPD conceptual framework. The five features are "*content focus, active learning, coherence, duration and collective participation*" (Desimone, 2009: 189). It is stated that this framework symbolizes the connections 'among the critical features of CPD, knowledge and beliefs of teachers, classroom practice and learner outcomes that are collaborating and non-recursive' (Desimone, 2009; Mokhele & Jita, 2010; Desimone, 2011; Aminudin, 2012 & Mohan, Lingam & Chand, 2017). This study has used this framework because it has already been used effectively in the assessment of CPD learning activities with the aim of supporting teachers. The model is applicable for this study because Kang, Cha and Ha (2013) assert that Desimone's CPD model

convincingly explains how effective professional development can be achieved and the means of achieving it, the influence of contextual factors on CPD and the impact of effective CPD on the learners' achievement. This model tests the theories of teacher change, as well as instruction, that changes practices and influences the learners' achievement. It is also indicated that through the effective utilisation of this framework, the CPD features model may enhance the implementation of reforms in schools (Desimone, 2011). Below is a description of each feature of professional development.

The **content** aspect of the five-featured conceptual framework for professional development focuses on building teacher competences and on enhancing their pedagogical knowledge, skills and the approaches used in the classrooms (Aminudin, 2012). When the reform content (information comes with reform) is not taken into account by teachers, it results in a mismatch between the aim of the innovation and the implementation process. Fullan (2007) argues that for innovation to be successfully implemented there must be effective teaching about such innovations to equip those who will put them into practice. This indicates that whenever reforms are introduced into schools, teachers' understanding of new innovations (knowledge and skills) should be at the heart of the implementation process. This is because an individual's understanding plays a decisive role in shaping teachers' practices and influences the learners' achievement.

The second element in Desimone's (2009) model from the five-featured conceptual framework for professional development is **active learning**. This element is about teachers actively learning new reforms by fully participating in the training or professional development programmes offered to them. The assumption here is that such participation enhances the skills of the teachers and increases their chances of successfully implementing policy demands. According to Desimone (2009) and Nihal (2017), teachers are exposed to the reforms which they experience rather than relying on explanations and then expecting them to deduce their use in practice.

Coherence is the third element in Desimone's (2009) model of a five-featured conceptual framework for professional development. Desimone (2011) defines coherence as the degree of the consistency of CPD for teacher learning opportunities and their view of state reforms and policies. Most important are the connections that

teachers make between the reforms, their classroom instruction and learners' achievement. However, the coherence of teachers has to be facilitated and monitored through the implementation procedure in order to effectively promote change in classroom practice.

The fourth element in Desimone's (2009) model of the five-featured conceptual framework for professional development is **duration**, which is defined as the period in time for the contact hours of CPD sessions and the distance end to end of the occasions that teachers participated in these CPD activities (Hochberg & Desimone, 2010). Sufficient duration is the time spent on CPD, regardless of the length of the innovation training sessions, as long as teachers are going to benefit and be able to understand all the aspects of the innovations (Desimone, 2009:184). This indicates that teachers should be offered CPD until the objectives of the reforms are realized and this will enhance the successful implementation of the reforms.

The fifth element in Desimone's (2009) model of the five-featured conceptual framework for professional development is **collective participation**. According to Hochberg and Desimone (2010), collective participation is related to the number of teachers from one school who participate in similar CPD activities or learning programmes. Collective participation is about collaborations and productive dialogue between professional development designers and recipients. These collaborations explain why teachers from different schools were chosen to take part in this study; to grant the researcher an opportunity to explore the outcomes of interactive and constructive discourses in terms of CPD programmes in a few schools in Lesotho. Collective participation therefore occurs when many of the teachers who are engaged in reform implementation are learning and discussing it jointly and watching it being moulded in cooperation (Desimone, 2009). This indicates that when teachers share information and abilities acquired from a CPD programme that they attend together, there is a greater likelihood that such a process could facilitate their teaching practice and improve their learners' outcomes, whilst learners engage with these reforms in the classroom. However, Lindberg and Olofsson (2010) indicate that there are growing complexities faced by teachers due to the evolution of technology and demands of the 21st century classroom. Therefore, teachers need to be assisted to refine their competences in using theoretical and pedagogical knowledge in their workplaces by

increasing CPD learning opportunities. These opportunities should be on a regular basis. CPD and the improvement of teaching practices will no doubt have a great impact on learners' achievements in schools. Professional development models can therefore be utilised to measure and to develop the CPD programmes aimed at improving the learners' achievements. Perspectives of developmental theories provide knowledge of how teachers assimilate new information and implement new strategies in the classroom. There are several theories underpinning professional development such as Metacognitive process and learning, Socio-cultural theory, Social cognitive theory, rational theory, Critical theory and Sense-making theory, amongst others. Below is a brief description of these theories:

The **Metacognitive processes and learning theory** refers to the process whereby teachers are learning to learn. It is believed that teachers who continually participate in professional development also learn to learn (Dewey, 1916). According to Wardford (2011), **Socio-cultural theory** claims that teacher trainers cannot promote the learning of teachers without awakening their previous knowledge and experiences during the learning process. The **Social cognitive theory** stresses that human behaviour is determined by environmental, behavioural and cognitive factors (Bandura, 1989). **Rational theory** is based on facts and where choice is at the heart of the implementing agents (Spillane & Anderson, 2014). **Critical theory** is defined as the process that seeks to understand the origins and operation of repressive social structures and it focuses on changing the world rather than describing it. Teachers as the key figures in education and as intellectuals, deserve to have some influence in addressing oppressive conditions in their classrooms as well as at school (Mokhele & Jita, 2010). **Sense Making Theory (SMT)** is a process whereby "individuals use their pre-existing beliefs to construct meaning within a specific context". Therefore, sense-making is an "individual as well as a social process of constructing meaning when confronted by new information or events" (Spillane, Reiser & Reimer, 2002: 349). SMT was used as a theoretical lens in this study to explore the selected primary school teachers' perspectives of the PD opportunities related to the IC and their influence on classroom practices in Lesotho. I used SMT because sense-making suggests that teachers use their prior knowledge and experiences to interpret and enact their meaning of reform (ibid.). Sense-making refers to a process whereby people construct meaning by relating new information to their existing knowledge in order to be able to

act on it (Schechter, Shaked, Ganon- Shilon & Goldratt, 2016). SMT is rooted in three domains, namely; individual cognition, situation and policy signals. The **individual cognition domain** argues that “*individuals are sense-makers because they develop interpretation about the programmes based on their prior knowledge, beliefs and experiences*” (Spillane *et al.*, 2002: 395). According to Spillane *et al.* (2002: 404), the **situation domain** is defined as the “*context in which the reform is taking place and has an influence on the implementing agents’ sense-making*”, that is, the attitudes and beliefs of teachers and administrators, the quantity and the quality of the support that they receive during the implementation influences the programme quality (*ibid.*). The **policy signal domain** is about the ‘*representation of ideas about changing practice*’ (Spillane *et al.*, 2002: 389). This means that teachers are confronted with expectations that often require them to change their teaching practice. The SMT is applicable to this study because the IC is a new reform in Lesotho primary schools that commenced in 2013. In the process of implementing reforms, teachers may construct meaning that either reinforces their pre-existing practice or focuses on superficial changes of the proposed reform (Coburn, Hill & Spillane, 2016). The SMT is appropriate to this study as it guided the exploration of teachers’ perspectives regarding the PD programmes that they participated in for the implementation of the IC. The SMT helps one understand how individuals construct meaning from the new information and explains how context influences their decisions (Coburn & Woulfin, 2012). SMT also encompasses teachers’ beliefs, knowledge and skills acquired from PD activities (Gawlik, 2015). This study offers a lens for understanding how teachers construct their understanding of the IC acquired from PD programmes and how this understanding potentially shapes their practice.

I have combined the Desimone (2009) five-featured conceptual framework for professional development and SMT. The combination of SMT and Desimone’s (2009) five-featured conceptual framework for professional development provides a suitable framework for this study because SMT assists the researcher’s comprehension of the manner in which individuals construct their understanding of new information and the societal background within which they work, and also explains how context influences their decisions (Coburn & Woulfin, 2012). Desimone’s five-featured conceptual framework for effective professional development explains how CPD could benefit teachers. It is asserted that Desimone’s CPD model convincingly

explains how effective professional development can be achieved and the means of achieving it; from effective CPD to student achievement as well as the impacts of contextual factors (Kang, Cha & Ha (2013). This combination helped me explore the teachers' views of CPD and how they could reshape their skills in order to enhance their teaching practices and also to observe the manner in which the teachers manifest their thinking and principles regarding CPD in the classrooms. The SMT and Desimone's framework helped me to understand how teachers interpret and make-sense of new information about the IC obtained from different CPD activities and also how they apply them in their classroom practices.

1.7 Overview of research methodology

This section focuses on the research methodology of the study. Methodology is explained as the structure connected with a meticulous set of model suppositions that can be employed to accomplish the study. It is a way to get to the bottom of the study dilemma or hypotheses scientifically (Creswell, 2013; Creswell, 2014). That is, it introduces all the information that would enable the reader to understand that the researcher followed scientific research methods in order to ensure the reliability and validity of the study (Johnson& Christen, 2012; Johnson, Burke & Larry, 2014). Therefore, geographical area, study design, population and the sample for the study, the study instrument, the methods used to maintain credibility and the trustworthiness of the instrument are also discussed (Creswell, 2014). Data gathering and the analysis that were followed to achieve the objectives were based on the theoretical framework discussed in the theoretical framework section (cf. pages 19 to 24). The study design and methodology used are shown in Table 1.

Table 1: Research methodology layout

Research title	Teachers' perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho
Research paradigm	Interpretivism
Research approach	Qualitative research

Research design	An intrinsic multiple Case study design
Sampling	Purposive and convenience sampling procedures of the participants
Pilot study	A pilot study was conducted with two primary school teachers to test trustworthiness of the instruments and analysis strategies on the collected data
Data collection method	Case study method
Data collection techniques	Document analysis, lesson observations, semi- structured interviews
Data collection instruments	Scheme book, lesson plan book, observation schedule, interview protocol
Data documentation	Photocopies of schemes and lesson plans for the observed lessons, photographs of the outstanding events during observations, audio and video recordings of the observations and audio recordings of interviews, transcriptions
Data analysis	Descriptive (content analysis)
Ethical considerations	Permission granted by the Ministry of Education and Training Lesotho, school principals, teachers; ethical clearance from UFS
Quality evaluation	Trustworthiness, credibility, dependability and transferability

1.7.1 Research paradigm: Interpretivism

This study adopted an interpretivism paradigm. Creswell (2013) argues that through the interpretivism paradigm people can gain an understanding of the social world by giving it meaning. The interpretivism orientates the study by guiding the selection of research approaches, design, and methods for data collection and analysis (Poni, 2014). Therefore, I used this paradigm to select the appropriate research approaches, design, and methods for data collection and analysis in order to understand teachers' perspectives on the CPD programmes that they participated in, relating to the IC implementation in some of the Lesotho primary schools. Therefore, comprehensive data obtained from the participants was used to comprehend the way in which individual teachers perceive and understand the influence of CPD on their classroom teaching practice. Interpretivism helped me analyse the work-schemes and individual lesson preparation made by teachers, to observe and to take notes on how they used learner-centred approaches to instruct and assess learners during lesson observations and also to analyse the interview transcripts of the participants.

Interpretivism also helped me to determine teachers' perspectives regarding the impact of CPD in the implementation of the IC. I used the interpretivism paradigm because it is based on concepts (Johnson & Christensen, 2012).

1.7.2 Research approach: Qualitative

A Qualitative approach guided this study. Qualitative research is an approach in social sciences and related disciplines used for the study of humans and items in their innate locations, while trying to construct logic from them (Creswell & Clark, 2011). Qualitative research uses forms of words for data collection and analysis (McMillan & Schumacher, 2014). This approach guided me to understand and explore teachers' opinions and experiences of the CPD activities that they participated in for the classroom implementation of the IC through the use of interviews, observation and content analysis data collection techniques (Bryman, 2008). Teachers were chosen from specific primary schools to take part in this research. This approach was appropriate for this study because it enabled me to use different forms of data collection techniques presented in the form of words, pictures, descriptions or narratives from the participants' social settings. These varying forms of data collection techniques enabled the triangulation of the data (Johnson & Christensen, 2012).

1.7.3 Research design: Case study

Multiple case study research was the design suitable for this study. Burke and Larry (2012: 383) define a case study as "a form of qualitative research that is focused on providing a detailed account of one or more cases". Multiple case studies were used in this study because they are explorative and descriptive (Maree, 2007; Creswell, 2011 & Maree, 2016). Multiple case study research enabled me to determine what actually happened in Lesotho primary schools as teachers implemented the IC, because I collected data from 4 teachers from 2 districts and from different schools denominations (church school, private school, community school and government school). This is because multiple case study research is an accurate means to assess peoples' actions, attitudes and feelings in different educational settings and cultural contexts. The approach also advocates for the use of data gathering using different tools for triangulation (Cohen, Manion & Morrison, 2011). I used this design to explore the

primary school teachers' perspectives of the PD opportunities related to the IC and their influence on classroom practices in Lesotho. It was also intended to explore the teachers' daily practices intended to improve learner outcomes. Therefore, through interaction between me and the participants, a case study enables an in-depth understanding of the meanings and value attached to the phenomena being studied (Marshall & Rossman, 2014). I used a mix of predetermined themes that align with the components of CPD and emergent themes. These themes were described in depth in order to shed more light in this regard.

In addition, multiple cases study research permitted me to use multiple-information collecting sources (Burke & Larry, 2012). I used a semi-structured interview instrument, document analysis and lesson observations to collect qualitative data. Through observations, data was collected in natural settings and this compensated for the participants who might shy away from giving rich information during the interviews. Data collected from the various instruments complemented and provided an opportunity for triangulation.

1.7.4 Sampling procedure: Purposive sampling

This study used purposive sampling procedures to select the participants from the Berea and Leribe districts of Lesotho (one teacher from each of the four sample schools) that made a total of four participants. In accordance with Burke and Larry's (2012) proposal, purposive sampling is a planned process of choosing research participants. Purposive sampling enabled me to ensure that participants were relevant to the research study and would give data that suited the aims of the research study (Burke & Larry, 2012; Creswell, 2011). All the participants were appropriate to participate in this study for the following reasons; they have participated in different forms of CPD programmes to implement the new curriculum (IC) and they were implementing the IC at the time of data collection.

The participants in this study were Grade Two teachers who have been in the education service for between ten and twenty years and therefore have practised diverse programme transformations and have been present at the IC training workshops. Selepe (2016) stated that the IC reform was first implemented in phases and "*the teacher who was allocated to teach Grades One, Two and Three when the*

reform was first implemented in 2013 was expected to teach the same grade for at least five years” (Selepe, 2016: 2). This means that the Grade Two teachers who participated in this study have more than one year of experience teaching the IC in Grade Two classes. The Grade Two teachers were selected purposively because of their experiences in teaching the IC. However, the year 2020 marks the eighth year for the teachers who had started with this reform in 2013 and the sixth year for those who had started in 2014. Table 2 shows the participants’ biography.

Table 2: Participants’ biography

Participants pseudonyms	Gender	Type of school	School abbreviations	Qualifications
Green	Female	Government primary	GP	Diploma in Education
Yellow	Female	Church primary	CHP	Diploma in Education
Red	Male	Private primary	PP	B. Ed. Hon.
Orange	Female	Community primary	CP	Diploma in Education

The school selection criterion chosen was made on the basis of convenience for the researcher (Macmillan & Schumacher, 2010). The schools were selected conveniently due to time and financial constraints. The primary schools in Lesotho are categorized as government, private, community and church schools. A Grade Two teacher was purposively selected from each of the schools participating in this study. Table 3 gives a brief description of the research sites.

Table3: A brief context of these research sites

School	Descriptions
Government Primary School (GP)	It is a government primary school located in a remote village in the Leribe district. The school does not have electricity. The teachers and students come from the nearby

	villages. Since the government implemented the free primary education to all policy over a decade ago, there are no fees charged in this school (Selepe, 2016). The school has a reputation of fair (neither bad nor good) results.
Church-owned Primary School (CHP)	It is a church owned primary school. It is located in an urban area in Berea district, about three kilometres from Maseru. Education in this school is also free and the school has a long standing reputation of good results.
Community Primary School (CP)	It is a community school located in a remote village in Berea district. It also offers free primary education. It has a reputation of poor results. There is no electricity and students travel long distances from their villages.
Private Primary School (PP)	It is a private school owned by certain individuals from the Leribe district. It is located in an urban area. It has electricity and is easy to reach. It does not follow the government 'free primary education for all' policy. This school, and many others that are privately owned, charge school fees the amount of which is set by the school (Selepe, 2016). The school has a reputation of good results.

1.7.5 Data collection techniques

A semi-structured interview, lesson observations and document analysis data collection techniques were employed to gather information.

Semi-structured interviews

It is noted that semi-structured Interviews are a systematic ways of conversations to collect data from the individuals (Marshall & Rossman, 2011). I used semi-structured

individual interviews to explore teachers' perspectives on professional development in Lesotho primary schools and how these influence the implementation process of the IC. I used an interview protocol (Appendix 6) instrument to collect data during the interview sessions. This data collection method was preferred because there is maximum interaction resulting from the conversations between the researcher and the participants. These conversations enabled me and the participants to gain more space and freedom to express judgments and ideas (Neuman, 2011). Punch (2013) maintains that information gathered through semi-structured interviews may be more revealing because they include a number of open ended questions. However, all participants responded to similar questions, even though the interviewer could adapt the formulation and terms that correspond with the background and the educational level of the participants (Johnson & Christensen, 2014). That is, rich data was obtained from the participants by rephrasing and summarising the participants' responses. This was done to enable the participants to validate the researcher's understanding of their viewpoints during the interview sessions. In particular, semi-structured interviews were used to maximise the credibility and trustworthiness of the measurement of the key concepts through the use of an interview guide/protocol/schedule (Anney, 2014).

I first formulated the interview protocol (see Appendix 6) consisting of the interview questions in a way that would help to answer the research questions using comprehensible and relevant language (Johnson & Christensen, 2014). The interview questions were developed by the researcher based on the research questions guiding this study. Two semi-structured interviews were used for each of the four participants. One of the two interviews was conducted before each lesson observation for each participant and the other one conducted at the end of each lesson observation. The purpose of the research study was explained to the participants. The participants participated voluntarily and indicated this by signing the consent form. I started each interview session by explaining how the interview was to be conducted. I used field notes and a voice-recorder during the interviews, with the consent of the participants, in order to capture data from them.

Lesson Observations

A lesson observations technique was also used to collect data because this allowed the researcher to check what participants had said in interviews against what they did

in actual practice (Johnson & Christensen, 2008). Burke and Larry (2012) argue that qualitative observation is used to uncover the unknown factors through observing and understanding the research problem. This method of data collection was applicable to this study because I intended to explore the teachers' perspectives about the relationship between their PD training and their classroom practices. In addition, I intended to observe how the PD programmes influenced the teaching of the IC in the classrooms. A total of 16 lesson observations were made over the eight-week period that translated into 4 lesson-observations per participant. The researcher used a preformatted lesson-observation protocol (Appendix 7) to record the teaching method that the participants used and then compared and contrasted the lesson observations with the pedagogical approaches recommended in the policy documents (Chimbi & Jita, 2019). The lessons observed enabled me to gain an understanding of how the participants used the instruction and assessment strategies of the IC and I compared this with the perspectives of the participants that emerged from the interviews.

Document analysis

Document analysis was used in this study to collect data in order to understand the curriculum policy embedded in the CAP framework that is used for the IC implementation in Lesotho. Document analysis focuses on all types of written communication that may be used to explain the phenomenon under investigation (Berg, 2007; Maree, 2007; Maree, 2016). This communication may include but not be limited to the policy documents, mission statements, annual reports, minutes of meetings, codes of conduct, web sites, a series of letters or email messages related to the policy, case notes and health promotion materials (Cohen, Manion & Morrison, 2007; Neuman, 2011). Therefore, I used the curriculum documents, course syllabi (scheme of work and lesson plans drawn from the syllabi) and the CAP to understand the connection between the intended objectives of the IC policy framework and teacher implementation of the IC in Lesotho following the document analysis protocol (Appendix 9). Table 4 is a summary of the data collection instruments used in each article comprising this study.

