THE FACILITATORS' PERSPECTIVE OF INTERPROFESSIONAL EDUCATION AT THE FACULTY OF HEALTH SCIENCES, UNIVERSITY OF THE FREE STATE

by

Dr J.P. Cairncross

Extensive mini-dissertation submitted in partial fulfilment of the requirements for the degree

Master of Health Professions Education (M.HPE)

in the

DIVISION OF HEALTH SCIENCES EDUCATION
FACULTY OF HEALTH SCIENCES
UNIVERSITY OF THE FREE STATE
BLOEMFONTEIN

January 2017

Supervisor: Prof W.J. Steinberg

DECLARATION

I hereby declare that the compilation of this mini-dissertation is the result of my own independent investigation. I further declare that the work is submitted for the first time at this university and faculty for the purpose of obtaining a Master's Degree in Health Professions Education and that it has not been previously submitted to any other university for the purpose of obtaining a degree. All information provided by study participants will be treated with the necessary confidentiality. I have endeavoured to use the research sources cited in the text in a responsible way and to give credit to the authors and compilers of the references for the information provided.

....
   Dr J.P. Cairncross   Date

I hereby cede copyright of this product in favour of the University of the Free State.

....
   Dr J.P. Cairncross   Date

DEDICATION

I dedicate this dissertation to my family for their support and encouragement.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF APPENDICES

APPENDIX A: RESEARCH INSTRUMENT

APPENDIX B: ETHICS COMMITTEE APPROVAL LETTER

APPENDIX C: PERMISSION LETTER UFS MANAGEMENT

APPENDIX D: PROOF OF LANGUAGE EDITING

APPENDIX E: PLAGIARISM SCREEN

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS

IPE:	Interprofessional Education
CAIPE:	Centre for the Advancement of Interprofessional Education
WHO:	World Health Organisation
UFS:	University of the Free State
UNESCO:	United Nations Educational, Scientific and Cultural Organization
IPL:	Interprofessional Learning
IPC:	Interprofessional Collaboration
IPP:	Interprofessional Practice
HMP:	Health mentors program
CBE:	Community-based Education
FoHS:	Faculty of Health Sciences
PBL:	Problem-based Learning
SP:	Standardised Patient
MDT:	Multi-disciplinary Team
TIPS:	Teams of Interprofessional Staff
OBE:	Outcomes-based Education
DASH-SV:	Debriefing Assessment for Simulation in Healthcare – Student Version
NHS:	National Health Service
USA:	United States of America

SELECTED DEFINITIONS AND TERMS

Interprofessional education (IPE)

Interprofessional education occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care (CAIPE 2002:online).

Collaborative practice

Occurs in healthcare when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers and communities to deliver the highest quality of care across settings (WHO 2010:7).

Facilitator

A teacher who does not operate under the traditional concept of teaching, but guide and assist students in learning for themselves – picking apart ideas, forming their own thoughts about them, through self-exploration and dialogue (Mazarin n.d.:online).

Outcomes-based education

An educational strategy where decisions about the syllabus are based by the outcomes students should achieve at the end of the course (Harden, Crosby & Davis 1999:7-8).

Problem-based learning

Acquisition of knowledge arising from working through a progressive framework of problems providing context, relevance and motivation (Maudsley 1999:178).

Standardised patient

Someone who has been trained to simulate a real patient so accurately, where the simulation cannot be detected by a skilled clinician. (According to Barr as cited by Dent and Harden 2013:215).

Reflection

Conscious consideration of the meaning and the implication of an action, including the assimilation of knowledge, skills, and attitudes with pre-existing knowledge (Decker, Fey, Sideras, Cabellero, Rockstraw, Boese, Franklin, Gloe, Lioce, Sando, Meakim & Borum 2011:S26-29).

Debriefing

A student-centred reflective dialogue (Decker et al. 2011:S26-29).

SUMMARY

Collaborative practice in healthcare occurs when various health workers with different areas of professional expertise work together with patients, their families and communities. The World Health Organisation (WHO) published a report that policy makers can apply to their own local context to address the local health needs and improve health outcomes through the implementation of interprofessional education programmes (IPE) that strengthen the health system. IPE can be defined as two or more professions learning "with, from and about each other" when they are brought together around a particular task. In 2014 the IPE programme was piloted at the Faculty of Health Sciences (FoHS), University of the Free State (UFS), and fourth year undergraduate students from the FoHS participated. Facilitators are staff from the different Schools of the FoHS, UFS, who assist small groups of undergraduate students to achieve the key outcomes/ competencies of the IPE programme.

This study investigated the facilitators' perspective, their opinions and attitudes, on the current and future IPE programmes at the FoHS, UFS.

A quantitative cross-sectional study was designed by the researcher to investigate the facilitator's perspective. The objectives of the study included determining the facilitator's perspective on the current and future IPE programmes. Through the literature review the need for IPE and collaborative practice were identified. The facilitators' perspective, students' perspective and the delivery of an IPE programme were also identified.

An online survey was emailed to all facilitators who had participated in the last IPE programme in 2015. The findings from the closed-ended questions were analysed and described. Findings from the open-ended questions were tabulated according to themes, categories and subcategories. All findings were discussed and summarised by the researcher.

The study generated information on the facilitators' perspective of the IPE programme that may be valuable in assisting programme coordinators in the development of future IPE programmes. Results indicated that not all facilitators were properly prepared for their role and the challenges they faced while conducting IPE sessions. Facilitators identified the need for additional training on the principles of IPE, conducting small group discussions and debriefing. Shortcomings of the current IPE programme, which do not allow for all students to actively participate with the specific case study, and a need to improve training of the

standardised patients (SPs) were identified. Suggestions for future case studies were also made, i.e. to include the psychosocial aspects that can also affect the health of a patient.