Table 4: A summary of the data collection procedures

Research questions	Articles	Methods	Instruments
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What are the teachers' perspectives on their CPD experiences for the implementation of the IC?	Teachers' perspectives on professional development for the implementation of the integrated curriculum in Lesotho primary schools	<ul style="list-style-type: none"> - Document analysis. - Semi-structured interviews. 	<ul style="list-style-type: none"> - CAP. - Voice recorder. - Interview protocol.
How do teachers perceive the influence of CPD activities on classroom practices when implementing the integrated curriculum?	The influence of continuous professional development activities on the teaching of the integrated curriculum in Lesotho	<ul style="list-style-type: none"> - Document analysis. - Semi-structured interviews. - Lesson observations. 	<ul style="list-style-type: none"> - CAP. - Voice recorder. - Scheme of work. - Lesson plans. - Video Camera. - Observation protocol. - Interview protocol.
How do the CPD activities for the implementation of the IC shape the teachers' perspectives on the curriculum project in Lesotho?	Professional development activities that shape the teachers' perspectives on the curriculum project in Lesotho	<ul style="list-style-type: none"> - Semi-structured interviews. - Lesson observation. 	<ul style="list-style-type: none"> - Voice recorder. - Interview protocol. - Lesson observation protocol.
How do the teachers describe and understand the CPD that they receive for the implementation of the IC from their	Synthesis of the study findings	Triangulation of the research questions.	

perspectives in the context of Lesotho?		
Recommendations		

1.7.6 Data analysis

Data analysis is defined as a process of searching for patterns, themes and holistic features in order to appreciate the difference and/or variations between the units of analysis (Johnson & Christensen, 2014). Potter (2013) argues that qualitative data analysis refers to the process of breaking up the data into parts and reorganizing the parts into a reasonable whole. The process is therefore an inductive process that is used to identify the relationships between relevant themes and also to analyse, summarise and translate the data in terms of the participants' points of view (McMillan & Schumacher, 2010). The data collected were text data from the documents, lesson observations and the descriptive data from the interviews. Data analysis started with the transcription of audio recordings of the interviews and the identification of possible similarities and differences.

I employed content and inductive analyses to analyse the data collected from documents (the policy documents, teachers' scheme of work and lesson plan books), the semi-structured interviews and the lesson observations. The content data analysis method was used in order to find common themes emerging from the data collected (to identify the similarities and differences) (Bryman, 2008).

Content analysis is defined as a process through which the researcher carefully reviews a document to detect pertinent information and to organise that information into categories according to the relation with the research questions (Bowen, 2009). Data analysis was done based on the principles of content analysis because the collected text and auditory data was presented in a written format (Taylor-Powell & Renner, 2003). I conducted content analysis according to the following steps by Bowen (2009) which are to collect and know the data; determine coding categories; code the content; identify the patterns and interpret the data using themes. I developed and

completed the different protocols in order to analyse the data collected through educational documents (teachers' scheme of work, lesson plan, observations - the real classroom practices) and transcriptions of the interviews.

The data obtained through document analysis was analysed by means of content analysis using the analysis protocols such as interview protocol (Appendix 6), observation protocol (Appendix 7), scheme of work (Appendix 10) and lesson plan protocol (Appendix 11). The data obtained from these various documents was analysed through document analysis protocols (Appendix 9).

Data analysis on document (scheme of work and lesson plan)

Scheme of work

The scheme of work presents the IC teaching and learning instructions, assessments criteria and learning experiences. This document was analysed in order to determine the alignment between the IC content (teaching and learning instructions, assessments criteria and learning experiences) and CAP descriptions. I did this because I wanted to understand the connection between the intended objectives of the IC policy framework and the teacher scheme of work of the IC in Lesotho following the document analysis protocol (Appendix 10).

Lesson plan

Data that was collected by analysing the lesson plan was also analysed using content analysis and it was presented on the analysis protocol. I used the protocol to determine the contents of the lesson plans. This helped me to determine how teachers plan to instruct and assess learners in the classroom. The analysis of the lesson plan was done in order to understand the connection between the intended objectives of the IC policy framework and teacher implementation of the IC in Lesotho primary schools following the document analysis protocol (Appendix 11).

Data analysis on lesson observations

Johnson and Christensen (2012) argue that an analysis of the lesson plan entails the information on how teachers interpreted the IC in terms of their perspectives on effective learning and assessment of the IC (Johnson & Christensen, 2012). Information from the observation notes and videos was presented in the form of text following the observation protocol (Appendix 7). The content analysis of the lesson

observation content was done in order to observe how primary school teachers implement the new curriculum (IC) in the classroom. The intention was to understand how CPD programmes influenced the teaching of the IC in classrooms.

Data analysis on interviews

Analysis of the transcripts was also content analysis following the interview protocol (Appendix 6). The interviews were audio taped and transcribed. Content analysis was first incorporated in this study in the development of the interview protocol as a basis for the coding scheme, as well as assessing the effectiveness of particular interview items (Elo & Kyngäs, 2008). The conversation helped me to explore teachers' perspectives on professional development in Lesotho primary schools and how these influence the implementation process of the IC (Ok & Erdogan, 2010). I also took notes during the interviews. The notes helped me in the writing up of the transcripts, because I wrote them in a narrative form. Each individual teacher's transcript was then analysed, depending on the quality of the individual case using inductive analysis (Saldana, 2016). Inductive analysis is the process by which themes and categories emerge from the data through the researcher's careful examination and constant comparison (Patton, 2002). The purpose for using an inductive content analysis approach was to reduce extensive and varied raw text data into a brief summary format. Again, I used this approach in order to establish clear links between the research questions and the summary findings derived from the raw data (ibid.). I used the interview transcripts and let the categories emerge on their own. Table 5 presents the research questions in relation to the major themes derived from participants' perspectives about the CPD for the IC on which data analyses were made.

Table 5: Synopsis for the cross- case analysis based on the themes

Research Aims	Research questions	Themes
1. Explore the teachers' perspectives of the CPD experience for the implementation of the IC	1. What are the teachers' perspectives on the CPD experiences for the implementation of the IC?	1. Teachers' perspectives on professional development experiences. 2. Teachers' perspectives on

		classroom implementation of the integrated curriculum
2. Explore teachers' perspectives on the influence of CPD activities on their classroom practices	2. How do the teachers perceive the influence of the CPD activities on classroom practices when implementing the integrated curriculum?	<ol style="list-style-type: none"> 1. Instructional strategies for implementing the IC 2. The IC modes of instructions such as the use of ICT and other materials. 3. Assessment in the context of IC 4. The teaching of the IC in terms of attitudes, challenges and opportunities
3. Explore the CPD activities for the implementation of the IC that shape the teachers' perspectives on the curriculum project in Lesotho	3. How do the CPD activities for the implementation of the IC shape the teachers' perspectives on the curriculum project in Lesotho?	Shaping of teachers' perspectives on the integrated curriculum implementation by the CPD programmes
4. Present a description and understanding of CPD that teachers receive for the implementation of the IC from their perspectives in the context of Lesotho	4. How do the teachers describe and understand the CPD that they receive for the implementation of the IC from their perspectives in the context of Lesotho?	Describing the understandings of the CPD

1.7.7 Credibility, dependability, transferability and trust worthiness

Validity is defined as being about the relevance and credibility of the research instrument (Babbie, 2010). I made the most of the honesty and trustworthiness of the qualitative data through dependability, transferability, triangulation, member checks, prolonged engagement in the field and a pilot study.

Dependability is about ensuring that the research process is logical, traceable and documented. In order for the study to be dependable “*its process should give the same conditions and circumstances that another researcher would identify, with more or less the same findings*” (Selepe, 2016: 39). I used the same data collection instruments and interviewed all the participants in the same way at their places of work. Although the social contexts of participants’ schools differed, I interviewed teachers of the same grades (Grade 2), so that the data could be dependable (ibid.). The differences in the contexts of the four schools were taken into account to see whether they might result in variations. The transcripts are available for verification (ibid.).

Transferability is the “degree to which the results of qualitative research can be generalized or transferred to other contexts or settings” (Choi, 2016: 123). The findings are transferable if they can be applied in another context (Selepe, 2016: 37). In this study I explained in detail the methods that were used and also provided the analysis protocols that should enable other researchers to make judgments and use the findings of this study in other research studies (Bryman, 2008).

Triangulation is where several instruments are used to collect data for cross checking of the results (Bryman, 2008). Triangulation was applied through the use of interviews, observations and document analyses of the data collection (Bryman, 2008). Data from the interviews, the various documents and the observations were compared and cross-checked to ensure that they are valid and reliable. That is, I collected data by means of document analysis, where I analysed the teachers’ scheme of work and lesson plans. I further conducted classroom observations with the focus on instructional and assessment practices. I also interviewed the teachers. According to Johnson and Christensen (2014), triangulation of the findings from various sources increases the trustworthiness of the results.

Member checks describe the procedure of cross-checking the correctness of the data that was captured and recorded with the participants after the completion of the interviews, so as to ask them whether the data gathered was correct or whether it required adjustment or additions (Maree, 2016). The researcher spent a lot of time (approximately two months) in the field in order to cross-check the accuracy of the data (Maree, 2007; Maree, 2016).

Prolonged engagement in the field made it possible for cross-checking of the data and to be assured of its trustworthiness (Maree, 2007; Maree, 2016). I spent four weeks in the field, one week studying all the necessary documents that were employed in order to facilitate CPD for the functioning of the IC and three weeks conducting the interviews and the classroom observations (Maree, 2016). Validity and reliability were ensured through pilot testing. Bhattacharjee (2012) and Maree (2016) believe that the pilot sample is a small portion of the targeted population. **Pilot testing** is seen as a device used to detect the appropriateness of the research and to ensure validity and reliability of the instruments to be used for the proposed research (Maxwell, 2013). Two teachers from two of the schools provided the data for the pilot study and the results indicated that the instruments were valid and reliable (Bhattacharjee, 2012). The findings from the pilot study indicated that the instrument used was able to gather relevant data that could answer the research questions. The pilot study helped me to address important aspects for the main research (objectives, data collection procedures, and data analysis procedures). The pilot study also helped me to identify some possible challenges that may occur during the actual research study. It enabled me to test the instruments (interview and observation schedules). The testing of the data gathering instruments provided me with the opportunity to make the necessary modifications to the instruments. As a result, I was able to make amendments on some points that seemed irrelevant to the topic.

In general, the findings from the pilot study revealed that the CPD programmes that teachers attended in order to better implement the integrated curriculum did not equip them with enough subject matter content and relevant skills. The findings did not match the findings from some of the literature that indicated that CPD activities are said to be useful for both the beginning and 'getting on' teachers and that they improve their classroom practice (Desimone & Garet, 2015. 2015; Akiba & Liagb, 2016). The

findings showed that the instruments will help to collect the relevant data that will help to answer the research questions as well as to address the research aim.

1.8 Significance of the study

This study was intended to explore teachers' perspectives of the PD opportunities related to the IC and how this influenced their classroom practices. The IC perspectives have been explored in different perspectives around the world and in Lesotho. The focal point of this study was to explore primary teachers' perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho. As a result, the study sheds more light on how some Lesotho primary school teachers perceive PD and how this influences their classroom practice; mainly when they implement the IC. Lesotho primary teachers from all the districts of the country may benefit from the findings of this study because all the primary schools are involved in the implementation of the IC. The study findings may also add to the literature on the IC and PD for CAP in Lesotho. This study might equip policymakers with useful information so as to be able to monitor and review the support structures needed for effective PD programmes aimed at facilitating the IC implementation process. The findings of this research may assist the MoET to understand how primary school teachers feel about the assistance they receive in order to improve their classroom teaching practice. The researchers from other countries may also benefit from the findings of this study, because not only Lesotho is undertaking a reform of their education system.

1.9 Ethics considerations

Participants should first be provided with security for the research to be conducted successfully. It is therefore critical to consider ethics in research to ensure that respondents are fully protected from physical and psychological harm (Creswell, 2014; Creswell, 2013). Permission for this study was granted by the Ethics Committee of the Faculty of Education of the University of the Free State. I was also given the authorization by the MoET to carry out research in the participating schools. The head teachers of the participating schools were informed about the rationale and importance

of this research. In order for the participants to indicate their consent, their consent was required in advance so that preparation could be made (McMillan & Schumacher, 2014).

1.9.1 Confidentiality, anonymity and voluntary participation

It has been suggested that confidentiality and anonymity in research may be ensured by omitting the participants' names and I did follow the same suit (Cohen, Manion & Morrison, 2011). In order to ensure the confidentiality of the participants, I used pseudonyms in the place of the participants' real names and the personal identification of the participants was omitted during the transcription process. The participants were informed about the nature and rationale of the study and they participated voluntarily. As according to Johnson and Christensen (2014), alphabetic letters were used for the research instruments, in order to ensure privacy and confidentiality. These necessary measures were taken in order to protect the participants from any harm. The completed transcripts were stored in lockable cupboards with limited access and the electronic data was secured with a password. All the data will be retained for a minimum period of seven years with no intention of sharing it (Johnson & Christensen, 2014).

1.9.2 Informed consent

The participants signed the consent forms as an indication of their interest and understanding so as to participate in this research study. The participants were able to withdraw their participation at any time since it was not obligatory (Babbie & Mouton, 2014).

1.10 Limitations

The participants were selected from two out of the ten districts of Lesotho. The teachers from other districts may have different perspectives regarding the PD activities that they participated in for the implementation of the IC. However, the applicability of the present findings could be compensated through other studies (Check & Schutt, 2012).

1.11 Clarifications of the key terms

Continuous professional development (CPD):

According to Kennedy (2016), CPD is a series of regular training activities aimed at improving individual understanding and capability and are intended to help individuals within the same location improve their job experience.

CPD may be facilitated through formal or informal settings. It focuses on helping people to develop their skills and gain information, so as to develop their professional practice. In the education system, CPD refers to the on-going teachers' training programmes focusing on teacher development for quality teaching. Therefore, a well-crafted and well-delivered CPD delivers successive benefits at every level within the education system (Caena, 2011).

Effective professional development:

This is an on-going series of activities including training, practices and feedback that is made available for a sufficiently long period and with adequate support. These activities should engage teachers' indecision-making in order to enhance their effectiveness and the growth of teachers' learning communities (Killion, 2008).

Integrated curriculum (IC):

The IC is described as the curriculum that puts emphasis on unified concepts by cutting across different subject matter. Integration makes learners connect with the real world by equipping learners with the necessary skills that are applicable to the world jobs market of the 21st century (MoET, 2013). Costley (2015: 3) maintains that the IC enables the learners *"to link their experiences in the classroom to the real world and make sense of experiences from their lives"*.

Professional development (PD):

Mizell (2011) defines PD as any activities used in the development of people's skills, understanding, the know-how and other responsibilities of a teacher. It is an approach used to strengthen teachers' practices throughout their career. It offers several educational programmes related to an individual's work.

Teacher perspectives:

This is defined as teachers' attitudes, values and beliefs based on their personal experience that helps them to interpret their classroom teaching practice. It is a particular way of viewing things based on experience and personality or a way of thinking about something, influenced by experiences (Atta, 2015).

1.12 Outline of the thesis

This thesis consists of three sections. The following sections are presented:

Section1: The introduction and orientation to the study whereby the research questions are discussed together with the justification and purpose of the study. It also presents the key terms, a summary of the conceptual framework and methodology.

Section 2: Presentation of three articles, which is the main section. Each article is cited and contains its own reference list according to the targeted journal for publication (**article1: Teachers' perspectives on the professional development for implementing the integrated curriculum in Lesotho primary schools, article 2: The influence of continuous professional development activities on the teaching of the integrated curriculum in Lesotho and article 3: The professional development activities that shape teachers' perspectives on the curriculum project in Lesotho**).¹

Section 3: The summary of the whole study whereby the researcher answered the fourth subsidiary question, presents conclusions and recommendations, combining the findings from the three articles.

¹**Article one** is to be submitted to the International Journal of Learning, Teaching and Educational Research. Guidelines attached.

¹**Article two** is to be submitted to the Journal of Innovation of Education and Teaching International. Guidelines attached.

¹**Article three** is to be submitted to the Issues in Educational Research Journal. Guidelines attached.

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Section 2

Article one

Teachers' perspectives on professional development for the implementation of the integrated curriculum in Lesotho primary schools

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Abstract

It is acknowledged from the literature that Continuous Professional Development (CPD) activities enhance individuals' skills, knowledge, expertise and other teacher characteristics needed to meet the global challenges and demands in evolving education systems around the world. This qualitative paper explores the perspectives of Lesotho primary school teachers on the CPD programmes offered to them for the implementation of the Integrated Curriculum (IC) in Lesotho Primary schools. Data were gathered through document analysis and semi-structured interviews. Thematic coding and descriptive content analysis techniques were employed in analysing the collected data. The study was guided by Sense-making Theory and Desimone's (2009) framework for professional development. The teachers' perceptions showed that they considered the CPD activities, guidance and monitoring able to assist them in implementing the IC as stipulated by the Curriculum and Assessment Policy (CAP) to be inadequate. As a result, they felt that they were not ready to implement the IC and that they were not implementing the IC as required by CAP. The paper recommends that teachers should be provided with the opportunity to attend and plan the CPD programmes that they believe will positively change their classroom practice. Those CPD programmes should be evaluated and monitored by the Ministry of Education and Training (MoET) and National Curriculum Development centre (NCDC).

Keywords

Continuous professional development, Integrated curriculum training, Teacher perspectives.

1. Introduction

World events such as technological advancement, the impact of human activities on the environment and aspirations for economic growth have triggered global and national educational reforms. Abad (2013) affirms that PD entails the development of teachers' beliefs, abilities and awareness with regard to teaching practice. PD involves a continuous process (CPD) that enhances teachers' professional strength. For the purpose of this study, CPD refers to the on-going learning opportunities that are given to teachers to enhance individuals' teaching practice (Opfer, Pedder & Lavicza, 2011). In Turkey, teachers complained that the CPD activities that were offered to them over a period of ten years while they were implementing a new curriculum were only moderately satisfactory and it was speculated that reform fatigue may be partially responsible for this finding. The argument here is that policymakers fail to consider and recognise teachers' preferences in educational reforms (Gokmenoglu & Clark, 2015). It is crucial to recognise teachers' voices regarding the CPD experiences offered to them. Therefore, this paper explored primary teachers' perspectives of their CPD experiences for the implementation of the IC in Lesotho. The findings of this study contribute to deepening insights about this practice through an analysis of teachers' perspectives about the implementation of professional development used to support a curriculum change.

2. Background

World events such as technological advancement and the needs for social transformation often trigger curriculum change. Lesotho as a member of the global village is one of the countries that went through restructuring in their education system in response to the needs of global markets. They introduced the integrated curriculum (IC).

The IC was enacted after the CAP was piloted in 2012 in Lesotho. Teachers and other relevant stakeholders needed to be given the opportunity to gain the relevant skills progressively through CPD activities, whereby teachers get the opportunity to solve the difficulties that may arise during the implementation process of reforms (Lee, 2011). This paper sought to explore teachers' perspectives of the CPD experience for the implementation of the IC in Lesotho.

Research question

What are teachers' perspectives on their CPD experiences for the implementation of the IC?

3. Literature review

Teachers' perspectives of CPD for the implementation of IC

How teachers perceive a change determines whether change actually occurs in the classroom or not (Aihi, 2011). This statement indicates that for the curriculum (IC) to be successfully implemented and sustained, teachers' voices on the new curriculum are very important. Dambudzo (2015) confirms that in Zimbabwe the IC implementation was effective and that it benefitted the learners.

In contrast, some teachers complained about CPD programmes. In the study by Ono and Ferreira (2010) it is clear that the teachers were not happy about the short workshops and they believe that they did not learn much through those training sessions. Gulamhussein (2013) revealed that short workshops appear to have little effect on teacher practice. Teachers articulated that programmes shorter than 14 hours produced no observable benefits. American teachers from the Gates Foundation study (Bill & Melinda Gates Foundation, 2014) argue that they were not happy with the short CPD activities that they participated in. Similarly, Herbert and Rainford (2014) argued that teachers in Jamaica complained that the CPD training offered to them had failed to train them sufficiently so as to be able to productively implement the new curriculum. These findings indicate that CPD facilitators are required to be thoughtful consultants who use opinions from CPD recipients to direct and develop the delivery of this form of PD.