The study confirmed that key outcomes/ competencies of the IPE programme were being achieved. Facilitators were benefiting from the IPE programme not only by learning about the other healthcare professions but also in terms of their own personal growth and development.

The study concludes with recommendations by the researcher to IPE programme coordinators. Undergraduate students should be better prepared regarding what is expected of them. Only facilitators who have completed a preparatory workshop should participate as a facilitator. The workshop should include the principles of IPE, facilitating small group discussions, conducting debriefing sessions and how to manage potential pitfalls that could arise during a session. SPs should be well informed regarding their role for the case study in order to deliver feedback to students. Case studies should be constructed to allow for active participation from all professions. Undergraduate psychology and social work students should be included in future IPE programmes to address the biopsychosocial model of health and illness.

OPSOMMING

Samewerkende praktykvoering vind plaas wanneer gesondheidsdienswerkers van verskillende gesondheidsberoepe gehaltediens lewer deur saam te werk tot voordeel van pasiënte, hul families en die gemeenskap. Die WGO het 'n verslag gepubliseer wat beleidmakers op plaaslike vlak kan toepas wat die gesondheidsbehoeftes en die verbetering van gesondheidsorguitkomste aanspreek deur die implementering van 'n interprofessionele onderwysprogram (IPO) wat die gesondheidsisteem versterk. IPO vind plaas as twee of meer beroepe "saam leer van en oor mekaar" wanneer hulle in 'n spesifieke konteks en met 'n bepaalde doel bymekaargebring word. Die Fakulteit Gesondheidswetenskappe (FG) aan die Universiteit van die Vrystaat (UV) het in 2014 die IPO program geloods waaraan vierdejaar voorgraadse studente deelgeneem het. Fasiliteerders is personeellede van die FG wat studente in klein groepe help om IPO doelwitte te bereik.

Hierdie studie ondersoek die perspektief, menings en houdings van fasiliteerders in verband met die huidige en toekomstige IPO programme van die FG, UV.

'n Kwantitatiewe kruissnitstudie is deur die navorser ontwerp om die fasiliteerder se perspektief te ondersoek. Die doelwitte van die studie sluit in die konseptualisering en kontekstualisering van IPO met behulp van 'n literatuuroorsig, en om die fasiliteerder se perspektief op huidige en toekomstige IPO programme te bepaal. 'n Literatuuroorsig bevestig die behoefte aan IPO en samewerkende praktyk. Die fasiliteerder se perspektief, studente se perspektief en die aflewering van 'n IPO program is ook ondersoek.

'n Aanlynvraelys is aan alle fasiliteerders wat aan die IPO program in 2015 deelgeneem het, gestuur. Die bevindings van geslote antwoorde is ontleed en beskryf. Bevindings van die oop vrae is volgens tema, kategorie en subkategorieë getabelleer. Alle bevindings word bespreek en opgesom.

Waardevolle inligting oor die fasiliteerder se perspektief op die IPO program het hieruit verskyn. Dit sal programkoördineerders van insig voorsien in die ontwikkeling van toekomstige IPO programme. Nie alle fasiliteerders was behoorlik voorbereid op hulle rol en op die uitdagings wat hulle ondervind het tydens die IPO sessies nie. Fasiliteerders het die behoefte aangedui vir verdere opleiding rakende die beginsels van IPO, die hou van kleingroepbesprekings, en 'n behoefte aan ontlonting. Tekortkominge van die huidige IPO program, wat nie ruimte laat vir alle studente om aktief deel te neem aan die spesifieke

gevallestudie nie, en 'n behoefte daaraan om die opleiding van standaardpasiënte (SPs) te verbeter, is aangedui. Voorstelle vir toekomstige gevallestudies word ook gedoen, nl. om die psigososiale aspekte wat die gesondheid van 'n student kan beïnvloed, ook in te sluit.

Die studie bevestig vanuit die fasiliteerder se standpunt dat sleuteluitkomstes/ vaardighede van die IPO program tans bereik word deur die voorgraadse studente. Fasiliteerders trek ook voordeel uit die IPO programme omdat hulle sowel by die ander gesondheidsorgprofessies leer maar ook vorder ten opsigte van persoonlike groei en ontwikkeling.

Die studie sluit af met aanbevelings aan IPO programkoördineerders vir die beplanning van toekomstige IPO programme. Voorgraadse studente moet beter voorberei word rakende wat van hulle verwag word. Slegs persone wat 'n voorbereidende werkswinkel bygewoon het, behoort as fasiliteerders op te tree. Die werkswinkel moet insluit: beginsels van IPO, hoe om kleingroepbesprekings te fasiliteer, 'n ontlontingsessie aan te bied en om moontlike vangplekke te bestuur. SPs moet goed ingelig word rakende hul rol vir die gevallestudie ten einde terugvoering aan studente te bied. Gevallestudies moet opgestel word om aktiewe deelname van alle professies in te sluit. Voorgraadse psigologie- en maatskaplike werkstudente behoort ingesluit te word by toekomstige IPO programme om die biopsigososiale model van gesondheid en siekte aan te spreek.

CHAPTER 1:
ORIENTATION TO THE STUDY

1.1   INTRODUCTION

This study investigates the facilitators' perspective, opinions and attitudes of the interprofessional education (IPE) programme that was started at the Faculty of Health Sciences (FoHS), University of the Free State (UFS) in 2014. The emphasis of the programme is to develop a collaborative experience between undergraduate students in the FoHS (School of Allied Health, School of Nursing and School of Medicine). The long-term expectation (outcome) of the IPE programme is that the collaborative practice will continue with a view to improve health outcomes for individuals and their families once they practice in the community.