4. Theoretical framework and Conceptual framework

Sense-making Theory (SMT) was used together with Desimone's five-featured conceptual framework (2009) for evaluating professional development. This combination is suitable for the theoretical framing of this study because SMT helps teachers to understand how individuals construct their understanding of new information and the social context within which they work (Coburn & Woulfin, 2012). Schechter et al. (2016) define SMT as a process whereby people construct meaning by relating new information to their prior knowledge in order to act on it. Therefore, teachers' policy 'sense-making' can be considered as an on-going learning activity that drives their CPD. Teacher CPD emerges from interactive decisions that are distributed and shared among peers and extracted as resources from the social situations of classrooms and schools (Li & Krasny, 2019). Spillane *et al.* (2002) indicate that teachers may construct meaning that may either reinforce their pre-existing knowledge and skills of their teaching practice or focus on new knowledge and skills gained from the CPD programmes who have focused on assisting them to successfully implement reforms in the schools. Therefore, the use of SMT and the five-featured framework enables the researcher to explore teachers' views and how they make sense of the CPD programmes in order to implement the IC. It is asserted that Desimone's CPD model of the five-featured conceptual

framework comprehensively explains how effective professional development can be achieved (Kang et al., 2013). However, some studies show that teachers, as the agents of change and the core beneficiaries of CPD activities vary in their response to the same CPD. These variations in response may have an impact on what teachers would initially need to and are actually capable of learning from the CPD activities provided for them (Youngs, 2013). The variations suggest that CPD activities should be planned in such a way that they consider individual teacher's needs. It should be calibrated to the differing understanding that individual teachers have about CPD activities and what works best for them (Bowdon et al., 2015). Figure 1 represents 'Desimone's conceptual framework' (Desimone (2009: 185).

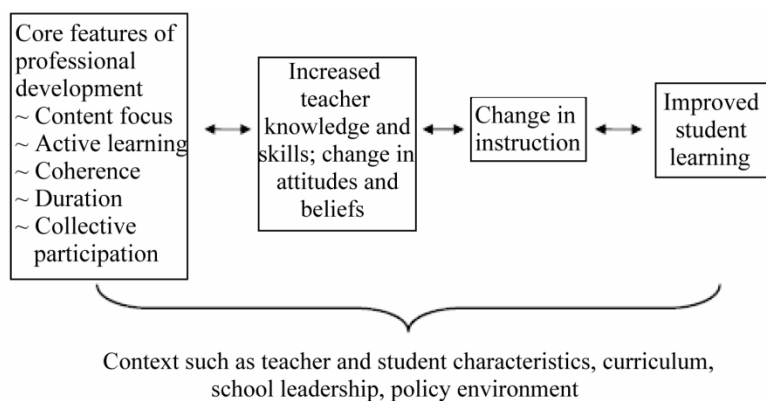


Figure 2 represent Desimone's Core conceptual framework for studying the effect of professional development on teachers and students, adopted from Desimone (2009: 185)

5. Methodology

Research design

This study adopts a qualitative interpretive paradigm. An interpretive qualitative approach allows one to understand persons' perceptions and insights of the world (Creswell, 2014). Denzin and Lincoln (2011: 3) observe that a qualitative approach also enables the researcher to look into the individual's perspective in order to "make sense or to interpret the phenomena in terms of the meaning that people bring to them".

Context

Teachers are exposed to CPD programmes to provide them with new information and skills so as to effectively put into practice the new curriculum. More importantly, teachers' perspectives on CPD experiences for reform implementations such as the IC have to be the focal indicators that measure the effectiveness of CPD activities. For the IC to be successfully implemented and sustained, teachers' voices on the new curriculum are very important. Teacher edification should be a core element of any professional development programme and therefore the learning activities should be structured appropriately (Tsakeni & Jita, 2015). This study used a multiple case study design to provide the structure, that according to Maxwell (2013) can be used to enhance an understanding of the significant attributes of CPD as well as the connections that exist between the identified CPD experiences, characteristics and outcomes (Merriam, 2009; Maxwell, 2013). Hence, this paper explores Lesotho primary school teachers' perspectives of their CPD experience for the implementation of the IC.

The data were collected from four schools hence multiple cases (four cases), which enabled access to gaining a deeper insight and might permit a better understanding of teachers' views and experiences of CPD for IC over a range of different sites (Saldana, 2016). The use of multiple cases enabled cross-case analysis and a comparison of teachers' views of teaching practice in different settings (Creswell, 2013). This helped the researcher to contrast the findings from government, church and privately owned primary schools in Lesotho.

The participants

The four participant teachers comprised three females and one male, selected using a purposive sampling technique in order to obtain rich data that could determine theoretical generalisation, as this is a qualitative study (Creswell, 2014). The participants had 4-8 years of experience teaching Grade 2, and their overall years of teaching experience ranged from 19 to 37 years. All the participants taught Grade 2 at the time of data collection. Selepe (2016) maintains that teachers who were assigned to teach Grade 1, 2 and 3 when the reform was first implemented in 2013 "were expected to teach the same Grade for at least five years" (Selepe, 2016, p. 2). The participating schools were selected from different contexts and included one government school (Mrs Green), one church primary school (Mrs Yellow), one private school (Mr Red) and one community school (Mrs Orange). The names of the participants were omitted through the use of these pseudonyms. The study sought to, by using these 4 cases, provides some insights into the teachers' perceptions of CPD. Table 1 gives information on their biography.

Table 1: Participants' biography

Participant	Gender	School Type	School	Qualification	Teaching experience (yrs)
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pseudonym					Old curriculum	Integrated curriculum
Green	Female	Government primary	GP	Diploma in Education	23	7
Yellow	Female	Church primary	CHP	Diploma in Education Primary	19	7
Red	Male	Private primary	PP	B. Ed. Hon.	28	7
Orange	Female	Community primary	CP	Diploma in Education primary.	37	7

Data collection instruments

Two semi-structured interviews were conducted with each of the four participants. The interviews enabled the researcher to explore the teachers' views and feelings about the CPD activities that they had participated in and also about their classroom practices. An interview technique was found appropriate for this study because it gave the researcher a chance to get a deeper understanding of the teachers; by granting them the opportunity to give follow-up ideas and by the researcher probing for their responses (Basit, 2010; Maree, 2011; Maree, 2016). Interview questions were developed by the researcher based on the research question. Semi-structured interviews were used to gain an understanding of teachers' perspectives on CPD for the implementation of the IC; hence the researcher probed the participants during the interview sessions in order to obtain greater clarity about what they had said. The two main themes on which the interview questions were formulated were; (a) Teachers' perspectives of their professional development experiences and (b) Teachers' perspectives on the classroom implementation of the IC.

Data collection procedures

I engaged one-on-one and face-to-face in interviews with all the participants at their schools. Two semi-structured interviews were conducted with each of the four participants. One of the two interviews was conducted on the first meeting with each participant and the second interview was conducted as a follow-up meeting and it included member-checking in order to increase the accuracy, credibility, validity and transferability of the findings (Harvey, 2015). I used an interview protocol instrument(Appendix 6) to collect data during the interview sessions. All the participants responded to similar questions (Johnson & Christensen, 2014).

Trustworthiness

For this qualitative case study, credibility and trustworthiness were maximised through member checks and prolonged engagement in the field (approximately two months). The participants were informed about the aim of the research and were assured of data confidentiality. The teachers' personal credentials were concealed by using pseudonyms for the purposes of transcribing the audio recordings. All forms of collected data (printed transcripts or audio recordings) were kept safe in a lockable filing cabinet and any electronic data files were secured in a password-protected computer (Creswell, 2013). The researcher received ethical clearance from the University of the Free State and MoET in Lesotho to conduct this research study in the selected schools.

Data analysis

Thematic content analysis was used to analyse all the data collected. The themes were predetermined based on the five core features of CPD(Desimone's framework, 2009).Then inductive coding processes were also used to identify the relationships between CPD experiences and the participants' knowledge and understanding of the IC (Saldana, 2016). For example, in analysing the interview data, the researcher transcribed each interview, coded and categorised it in order to place the data into the previously identified themes. Examples of how the data were coded and analysed are shown in Table 2.

Table 2: Excerpts from extracts of the interview codebook

Code	Description code	Examples from interview extracts	Categories
Defining teachers' perceptions of CPD experiences for IC	Dissemination of IC knowledge	The IC was not well clarified from the dissemination workshops because the presenters were not knowledgeable and not well equipped therefore teachers lack IC knowledge and skills	-Content focus Active learning Coherence Substantial duration Collective participation
Description of teachers' perceptions on the nature of CPD and participation	The kind of CPD and teacher participation	Teachers participated in one dissemination workshops and met in clusters quarterly	Kind of PD provided for teachers

Description of teachers' perceptions on IC resources	The use of IC resources and teaching materials.	There were no IC resources and teaching materials	Teaching materials
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An inductive analysis was conducted to establish the relationships and/or contrasts between the four interviewees' responses. An inductive data analysis was also applicable to the discussion section in order to produce any possible key finding.

5. The Findings

Three major themes were used to organise the teachers' perspectives on the PD experience for the implementation of the IC and they are as follows: Teachers' perceptions on CPD experiences for IC, Teachers' perceptions on the nature of CPD and participation as well as the teachers' perceptions on IC resources.

6.1 Theme 1: Teachers' perceptions on CPD experiences for IC

This theme comprises of 5 sub-themes. The 4 sub-themes are predetermined based on the Desimone framework (perspectives on content, active learning, coherence, collaboration and duration).

6.1.1 Sub-theme 1: Teachers' perspectives on the content of professional development

CPD activities were intended to provide teachers with new content and the relevant skills that come with the reforms in order to enhance their teaching practice and improve learners' achievement. Mrs Green from GP School and Mrs Orange from CP school reported that the training workshops that they had once attended had highlighted the content of the new curriculum and how to teach it. They said this in passing without giving details. They were faced with the problems of their actual teaching practice:

We were given inadequate knowledge and no skills that we needed to use as we teach the IC content. Due to our limited acquaintance with the knowledge and skills, we are still using the previous curriculum. The training workshop did not equip us well enough with the relevant content because the IC comes with new knowledge.

This explanation indicated that the participants had limited knowledge and skills pertaining to the teaching of the IC content. This would have a negative impact on the IC implementation. The above extract shows that, although the two teachers attended a dissemination workshop as part of the CPD for the IC, the workshop was not enough for them to successfully implement the IC. It seemed that more workshops are needed for content coverage training. These

findings indicate that due to the limited knowledge and skills pertaining to the teaching of the IC content, the two teachers mentioned above used the old techniques of imparting knowledge in the classroom, thus undermining the notion of integration. This we would expect to affect the learners' achievement negatively.

However, Mr Red from PP school and Mrs Yellow from CHP noted that they benefited from the training workshop that they had once attended. Mr Red said:

The training programmes were relevant because the presenters provided us with a clue on how to implement the integrated curriculum content making examples of how to integrate and teach the new content of the integrated curriculum. The presenters clarified complex concepts that are not clear from the syllabuses.

Mr Red and Mrs Yellow's views seem to imply that some teachers benefited from the integrated training workshop that they attended as a part of CPD activities for the IC implementation while Mrs Green and Mrs Orange did not benefit. One may conclude that teachers have different perspectives regarding how CPD activities, organised to help them implement the IC content effectively, benefited them. Two participants indicated that they benefitted from different forms of CPD that they attended, while the other two participants indicated that they did not. It should be noted that the four participants did not attend the same CPD workshops. This finding may mean that teachers handle the issue of content in their teaching practice differently, as directed by their perceptions.

6.1.2 Sub-theme 2: Teachers' perspectives on active teacher learning

Teachers were provided with dissemination workshops planned by the MoET and the NCDC as CPD programmes for the implementation of the IC prior to the initial implementation of the IC, followed by cluster workshops. The workshop training used a cascade model. Mrs Green acknowledges the significance of the IC, but she is not happy about the CPD activities regarding the implementation of the IC:

I only participated in training sessions using the cascade model prior to the initial implementation of the integrated curriculum ... two times. We actively participated and presented topics in those workshops. A few topics were introduced from this new curriculum but not all the topics covering this curriculum were introduced.

Mrs Yellow and Mrs Orange's point of view was similar to that of Mrs Green. The two teachers' perspectives were that they were not well-trained to implement the IC because not all the content topics were covered. However, they acknowledged that they participated in active learning during the few training sessions. Mrs Orange aired similar sentiments as follows:

We attended one workshop prior to the implementation of the integrated curriculum. We actively participated through a presentation whereby we practised how to scheme and how to integrate a few topics through peer teaching. However, the trainers failed to answer some of the questions that we asked.

According to the teachers' perspectives expressed above, they were not well equipped in order to implement the IC effectively because the trainers failed to solve or address some of their challenges. Hence, after attending the CPD sessions they were unsure about certain things that the trainers were unable to explain. It meant that they would have to rely on their own interpretation of the curriculum based on prior knowledge. This implies that more workshops and training were still needed to capacitate teachers with the relevant information needed to carry out this reform effectively. Similarly, Mr Red said that he was also not well prepared to teach the IC and wished that he could be trained again to get more practise; he pointed out:

I participated actively in one training prior to the introduction of the integrated curriculum and in the cluster workshops; though we meet once in a quarter. However, I wish we could have further training from the MoET and the curriculum developers so that we could participate further. Practice makes perfect. I think if we could be offered more training, we would be able to implement the IC as prescribed.

The above extracts indicate that not all the participants were happy with the CPD activities provided to the teachers during the reform process. They felt that if they could be provided with more training workshops organized by the MoET and the NCDC, they would be able to facilitate the IC according to the CAP objectives. Therefore, there is a need for these teachers to be offered CPD programmes in order to improve the implementation of the IC reforms.

One may anticipate that although the teachers participated actively in the workshops aimed to enhance their skills and to improve their content knowledge in order to implement the IC successfully, it is clear that active learning about new reform was not fully achieved because teachers only participated in introductory workshops and in clusters; there were no other workshops from the MoET and the policy makers (National Curriculum Development Centre [NCDC]).

6.1.3 Sub-theme 3: Teachers' perspectives of coherence

For the reforms to be successfully implemented there should be regular workshops that can develop the teachers with regard to their needs for delivery of the new curriculum. There should be monitoring of such programmes to measure coherence. All the participants noted

that since the IC was first implemented in 2013, there was no coherence between the workshops organised by the government and the policy makers:

There are no follow up workshops for this curriculum from the Ministry of Education. We only attended the introductory training once prior to the initial implementation of the IC. There is no coherence because there are no regular workshops. In addition, there are no monitoring workshops. We are teaching this new curriculum trying to follow the policy prescriptions though it's challenging due to our limited knowledge and skills.

These participants' views demonstrate that they struggle with the classroom implementation of the IC due to the limited support that they get from the MoET and also that there are no follow-up workshops. There appears to be no coherence for the new curriculum. Yet in an education system, the effectiveness of teaching must be measured and monitored. Hence the implementation process of the reform should also be evaluated and monitored so that the policymaker can make amendments where necessary. There should be follow-up workshops and on-going CPD to assist teachers all the way up until they master all the policy objectives.

6.1.4 Sub-theme 4: Teachers' perspectives on duration

The duration of the CPD programme does not necessarily reflect whether learning occurred or not. It all depends on the individual participant and the approach taken by the instructor in a given session. Some teachers prefer long-term CPD programmes while others prefer short-term ones. All the participants noted that the dissemination workshop they had attended lasted for just a week. However, only one teacher from each grade attended. They then attended cluster workshops on a quarterly basis that lasted for a day. One of the teachers' comments:

The introduction workshops lasted for a week in every district with no follow-ups on teaching practice by the MoET and NCDC. Only one teacher from each grade in each school attended. Our cluster workshops are usually a one-day workshop held on a quarterly basis.

The information from the extract above shows that the teachers had participated in one of the training workshops that lasted for a week and that they also met in cluster workshops. This indicates that the time set for training (dissemination training workshops) was too short for the participating teachers to be adequately trained. It seemed the participating teachers had to rely more heavily on theory (policy guidelines) than on practice. This implies that there was limited training for the IC implementation and therefore teachers were not likely to follow the policy descriptions accordingly.

6.1.5 Sub-theme 5: Teachers' perspectives on collaborative participation

When several teachers from the same school collectively take part in the same CPD activities, their understanding of the reforms could be enhanced. They might be able to help one another when they are faced with challenges when they teach the reforms. Two participants noted that although teachers meet in clusters, they hardly help one another effectively because there was no school monitoring by the resource teachers from the MoET:

We only meet once in a quarter when we scheme for the quarter, helping one another to match the relevant learning outcomes. Resource teachers from the MoET do not visit us in schools to monitor and to assist us. Even in the introductory workshop, not all of us attended because only one teacher had to attend from each school as the MoET declared that they lack funds to cater for many teachers. There is no support from the MoET for this new curriculum.

The above extract implies that although the teachers meet in clusters quarterly, that provided very little platform for collaboration. The resource teachers from the MoET did not visit the school to monitor the progress of teachers in the implementation of the IC. However, one of the participants (Mrs Orange) noted that teachers receive minimal support from the MoET as the resource teachers visited schools only once in a while to monitor the progress of the IC implementation:

Resource teachers from the MoET last visited my school once after a long time. It was when I first taught integrated curriculum in 2013. There were no other visits till the present to observe and monitor progress with the implementation. Even the principal does not monitor the process and teachers understand IC differently.

Although Mrs Orange indicated that resource teachers from the MoET visited her school once and she felt this was not enough for the effective monitoring of the reforms in the school. This was probably why she indicated that collaboration between the teachers and the monitors is minimal or largely non-existent. The monitoring process should also be on-going and not a once-off programme. This finding seems to indicate that the participating teachers did not benefit much from collaboration activities between them and the monitors. The participating teachers struggle to implement the IC due to ineffective support from the policy makers and the MoET. Contrarily, Mrs Green noted that the monitoring of the meetings about how the IC is being implemented is done by the school principal:

In my school, we meet regularly to discuss the challenges that we meet when we teach the IC and the principal monitors those meetings. The problem is that there are no visits from the MoET to monitor the work due to the lack of funds, we are told.

From the participating teachers' experiences, all the participants point out that there was no supervision and assessment of the functioning process by the MoET. Thus, teachers' understanding and practice of this curriculum may be influenced by their attitudes and understanding of the previous curriculum. It is noted that the teachers in this study conceded that they were not effectively carrying out the IC as it is prescribed, due to limited training. The participating teachers said that they were not given adequate workshops to make sure that they could master the IC.

6.2 Theme 2: Teachers' perceptions on the nature of CPD and participation

Different kinds of CPD have different potential as to how they develop the teachers and this is based on the individual teachers. All the participants noted that they only participated in one dissemination workshop as one kind of CPD program and also then continually met in quarterly cluster meetings afterwards:

We once participated in the training workshop using the cascade model. Each workshop lasted for a week. There was a workshop for each grade in different districts. The trainers from the Ministry of Education articulated that the policy and syllabi describe all the necessary information that a teacher has to follow. We were provided with prepared schemes, assessment packages and teaching guides. We only lack the relevant knowledge and skills. We also meet in clusters quarterly.

The CAP stipulates that the changes in classroom orientation require a radical shift in pedagogy. The teachers have to "move from traditional teaching approaches to teaching methods that develop creativity, independence and the survival skills of the learners" (MoET, 2009: 18). These skills need to be instilled through CPD programmes. The participating teachers indicated that they had once participated in introductory workshops, using the cascade model that lasted for a week. They also attended the cluster workshops quarterly for their development towards enhancing their teaching practice. They did not use any other kinds of CPD programmes. The findings seem to indicate that more training and follow-up workshops are needed from the MoET and NCDC for further clarity on the policy descriptions.

6.3 Theme 3: Teachers' perceptions on IC resources

Resources are necessary tools that facilitate teaching and learning. The participants articulated that they were not equipped with all the relevant resources needed for the

teaching of the IC. Mrs Green, Mrs Orange, Mrs Yellow and Mr Red indicated that they were provided with insufficient IC resources. For example, Mr Red noted:

We were only provided with the syllabuses, schemes, teachers' guides, text books and assessment packages. We are not provided with teaching materials, computers, music instruments, cooking utensils, science equipment. This impacts negatively on our teaching because theory alone does not benefit all the learners. The curriculum prescribes practice as part of teaching this curriculum. There is no electricity in rural schools as compared to schools found in towns.

This extract denotes that not all the necessary resources and teaching materials were available in schools to support teachers to effectively develop knowledge and skills. This may make it hard for teachers to follow the CAP prescriptions. The four participants all reported a lack of the relevant resources needed to teach the IC in their schools. The participants reported that they were faced with the challenge of limited resources when they implement the new curriculum. This implies that even if the teachers were keen to implement the IC effectively, as it is described by CAP document, scarce resources hindered them. Therefore, it is imperative for the policy makers and the MoET structures to ensure that all the schools have all the teaching facilities as well as the relevant resources.

6.4 Discussion

This paper explored the teachers' perspectives of the CPD experience for the implementation of the IC. The teachers' perspectives indicated that they were inadequately prepared to implement the IC effectively. In particular, the teachers' view was that little was done to support their teaching practices in terms of guidance and monitoring to implement the IC as required. Seven observations on the participating teachers' perspectives of the CPD were made and constitute the key findings of this study.

The first finding shows that the participating teachers had different perspectives regarding how the CPD activities organised to help them to implement the IC content benefited them. That is, the CPD activities that the participating primary school teachers attended for the implementation of the IC failed to equip the teachers with the relevant knowledge about the content of the IC. The participating teachers' perspectives suggest that they were not implementing the IC content as intended according to the policy specifications. This implies that the participating teachers were guided by their policy signal sense-making to construct their understanding of new information based on the social context within which they work (Coburn & Woulfin, 2012). This finding matches a finding from Gresnigt et al. (2014), indicating that teachers still taught separate subjects in isolation.

These perspectives, suggesting insufficiency in the implementation of the IC, formed part of the framework that the teachers used to engage sense-making at the individual cognition level (Spillane et al.2002) in order to decide what and how to teach the IC. On that note, Desimone's (2009) framework suggests that when the content of the reform is not considered by teachers; it results in a mismatch between the aim of the innovation and the implementation process (Aminudin, 2012). Similarly, it is indicated that in South Africa, teachers failed to comprehend the new terms of the Outcome Based Education (OBE) programme. As a result, they did whatever they could as individuals in an attempt to implement OBE (Hoadley, 2013). This shows that the teachers' sense-making has a great impact on the implementation of reforms in schools (Spillane et al., 2002). This finding indicates that in spite of the calls for teachers to transform their teaching practices to meet the requirements of the CAP, old practices may still persist in classrooms due to limited relevant knowledge and skills acquired from CPD activities provided for teachers to help them teach the IC.

The second finding suggests that the participating teachers felt that active learning about the new reform was not fully realised because they had only participated in introductory workshops; there were no follow-up workshops organised by the policy makers and the MoET. They conceded to be struggling in the classroom implementation of the IC due to the limited CPD support that they had received from the MoET. This finding does not fulfil what Desimone (2009) indicates for effective CPD. Active learning is about teachers actively learning new reforms by fully participating in the training or professional development programmes. Rather, they match the findings of Porter, Fusarelli and Fusarelli (2015) from Botswana who indicate that the teachers and curriculum designers have a different understanding concerning the implementation of reform. A misunderstanding about the curriculum has led to a mismatch between pedagogical practices and the expectations of the curriculum designers in schools. In order for the CPD to have a constructive effect on both the teachers and the learners, it is necessary for teachers to be given the opportunity to develop all the necessary knowledge elements such as subject matter content and technologies that promote high teaching standards. The teachers interviewed in this study attributed their limited preparation for IC implementation to little training and difficulties in the interpretation of the IC by both the CPD facilitators and the teachers. Added to this, the participants indicated that they are still faced with challenges after attending cluster workshops organised by the teachers themselves. It seems that they needed further training workshops facilitated by external stakeholders from the MoET. Evidence from this study shows how the teachers struggle with some aspects of the curriculum differentially. This is in line with Allen and Penuel's (2015: 136) findings: "*Some teachers were able to manage ambiguity, uncertainty, and perceived incoherence productively, while others foreclosed on deep and sustained sense-making*".

CPD participants need to have adequate time to comprehend the IC in order to obtain positive teacher learning outcomes (Du Plessis, 2013). It is further stated that more time is needed in order to understand the reforms (Phasha et al., 2017). In this study the issue of limited time to engage the teachers in CPD activities was also highlighted. The third finding reveals that the participating teachers indicated a lack of coherence about the IC; teachers struggled in the classroom due to lack of support from the MoET, especially because there were no follow-up workshops. They indicate that they relied heavily on their prior knowledge for the sense-making necessary to interpret the policy signals. Sense-making, according to Weick (2009), gives teachers something to hold onto in order to keep fear at a distance. The teachers in this study said that they were confused and indicated that they did not teach the new curriculum, as the policy suggests, due to lack of support. These findings do not support what Desimone's five-featured conceptual framework suggests for effective professional development programmes that enhance teaching practices. This paper corroborates the findings by Taole (2013) which indicate that education inspectors should supervise teachers in the process of reform implementation, because monitoring and support make sure that a new curriculum is successfully implemented. This implies that follow-up and monitoring support programmes for some of the Lesotho primary school teachers are needed while they implement the IC. Coherence of teacher learning through CPD has to be facilitated and monitored throughout the implementation process in order to effectively promote change in classroom practices (Desimone, 2011). This point indicates that if there is no constant collaboration and peer support among teachers due to limited opportunities, *"that are grounded on the defined principles of what constitute CPD for teacher learning activities"* (Tsakeni, 2015, p. 298), then the reform implementation process will pose a threat of resistance.

The fourth finding is that the participating teachers had the perspective that they had failed to acquire all the necessary IC knowledge and skills due to the limited time provided for CPD activities, thus they often relied on their own sense-making in order to justify the decisions that they made regarding how to implement the IC (Weick, 2009). 'Sufficient duration' in this context refers to the time spent on CPD regardless of the length of the innovation training, as long as they are going to benefit the teachers' understanding of all the aspects of the innovations (Desimone, 2009, p. 184). This point indicates that teachers should be offered CPD until the objectives of reforms are realised so that implementation of the reforms can be successful. Teachers, as the agents of change in schools, should be provided with the relevant knowledge and skills regarding the reforms so that implementation may succeed.

The fifth finding is that all the participants pointed out that there was little or no regular professional development activities that promoted meaningful teacher collaboration. Thus, the participating teachers' understanding and practice of this curriculum was largely influenced by

their personal attitudes and understanding of the previous curriculum. Although teachers tried to meet in cluster workshops to discuss the challenges that they faced as they implemented the IC, it seemed they could not resolve these challenges without extra support. Teachers therefore relied on their prior knowledge to make meaning of the IC curriculum. Without proper learning during professional development, teachers' sense-making can cause confusion about the CAP objectives and how to implement the IC. It is indicated that when many teachers are engaged with an improvement, they should learn it jointly, discuss it and watch it being moulded in cooperation, then they participate cooperatively and collaboratively (Desimone, 2009). This indicates that when teachers share information and abilities acquired from CPD programmes that they have attended, there is a greater likelihood that it could positively influence their teaching practices and improve the learners' outcomes. Hochberg and Desimone (2010) elude 'collective participation' of a number of teachers from the same school who participate in the same CPD activities. This was not the case with the Lesotho primary schools.

The sixth finding is that the participating teachers participated in week-long introductory workshops, which were facilitated through the cascade model and were followed by quarterly cluster workshops. However, the teachers perceived the workshops provided for them as insufficient. This finding is observed in Karalis (2016), indicating that teachers should be provided with CPD programmes that enable training to take place in stages with monitoring mechanisms in place. This is so that teacher learning progression can be well observed. If not, teachers may rely on sense-making based on prior knowledge and teach the IC in the same way as the previous curriculum. Lee (2011) suggest that teachers should be provided with different forms of CPD rather than a one-size-fits-all approach to teacher training, which seems to be the case with the ones offered to Lesotho primary schools. The most effective CPD programmes are those that approach change in a gradual and incremental fashion, not expecting too much at one time but facilitating and monitoring teacher practice through support structures to enhance the desired learning outcomes (Shriki & Lavy, 2012).

The seventh finding shows that the participating teachers were not supplied with the relevant resources and teaching materials to refer to and use, this as they put new skills and new knowledge acquired from the training sessions into practice. As a result, they found it hard to use the limited skills and knowledge due to the unavailability of teaching and learning materials. This implies that teachers worked with very little to interpret and make sense of the IC in order to respond to it (Gawlik, 2015). That is, the teachers made-sense of the IC by constructing reality through the creation of meaning out of their prior knowledge, experience and beliefs (Spillane & Anderson, 2014). The absence of teaching and learning materials seems to be a big challenge that hinders the implementation of new knowledge and skills

acquired from the training. This finding is similar to Magudu's (2013) observation which suggests that teachers struggle to implement the IC due to inadequate grounding in the IC and that they lack resources (Magudu, 2013). Another similarity is observed, in Yoshimoto (2015) who explored English as foreign language (EFL) student teachers' perspectives and experiences of their CPD. It was found that the EFL student teachers' PD experiences were undermined by inadequate support from the instructors. Thomas (2013) argues that the IC requires the use of various resources while Singh (2012, p. 598) suggests that "providing essential materials allows the teachers to focus their attention on teaching the learners rather than tracking down materials they do not have".

7. Conclusions

This qualitative study used multiple cases to explore teachers' perspectives on CPD for the implementation of the IC in Lesotho primary schools. This study sought to understand the teachers' perspectives of the CPD experience for the implementation of the IC. The study contributes case-study insights and knowledge on teachers' perspectives on the CPD programme aimed to help them in the implementation of IC in primary schools. The study findings show that areas of CPD for the implementation of IC in Lesotho, according to teachers' perspectives, could be improved. The teachers indicated that more could be done to increase the frequency of PD workshops that (1) have a focus on content and pedagogical development, (2) are designed for the teachers' learning needs, and (3) include the resources that teachers need for classroom practice. The kinds of CPD provided for the primary school teachers were not coherent, were infrequent and did not maximise opportunities for active learning, collaboration and content learning as espoused by Desimone's five-featured framework (2009). The result was that the teachers used their own inadequately changed beliefs and knowledge to implement the IC prescribed by CAP. Teachers make sense of new curricula by constructing reality through the creation of meaning out of their previously acquired knowledge, beliefs and practices (Spillane & Anderson, 2014). Hence, the need for better-structured CPD programmes for teachers so that they can continuously develop professionally in order to successfully implement the IC.

8. Recommendations

Teachers' views and understanding of CPD need to be taken into consideration because they are the vehicles of transformation. Therefore, it is crucial to provide teachers with CPD programmes that take into account the teachers' learning needs as they arise during the implementation of a new curriculum. This study suggests that the MoET should monitor and evaluate the CPD programmes on a regular basis.

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Article 2

The influence of continuous professional development activities on the teaching of the integrated curriculum in Lesotho

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Abstract

Continuous professional development (CPD) is described as the lifelong education of professionals after their initial registration and admission to the profession; on specialized knowledge, skills, attitudes and ethical and moral values. This qualitative study used sense-making theory (SMT) and the Desimone framework for effective professional development to explore the influence of CPD activities on the teaching of the integrated curriculum from teachers' perspectives. Data were collected through document analysis, semi-structured interviews and lesson observations, with four participants purposively selected from Leribe and Berea districts in Lesotho. Emerging data were analysed using thematic and descriptive content analysis techniques. The findings of this study shows how the CPD programmes influenced the learning of the integrated curriculum (IC) classroom practice, which in turn influenced how the teachers implemented the curriculum. However, what the teachers learnt during CPD failed to assist them to overcome some contextual factors such as lack of materials. Their prior knowledge stood in the way of the implementation of learner-centred approaches, the integration of Information and Communication Technology (ICT) in teaching and learning and the use of integrated continuous assessment in the classroom. The CPD should be designed to have a greater influence on classroom practice.

Keywords

Continuous professional development, Effective professional development, Integrated curriculum training, Teachers' perspectives.

1. Introduction

It is observed that whenever a reform is introduced in schools there is a need for appropriate training and support for the teachers through CPD programmes (Phasha, Keshni & Beckmann, 2017). The effective CPD programmes are those methods that transform teachers step by step in an incremental style, without anticipating much to be observed immediately, but facilitating and monitoring teachers' practice through

support structures to enhance the desired learning outcomes (Shriki & Lavy, 2012). This study explored teachers' perspectives on the influence of CPD activities on their classroom practice. The present researchers sought to understand how the CPD programmes help the Lesotho primary school teachers to implement the IC. This study hopes to contribute further insights on the influence of CPD programmes in the implementation of IC reforms in schools.

1. Background

The IC was enacted after the Curriculum and Assessment Policy (CAP) was piloted in 2012 in Lesotho and was first put into practice in 2013, commencing with the foundation phase (pre-school, grades one to three) (Raselimo & Mahao, 2015). It is indicated that the IC is “*a trend of modern teaching approach and is a means by which learners can develop deep knowledge structures that are connected with one another*” (Nam, 2019, p. 2). However, “*to effectively teach IC, teachers have to have adequate knowledge in various subject areas*” and to improve it from time to time (Raselimo & Wilmot, 2013, p. 3). The form of assessment that comes with the IC is continuous assessment (CASS). Khechane (2016, p. 68) argues that factors such as “*lack of clarity, lack of resources, large class size, increased workload and time constraints*” hinder the implementation of CASS in Lesotho. The challenges that seem to hinder the implementation of CASS in school are not only prevalent in Lesotho but are also observed in other countries. For example, in the study carried out in Zimbabwe by Kapambwe (2010, p. 104), teachers indicated that the “workload became higher as they were required to mark and keep records of the progress of all learners”. Raman and Yamat (2014) stated that it is hard in a large class to know individual learner's strengths and weaknesses. Therefore, there is a need for CPD to capacitate teachers with relevant skills to use CASS in the class. This study contributes insights on primary teachers' perceptions of the influence CPD has in the classroom in the context of IC implementation.

Research question

How do teachers perceive the influence of CPD activities to be on classroom practices when implementing the integrated curriculum?

2. Literature review

The influence of continuous professional development activities in educational innovations

The complexity of curriculum implementation and how it is related to teachers' CPD has been explored in different contexts. Schleicher (2011) argues that how CPD activities improve teachers' quality is dynamic and continuous throughout a teacher's career. This implies that although CPD activities are regarded as tools that promote effective teaching practice, their effectiveness varies largely with individual teachers. William (2013), however, generally views CPD as an important factor that positively influences teachers in classroom practice and enhances learners' achievement. For example, Gudmundsdottir and Hatlevik (2018) argue that effective PD programmes entail the aspect of ICT skills acquisition. Therefore CPD activities should include practical sessions on the exemplary use of ICT.

The IC advocates for learner-centred as opposed to teacher-centred approaches. CPD activities help teachers to adopt new roles such as the use of learner-centred approaches. The teacher's new role of a facilitator is "geared to help learners achieve educational goals that are considered indispensable in acknowledging their society" (UNESCO, 2012, p. 6). Gates and Gates (2014) revealed that teachers are of the view that many of the CPD activities are simply not working out for the benefit of teachers. Teachers often view such CPD offerings as irrelevant, ineffective and not connected to their core work of helping learners learn; namely, because they failed to help them use CASS appropriately. CPD activities should be structured in a manner that is relevant to the individual teacher's needs. It should not be a one-size-fits-all.

3. Theoretical framework and Conceptual Framework

This paper combined SMT and the Desimone five-featured conceptual framework for PD to explore teachers' perspectives on the influence of CPD on their classroom practice. These two frameworks were used to explore teachers' perspectives on their different experiences of how the CPD programmes that they had attended for the implementation of the IC influenced their teaching practice. SMT is essential in the processes of reform implementation because "implementers must figure out what a policy means and how it applies in order to determine how it is used, then a cognitive framework that unpacks the ideas that implementers construct from reform proposals is needed" (Spillane et al., 2002, p. 49). Desimone's (2009) five-featured framework for

effective PD symbolizes the connections between the critical features of professional development, teacher knowledge and beliefs, classroom practice, and learner outcomes that are working together (Mohan, Lingam & Chand, 2017). These features are (a) “content focus, (b) active learning, (c) coherence, (d) duration and (e) collective participation” (Desimone, 2009: 184). The study conducted by Main and Pendergast (2015) affirms that the Desimone five featured framework for effective CPD has shown to be useful in guiding the CPD providers involved in the study to improve their practice and deliver more effective CPD. This framework is therefore useful to guide CPD programmes for teachers, mainly in the process of reform implementation.

4. Methodology

This qualitative study adopted the Interpretivism paradigm because the participants’ voices and experiences were used as data sources in order to explore the teachers’ perspectives on the CPD programmes that they participated in, regarding the implementation of the IC in Lesotho primary schools (Creswell, 2014). Purposive sampling was used to select the four schools and the four Grade 2 primary teachers that participated in this study (one teacher from each school). Document analysis, semi-structured interviews and lesson observations were used (Creswell, 2014). Lesson observation was used in order to assess the extent to which teachers used learner-centred approaches, integrated ICT, implemented CASS and the challenges that they encountered as they implemented the IC in their classrooms. The interviews were audio-recorded and transcribed verbatim into written text. Interviews gave the researcher a chance to get deeper insights into the teachers’ perspectives on how CPD activities influenced their classroom practice when implementing IC. A mixture of content, thematic and inductive analyses was used to analyse the data collected from document analysis (of the policy documents and teachers scheme and lesson plan books), semi-structured interviews and lesson observations (Saldana, 2016). All the teachers who participated in this study signed the informed consent form to demonstrate their willingness to participate in the study (Creswell, 2014).

5. The Findings

In this section, we discuss the major findings that emerged from the data collected from document analysis, lesson observations and semi-structured interviews.

6.1 Theme 1: Teachers' perspectives on the use of learner-centred instructional strategies in implementing the IC

The IC advocates the use of learner-centred teaching strategies and discourages the overuse of teacher-centred approaches (Raselimo & Mahao, 2015). However, the lessons observed revealed that teachers were still using teacher-centred methods of teaching. For example, when Mrs Green presenting the lesson instruction from the integrated part on the concept/topic of “ho Lumelisa le ho araba ka nepo [appropriate greetings and responses in Sesotho]”, she often carried out most of the activities while the learners' roles were to observe yet she mentioned that she was trained to use learner-centred approaches although she hardly used them in teaching:

I was trained to use the learner- centred approaches to teach IC...

In the same manner, Mrs Yellow affirmed that the IC training and cluster workshops helped her to use learner-centred approaches. However, it is not easy to use them due to learners' background:

The challenge that I face with learner-centred approaches is that there is no active participation because of the learners' background.

Similarly, Mr Red indicated that he was trained to use a learner-centred approach to teach IC and it is easy for him to facilitate learning in the classroom:

I was trained to use the learner-centred approach from the workshops and I understand it very well. It is easy for me to facilitate learning.

This story of Mr Red was evident in his lesson presentations. For instance, He tasked the learners to draw sets of ten members on the chalkboard and almost every learner was eager to go and draw. All the learners that were selected drew the set of ten members correctly. Active participation by the learners was observed with all his lessons.

In contrary, Mrs Orange's claims during the interviews did not match her lesson presentations as she indicated that she knew how to use the learner-centred approach:

I was trained to use the learner-centred method of instruction and I am using it to teach IC.

Unexpectedly, all her lessons that were observed show that Mrs Orange used a teacher-centred approach that is said to make learners the recipients of information. Mrs Orange performed all the activities whilst the learners acted as the recipients of knowledge. For example, when she taught about identifying pronouns using sentences written on the board, she said: “Today we are going to learn about subject pronouns”. The subject pronouns are the words that take the place of nouns and they are used when the pronoun is the subject of the sentence. She said: “Now, from these sentences on the board, identify the subject pronouns”. A few learners participated but their responses were mostly incorrect. She then showed the learners the pronouns by underlining all of them instead of underlining just one pronoun to set an example. Whenever the learners failed to follow the lesson instructions, she gave them the answers without letting them work on their own or in groups to help one another. By so doing, she compromised the development of the learners’ skills towards achieving the objectives as indicated by the policy and the IC curriculum.

5.2 Theme 2: Teachers’ perspectives on the integration of ICT and the use of learning materials

The IC aims to develop the “learners’ ability to apply knowledge to acquire some skills and to demonstrate the values and attitudes”, which they need in order to address the current and new situations in primary schools with the use of information and communications technology (ICT) (MoET, 2009, p. 9). However, the four teachers who were observed did not use or incorporate any form of ICT in their lessons. They used the chalkboard, prepared charts and read from text books. Table 1 gives a summary of the participants’ views about the use of ICT and other teaching materials.

Table 1: Interview extracts on the use of ICT and learning materials.

Pseudonyms	Extracts
Mrs Green	<i>I was not trained about the use of the ICT though the policy advocated for it. Even in the training the ICT equipment was not used.</i>

Mrs Yellow	<i>When teaching concepts that need ICT instructional modes, we rely only on written theory and compromise on practice. Sometimes I end up skipping some of instructions that need the use of ICT materials.</i>
Mr Red	<i>I was not trained to use ICT in class. Although I was not trained to use ICT, I use cell phones following the policy prescriptions.</i>
Mrs Orange	<i>At grade 1-3, [Grade 1-3 teachers], we were not trained to use ICT, but the policy needs the use of ICT such as the use of cell phones. I rely on theory because we are not allowed to go with our cell phones in class in my school.</i>

The information in Table 1 indicates that not all the participants were trained to incorporate the use of ICT, yet it is required by CAP for effective implementation of the IC. Therefore, the teachers referred to ICT in theory because of their lack of facilities and skills. This finding was evident from all of the lesson plans and also the observed lessons. Teachers could not supply the learners with the necessary skills because of limited practice and lack of teaching materials regarding the use of ICT.