Facilitators of the IPE programme at the FoHS, UFS, hail from all healthcare disciplines and consist of doctors, nurses, optometrists, biokineticists, physiotherapists, occupational therapists and dieticians. In preparation facilitators attend a 4-hour workshop to discuss the IPE programme and to clarify what their role as facilitator will be before the sessions with students start. Each facilitator works with a small group of undergraduate students of medicine, nursing, optometry, dietetics, physiotherapy, occupational therapy and exercise and sports sciences for the duration of the programme. Each session is 3 to 4 hours long. The outcomes out the IPE programme includes students establishing professional role clarification, shared values, shared power with shared decision making as well as effective communication and teamwork in the delivery of patient care. During the sessions students work together to formulate their concept of an ideal health service delivery/ provider, work as a collaborative team in managing a patient and then reflect on their experience.

Collaborative practice as defined by the World Health Organisation (WHO) occurs when the best quality of care is delivered across settings. This happens in healthcare when different health workers with various professional expertise deliver a comprehensive service in their interaction with patients, their families and communities (WHO 2010:7).

The WHO has identified that many health systems throughout the world are struggling to meet the expanding complex health needs of patients. In 2010, under the leadership of John HV Gilbert and Jean Yan, the WHO published a report that policy makers can apply to their own local context. This report addresses the local health needs and improved health

outcomes through the implementation of IPE programmes that strengthen the health system. The WHO study group that compiled this report consisted of 25 experts in the fields of education, practice and policy from across the world. The initiative was started in 2007 to aid member states in strengthening their health system and to tackle the global health workforce challenge (WHO 2010:53).

Literature indicates that IPE programmes at other universities have included real patients from the community, administrators, social work and pharmacy undergraduate students. There remains a need to assess whether an interprofessional programme in the current academic setting is feasible as a learning opportunity. Having a baseline survey of the facilitators' perspective with the current IPE programme can serve as a directive for programme coordinators on future IPE programme planning and implementation at the UFS.

This chapter aims to orientate the reader to the background of the research problem. The following aspects will be discussed: the problem statement, the research questions, the overall goal of the research, the aim and associated research objectives, the demarcation and scope of the study, and the research design and methodology. A layout of the subsequent chapters and a short summary conclude this chapter.

1.2   BACKGROUND TO THE RESEARCH PROBLEM

As defined by the United Nations Educational, Scientific and Cultural Organization (UNESCO), "The term education is thus taken to comprise all deliberate and systematic activities designed to meet learning needs. Education is understood to involve organised and sustained communication designed to bring about learning" (UNESCO 1997:online). This further relates to the definition of IPE "when two or more professions learn with, from and about each other to improve collaboration and the quality of care." It refers to all education in academic and workplace settings before and after qualification as defined by the Centre for the Advancement of IPE (CAIPE) (CAIPE 2002:online).

Key messages from the WHO report titled the "Framework for Action on IPE and Collaborative Practice" highlighted that a collaborative practice-ready workforce would respond better to the needs of the community and that IPE is required to prepare the health workforce (WHO 2010:10-11).

One of the key challenges regarding the implementation of an IPE programme is finding the time to bring students from different professions together. This can be addressed by having a common calendar across programmes. Faculty training and development must still take place as IPE differs from the academic content taught. The development of an appropriate assessment instrument to measure the attainment of the interprofessional competencies remains an area of ongoing development (IPE Collaborative Expert Panel 2011:34-35).

Literature confirmed the importance of collaborative practice in the interest of improving health outcomes for individuals, families and communities. IPE definitely has a role in improving healthcare where students are exposed to this before receiving their qualifications and entering the workplace. Facilitators play an important role in achieving the outcomes of an IPE programme; they should be knowledgeable on the principles of IPE, facilitation and debriefing to ensure that effective learning takes place. Literature mainly mentions how students experienced IPE.

1.3   PROBLEM STATEMENT AND RESEARCH QUESTIONS

There is limited literature available on the role of facilitators and their perspective (opinions and attitudes) of an IPE programme. With the delivery of comprehensive patient care, the ideal IPE programme also includes the social worker, psychologist, pharmacist and finally the community. The current IPE programme at the FoHS, UFS excludes social work, psychology and pharmacy undergraduate students, along with real patients from a community. Therefore the problem that has been identified is the need to assess whether an IPE programme in the current academic setting is feasible as a learning opportunity that prepares undergraduate students for collaborative practice. Should social work, psychology undergraduate students and community members rather be included? In addition, how do the facilitators experience the IPE programme hosted at the FoHS, UFS. A survey of facilitators' experiences with the current IPE programme can serve as a directive for programme coordinators on future IPE planning and implementation at the FoHS, UFS.

In order to address the problem stated, the following research questions are formulated:

(i) What is the facilitators' perspective on the current IPE programme at the FoHS, UFS?
(ii) What is the facilitators' perspective on future IPE programmes at the FoHS, UFS?

1.4 OVERALL GOAL, AIM AND OBJECTIVES OF THE STUDY

1.4.1 Overall goal of the study

The overall goal of the study was to describe the facilitators' perspective on the current IPE programme and on future IPE programmes at the FoHS, UFS.

1.4.2 Aim of the study

The aim of the study was to investigate the facilitators' perspective (opinions and attitudes) on the current IPE programme and of future IPE programmes at the FoHS, UFS.

1.4.3 Objectives of the study

To achieve the primary aim and address the principal research question of the study, the objectives were as follows.

(i) To determine the facilitators' perspective regarding the current and future IPE programmes at the FoHS.

1.5 DEMARCATION OF THE FIELD AND SCOPE OF THE STUDY

This study was conducted in the field of Health Professions Education and lies in the domain of academic programme development. This study was interdisciplinary as it reaches across Health Professions Education and IPE.

The researcher has a background in Family Medicine and has a keen interest in patient-centred and community-centred care. The researcher believes that in the near future IPE will become an Interprofessional Practice (IPP) platform with community-based education (CBE) programmes addressing healthcare delivery in rural areas at the FoHS, UFS. Through this initiative further research may be conducted on collaborative practice in the workplace with a view to improving health outcomes in communities. The information obtained from this study may be used by IPE programme coordinators when they plan the IPE curriculum at the FoHS, UFS.

The study was conducted between February 2014 and December 2016, with the empirical research phase from November 2015 to April 2016.

1.6 THE VALUE, SIGNIFICANCE AND CONTRIBUTION OF THE STUDY

1.6.1 Value

The value of this research study is that it will afford coordinators of the IPE programme at the FoHS, UFS, insight into the perspective of facilitators regarding the current and future IPE programmes.

1.6.2 Significance

The proposed study will contribute to further curriculum development of the IPE programme at the FoHS, UFS.

1.6.3 Contribution

The study will provide valuable information to coordinators of the IPE programme at the FoHS, UFS; regarding its weaknesses, strengths and provide suggestions for further development.

1.7 THE RESEARCH DESIGN AND METHODS OF INVESTIGATION

1.7.1 The research design

The researcher used a quantitative research design for the purpose of this study. This was the most appropriate design to investigate the facilitators' perspective on the current and future IPE programmes at the FoHS, UFS.

A quantitative design can be described as the researcher using positivist claims for developing knowledge, with the use of experiments and surveys to collect data on predetermined instruments that yield statistical data. By contrast a qualitative research design can be described as the researcher making knowledge claims on constructivist or advocacy/participatory perspectives, or both. There is a collection of open-ended, emerging data by the researcher with the intent of developing themes from the data (Cresswell 2003:18).

This study has a quantitative design with both closed and open-ended questions. A cross-sectional survey was conducted by the researcher and a detailed description (cf. Chapter

3.) of the study population, sample, data collection, data analysis and results are provided in Chapter 3.

1.7.2   The methods of investigation

Initially the researcher conducted a literature review which focused on health outcomes, the need for IPE and collaborative practice. The literature review (cf. Chapter 2) also addressed the facilitators' perspectives on IPE programmes, students' perspectives on IPE programmes and the delivery of an IPE programme. In some instances, interprofessional (collaborative) practices were also identified.

According to Cooper; Marshall and Rossman (cited by Cresswell 2003:29-30) the aim of the literature study is to indicate to readers the results of previous studies that correlate to the current study. By filling in gaps and covering past studies, it links a study to the larger continuous dialogue in the literature about a topic. The literature review allows the researcher to become familiar with the area of the research project, refines the purpose of the study and may be a source for narrowing the research question (Haverkamp & Young 2007:285-286).

The above exposition assisted the researcher to conceptualise and contextualise the research problem, identify the goal of the study and to formulate specific objectives to investigate. This approach also formed the basis and rationale for the use of an online survey (questionnaire) to collect data in this study. In the research design the survey instrument used to collect data should be mentioned. Pilot testing of the survey instrument is important for content validity of the instrument and to improve the questions, format and scales (Cresswell 2003:158).

An online survey is conducted when respondents answer a questionnaire through an internet-based survey. This can be useful, as respondents do not feel pressured and may give more accurate answers. The questionnaire used in this study comprised of both open and closed ended questions. For the purpose of this study, the study population and the study sample was the same. The questions regarding facilitators' demographic information, work and educational background, current IPE programme and future IPE programmes were analysed. This data analysis was performed by the EvaSys administrator and the researcher.

1.7.3 Schematic overview of the study

Figure 1.1 provides a schematic overview of the study.

Preliminary literature study

Protocol

Evaluation Committee

Permission from the School of Medicine / Faculty Management, Faculty of Health Sciences, UFS / or other....

Permission from the Vice-rector: Academic

Ethics Committee

Consent from respondents

Extensive literature study

Empirical phase: Online survey (questionnaire)

Data analysis and interpretation

Pilot study: Online survey (questionnaire)

Empirical phase: Questionnaires to facilitators

Data analysis and interpretation

Discussion of the results

Finalisation of the mini-dissertation

FIGURE 1.1: A SCHEMATIC OVERVIEW OF THE STUDY
[Compiled by the researcher, Cairncross: 2016]

1.8   IMPLEMENTATION OF THE RESULTS

Through a comprehensive report, the research findings will be brought to the attention of the coordinators of the IPE programme at the FoHS, UFS.

The emphasis will be on the facilitators' perspective on the current IPE programme and their view of future IPE programmes at the FoHS, UFS. The researcher endeavours to identify challenges and successes of the IPE programme and posits that the information obtained will be valuable to coordinators in the planning of future IPE programmes at the FoHS, UFS.

Furthermore, information obtained from this study will be submitted to academic journals for publishing, with a view to contribute to the development of health professions education. The researcher hopes that the findings will lead to future research in undergraduate IPE programmes locally and internationally.

1.9   ARRANGEMENT OF THE REPORT

To deliver further insight into this topic, the methods used to find solutions and the final outcome of the study will be reported as follows:

With this introductory chapter, **Orientation to the study** (Chapter 1), information was provided on the background of the problem, followed by a review of the main components of the study. This included the research problem, research questions as well as the goal, aim and objectives of the study. In addition, this chapter demarcated the field and scope of the study, whilst also explaining the significance and contribution of the study. Also described are the research design used, the method of investigation and how the findings of the study will be implemented.