6.3 Theme 3: Teachers' perspectives on assessment strategies in the context of IC classroom practice

The assessment policies indicated that teachers should use CASS that assesses the 4 competences in every lesson (MoET, 2013). Those competences include listening, writing, speaking and drawing. In attaining this, teachers were provided with assessment packages that clearly indicate how to assess and achieve the objectives. The lessons observed show that the participants relied mostly on oral and written forms of assessment taken from the learners' textbooks. For example, Table 2 is the assessment segment based on Mrs Yellow's lesson plan. It does not show the listening assessment criteria.

Table 2: Mrs Yellow's assessment segment from lesson plan IP

Objective 1: by the end of the lesson, the learners should have begun to Identify household utensils and tools.
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Objective 2: by the end of the lesson, the learners should be able to Identify household utensils and tools.

Lesson stages	Assessment criteria	Assessment method	Teaching materials
Introduction	Give the name of the utensils displayed in the textbook	Oral (speaking)	
Development	Draw and Colour-in drawings with appropriate colours	Writing and drawing	textbook
Evaluation	Written activity on page 8	written	

The teacher assessed two skills; oral and writing, although the lesson plan indicated drawing as another assessment criteria. Mrs Yellow indicated that it is not easy to assess all the skills in one lesson because of the time factor:

It is not always that I teach and assess students according to the prepared scheme of work due to the time factor.

Similarly, Mrs Green pointed out that it is hard to follow the prescribed assessment package due to the time factor and the large class:

It is not possible to assess all the skills in one lesson that could be possible for the day. The class of 65 students makes it difficult.

This implies that teachers adapt the guidelines and assess the learners according to how the lesson had been taught. In spite of the guidelines, the teachers make alternative assessment decisions following the flow of the lesson because of the different abilities of the learners. This was observed from Mrs Green lesson plan. The lesson ended without students being given the opportunity to write the numbers 1-100. The teachers spent the 40-minute lesson helping students to read from 1-100 from the chart.

In the same way, Mr Red mentioned that he is familiar with the assessment strategies that came with the IC but conceded that they were hard to apply in the classroom:

The challenge is that the assessment package guidelines assess only one learning outcome (LO) at a time yet I have schemed and taught several LOs as prescribed from the policy.

According to Mr Red, there is some kind of contradiction in the assessment package guideline and the scheme of work already prepared by the policy makers (national curriculum development centre [NCDC]) and the ministry of education for teachers to follow. However, Mr Red followed the assessment criteria and assessment methods from his lesson plans. Table 3 is an assessment segment from one of his lesson plans.

Table 3: Mr Red’s assessment segment from his lesson on NW

Objective 1: By the end of the lesson, the learners should have begun to draw a set of ten members correctly.			
Objective 2: By the end of the lesson, the learners should be able to draw a set of ten members correctly.			
Stages	Assessment criteria	Assessment method	Teaching materials
introduction	Teacher explains a member of a set	Listening	
development	Observe the demonstration; draw a set with ten members.	Oral (Observation), drawing.	Textbook, Sticks and stones
evaluation	Draw a set with ten members.	Written , drawing	

Mr Red instructed the learners to take out their counting sticks and stones and put them into bunches of ten. He went around and observed every learner and assisted those struggling to put ten stones and sticks together. He then concluded by showing the whole class how to make a set of ten members using sticks and stones. He finally evaluated his lesson by giving the learners a task of drawing sets of ten members in their books and he went around marking every learner.

Similar to Mr Red, Mrs Orange followed her lesson assessment criteria and assessment methods within 40 minutes. She assessed the learners by asking them

questions and requesting them to give the answers, identification of symbols drawn from the board and by giving learners an activity to write down, using the appropriate symbols, properly in their books. She marked the books of every learner. Mrs. Orange indicated her familiarity with assessment and the challenges involved:

The problem is that assessing many skills in one lesson is not easy because it is time consuming.

The case studies above show that there is existed mismatches and partial mismatches on the intended and the implemented curriculums in terms of the use of learner-centred approaches, use of ICT and assessment. None of the four teachers used ICT-based modes of instruction. The findings seem to suggest that despite the training received on the IC and CASS, the participating teachers chose how to implement and assess the curriculum based on their personal interpretations.

6.4 Theme 4: Teachers' attitudes towards the teaching of the IC and perceptions of challenges and opportunities

The evidence seemed to indicate that all four teachers tried their best to interpret and teach the IC accordingly. However, the challenges manifested in a lack of teachers' skills and teaching materials such as ICT facilities and overcrowding in the classrooms. As a result of the challenges experienced, the participants expressed frustration that resulted in negative attitudes towards the implementation of IC. Mrs Green from the government primary school noted that large classes result in teachers not implementing the IC as it is prescribed:

We have large classes that make me undermine the learners with different abilities and understanding due to teacher learner ratio which is 1 teacher to 60 learners.

Individual teachers react differently towards the teaching of the IC. As a result, the outcomes of the process of the IC implementation should be expected to differ from school to school. Mrs Yellow seemed to be discouraged by the increased load that came with the implementation of IC:

This is time consuming. Therefore, I feel discouraged. As a result, I fail to implement this curriculum as prescribed.

Mr Red seemed to be discouraged by the lack of materials although he considered himself to have the skills to effectively plan for the IC implementation:

...However the challenge is that we lack the relevant resources for the implementation of the IC. As a result, I struggle to teach some of the concepts that need ICT materials.

Despite the existence of the challenges, Mrs Orange reacted to them differently. She views the challenges as an opportunity to do what she likes, which is helping the learners:

I enjoy teaching the IC despite of some challenges. Because I like it I am patient with slow learners and take my time to assist each and every one of them.

How teachers perceived the IC influenced how they implemented it. Due to the large class and the time constraints, three of the teachers in this case study had negative attitudes towards the implementation of this reform. This shows that the training workshops did not fully equip the individual teachers with the relevant knowledge and skills to navigate the contextual factors in order to implement the IC. Mrs Green mentioned that:

I feel that dissemination workshop did not equip me well enough to facilitate the IC.

Mrs Yellow also mentioned that:

I wish that the government would provide us with more workshops to guide us all the way in addition to the cluster workshops that we attend.

Mrs Orange was of a similar view:

There is no monitoring and no follow ups. Even the cluster workshops do not help us solve some of the challenges that we face as we teach the IC.

However, Mr Red mentioned that the IC training has assisted him a lot:

I am able to facilitate the IC in the classroom. Workshops are very helpful because we share challenges and solutions for teaching IC.

The information provided by three of the participants in this study indicates that, although primary school teachers continue to attend the cluster workshops for the IC on a quarterly basis, teachers are still faced with some challenges in the classroom. One participant did indicate that the workshops helped him to facilitate the IC in the classroom. This implies that the continuing workshops that teachers attended as forms of CPD did not always equip teachers with all the necessary knowledge and relevant skills to carry out the IC implementation process effectively.

6.5 Discussion

This is a qualitative multiple-case study that explored teachers' perspectives on the influence of CPD activities on their classroom practices. Four key findings were revealed.

The first finding of this study is that although the participating teachers attended the CPD programme workshops in order to implement the IC as prescribed by the CAP, three teachers struggled to implement the learner-centred approaches such as group work, brain-storming, posing-a-problem, presentations, debate, role-play that lead the learner to develop content in the activities. One teacher did manage to use brain-storming, group work and posing-problem activities. This implies that those workshops did not equip teachers with all the necessary skills to facilitate learner-centred techniques of teaching (Mokhele & Jita, 2010). Similarly, the CPD programmes influenced the sense that teachers made on how to teach the IC because one teacher used learner-centred approaches while the other three teachers continued to use teacher-centred approaches where teachers impart knowledge to the learners. This is because individual teacher sense-making in policy implementation is closely related to the teachers' previously acquired expertise and experience (Spillane et al., 2002). These findings coincide with the findings from the study conducted by MacMath (2011) that indicates that teachers who implemented the IC are not competent enough to integrate it into the classroom, implying that the CPD programmes that they participated in insufficiently prepared them for teaching the IC. This means that the CPD programmes should be able to influence the teachers' sense-making and significantly transform the teaching practices (Gawlik, 2015).

Secondly, this study finds that the participants are not well trained to incorporate ICT in the teaching and learning process, yet it is required by CAP for effective implementation of the IC (Tonui et al., 2016). The participants referred to ICT only in theory because of the lack of facilities and skills. The CPD provided for the teachers and the lack of resources could not enable the integration of ICT into classroom practice. Thus, “teachers’ prior knowledge is a determinant for conceptualizing the policy prescriptions of the proposed curriculum” (Spillane et al., 2002: 349). This finding conveys the message that the teachers are not adequately prepared to implement the IC due to the kind of support that they are given (Fu & Sibert, 2017). This is similar to the findings of Woolf, Arroyo and Zualkernan (2011), which indicates that limited infrastructure, educational resources and lack of ICT skilled teachers hinder the integration of ICT in classroom. Consequently, the participating teachers’ perception is that the training and workshops offered to them for the IC had shortcomings because they were just told what to do without engaging in practical demonstrations of the use of ICT materials. Morris (2010) indicated that CPD activities aimed to help teachers integrate ICT in education should show teachers the available tools and how they can be used to support the delivery of the curriculum.

Thirdly, the study findings show that despite the training that the teachers received on the IC and CASS, the participating teachers still decide themselves how they will implement and assess the IC. Two of the participating teachers did not follow the prescribed assessment packages provided to them to assess the IC due to time constraints and large classes. However, two of the teachers managed to implement the planned assessment. These findings shows that the workshop training that the teachers attended did not fully equip individual teachers with proper skills and knowledge regarding assessment in the IC and how to handle the challenges of lack of teaching materials, big classes and time constraints (Mokhele & Jita, 2010). As a result, the participating teachers used their own sense-making to design other ways to serve as alternatives to those prescribed by the CAP (Spillane et al., 2002). This indicated that teaching experience influenced teachers’ assessment practice (Matovu & Zubairi, 2014). Kucharcikova and Tokarcikova (2016) argue that the IC implementation requires the use of participatory methods which are suitable for small groups of learners but pose a great challenge for large groups of learners. Consequently, large class sizes are a threat to the quality of assessment provided by

the teacher, since teachers are likely to provide ineffective feedback to the learners owing to a lack of time (Raman & Yamat, 2014).

Fourthly, the findings of this study show that CPD programmes differently influence participating teachers in their classroom practice. Three of the participants indicated that they encountered challenges in the classroom when teaching the IC while one participant indicated that the workshops helped him to facilitate the IC. The difference in perspectives may point to the need for an increased number of CPD workshops, as opposed to quarterly encounters provided for the participating teachers, for them to obtain a common understanding. Educational policy-makers seem to concentrate more on the desired educational change and thus neglect the means by which the anticipated change should be realized (Kasapoglu, 2010). As a result, the teachers' personal understanding of the IC and the teachers' sense-making shapes how they implement the reforms according to policy prescriptions (Tam, 2015). The findings of this study seem to indicate that CPD programmes that were organised to equip the participating teachers failed to prepare them to navigate contextual factors such as lack of materials, insufficient learners' prior knowledge necessary for implementing learner-centred approaches, the use of ICT and the use of CASS in the classrooms. Therefore, teachers' voices and experiences about the influence of the CPD programmes in the teaching of the IC should be taken into consideration, so that they can be organized in responsive ways that benefit them. The policy makers should consider the sense-making process in which teachers are actively engaged in the process of reform implementation in schools (Khechane, 2016).

7. Conclusions

This paper explored how four teachers perceive the influence of CPD activities on their classroom practices. The findings indicate some of the areas that constitute aspects of the content focus of a professional development programme that need to be attended to in the case of IC implementation (Desimone, 2009). The findings also show that the lack of relevant learning materials, time constraints and large classes hindered the process of the IC implementation and CPD should assist teachers in overcoming these challenges. The findings of this study contribute towards an understanding of how primary school teachers learn the content knowledge aspects of the IC and this may influence implementation in the context of Lesotho.

8. Recommendations

This qualitative case study recommends that in addition to providing CPD programmes for teachers there should be ways to collect data on the teachers' needs that can be used to improve the teachers' learning experiences. Monitoring programmes that assess and evaluate the effects and influence on teacher learning and change in classroom practice should be an integral part of CPD.

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Article three

**Professional development activities that shape teachers' perspectives on the curriculum project in
Lesotho**

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Abstract

This paper stems from the notion that the redesigning of effective continuing professional development (CPD) should be informed by teachers' perspectives. CPD is described as the lifelong education of professionals on specialized knowledge, skills, attitudes and ethical and moral values after the initial registration and admission to the profession. This qualitative study used sense-making theory (SMT) and the Desimone framework for effective professional development to explore how CPD activities had shaped the teachers' perspectives on the Lesotho integrated curriculum innovation. Data were collected through document analysis, semi-structured interviews and lesson observations, with four primary school teachers purposively selected from Leribe and Berea districts in Lesotho. Data were analysed using thematic and descriptive content analysis techniques. The findings of the study show that the teachers' perspectives of the curriculum project that were shaped by CPD, were their beliefs on the use of learner-centred approaches, their perceptions on the use of integrated assessment approaches, their attitudes towards the usefulness of the integrated curriculum and their beliefs on whether teacher development influenced learner outcomes. The study recommends that CPD should be designed to have a greater influence on teachers.

Keywords

Continuous professional development (CPD), Effective professional development, Integrated curriculum training, Teacher perspectives.

Introduction

Despite the fact that CPD programmes have been accepted generally as essential tools for the development of teachers, studies continuously identify the ineptitude of some of these programmes (Mokhele & Jita, 2010). This is because there are several forms of CPD that differ extensively in their structure (Desimone, 2009). This leaves a question mark about how something that can manifest so differently is commonly assumed to be good. There are factors that hinder the effectiveness of CPD and that differ from country to country and from school to school. Some limitations of the CPD programme such as using a one-size-fits-all approach to teacher training and using facilitators as the only sources of knowledge while ignoring teachers and beneficiaries (Lee, 2011). This study used a background of the implementation of the integrated curriculum (IC) in Lesotho to explore the nature of CPD activities using teachers' perspectives. This study explored how CPD activities for the implementation of the IC shaped the teachers' perspectives on the curriculum project that began in 2013 in Lesotho. The study gives voice to the teachers by eliciting insights of how CPD experiences shaped their understanding of the IC implementation. The study contributes to the literature on the perspectives that teachers have on curriculum projects after going through CPD programmes.

Background

Countries around the world carry out reforms in education systems and Lesotho is not an exception in this regard. One of the major reasons for educational reforms development worldwide is to respond to global patterns of educational change. The IC was adopted in order to promote the "practical application of concepts and skills in most subjects" in order to alleviate poverty, unemployment and disease and to promote self-reliance (MoET, 2009). The IC was enacted after the Curriculum and Assessment Policy (CAP) was introduced in 2012 in Lesotho. It was first implemented countrywide in

2013, commencing with the foundation phase (Raselimo & Mahao, 2015). It gradually moved to grades four, five, six and seven in 2014, 2015, 2016 and 2017 respectively.

It is acknowledged that the IC approach to teaching and learning promotes democratic values and learner-centred approaches, encourages life-long learning and promotes work-related competencies (Malik & Malik, 2011), (Raselimo & Mahao, 2015) which lead to the ability to solve practical problems and the striving for self-reliance (Brauer & Ferguson, 2015). The adoption of IC in schools engages learners progressively in learning and assessment, as opposed to examination-oriented curricula, which are judgemental and teacher-centred (Petersen, 2015), hence it provides an enabling environment for a more fruitful teaching and learning process to take place (Nhlapho, Moreeng & Malebese, 2019). However, the successful implementation of the IC relies heavily on the teachers' readiness and understanding of this new curriculum as well as on the available resources. For example, Nhlapho, Moreeng and Malebese (2019) indicate that "without adequate understanding, teachers think an IC is some kind of a teaching method, and so, continue to teach in out-dated, traditional ways, rather than using the IC as a new way of producing knowledge". These implementation challenges are prevalent in Lesotho, and impinge negatively on integrated teaching. Therefore, CPD programmes are highly needed in order to assist teachers in Lesotho. The study explored the CPD activities for the implementation of the IC that shaped the teachers' perspectives on the curriculum project in Lesotho.

Research question

How do the CPD activities for the implementation of the IC shape the teachers' perspectives on the curriculum project in Lesotho?

Literature

Teachers' CPD in context of national reform

CPD is defined differently in the literature. Remijan (2014) views teachers' CPD as training focused on improving teachers' performance and learners' outcomes. In this study, CPD is defined as any series of teacher training activities and life-long learning that improves teachers' knowledge, skills beliefs and attitudes for the implementation of curricula such as the IC in Lesotho. There are several factors that influence the effectiveness of CPD and its effects on teachers and learners' outcomes. These factors include the following, inter alia: "*the critical features of professional development, teacher knowledge and beliefs, classroom practice, and learners' outcomes*" (Ha, Baldwin & Nehm, 2015). In contrast, although CPD is put in place to develop teachers, the importance tends to differ considerably by individual and school context (Opfer, Darleen & Pedder, 2010). Teachers reported that they still face low access to supporting materials that should help them to implement reforms effectively, even though training is provided (Towers, 2012). All in all, teachers still face some challenges in the classrooms even though they participate in CPD (Ucana, 2016).

CPD in Lesotho

CPD is an important tool that enables teachers to successfully implement reforms in schools (Selepe, 2016). Therefore, CPD courses for teachers have been offered in Lesotho by different institutions and most of them have been run by the Ministry of education and training (MoET) (2009). The forms of CPD that were predominantly used in Lesotho are the cascade model of CPD and cluster workshops aimed at equipping teachers with the required skills and knowledge. Khechane (2016) further reports

that the CPD programmes were in the form of short training sessions, which were usually held during the school holidays and one or two teachers from each school participated. Surprisingly, these CPD programmes provided to teachers seemed to have the same effect as once-off workshops because of the long time that lapsed before follow-up sessions could be conducted. The above statement implies that teachers were provided with inadequate support to implement the reforms. Shelile and Hlalele [2014] articulate that *“the other challenge of CPD in Lesotho is an acute shortage of staff to offer CPD activities”*.

CPD and teacher change

Teachers are regarded as the agents of change in schools (Aihi, 2011). Their development and their perspectives should therefore be taken into consideration through their participation in various CPD activities. Atta (2015) defines teacher perspectives as teachers' attitudes, values and beliefs based on personal experience that helps them to interpret their teaching practice. Kuzborska (2011) indicates that there is a strong relationship between the teachers' beliefs and their classroom practices, although there is no distinction about how they influence one another. Park and Sung (2013) point out that the success of reform implementation relies on the teachers' acceptance of the reforms and their own principles as they are the ones who put reform ideas into practice (Park & Sung, 2013). Furthermore, teachers' attitudes and beliefs are other crucial factors that determine the success or failure of curriculum implementation. For instance, according to Donaghue (2003), teachers' beliefs serve as a guide for their teaching practice. In this regard, teachers' "beliefs about and understanding of any reform are recognised as essential in influencing whether reforms happen as intended and promote long-lasting change" (Fullan, 2008: 30).

CPD activities are important for classroom practice improvement and for improving learning outcomes. This is because CPD activities change teachers' beliefs of their teaching practice which in turn influences classroom practice (Guskey, 2010). However, based on the assumption that CPD programmes can change teachers' attitudes and beliefs, it is important to involve them in the planning sessions in order to make sure that there is alignment between the new strategies and the teachers' needs (OECD, 2018), Pedder's (2006) study reported changes in teacher attitudes and beliefs as a result of teachers having participated in CPD programmes. Although CPD is said to have the power to change teachers for the better, Guskey (2010) argues that it is the teachers' experience in the process of reform implementation that changes their attitudes and beliefs, but not the professional development per se.

Theoretical framework and Conceptual framework

This paper, informed by sense-making theory (SMT) proposed by Spillane, Reiser and Reimer (2002) and Desimone's (2009) (Desimone, 2009) five-featured framework of effective PD, aims to explore how CPD activities for the implementation of the IC shaped the teachers' perspectives on the curriculum project in Lesotho. Schechter *et al.* (2019) define sense-making as a process whereby people construct meaning by relating new information to their prior knowledge in order to act on it. Spillane *et al.* (2002) assert that "sense-making is not a simple decoding of the policy message but it is an active process of interpretation that draws on the individual's rich knowledge based of understanding, beliefs and attitudes". This shows that a connection exists between teachers' sense-making about reforms and their perspectives on the implementation of such reforms. The SMT is

“rooted in three aspects, namely; a) individual cognition/effect, b) situation/context and c) policy signals” (Spillane et al., 2002: 389).