In Chapter 2, **Literature review on interprofessional education**, an investigation to describe the facilitators' perspectives regarding IPE at the FoHS, UFS and its conceptualisation and contextualisation is provided through a literature review. Specific focus is placed on the background describing the need for collaborative practice; why an IPE programme is important, delivery of an IPE programme and how facilitators and students have experienced the IPE programme.

In Chapter 3, **Research design and methodology**, a full description of the research design and the research methods applied is given. The data collection method (online survey) and analysis will also be described in a systematic manner.

In Chapter 4, **Results, analysis and discussion of the closed-ended questions of the online survey**, the results of the closed-ended questions will be reported and discussed.

In Chapter 5, **Results, analysis and discussion of the open-ended questions of the online survey**, the results of the open-ended questions will be reported and discussed.

In Chapter 6, **Conclusion, recommendations and limitations of the study**, an overview of the study, underlying limitations of the study, along with the conclusion and recommendations of the study are described.

1.10   SUMMARY OF CHAPTER

In Chapter 1 an introduction and background to collaborative practice and IPE programmes was provided.

The researcher explained the train of thought from IPE as the field of scope, to the identification of the research problem, and how the overall goal and objectives were derived.

The following chapter, titled **Literature review on interprofessional education**, will provide theoretical background relevant to the concepts related to collaborative practice and IPE programmes.

CHAPTER 2:
LITERATURE REVIEW ON INTERPROFESSIONAL EDUCATION

2.1   INTRODUCTION

In Chapter 1, **Overview and orientation to the study**, a brief background to the research problem, the problem statement and research questions, and the goal, aim and objectives of the study were provided. The field and scope of the study, significance and contribution of the study were further described. Finally, an overview of the research methodology and implementation of the findings were discussed.

This chapter provides the reader with a theoretical perspective on the research problem and sets the background for an IPE programme. Improvement in healthcare service delivery has been suggested through exposing undergraduate students to collaborative practice before entering the workplace.

To analyse the effectiveness of an IPE programme, Kirkpatrick (1994:online) describes a four-level training evaluation model that can be applied to evaluate the impact of an IPE programme and make improvements for the future. The first level is to evaluate the facilitators' and students' perception of the IPE programme, as applied by the researcher in this study.

Level 1: Reaction	Level 2: Learning	Level 3: Behaviour	Level 4: Results
Measure the the facilitators' and students' perspective of the IPE programme	How has the knowledge, skills and attitude of the students improved with the IPE programme?	Has the behaviour of students changed to a more collaborative and patient centred-approach in their practice?	Were outcomes set out achieved by the IPE programme?

FIGURE 2.1: ANALYSING THE EFFECTIVENESS OF AN IPE PROGRAMME
[Kirkpatrick 1994: **online, adapted by the researcher in 2015]**

The IPE programme at the FoHS, UFS, consists of 4 sessions, where each session has specific learning outcomes. The main outcome is to promote collaboration between undergraduate health professions students and prepare them for collaborative practice in the workplace. The teaching strategy used is problem-based learning (PBL) within a classroom and is case-based through simulation, with the use of standardised patients (SPs) for selected sessions.

2.2 THEORETICAL OVERVIEW OF THE STUDY
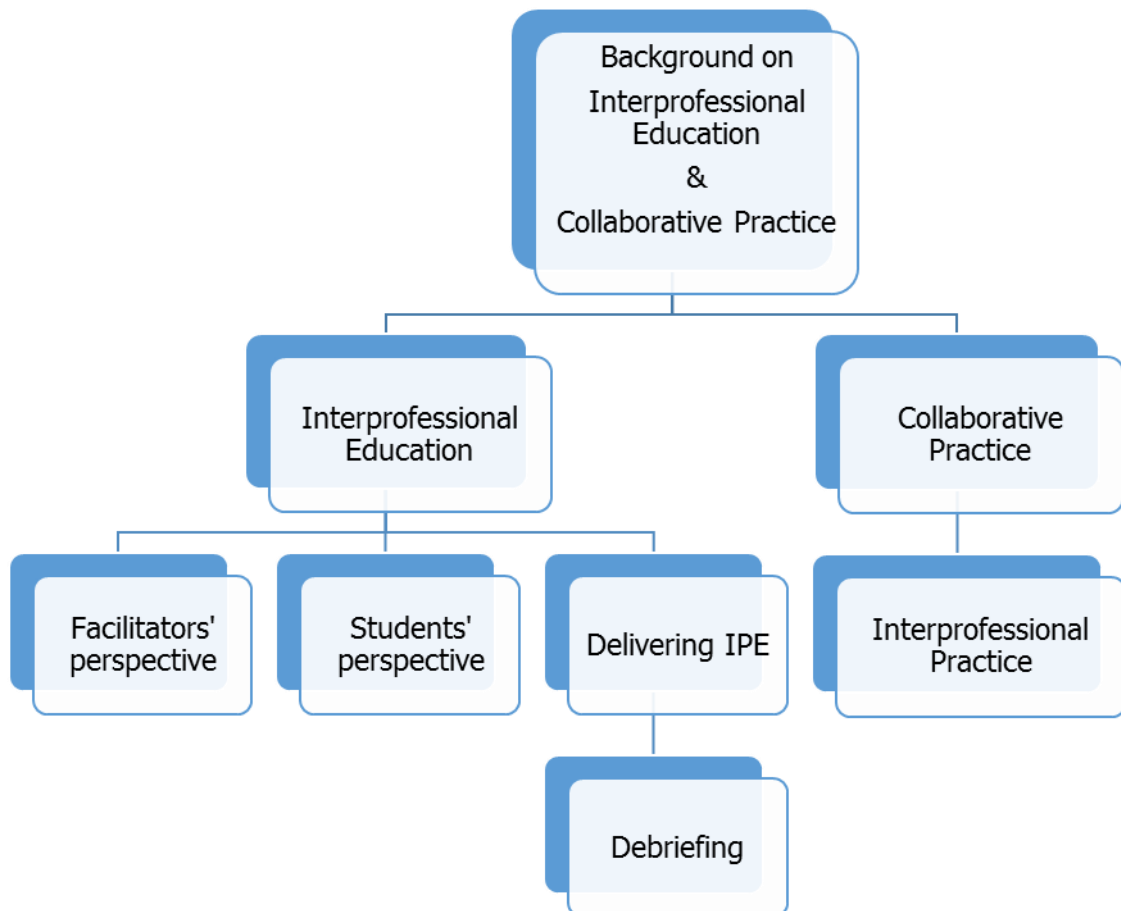
FIGURE 2.2: THEORETICAL OVERVIEW OF THE STUDY
[Compiled by the researcher: Cairncross 2016]

2.2.1 Background on the need for IPE programmes and collaborative practice

The WHO report titled the "Framework for Action on IPE and Collaborative Practice" include the following message. A willingness to update, renew and revise existing curricula is mentioned as one of the mechanisms that forms IPE and collaborative practice. The WHO

also suggests that students are ready to enter the workplace as part of a collaborative practice team once they understand how to work interprofessionally (WHO 2010:10-11).
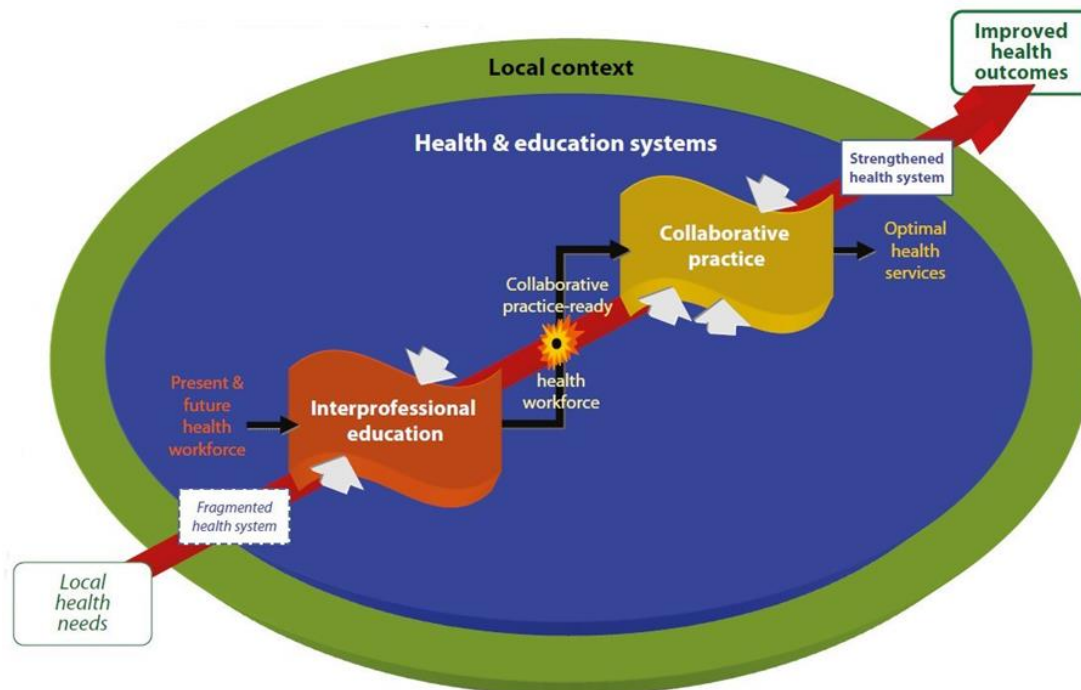
FIGURE 2.3: HEALTH AND EDUCATION SYSTEMS THAT SHAPE SUCCESSFUL COLLABORATIVE TEAMWORK WITHIN LOCAL HEALTH SYSTEM [FROM WHO 2010:9]

An IPE collaborative expert panel discussed the core competencies for interprofessional collaborative practice and mentions the following four:

- Values/ ethics for interprofessional practice – For collaborative care delivery to take place mutual respect and trust are important in interprofessional working relationships. A new professional identity is formed, one that is both professional and interprofessional. These values are patient-centred within the context of a community. The goal is improved healthcare, with a similar commitment from each profession. Through a multidisciplinary team approach, patient/ family and community healthcare needs can be met at an affordable cost.
- Roles and responsibilities for collaborative practice – To meet the healthcare needs of the patient and the community an awareness of one's own role and those of other professions are needed. There should be clear communication between patients, families and other professionals regarding their roles and responsibilities. Working with other healthcare professionals and using available resources, patient-centred care can be delivered.

- Interprofessional communication – Communication between patients, families and healthcare team members should take place in a responsive and responsible manner. Communication should be understandable and avoid discipline-specific terminology when possible. Team members should listen actively and encourage ideas and opinions.

- Teamwork – Delivering patient-centred care through shared decision-making and shared problem-solving to reduce adverse outcomes. Dealing with conflict in an open and constructive manner through effective communication strengthens and creates a more effective team (IPE Collaborative Expert Panel 2011:16-27).

2.2.2   Facilitators' perspective

An account by Derbyshire, Machin and Crozier (2015:50-56) on the perceptions of interprofessional learning (IPL) facilitators' competence for their role demonstrated that the majority were confident due to recurrent prior exposure as an academic, a practice educator and/ or an experienced professional. Getting to know students and creating a positive IPL group culture from the start was highlighted as priorities by most facilitators. Ensuring that students in the group feel valued and comfortable to contribute, allowed students to "learn with, from, and about each other", which is the goal of IPL. Flexibility in leadership styles is also important to ensure that outcomes are met within that specific group. Facilitators emphasised the importance of understanding IPL principles, theory and policy together with a clear understanding of the curriculum. They also suggested, that educators should be committed and reflect interprofessional behaviour to their students in the light of the changeable nature of facilitating IPL. As preparation for IPL facilitation the authors suggest personal leadership development, with activities such as coaching, action learning and role shadowing.