Under individual cognition, it is clear that teachers’ perspectives about the reform are shaped and influenced by their prior knowledge, attitudes/beliefs, contextual factors and policy signals (Coburn, 2005). It is therefore argued in the literature that teacher’ attitudes and beliefs about classroom practice are drawn from their past experiences and this guides their interpretation of the reform (Coburn, 2005). The SMT provided a lens for an in-depth exploration of teachers’ perspectives on how the CPD activities that teachers participated in shaped their attitudes and beliefs for classroom implementation of the IC. The use of SMT enabled the researchers to explore teachers’ views and how they make sense of the CPD programmes for the IC implementation.

Desimone’ five-featured framework consists of two components. The first one involves identification of a set of core critical features for effective CPD. These features are (a) “content focus, (b) active learning, (c) coherence, (d) duration and (e) collective participation” (Desimone, 2009: 184). The second component establishes an operational theory for how the PD is assumed to work to influence teachers, instruction and learners (Desimone, 2009). This paper employed the second component that concerns an operational theory of how the PD is assumed to work to influence teachers, learners and practice. The second component reflects that teachers’ experiences from PD (with certain core critical features) result in changes of teachers’ knowledge and beliefs, which in turn foster changes in their instructional practices and improve learners’ outcomes (Desimone, 2009). Kang, Cha, and Ha (2013) affirmed that the framework by Desimone (2009) includes: (1) what effective PD is, (2) how it is supposed to affect teachers, instruction and learners and (3) the contextual factors that could impact the PD. According to (Desimone, 2009) and (Mokhele & Jita, 2010), this framework suggests a sequence of events from learning activities to changes in knowledge, beliefs, attitudes, practice and finally the learners’ improvement. In these CPD programmes, teachers are involved in the planning sessions after the programme organisers have conducted surveys to ensure that the new practices are well aligned with what teachers think would work better for them (Desimone, 2009). Pedder (2006) maintained that as a result of teachers’ participation in CPD programmes, they must have learned something and they may also have to undergo a change in beliefs. However, other internal characteristics may influence how teachers respond to change (Le Cornu, 2013). The combination of these two frameworks helped the researcher to understand the views of the teachers regarding how the CPD programmes that they received for the implementation of the IC shaped their perspectives.

Methodology

Research design

A qualitative interpretive paradigm was adopted in this study because it allowed the researcher to understand the individuals’ perceptions and insights of the world (Creswell, 2014) and to “*make sense or to interpret the phenomena in terms of the meanings people bring to them*” (Denzin & Lincoln, 2011).

The participants

Purposive sampling, one of the non-probability sampling strategies, was used based on the aim of this paper (Creswell, 2014). “*Purposive sampling is defined as an approach whereby participants are*

chosen because they hold and present relevant data that is needed for the study in order to obtain the richest data that may answer the research questions”(Creswell, Ebersohn, Eloff, Ferreira, Ivankova, Jansen, Nieuwenhuis, Pieterse, J., Pano Clark & Van der Westhuizen, 2010). Purposive sampling was found to be appropriate for this study because it enabled the researcher to select the participants who participated in CPD activities for the classroom implementation of the IC and who are currently engaged in the implementation of the new curriculum. The four participants selected were Grade 2 teachers from four different schools. One participant was selected from a school that is owned by the government (Mrs Green); one was selected from a church primary school (Mrs Yellow), one from a private school (Mr Red) and the fourth one from a community school (Mrs Orange).

Data collection instruments

Semi-structured interviews and non-participant classroom observations were used to collect the data used to address the research question of this study. A semi-structured interview of each participant was conducted before each lesson observation. The classroom observations lasted at least 30–35 minutes for two different sessions per participant (Creswell, 2014). A total of 16 lesson observations were conducted over an eight-week period. This translated into 4 lesson observations per participant. Semi-structured interviews were used to provide information about the teachers’ views on how CPD activities shaped their perspectives as they implemented the IC. These interviews permitted the interviewer to probe for clarification of their responses in cases where they did not give a clear response (Maree, 2016). This technique was appropriate for this study because it gave the researcher a chance to get an in-depth insight from the teachers by allowing an opportunity to make follow-ups on ideas and probe for teachers’ responses (Maree, 2016).

Data collection procedures

Data from the interviews were collected through the use of an interview protocol (Appendix 6) and an audio recorder. Thereafter, the audio-recording was transcribed into a written text which was coded, categorized and analysed for content, with the aim of identifying the themes into which the data fitted. The non-participant classroom observations were guided by a classroom observation protocol. The researcher only observed, recorded and took notes, but did not take part in the observed activity. Classroom observations were used in order to maintain the trustworthiness of this study because according to Johnson & Christensen (2008) “recording actual behaviour is better than obtaining reports of preferences or intended behaviour because people do not always do what they say they do”. The data collected through the classroom observations were compared to what the participants said they did in the classroom when they were interviewed.

Trustworthiness

For this qualitative case study, credibility and trustworthiness were maximised through member checks and prolonged engagement in the field (eight weeks). The participants were ensured of the confidentiality of the data that they provided and that their names were replaced with pseudonyms while transcribing the audio recordings (Creswell, 2013). The researchers received ethical clearance from the University of the Free State and the Ministry of Education and training (MoET) in Lesotho to conduct this research in the selected schools.

Data analysis

The data collected using semi-structured interviews and lesson observations were analysed using thematic content analysis (Ganon-Shilon & Schechter, 2019). The themes were built across a case analysis of the data collected from the four participants. Further inductive analysis processes were also used to identify the relationships between the CPD and participants' perspectives regarding the implementation of the IC (Saldana, 2016). The interview questions were formulated from the one main theme, which is the shaping of teachers' perspectives on the integrated curriculum implementation.

Similarly, the data collected using the classroom observations and the field notes were merged into interview transcripts and were then coded in order to generate the categories which were later assigned to the themes that were analysed using thematic content analysis (Ganon-Shilon & Schechter, 2019). The data was analysed based on the themes generated from the interviews and further analysed using an inductive analysis (Saldana, 2016), in order to identify the impact of CPD on teachers' perspectives on the implementation of the IC.

The Findings

The major predetermined theme was articulated as the shaping of teachers' perspectives on the IC implementation through the CPD programmes. The four perspectives that were demonstrated by the teachers were:

- (a) Perceptions on teacher knowledge to implement IC,
- (b) Teacher beliefs on IC assessment implementation,
- (c) Teacher attitudes on IC implementation and
- (d) Teacher perceptions on IC learner outcomes

Theme 1: Shaping of teachers' perspectives on the integrated curriculum implementation by the CPD programmes

Sub-theme 1: Perceptions on teacher knowledge to implement IC

The CPD programmes equip teachers with the relevant knowledge and skills regarding the implementation of reforms in schools. Mrs Green from GP School indicated that the kind of CPD programmes that she participated in were helpful because she acquired some new knowledge and skills on how to teach the IC and this changed the way she perceived the new curriculum:

I have acquired new IC knowledge and skills.

Mrs Green's view indicated that the CPD helped her to teach the IC as prescribed in the CAP, but surprisingly all of her lessons observed revealed a different story. She did not use learner-centred methods prescribed by CAP. Her teaching practice still matched the teaching of the previous curriculum that was dominated by teacher-centred approaches.

Mrs Yellow from CHP School had the same view as Mrs Green, she indicates that:

CPD programmes helped me to improve my teaching of the IC because they equipped me with teaching strategies and how to approach the learners.

Mrs Yellow was of the opinion that she was competent in teaching the IC according to the CAP but she did not use the appropriate teaching strategies proposed by the CAP. She tried to group the learners but not every learner participated. In the end the teacher-centred discourse dominated the lesson presentation. Mrs Yellow provided the answers for each group instead of letting each group present their findings so that members of the group could learn from each other.

The two extracts above imply that Mrs Green and Mrs Yellow used teacher-centred approaches as their mode of instruction instead of learner-centred approaches. Their teaching practice was still dominated by teacher-centred approaches that were not in line with the IC teaching strategies. These extracts contradicted their perceptions as they claimed to have gained an understanding of how to teach IC from the CPD activities.

Mrs Orange from CP school said that the workshops equipped her with limited skills regarding the implementation of the IC:

The workshops helped me to have few skills of integrating the learning areas from different windows and how to teach the IC using the appropriate teaching strategies.

The above view implies that Mrs Orange thought that the workshops did not fully prepare her to teach IC. This was evident from all the observed lessons that were dominated by teacher-centred approaches. She presented the lesson objectives and asked the learners about the previous lesson. From there she presented all the information and the learners were just the recipients.

Mr Red stressed the view that the CPD programmes played a vital role in changing the teachers' perceptions regarding the new curriculum:

...after attending the workshops several times, I then understood the teaching strategies needed to facilitate the IC learning.

Mr Red's story matched his teaching practice. He facilitated learning in all the lessons that I observed. He used brain-storming and group discussions quite often. He sometimes let the learners argue until they reached a consensus about the correct information on the concept being taught. He provided the conclusion and the assessment.

The stories from the participants indicated that the CPD programmes in the form of workshops helped them to develop their perceptions towards the teaching of the IC. However, the three participating teachers, when observed in the classroom, revealed that they were still using teacher-centred and not learner-centred approaches. Only Mr Red used learner-centred approaches.

Sub-theme 2: Teacher beliefs on IC assessment implementation

According to Donaghue (2003), teachers' beliefs enable them to implement the proposed changes. The teachers' perspectives were explored in order to understand teachers' beliefs about IC assessment techniques and how they influence their classroom practice (Farrell & Mom, 2015).

Based on how the teachers understand the IC assessment methods, Mrs Green indicated that the CPD programmes shed some light on the IC assessment methods but she felt it was not easy applying all these forms of continuous assessment:

The workshops really shed some light about the use of IC continuous assessment in the classroom but it is not easy to apply all forms of continuous assessment due to the time constraints.

In contrast, Mrs Green assessed the learners' performance following the intended lesson plan assessment method. The story of Mrs Green on the use of assessment indicated that although she believed that CPD had not fully equipped her with regards to the IC assessment methods, the lesson that was observed revealed that she did use the continuous assessment prescribed by the CAP. Similarly, Mrs Yellow followed her intended assessment methods as she implemented the IC in class, yet she believed that assessing different competences in one lesson was not that easy:

I am trained to use both summative and formative forms of IC assessment but I feel challenged by assessing different learner competences in one lesson.

Mr Red believed that he understood the IC assessment methods because of the professional development that he had received in the workshops:

The training workshop and cluster workshops enlightened me about the IC assessment methods and now I understand them and apply them in my teaching.

Mr Red's opinion was evident in all of the lessons of his that were observed. Mr Red followed the assessment criteria indicated from his lesson plans.

Lastly, Mrs Orange's assertion was that '*I am trained to use continuous assessment in class and I definitely use it in teaching the IC*'. Mrs Orange matched what she had said about using correct assessment methods in her observed lesson.

The three participants indicated that the CPD programmes had changed their beliefs positively because they were equipped with knowledge and skills that enabled them to implement the IC assessment methods according to the CAP. The fourth participant indicated that she still believed that she had challenges regarding the assessment of different competences in one lesson. However, all the participants followed the intended assessment methods of their lesson plans in the classroom. This set of findings shows how the teachers' perception of assessment was shaped by the policy signals and influenced their practice.

Sub-theme 3: Teacher attitudes on IC implementation

Teachers' attitudes shape or influence how they implement the reforms because they are not passive recipients of an innovation. The exploration of teachers' perspectives was made in order to gain some insight into the attitudes that the teachers had developed towards IC implementation owing to their participation in CPD.

The participant teachers demonstrated different attitudes towards the implementation of IC. Mrs Green mentioned that the CPD programmes changed her attitudes towards IC:

...the workshops helped me a lot because they gave some clarity on how it was going to be implemented.

Correspondingly, Mr Red had the same view that he benefitted from the cluster workshops and he implemented the IC according to CAP recommendations:

The knowledge and skills that I acquired from the cluster workshops automatically helped me to change my approach in implementing the IC.

Mrs Yellow had the same opinion that the workshops helped her to enjoy teaching the IC:

I have been trained to teach IC. I am now competent enough to teach it.

Mrs Orange had a different view from the other three participants. She indicated that she still struggled to teach the IC:

Even after attending the cluster workshops I find myself still struggling to implement the IC according to the CAP because of the limited resources in my school and because I have acquired limited skills....

Three of the participants indicated that they benefitted from the workshops and their teaching of the IC had changed. However, the other participant indicated that the CPD programmes had failed to change her teaching practice because she still struggled with the implementation of the IC according to CAP. This set of the findings implies that because teachers attended different cluster workshops that might be differently organised, they benefitted differently from them and therefore their attitudes varied significantly towards the IC implementation. All the lessons observed showed that all the participants had developed positive attitudes towards the implementation of the IC in terms of planning and teaching.

Sub-theme 4: Teachers' perceptions on IC learner outcomes

The teachers' perceptions of learner outcomes were explored with regard to the implementation of learner-centred teaching as a result of participation in CPD activities. Mr Red indicated that he was happy to have participated in CPD and he is competent in teaching IC as prescribed:

I engage the learners and let them find information. Therefore, I obtain good results. The learners seem to understand because they take control of their learning.

Mr Red's view was evident in his observed lessons; these indicated active learning through the learners' participation. The learners were able to ask and answer the questions in class. They shared knowledge in groups as well as through other learner-centred techniques (cf. sub-theme 2, Mr Red's extract).

Mrs Green indicated that the level of the learners' participation differed depending on the different learning outcomes being targeted. Some learning outcomes were complex while others were simple:

The variation of learning areas motivates the learners as they cater for every learner's ability and encourage learner participation except for the concepts that are complex and high for the level of the learners.

Mrs Green’s view indicated that the learners did not actively participate when they were learning complex concepts and that they needed the use of both teacher-centred and learner-centred teaching. For example in the extract below:

Teacher’ action: *ask the learners to explain the meaning of love and kindness (she repeats the question several time moving around in the classroom)*

Learners’ actions: *(they were passive and silent)*

Teacher’ action: *Repeats the question switching codes to Sesotho (“lerato le mohau keng?”)*

Learners’ actions: *(puzzled) still not responding*

To resolve the above situation the teacher decided to use teacher-centred explanations as shown below.

Teacher’ action: *Love and kindness is shown by “caring, sharing, friendship, helping and playing” so when you share your lunch box with others you show love and kindness. If you lend others your belongings such as pencils and rubbers, that is love and kindness...*

The lesson was dominated by teacher-centred teaching methods and an outcome of learner participation was hardly achieved. Mrs Green’s extract implies that learner outcomes varied based on the different concepts being taught. Similarly, Mrs Yellow indicated that it was not always possible for her learners to participate actively all the time:

When teaching some concepts, the learners are able to gather the relevant information to facilitate learning while they fail to do so with other concepts.

Table 1 shows an example of one lesson objective segment. During that lesson presentation, I observed that the learners were not able to sort the collection of small animals according to the body parts and it resulted in teacher-centred teaching where the learners acted as empty vessels and recipients of knowledge.

Table 1: Mrs Yellow’ lesson plan objectives segment

<p>Objective 1: At the end of the lesson, the learners will be able to sort small animals according to colour, size and similarity in body parts.</p> <p>Objective 2: At the end of the lesson, the learners should begin to sort small animals according to colour, size and similarity in body parts.</p>

Mrs Yellow’s story indicated that is a need for further training organised by the MoET and NCDC to clarify some of the concepts so that teachers can fully understand the IC and as a result learners’ outcomes may improve. Mrs Orange highlighted how differently she experienced workshops organised by MoET and cluster workshops. She said that the MoET training workshops had failed to train her to teach the IC but she felt the cluster workshops had done their job:

It is only the cluster workshops that helped me to teach the IC that led to improved learner outcomes because we help one another with both theory and practice. I can therefore afford to follow the IC teaching methods.

The participants' stories reveal a variety of views regarding how the CPD programmes influence the learners' outcomes. Two participants highlighted that in the training workshops the facilitators discussed how to teach the IC whilst the cluster workshops had assisted by actually showing them how to teach the IC. One participant elaborated that the training workshop had failed to teach her how to teach the IC hence she had relied on the cluster workshops, which according to her, were not sufficient to help her improve the learners' outcomes. Mr Red, however, had different experiences. He indicated that both the training and cluster workshops helped him to implement the IC according to the CAP and he had obtained good results. This set of findings implies that although all the participants attended the IC training workshops and different cluster workshops, they had different views on how these programmes changed their perceptions towards the implementation of the IC according to the CAP prescriptions.

Discussion

This is a qualitative multiple case study using semi-structured interviews and lesson observations that explored CPD activities for the implementation of the IC, which intend to shape the teachers' perspectives on the curriculum project in Lesotho. Four perspectives were identified as the main findings of the study and contribute to the insights and knowledge of the role of CPD programmes in shaping teachers' perceptions regarding the implementation of IC reforms in schools.

The first finding is that although the four participants indicated that the CPD programmes assisted them with the knowledge to implement IC, the classroom observations revealed that three participants were still using teacher-centred approaches apart from Mr Red who used learner-centred approaches. This finding seems to align with the SMT's postulation that teachers' understanding of the "policy intentions is an individual, social as well as contextual matter" (Spillane, Reiser & Reimer, 202: 349), this as evidenced in the gaps between teacher interpretations and the intentions of the policy. This finding seems to show that although the CPD programmes may influence what the teachers claim about what they ought to know about the curriculum implementation, they display gaps in the practical implementation of the IC. The inefficiencies are manifested in their over-reliance on teacher-centred approaches. However, one teacher's claim of having the knowledge to implement IC effectively matches what he did in the classroom. The implication from this finding seems to point to the importance of the content component of the PD framework by Desimone (2009). It seems that using learner-centred approaches should be part of the content that needed to be emphasised. Therefore, the shaping of how teachers perceive their knowledge to implement the IC varies and shows that the CPD programme does not adequately enough change the teachers' perceptions on the implementation of the IC.

The second finding revealed that three participants indicated that the CPD programmes had positively changed their beliefs because they were equipped with knowledge and skills that enabled them to implement the IC assessment methods according to the CAP. The fourth participant indicated that she still believed that she had some challenges with regard to the assessment of different competences in one lesson. All the participants followed the intended assessment methods of their lesson plans in the

classroom. However, it seems that the use of different types of assessments in one lesson is one of the content areas that must be emphasised during the CPD activities. These sets of findings imply that individual teachers have different beliefs regarding the IC assessment methods that influence their teaching practice. The findings also indicate that individual teachers make sense by constructing reality through the creation of meaning coming from their prior knowledge, experience and beliefs (Spillane & Anderson, 2014). The opinion of the participating teachers is that CPD benefitted them in terms of outlining how assessment should be conducted. The only challenge was for them to implement all the four types of assessment in one lesson. They realised there were benefits for the transformation of their teaching practice with regard to the use of the prescribed assessment methods. Prescription of strategies as opposed to cases where there are no clear prescriptions seemed to be very influential for the teachers' beliefs and perceptions. It also seemed it would be easier to emphasis prescribed assessments in the CPD activities. Consequently, as (Gilakjani, 2017) suggests the beliefs guided the teachers' teaching practice which in this case was assessment in the context of IC. Once beliefs and perceptions have been allowed to form, they influence teachers' classroom behaviour, decision-making and interactions with the learners. Every individual teacher is unique. *"Teachers' beliefs, values, practices and interests are normally not taken into account by policymakers and this hinders implementation of reforms because teachers may not understand the foundations for curriculum change"* (Glatthom, 2000). Teachers' beliefs have to be taken into consideration whenever CPD programmes are organised. Le Cornu (2013) indicates that teachers' beliefs have an impact on their resilience in solving the problems that they encounter in teaching, especially when using the forms of assessment methods designed to measure the attainment of learning outcomes. It is generally asserted that CPD activities develop teachers' knowledge, teaching skills, attitudes and beliefs that help them to enhance their classroom practice (Van Kuyjk, Deunk, Bosker & Ritzema, 2016). For instance, teachers' beliefs enable them to make decisions about their classroom teaching and learning as indicated (Kuzborska, 2011) because beliefs play a key role in teachers' classroom practice and their professional development. Teachers' perspectives should be shaped carefully and successfully. If not, teachers may continue with their former practice in the belief that it is a new practice (Timperley, Wilson, Barrar & Fung, 2007).