As discussed by Egan-Lee, Baker, Tobin, Hollenberg, Dematteo and Reeves (2011:333-338) new facilitators lacked knowledge on the key principles of IPE and relevant literature before attending the preparatory workshop. There was a misconception among facilitators that IPE involved teaching learners from a profession different from their own and that facilitation skills meant keeping small group discussions on the specific topic, rather than encouraging students to explore their conventional views of the other professions. However, after the IPE programme, facilitators admitted their under-preparedness for small group facilitation and expressed the desire for further interprofessional faculty development in this area. Facilitators admitted there could potentially be missed teachable moments due to their unfamiliarity with the IPE principles and the lack of experience in facilitating IPE

groups. Some asked for additional support from their educational consultants after their initial facilitation session. Positive comments from their facilitation were the improvement in their understanding of IPE principles and approaches, as well as becoming more self-assured in IPE facilitation. This growth in personal confidence made facilitators more committed to IPE facilitation. The study further suggested that new IPE facilitators should have the opportunity to work with experienced facilitators where they could observe, mirror their facilitation style and receive feedback. In addition, a debriefing opportunity with experienced facilitators regarding issues linked to facilitation will assist new facilitators in delivering IPE in an effective manner.

Novice facilitators' perceptions regarding an IPE programme were assessed before their involvement and after working with an experienced facilitator. At the initial interview the facilitators had reservations regarding IPE, but after their participation their attitudes changed from negative to positive. Some of the negative attitudes included feeling unprepared and exposed as an educator, the extra time needed for IPE as this placed pressure on their time due to curriculum commitments and fears that students would miss out on important discipline-specific learning with the loss of professional teaching time. Highlights from their IPE experience included how students from different disciplines were interactively learning alongside each other and the novice facilitators were learning more about other disciplines. In spite of attending prior training, novice facilitators still stated that they needed more help from experienced peers. All of the novice facilitators agreed that teaching alongside an experienced facilitator was helpful. Co-teaching with an experienced facilitator played a role in changing attitudes as part of training and development. Anderson, Thorpe and Hammick (2011:11-17) further noted that novice facilitators should receive training on the principles of IPE and the required facilitation skills.

Hall and Zierler (2015:3-7) discuss how a faculty development course that presents various educational strategies, including small group exercises, local implementation of new IPE projects and peer learning, can be used to prepare faculty leaders for IPE. An important aspect they highlight is the adaptation of the IPE curricula to accommodate the local context. It is further stated that faculty involved in the IPE programme should actively model the interprofessional principles that will be taught to students. Lessons learned from a literature review of past successful IPE programmes, should be incorporated in the development of an IPE curricula. The need to prepare faculty members for facilitation was addressed with several short didactic presentations as well as small group classroom activities which involved passive to active learning. Facilitators participated in actual IPE activities, which allowed for facilitators to apply their collaborative knowledge and skills with IPE facilitation.

Two focus group interviews (n=5; n=8) explored facilitators' experiences of IPL and identified key factors that contributed to successful facilitation of IPL. Facilitators described the induction programme as useful in preparing them for what was expected of them. Peer support through facilitator debriefing after each session with students, especially after a negative student session, was also beneficial. Past experiences of small group facilitation and having collaborated in healthcare teams helped them with their role of facilitating the IPL sessions. Many also emphasised the importance of being role models of collaborative practice. Facilitators also benefitted from the IPL as they experienced an improvement in interprofessional relationships amongst themselves. A challenge was to facilitate the learning, with the facilitator finding the right balance of how much to guide the students when nothing was happening. Another challenge was dealing with students who felt they were wasting their time doing IPL. Facilitators experienced that working with interprofessional student groups was more challenging and demanding (Lindqvist & Reeves 2007:403-405).

Anderson, Cox and Thorpe (2009:85-90) describe the facilitators before and after attending a two-day Master's level course on IPE. The majority indicated that they hoped to gain in their knowledge, skills and understanding of IPE. Concerns expressed focused on the lack of confidence and experience of how theory would be translated into practice. Some of their expectations included to gain new teaching skills, confidence and to best facilitate IPL. Almost 80% of attendees expressed that attending the course "enhanced their appreciation" of IPE. Other benefits included learning and refreshing their skills with regard to teaching strategies. The importance of the academic content, covering Kolb's cycle of learning and PBL, was also addressed. Those with little teaching experience would have preferred more basic teaching assistance and to practice facilitation. Novice facilitators valued learning from the more experienced attendees at the course.

2.2.3 Students' perspective

Perceptions from health and allied healthcare students at Stellenbosch University after working in a clinical rural health setting which also allowed for home visits were very positive regarding interprofessional collaboration (IPC) and IPE, according to Theunissen (2013:online). Participants felt valued with an improvement in their self-esteem. With IPC mutual respect for the different professions and elimination of prejudices emerged. Delivering patient-centred care as a multidisciplinary team was a mutual goal. Home visits proved valuable to student insight and professional development. It was possible to work with a patient within his home and not take the patient to hospital. Actively learning "with,

from and about each other" was taking place. As a multi-disciplinary team (MDT), discussing a case and making a decision on patient care was possible. Students could better understand some of the challenges a social worker faced; for example, regarding older people living with children who abuse drugs and the difficult task to find placements for these children. One of the challenges, however, was learning to work together with all the different personalities within the MDT (Theunissen 2013:online).