The third finding is that three participants seemed to have a positive attitude towards the teaching of the IC while one expressed misgivings about it, possibly due to their CPD experiences. Besides the misgivings expressed by one of the teachers during the interviews, all the observed lessons showed that the participants have developed positive attitudes towards the implementation of IC in terms of planning and teaching. They designed their lesson plans based on the syllabus and followed them in teaching the prescribed content from the instruction stage to assessment. However, as indicated earlier, there was an over reliance on teacher-centred strategies. This finding implies that CPD programmes influenced the sense-making that teachers made in relation to the reforms (Spillane et, al., 2002). According to Desimone (2009) CPD should be comprehensive and holistic (coherent) by addressing the teachers' content needs, through active learning, collaboration and also that these learning experiences should be conducted continuously. The fact that not all the teachers felt the same about the teaching of IC suggests that the CPD activities influenced their perspectives differently possibly due to the contextual settings in which the central training and cluster workshops were conducted. As a result, the quantity and quality of the support that they received during the reform implementation influenced the quality of the policy implementation (Spillane et, al., 2002). The

participating teachers had positive intentions to implement the IC based on their sense-making, but sometimes they were inadequately prepared for its implementation (Dowden, 2014).

The fourth finding of this study revealed that the participating teachers had different views regarding how CPD programmes help them to teach the IC according to the CAP prescriptions and thereby to improve the learning outcomes. The evidence is that it was easier for the teachers to improve the learners' outcomes when they taught less complex concepts but it was more difficult to realise the positive learning outcomes with more complex concepts. The study concludes that according to the participating teachers' perspectives, the CPD programmes have both a positive and a negative influence on learning outcomes. These learning outcomes are related to active learning as prescribed by the CAP for IC. The teachers used sense-making to choose one option over another when they encountered some conflict between the expected reform objectives and their teaching practice, based on their beliefs (Gawlik, 2015). That is, teachers may construct meaning that either reinforces their pre-existing practices or rather focuses on the changes of the proposed reform (Coburn, Hill & Spillane, 2016). More importantly, one of the constraints was that the teachers were not trained to teach IC at university and therefore had challenges when putting it into practice (Harrell, 2010).

The findings imply that although the study participants attended the IC training workshops and regular cluster workshops (CPD programmes) for the implementation of the IC, the manner in which their perspectives of the IC are shaped by CPD varied. The CPD programmes changed their perspectives differently due to the different sense that teachers made about the programmes. That is, teachers' perceptions of teacher knowledge, beliefs, attitudes and learning outcomes in the process of the IC implementation were shaped differently - they were positive for some teachers but negative for others based on their sense-making.

Conclusions

The findings of this study contribute to the literature on how CPD programmes shape teachers' perspectives on new curriculum projects which in this case was the implementation of the IC. The findings reveal that CPD programmes had guided teachers' beliefs, attitudes (through sense-making) in ways that influenced the learners' outcomes positively. The perspectives on the areas indicated above may also serve as indicators to determine how to respond to teacher learning needs according to Desimone (2009) in terms of content learning, how teachers learn (actively or collaboratively), the frequency of learning sessions and development of coherent learning programmes.

Recommendations

The study recommends that the government should provide primary school teachers with effective CPD programmes that consider the teachers' curriculum sense-making, beliefs that guide the implementation and attitudes towards the IC. There should be follow up programmes that monitor and evaluate the influence of CPD programmes in all the schools involved with the IC implementation.

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Section 3: Discussion, conclusion and implications

This section presents a summary of the findings that are discussed in the previous sections, linked to the research questions. The researcher therefore draws conclusions in this section.

3.1 Discussions

This study used the Desimone (2009) framework for effective professional development (PD) and sense-making theory (SMT) to explore Lesotho primary school teachers' perspectives on the CPD opportunities related to the IC and their influence on classroom practice. Desimone (2011) indicated that Desimone (2009) five-featured conceptual framework enhanced the implementation of reforms in schools. SMT was used because sense-making suggests that teachers use their prior knowledge and experiences to interpret and enact their meaning of reform (Spillane, Reiser & Reimer, 2002). The findings of this study show that the participating primary school teachers felt that CPD programmes had limitations in providing them with enduring knowledge and skills to implement the IC as required by the CAP. As a result, teachers struggle to implement learners-centred approaches, the use of the ICT and the use of CASS in the classroom. Again, teachers' perspectives regarding the CPD programmes that they participated in varied implying that each individual teacher had a specific development. This was due to the different sense that teachers made in addition to their varying backgrounds, beliefs, attitudes and contextual challenges regarding the IC implementation process. The findings of the study point to the need for the CPD programmes to be centred on the needs of the teachers and for teacher learning to be more active. Given that the teachers' curriculum implementation needs are context-based; the teachers should engage in school-based professional development to augment the quarterly cluster meetings. The school-based professional development activities may improve active learning, the frequency of engagement, coherence of activities and collaboration among teachers. The study findings were briefly accounted in three articles which are discussed in section 2 above. The articles provided insights into the Lesotho primary school teachers' perspectives regarding the CPD programmes that they attended for the improving their implementation of the IC and how these programmes influenced their teaching practice.

Below is an account of how the three articles answered the research questions.

3.1.1 Research question 1: Teachers' perspectives on their professional development experiences for the implementation of the IC.

What are the teachers' perspectives on CPD experiences for the implementation of the IC?

To answer research question one, I have drawn on the information from article one.

Teachers are regarded as the catalysts of change as they are the ones who implement reforms in schools (Aihi, 2011). This indicates that they should be recognised in all the steps of curriculum reform implementation. This should be done from the designing of the reforms, the designing of the training programmes and in the monitoring and evaluation of such programmes. This design might enable the policy makers to effectively align the reforms to individual perspectives of what could work best for them in order to successfully implement the new curriculum in schools. Successful change in education does not usually take place without some form of teacher professional development (Abad, 2013). The new curriculum "requires that teachers learn new roles and ways of teaching that translate into long-term developmental processes which require them to focus on changing their own practices" (Mokhele, 2011: 20). Therefore, CPD is an important tool that may be utilised at any stage in order to successfully implement the reforms (Mokhele & Jita, 2010).

As discussed in article 1 (see pages 61– 83 in this report), the study explored the Lesotho primary school teachers' perspectives of the CPD activities that they participated in and that they needed from the inception of the integrated curriculum (IC) implementation. The main question that informed the study was: *What were the teachers' perspectives on the professional development experiences for the implementation of the IC?* Teachers may have different views and attitudes towards the CPD activities that they participated in and may perceive them differently. The different perceptions influence how they implement the IC (Massey & Kregor, 2015). The first research finding presented in the first article (pages 60-83) revealed that the participants did not benefit equally from the CPD activities for IC. The finding suggests that the participating teachers had different perspectives regarding how CPD activities, organised to help them to implement the IC effectively, benefited them. This

finding indicates that although the teachers participated in the IC training and in the cluster workshops, these activities occurred in different settings for different groups of teachers and therefore the perspectives they develop may be contextual. What was common was, they experienced limitations in their attempt to teach the IC, possibly because the CPD programmes did not effectively address the contextual and individual needs. The literature indicates the need to consider teachers' views for their own professional development (Gokmenoglu & Clark, 2015). Most developing countries do not seem to adhere to this recommendation. Mokhele and Jita (2010: 1765) and Mokhele (2015) argue that "*teachers are the key actors in CPD and should be involved in the decisions made by the authorities*". As teachers are the ones involved in the implementation of reforms, they should be given the chance to decide on the kind of CPD activities that they think would work best for them. Teacher involvement may enable teachers to shape the CPD programmes in such a way that they benefit the teachers as they implement the reforms. Zdonek (2016) suggests that a considerable time is needed for teachers in order for them to reflect on improving their classroom practice.

The second finding of this study indicated that active learning about the reform has not been fully achieved because the participant teachers only participated in introductory workshops and in clusters; there were no follow-up workshops from the MoET and NCDC. Even in the training sessions offered by the Ministry of Education, the trainers seemed to have different understandings of the IC. This led to confusion on the part of the teachers. In addition to the cluster workshops organised by the neighbouring schools, Lesotho Primary schools followed the Cascade Model of professional development. The training was intended to assist the teachers to attain the objectives of the new curriculum. The teachers interviewed indicated that the workshops that they attended were led by teachers who were trained by the policy-makers in order to implement the IC. In other contexts, the Cascade Model has failed to assist teachers to successfully implement reforms in schools (Mokhele & Jita, 2010; Ravhuhali, Kutame, Mutshaeni, Mokhele & Maluleke, 2017). This challenge seemed to hinder the effective implementation of the IC. The core components of the workshop may have been lost through the cascade process.

The third finding reveals that the participating teachers indicated lack of coherence for the IC because MoET did not make any follow-up after the cascade training in order to measure the effectiveness of the CPD programmes and to find out whether the teachers adhere to the objectives of the new curriculum. The participant teachers were confused and they indicated that they did not teach the new curriculum effectively due to lack of support and resources. The literature indicates that one of the challenges of CPD programmes is a lack of support and monitoring of such programmes (Desimone, 2011; William, 2013). Zdonek (2016) also states that one of the challenges of PD is limited support and lack of monitoring of the implementation process after the workshops.

The fourth finding shows that the participating teachers had the perspective that due to the limited time provided for CPD activities they failed to acquire all the necessary IC implementation, knowledge and skills, thus they often relied on their sense-making in order to justify the decisions that they made regarding how to teach in the context of the IC (Weick, 2009).

Furthermore, data from the study indicate that the participant teachers were not well equipped with relevant resources and teaching to refer to when they put the new skills and knowledge that they had acquired from the initial training into practice. The participants' opinion is that it is difficult to apply the new skills and knowledge without appropriate teaching and learning materials.

3.1.2 Research question 2: The teachers 'perceptions of the influence of the continuous professional development activities on classroom practice.

How do the teachers perceive the influence of the CPD activities on classroom practices when implementing the integrated curriculum?

To answer the second research question, the researcher drew some information from the second article. The observation is that for CPD to be effective on the learners' achievements, "*its structure has to be consistent with the curriculum materials that teachers use, the assessment, and the answerability measures that guide the learners' success*" (Atta, 2015: 50). As discussed in the second article (see pages 84 – 102 in

this report), the study explored the teachers' perspectives on the influence of CPD on classroom practice. The main question that informed the study was *how do the teachers perceive the influence of the CPD activities on classroom practice when implementing the integrated curriculum?* This study finds that although participant teachers participated in workshops (CPD programmes) that are organized to equip them with the knowledge and skills necessary to implement the IC in the classroom, there were limitations in preparing them adequately to navigate contextual factors such as lack of materials, insufficient learners' prior knowledge that can facilitate learner-centred approaches, the use of ICT and the use of continuous assessment in the classroom. The participating teachers felt the need for more training workshops that could provide them with the necessary skills and relevant knowledge regarding the IC classroom practice. Zide and Mokhele (2018) argue that poor planning and a lack of monitoring of the CPD programmes result in programme inefficiency and discontinuity. These views imply that there should be alignment between CPD activities and classroom practice. Most of the teaching aspects (teaching resources, teaching methods, classroom activities and classroom inspections) should be covered by the mentoring process for teachers (Jewett & MacPhee, 2012).

3.1.3 Research question 3: Do the CPD activities for the implementation of the IC shape the teachers' perspectives on the curriculum project in Lesotho.

How do the CPD activities for the implementation of the IC shape the teachers' perspectives on the integrated curriculum project in Lesotho?

To answer the third research question, the researcher has drawn the information from the third article.

CPD includes both formal and informal learning opportunities for teachers to improve their teaching practice (Avalos, 2011; Stewart, 2014; Khechane, 2016). However, Khan and Begum (2012) argue that teachers usually regard CPD and training centres as the only sources of professional learning and they pay no attention to the importance of work-place and experiential learning. Teachers' beliefs, attitudes, opinions and feelings relating to the support structures provided have considerable influence on the process of new curriculum implementation.

As discussed in article 3 (see pages 103 – 112 in this report), the study explored the CPD activities that shaped the teachers' perspectives on the recent curriculum project in Lesotho for the implementation of the IC in primary schools. The main question that informed the study was; *How do the CPD activities for the implementation of the IC shape the teachers' perspectives on the integrated curriculum project in Lesotho?* The teachers' understanding of their CPD programmes and their views about how CPD may work better for their teaching practice and the learners' achievement also influences the curriculum implementation. The findings (as discussed on pages 136-173 of this report) are that although all the participant teachers attended the IC training workshops and regular cluster workshops (CPD programmes) for the implementation of the IC, the manner in which their perspectives of the IC were shaped by CPD varied. The CPD programmes changed their perspectives differently due to the difference in the sense that the participant teachers made about those programmes. The classroom observations revealed that the three participants were still using teacher-centred approaches except for one participant who used learner-centred approaches. That is, the participant teachers' perceptions on teacher knowledge, beliefs, attitudes and learners' outcomes in the process of the IC implementation were differently shaped (positive for some teachers and negative for other teachers based on their individual sense-making). The training workshops about the IC that the teachers participated in shaped them differently, based on their sense-making, which was constructed through their existing knowledge. Thus, the participating teachers had different views regarding how CPD programmes helped them to teach the IC according to the CAP prescriptions and to improve the learning outcomes.

These findings suggest that CPD programmes should not focus only on the acquisition of knowledge and skills, but should also consider shaping the teachers' perspectives regarding the reforms because their prior experiences have a great influence on how they interpret and implement the new curriculum in schools. The teachers are regarded as the key implementers of the curriculum. However, "*curriculum change demands that they acquire new knowledge in order to change both their existing attitudes and their instructional practices*" (Mokhele & Jita, 2010: 1762). According to Allen and Penuel (2015), some teachers are able to manage ambiguity and the uncertainty of the reforms while others do not. Spillane *et al.* (2002) indicates that individual agents' sense-making about implementing the policy is closely related to

their prior knowledge, their expertise and their experiences. The participant teachers' perspectives regarding the influence of the CPD programmes for the implementation of the IC varied. Teachers tend to implement reforms in any way that could benefit the learners and not necessarily according to the policy descriptions (Bunten, 2014).

3.2 Summary

The study used the combination of the Desimone (2009) five-featured conceptual framework for professional development and sense-making theory (SMT) to explore Lesotho primary school teachers' perspectives on the CPD opportunities related to the IC and their influence on classroom practice. Desimone's (2009) five-featured framework guided the exploration of teachers' perspectives regarding the CPD programmes that these teachers participated in for the implementation of the IC (Desimone, 2009). The SMT was used to understand how individuals construct understanding of new information and explains how context influences their decisions (Coburn & Woulfin, 2012). Regardless of how useful the curriculum is, it might be held back by teachers' experiences and lack of knowledge regarding the reforms (Gecer & Ozel, 2012). CPD is considered a significant tool to help teachers in the process of curriculum implementation because it equips teachers with relevant knowledge and skills pertaining to educational reforms. The participating teachers' perspectives indicated that CPD programmes had failed to provide them with enduring knowledge and skills to implement the IC, as required by the CAP. As a result, the participating teachers experienced limitations when implementing learner-centred approaches, ICT integration and continuous assessment in the classrooms. The participating teachers' perspectives regarding the CPD programmes that they participated in varied due to different sense that they made in addition to their varying backgrounds, beliefs, attitude and the contextual challenges regarding the IC implementation process. It should be noted that CPD programmes are a great vehicle for reform implementation and for improving the learners' achievements if they are provided by experts and happen on a regular basis so as to meet the needs of individual teachers.

3.3 Conclusion

The findings of this study reveal that the participant teachers were not always satisfied with the CPD programmes organised by the MoET in collaboration with NCDC for the implementation of the IC in primary schools. This was due to their limited planning in

terms of the teachers' individual and contextual needs; and a lack of monitoring, which resulted in the programmes being non-continuous and limiting change in classroom practice (Khechane, 2016). The paper concludes that the non-involvement of teachers in the planning of the CPD programmes has negative effects.

The study concluded that the participant primary school teachers' perspectives varied in response to the CPD programmes. The findings suggest that the MoET and NCDC should not use a 'one-size-fits-all' form of CPD, but should consider the needs of individual teachers from different contexts. The "one-size-fits-all" CPD activities should be augmented by 'individualised and context-responsive' professional development activities. The 'individualised and context-responsive' teacher development could be achieved through school-based activities, which in turn have the potential to enhance active learning, improve coherence and frequency of professional development and teacher-collaboration.

3.3.1 Recommendations

This study recommends that workshops should equip teachers with the relevant resources that may enable them to apply new information and skills attained from the CPD activities. Phasha, Bipath and Beckmann (2016) observed that the provision of the relevant materials is part of effective training activities for improved classroom practice.

The findings suggest that the CPD activities should be aligned to teachers' needs that are relevant to teaching practice. Mokhele & Jita (2010: 1762) assert that for CPD to be more effective, "*teachers should not only be involved in the planning of the CPD programmes but that the programmes should be aligned to their personal circumstances and motivation*".

This study recommends that teachers should be provided with the opportunity to attend and to plan the kind of CPD programmes that they believe will assist them when they implement reforms and that will change their classroom practices. The addition of school-based professional development activities could help incorporate more 'individualised and context-responsive' teacher development. The CPD programmes

should also focus on changing the teachers' perspectives, based on knowledge to implement IC, beliefs guiding implementation, attitudes towards the curriculum project and perceptions of the learner improvement outcome.

Above all, in order to overcome the shortcomings of the CPD that the participant primary school teachers receive from the MoET as they implement the IC, I suggest that CPD providers in Lesotho (MoET and NCDC) should organise CPD strategies that can consider providing Lesotho primary school teachers with active learning opportunities. Active learning opportunities may enable teachers to collaborate and work in groups in each school to discuss the IC concepts, skills needed and the problems they encounter as they implement the IC as related to their own school's context. As a result, through this CPD strategy MoET and NCDC may be able to address and deal with the concerns and needs of each school and avoid using a one-size-fits-all form of professional development. Again, as the participant primary school teachers complained about the lack of monitoring, I suggest that MoET and NCDC should also consider making the CPD programmes more coherent and sustained over time in order to create the desired influence on Lesotho primary school teachers in the process of reform implementation (teachers' classroom practise of the IC). I believe that if the CPD providers (MoET and NCDC) could organise several longer training workshops for teachers, in-depth discussions of content knowledge, skills development and also the challenges of the new curriculum should be addressed as opposed to the use of once-off training workshops without monitoring or school support.

3.4 Implications

Firstly, this study has addressed the question (in article 1): "What are the teachers' perspectives on their professional development experiences for the implementation of the IC?". The findings revealed that primary school teachers felt that they were inadequately provided with enduring CPD activities, guidance and monitoring to assist them in implementing the IC, as required by CAP. Therefore, more IC training workshops, guidance and monitoring programmes for teachers are necessary for the success of this innovation. The results of this study provide case study insights on teachers' perspectives regarding the CPD programmes in relation to the IC and its implementation phase.

Secondly, the study has addressed the question: “How do the teachers perceive the influence of the professional development activities on classroom practice when implementing the integrated curriculum?” The study concludes that the CPD programmes that the participant primary school teachers participated in order to implement the IC had limitations in preparing them to navigate contextual factors such as lack of materials, insufficient learners’ prior knowledge in order to implement learner-centred approaches, the use of ICT and the use of continuous assessment in the classroom. The findings of this study are limited to the context of Lesotho, but they may provide useful information for policy makers in other countries in order for them to supervise their educational reform implementation processes.

Thirdly, the study has addressed the question: “How do the CPD activities for the implementation of the IC shape the teachers’ perspectives on the integrated curriculum project in Lesotho?” The study concludes that CPD programmes had changed teachers’ perspectives differently due to differences in the sense that the teachers made about these programmes. That is, teachers’ perceptions on teacher knowledge, beliefs, attitudes and learners’ outcomes in the process of the IC implementation were differently shaped (which can be positive for some teachers and negative for others based on their different sense-making). This finding may shed light for policy makers on the requirements of CPD programmes that focus on shaping teachers’ attitudes and beliefs in the process of reform implementation.

3.4.1 Limitations

Although multiple cases have been used, the findings may not accurately represent all the Lesotho primary school teachers’ perspectives on CPD regarding the IC implementation because a qualitative case study does not allow for the generalisation of the findings. However, this limitation may possibly not affect the entire study because three data collection instruments were used and they allowed for triangulation. Data was collected from four participants from two districts of Lesotho (Leribe and Berea out of the 10 districts). Teachers from other districts may have different perspectives regarding the CPD programmes that they participated in for the IC. This would have to be verified through further research studies. Data were collected from only Grade 2 teachers. Teachers from other grades may have different

perspectives because they attended different workshops. These perspectives would also have to be verified through other research studies.

3.4.2 Personal: Lessons and Reflections

To begin with, unlike my previous professional development experience, I have learned that teachers are the catalysts of change in schools and they need to be considered when reforms and CPD programmes are designed. This is because their attitudes, views and feelings could shape how the reforms are implemented (McCracken, 2017).

I used structured-interviews as one of the instruments to gather the data for the study. It enabled me to learn about teachers' perceptions and experiences about the CPD activities that they participated in while they implement the IC and how those activities influenced their teaching practices. This has become a valuable part of the experience, because that process enabled me to actively engage in a critical review of my work and has ultimately increased my learning experience.

Regarding how the experience of writing this thesis impacted on my learning, the process of writing the recommendations for this study is also directed and is personal to me. I have realized that several ideas have emerged from the findings that could immediately be applied in practice in order to enhance my teaching practice. One such idea is collective learning. The journey of completing this thesis was made possible by the eternal assistance and supervision from my supervisor, my cohort group, the Instructional Leadership, Curriculum and Instructional Studies (ILCIS) special interest group in the Faculty of Education and the SANRAL chairperson Professor Jita through the spirit of team work among the group members.

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Appendices

Appendix: 1- Letter to Lesotho primary school teachers

RESEARCH STUDY INFORMATION LEAFLET AND CONSENT FORM

DATE

2019

TITLE OF THE RESEARCH PROJECT

Teachers' perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho

PRINCIPLE INVESTIGATOR / RESEARCHER(S) NAME(S) AND CONTACT NUMBER(S):

Mapapali Gladys Tafai

2012126898

+26658073314

FACULTY AND DEPARTMENT:

Faculty of Education

Department of Curriculum studies (School of Mathematics Natural Sciences and Technology Education)

STUDYLEADER(S) NAME AND CONTACT NUMBER:

Dr M. Tsakeni

+27786403218/ tsakenim@ufs.ac.za

WHAT IS THE AIM / PURPOSE OF THE STUDY?

This study is intended to explore teachers' perspectives on the Continuous Professional Development (CPD) for the Integrated Curriculum. It aims to discover the teachers' views of the Continuous Professional Development and how it could be reshaping in order to enhance their teaching practice. It also seeks to examine the ways in which the teachers manifest their thoughts and beliefs regarding Continuous Professional Development in the classrooms.

The main objectives of this study are to explore:

- 1. The teachers' perspectives on the professional development experience for the implementation of the integrated curriculum.*
- 2. Teachers' perspectives on the influence of Continuous Professional Development on their classroom practice?*
- 3. The CPD activities for the implementation of the Integrated Curriculum that shape the teachers' perspectives on the curriculum project in Lesotho*

4. *The description and understanding of professional development that teachers receive from their perspectives in the context of Lesotho.*

WHO IS DOING THE RESEARCH?

I am Mapapali Tafai working at Ralikiriki Government High school in Leribe district, under the Ministry of Education and Training. I am currently a PhD student at the University of the Free State, in the faculty of education. As part of my doctoral programme, I am required to conduct research on a topic of interest with a purpose of contributing towards knowledge and understanding of the topic under study.

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-HSD 2019/0486*

WHY ARE YOU INVITED TO TAKE PART IN THIS RESEARCH PROJECT?

Your school has been invited to partake in this study because it is implementing the integrated curriculum since all the primary schools in Lesotho do. Your school was randomly selected together with other schools in the district to partake in the quantitative survey. A total of 4 schools will be selected for collection of qualitative data, two schools from Leribe district and the other two schools from Berea district. The grade two primary school teachers from these schools will be invited because are the ones of the teachers who has more than 5 years putting this innovation in to practice.

WHAT IS THE NATURE OF PARTICIPATION IN THIS STUDY?

This study is a qualitative case study. I am intending to observe 5 lessons of different learning areas from each participant and one interview from each participant in each of the participating schools. The interview will take about 20-30 minutes in the morning before the classes start. All the forms of ethical considerations will be observed.

CAN THE PARTICIPANT WITHDRAW FROM THE STUDY?

Participation in this study is voluntary and there is no penalty or loss of benefit for non-participation. The participants will take part voluntary and you are under no obligation to consent to 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, it will regrettably not be possible to withdraw from the study once the non-identifiable data has been collected.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The main contributions that you are making as teachers are just to assist me with data to complete my study. You might just benefit from the reflections that you do as you plan for the lessons which will

be observed. I will also share my finding with you that might help you to reshape your teaching of the integrated curriculum.

WHAT IS THE ANTICIPATED INCONVENIENCE OF TAKING PART IN THIS STUDY?

No inconvenience, discomfort risks anticipated to the participants when carrying this study. The participants will not be intentionally exposed to any form of harm during the study. The level of inconvenience and/or discomfort to the participant will be minimum in that they will be expected to participate in the research for short periods of time. They will also be allowed to withdraw their participation at any point in time and they will spend some of their time sitting for the interviews

WILL WHAT I SAY BE KEPT CONFIDENTIAL?

All information you will provide during interview and the one collected during lesson observations will be recorded confidentially. This means your name or that of their school will not be recorded anywhere and no one will be able to connect you to the information you have provided. All the data collected will be given fictitious code numbers or pseudonyms and they will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings. Your answers may be reviewed by people responsible for making sure that research is done properly, including the language editor, the reviewers and members of the Research Ethics Committee but you will not be identifiable in the documents. Anonymous data from you may be used for other purposes, including the research report, journal articles, and conference presentations, among others. A report of the study may be submitted for publication, but you will not be identifiable in such a report.

HOW WILL THE INFORMATION BE STORED AND ULTIMATELY DESTROYED?

All forms of collected data (printed transcripts or audio recordings) will be kept safe in a lockable filing cabinet and any electronic data files will be secured in password-protected computers. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Electronic data will be destroyed by using appropriate data deletion software to ensure that the data cannot be retrieved. The data that is in the form of hard copies and voice tapes will be destroyed by shredding.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

The participants will participate voluntarily, no payment or any incentives for the participants will be involved.

HOW WILL THE PARTICIPANT BE INFORMED OF THE FINDINGS / RESULTS OF THE STUDY?

Upon the completion of the study, I undertake to provide the Ministry of Education and Training with a copy of the research report and to share my findings with the Grade 2 teachers in the two districts and (possibly) other districts as necessary. If you would like to be informed of the final research findings, please contact Mapapali Tafai as the researcher on 58073314 or mtafai@yahoo.com.

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 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 the *insert specific data collection method*.

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: _____

Appendix: 2- Letter to Parent and consent form

RESEARCH STUDY INFORMATION LEAFLET AND PARENTAL CONSENT FORM

DATE

WHO IS DOING THE RESEARCH?

I am Mapapali Tafai working at Ralikariki Government High school in Leribe district, under the Ministry of Education and Training. I am currently a PhD student at the University of the Free State, in the faculty of education. As part of my doctoral programme, I am required to conduct research on a topic of interest with a purpose of contributing towards knowledge and understanding of the topic under study.

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-HSD 2019/0486

WHAT WILL HAPPEN TO YOUR CHILD IN THIS STUDY?

Your child will participate in this study by just being part of the class in which a teacher is observed teaching. The teaching will take place as usual. I am not going to intervene with the teaching procedure but I am going to observe the lessons in the teaching of the integrated curriculum in grade two, take note and tape record the lessons.

CAN ANYTHING BAD HAPPEN TO YOUR CHILD?

Nothing bad will happen to your child or anything painful because I will be just observing the lesson being taught and take notes and tape recording, I will not contact your child as individual or coming next to him/she to either ask he/here questions.

CAN ANYTHING GOOD HAPPEN TO YOUR CHILD?

The child may benefit from improved teaching strategies by the teacher because for this observation he/she (the teacher) may use reflection to improve classroom practice. This study is going to help your teacher to improve in teaching the integrated curriculum because the finding is going to be used to modify this curriculum where necessary and your teacher will be provided with necessary assistance needed for the better implementation of this new curriculum. As your teacher gain necessary information and skills, his/her teaching will improve as well your achievement and your siblings' achievement in future.

WILL ANYONE KNOW YOUR CHILD IS PART OF THE STUDY?

The child's identity will not be revealed. If any pictures have to be used the children's and the teacher's faces will be covered. No risk factors are anticipated for participating in this research. Neither participants nor their schools shall be identified by name. For reasons of confidentiality pseudonyms will be used where names are necessary. No one will know that your child participated in this study.

WHO CAN YOU TALK TO ABOUT THE STUDY?

Dr Tsakeni: tsakenim@ufs.ac.za or +27786043218.

Mapapali Gladys Tafai: +266 58073314 or mtafai@yahoo.com

WHAT IF YOU DO NOT WANT YOUR CHILD TO DO THIS?

Participation in this study is voluntary. It means if you do not wish your child to be part of the class during the observation you show by not signing the consent form and your wish will be respected. Your child will participate voluntarily and has a right to withdraw at any stage of research even if you have signed the consent form.

PLEASE RETURN

Name of child: _____

Name of Parent: _____

- Do you understand this research study and are you willing to let your child take part in it? Yes No
- Has the researcher answered all your questions? Yes No
- Do you understand that you can withdraw from the study at any time? Yes No
- I give the researcher permission to make use of the data gathered from my child's participation Yes No

Signature of Parent

Date

Appendix: 3- Letter to parent and Sesotho consent form

RESEARCH STUDY INFORMATION LEAFLET AND PARENTAL SESOTHOCONSENT FORM

DATE

2019

TITLE OF THE RESEARCH PROJECT

Teachers' perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho

RESEARCHERS NAME(S) AND CONTACT NUMBER:

Mapapali Gladys Tafai

2012126898

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FACULTY AND DEPARTMENT:

Faculty of Education

Department of Curriculum studies (School of Mathematics Natural Sciences and Technology Education)

STUDYLEADER(S) NAME AND CONTACT NUMBER:

Dr M. Tsakeni (UFS staff member)

+27786403218 or tsakenim@ufs.ac.za

WHAT IS THIS RESEARCH PROJECT ALL ABOUT?

Sephehosaboithuto bona ke ho fumanahorenamatichere a likolo tsa mathomo Lesotho a utloisisalenanethuto le lecha (integrated curriculum). Makutloabonakeafemalebana le lithupelotsebalitsoaretsoeng. Ele ho matlafatsa le ho banolofaletsatselaea ho Kenya tsebetsonglenanethutolena. Liphuputso tsa boithuto bona litlathusabohelebaamehanglefapheng la thuto Lesotho, le linahengtsohle tsa lefatse. Ketsepisa ho bolokalekunutu le ho tserelitalitichere le banabasekolobatlankakarolobothutong bona. Keqhoaelletselengololetsoanglekaleng la thuto le mphilengtumelloea ho etsaboithutobona. Bakengsalithlakisetsookabuisana le mothusiwaka Dr Tsakeni ho tsakenim@ufs.ac.za kappa +27786043218.

WHY HAVE YOUR CHILD BEEN INVITED TO TAKE PART IN THIS RESEARCH PROJECT?

Boithuto bona kekhethile ho boetsa ka grade two, elengsehlophaseongoanaoahaoalenghosona. Keetsasenahobalitalitichere tsa sehlophasena base baena le lilemotseletsengbaruta integrated curriculum. Tumeloakakehorebana le leseli le hlakilemolemomgoa ho nthusa ho etsalipatlisiso. Monakeetsakopoea ho etsaboithuto ka sehlopheng se ngoanaoahaoaleng teng. ke ntsekeithutelalengolo la PhD University of the Free State. Ho phethelaboithutobakakelohetlatsetso ka hoetsaliphuputso ho matlafatsalitsebo le thuto e matlafetsenglekaleng la thuto

WHO IS DOING THE RESEARCH?

ke Mapapali Tafai , kesebetsaRalikariki Government High school seterekengsa Leribe. Kemoithutioa PhD junifesithingeaAfrikaBoroaele ho phethelaboithuto bona kelebeletsoehoetsaboithutobalipatlisisoele ho tlatsetso ho botsebimabapi le sehlohosaboithutobonna.

HAS THE STUDY RECEIVED ETHICAL APPROVAL?

Boithuto bona bofumanetumellohotsoa ho Research Ethics Committee of UFS. Kopi ealengolo la tumello le qhoahelletsoemona.

Approval number: UFS-HSD 2019/0486

WHAT WILL HAPPEN TO YOUR CHILD IN THIS STUDY?

Ngoanaoahootlonkakarolo ka hobatengsehlophengjoalo ka kamehla.Boithuto bona ha bona ho kenakena le tsamaisoeatichere ka sehlopheng.Nnakeilo labella ha tichere e ruta integrated curriculum. Ho ngola se etsahalang le ho hatisaboithutobathuto ka ngoe ka sehlopheng.

CAN ANYTHING BAD HAPPEN TO YOUR CHILD?

Ketsepisahorehaho le lebe kappa le kotsilekahlahellangoanaoahao ka nakoeaboithutobaka ka sehlopheng .hakena ho buisa kappa ho shapangoana ka sehlopheng. Hakena le ho mobotsaletho.

CAN ANYTHING GOOD HAPPEN TO YOUR CHILD?

Boithuto bona botlothusalitichere tsa sehlophasabobeli ho ntlafatsamosebetsioa bona. Mme ha liticherelintlafetse, boithutobangoanaoahao le bona botlontlafala.maikutlo a liticheremabapi le lithupelotseba li tsoareloanglitlathusalekala ho ntlafatsammeebelitichere li nolofalloakemosebetsi.

WILL ANYONE KNOW YOUR CHILD IS PART OF THE STUDY?

Hahomothoatlotsebahorengoanaoahaoonkilekaroloboithutong bona hobahohomabitso a ngoana, a tichere lea a sekoloatlohlahellasephethongsoithuto bona.

WHO CAN YOU TALK TO ABOUT THE STUDY?

Dr Tsakeni: tsakenim@ufs.ac.za or +27786043218.

Mapapali Gladys Tafai: +266 58073314 or mtafai@yahoo.com

WHAT IF YOU DO NOT WANT YOUR CHILD TO DO THIS?

Ho nkakaroloboithutong bona boetsoa ka ho ithaopa. Ngoanaoahao o lokolohile ho tlohelahonkakarolonakoefe le efe ha aikutloajoalolehaomotekenetsepampirieatumellano.

PLEASE RETURN

Lebitso la ngoana : _____

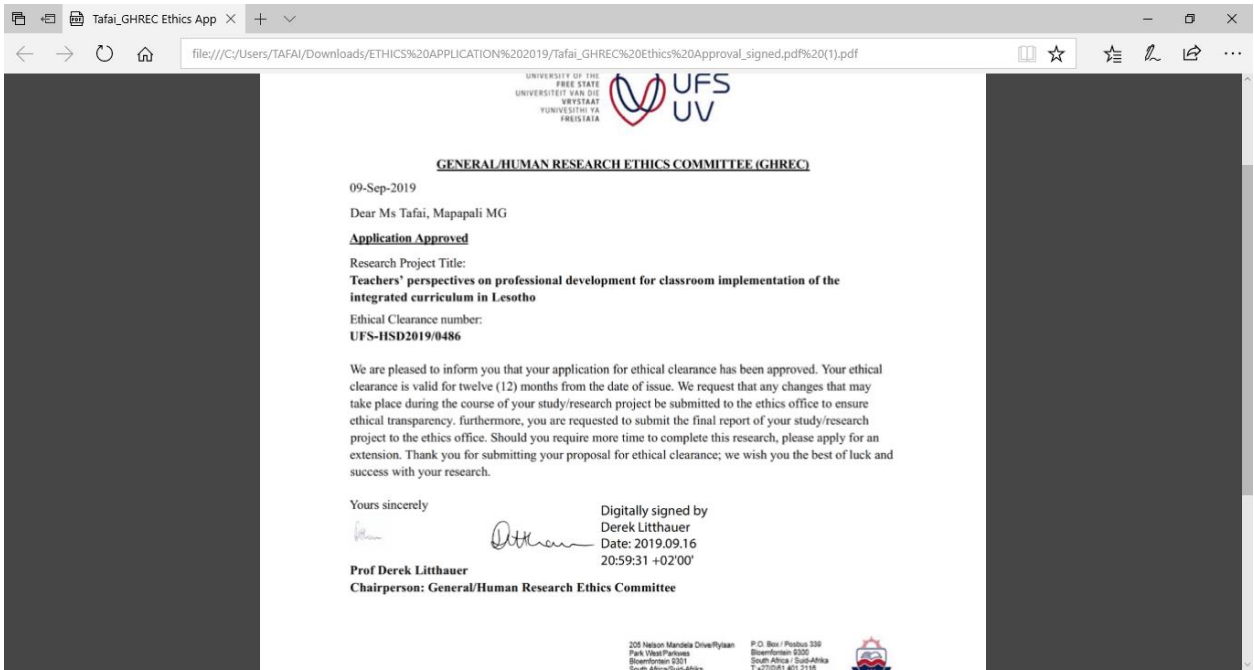
Lebitso la motsoali : _____

- Na o oautloisisaboithuto boo, hape o ikemiselitse ho lumellengoanaoahao ho nkakarolo? Yes No
- Na moithuti o arabetselipotsotsohle? Yes No
- Na o eautloisishoreokatlohelahonkakarolonakoefe le efe? Yes No
- Kefana ka tumellohorengoanoakaankekaroloboithutong bona Yes No

Signature of Parent

Date

Appendix: 4 Letter of clearance from the university



Appendix: 5- Approval letter from the Ministry of education



Appendix: 6 Interview protocol

Teachers' perspectives on professional development for classroom implementation of the integrated curriculum in Lesotho Interview Protocol

This research study is to investigate the nature of the existing CPD in relation to (aspects system such as professional practices, approaches and supportive system in schools) that Lesotho primary school teachers receive for the implementation of the new IC and the impact of such approaches on students' achievements from the perspectives of Lesotho primary school teachers. The findings were discussed in three articles by following four primary school teachers who teach grade 2.

Key issues	Participants			
	A	B	C	D
Teachers' biography	Name: Qualification: Teaching experience: IC experience: School:			
Teachers' perspectives on professional experiences for the implementation of the IC.	a) b) c) d) e) f) g)			
Teachers' perspectives on the influence of the CPD activities on classroom practice.	a) b) c)			

	d)			
Teachers' perspectives on how CPD activities shape their beliefs and attitude on IC.	e)			
	f)			
	g)			
	a)			
	b)			
	c)			
	d)			
	e)			
	f)			

Lesson Observation Schedule

Lesson observations were used in order to check what participants said in interviews against what they believe they do in actual practice. For this study the observer focused on how the aspects of classification and framing played out in the observed lessons.

Key issues	participants			
	A	B	C	D
A. How teachers starts the lesson.				
B. How teachers present the success criteria to learners.				
C. The use of learner - centred strategies.				
The use of the modes of instructions such as ICT and other materials.				
D. The identification of assessment methods used.				

Appendix: 8

Observation field notes protocol

Name of teacher:

Name of observer:

Date:

Time:

Duration:

Place of observation:

Specific facts	Details of what happened
Teachers' perspectives on CPD	
Teachers' attitudes regarding the implementation of IC as a results of CPD	
Teachers' beliefs regarding the implementation of the IC as a results of CPD	
Learners outcomes as a results of CPD	

Appendix: 9

Document analysis protocol

Key issue	descriptions
Aims of CAP	
Curriculum and Assessment	
Integrated Curriculum Organization	
Curriculum Aspects and Learning Areas	
Core Competencies	
Pedagogy	
Assessment	

Appendix: 10

Scheme of work protocol

Key issues	Participant name(Mrs Green)	Participant name(Mrs Yellow)	Participant name(Mr Red)	Participant name(Mrs Orange)
A. Components				
B. Arrangement of learning outcomes within the learning area C. Arrangement of learning outcomes per window/ learning area				
D. Arrangement of learning outcomes across windows/ learning areas				
E. Alignment of content that addresses different domains (cognitive, affective & psychomotor)				
F. How are concepts integrated within the learning area				
G. How are concepts integrated across the learning areas				

Appendix: 11

Lesson plan protocol

Key issues	Participant name (Mrs Green)	Participant name(Mrs Yellow)	Participant name(Mr Red)	Participant name(Mrs Orange)
A. The nature of instructional objective(s):				
B. How introduction links with the prior learners' knowledge				
C. Success criteria in relation to the objective(s)				
E. Instructional materials				
F. Instructional method				
G. Assessment methods				
H. Integration of concepts to real life: (holistic teaching and assessment)				

Appendix: 11

Turnitin Report

Turnitin Originality Report

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