At the University of Limpopo, Health Sciences students participated in a small study where the IPE sessions were conducted at an outpatient clinic. Facilitators and students were able to reflect on their experience of the simulated consultation. In preparation students were briefed about the scenario and also watched a DVD of the management of the SP pre-hospital as well as in the emergency room. The case study was the management of a multiple-trauma patient. The SP portrayed a 25-year-old technician who had sustained injuries two weeks prior to the consultation. Injuries sustained were a stab wound to the arm and trauma to the lungs. Complaints at the consultation included shortness of breath when walking upstairs, clumsiness of his hand and not being able to extend his fingers and wrist. He was concerned about possible dismissal when returning to work. In constructing the case study, inputs from clinicians were given regarding the injury and its management. Medical students were expected to assess the patient and refer him for physiotherapy and occupational therapy. These students were then also expected to perform a clinical assessment, provide a treatment plan and explain this to the patient. It was also expected to address the patient's concern about returning to work (Pitout, Human, Treadwell & Sobantu 2016:338).

During the first hour of the session, students reviewed and clarified the role of each profession in the treatment of the patient. During the second hour of the simulation, each profession conducted a consultation with the patient, while the rest of the students observed. In this way, students experienced the benefit of an MDT approach to patient treatment. Medical students realised that although they could perform a neuromuscular assessment, the physiotherapy and occupational therapy students were better trained to do it. Through role clarification medical students learned that the occupational therapy students could assist by making a splint and the physiotherapist could help with the respiratory complaint. One specific comment, "Doctors should develop the habit of working closely with other healthcare professions", highlighted the importance of collaborative practice. Students described the simulation as a "safe situation" where they learned the importance of a "proper assessment" and communication with the patient, to be sure the patient understands the management plan. Students realised their education needs by

reflecting on their own limitations on performing a clinical assessment and conducting an interview with a patient. They also requested more opportunities for IPE as it would allow them to grow as health professionals of the future. Subsequently, programme coordinators and facilitators reflected on how to improve future IPE programmes. They realised that students should be better prepared; one suggestion was presenting students with a video recording of facilitators conducting a consultation session. Also, students should be taught on how to reflect before starting the simulations (Pitout, Human, Treadwell & Sobantu 2016:338).

According to Arenson, Umland, Collins, Kern, Hewston, Jerpbak, Antony, Rose and Lyons (2015:138-143) the health mentors' programme (HMP) was introduced across an interprofessional curriculum from 2007 at the Thomas Jefferson University, United States of America (USA). This programme was developed in 2006 by faculty from six professions whose students eventually participated in the programme. The success of the programme is based on faculty from each profession willing to learn together and from each other, hallmarked by the commitment to interprofessional person-centred education. Participation was compulsory for students from six disciplines: medicine, nursing, occupational therapy, physical therapy, pharmacy, couple and family therapy. The role of the patient as the teacher and team member was emphasised in the design of the HMP. Volunteers from the community living with one or more chronic health conditions or disabilities were recruited to be the health mentors in the HMP; many were over the age of 65. The programme consists of four modules to be completed over two years by teams of students comprised of the various disciplines. Objectives of the module included taking a complete life and health history, formulating an interprofessional wellness plan, evaluating patient safety in the home and the reduction of medical errors, and the correct use of vitamins, herbals and drugs. From 2007-2013, 2911 students enrolled in the programme.

Data from 577 students were gathered through formal course evaluations, student focus groups, monthly student liaisons, faculty meetings and the review of student reflection papers. Themes emerging from student reflection papers were in line with the principles of IPE as they suggested improved attitudes towards chronic illness and toward caring for the elderly. It also included clear communication, efficiency, flexibility, role differentiation and teamwork. Challenges of the HMP included that students were not sure of their role and expressed the need for curriculum goals to be clear and relevant to each profession. Overall, students believed that IPE would benefit them in their future practice. The shift in the culture on campus was noticeable: students now expected to work with peers from

other professional programmes, changing the traditional separateness of health professions students (Arenson *et al.* 2015:138-143).

IPE activities have previously largely excluded undergraduate psychology students. In comparison to other undergraduate health profession students who engage in work placements, psychology students do not and tend to have a career outside the healthcare environment.   At an Australian university, 188 undergraduate psychology students completed an IPE health sciences programme during their first year and their perceptions of IPE in relation to future career paths (within health settings) were examined at the start of their second year. Some of the open-ended comments from students indicate that a better healthcare system can be created through IPE in future when different faculties from health sciences work together. It was also highlighted that the common goal of delivering the best possible care is created when multi-professionals are working with the same patient and can effectively communicate with each other. Some students expressed that IPE participation should be moved to the clinical years when students know more about their own field of psychiatry. However, other students conveyed overall dissatisfaction with IPE, remarking that the time for IPE could have been spent better preparing them for their careers, and they did not learn anything valuable about other professions. Students also mentioned that some career paths would be in human resources and outside the healthcare setting. The study suggests that IPE teaching staff should place a stronger emphasis on the interprofessional skills taught. Such an approach will increase the awareness of its relevance to workplaces outside of the health environment (Roberts & Forman 2015:188-194).

2.2.4   IPE in practice on improving patient care

Lewin and Reeves (2011:1595-1602) discuss teams and teamwork, with interprofessional practice, at a National Health Service (NHS) teaching hospital in England. The hospital delivers healthcare services to a generally low-income community. They conducted the study by observing the verbal and non-verbal interprofessional interactions between different professionals coming together to discuss delivery of miscellaneous related tasks. Observational data were gathered over a period of two years (from 2001-2002) in three, three-month periods. There were two general medical wards where various professionals worked; doctors (junior to senior), nurses, occupational therapists, social workers, physiotherapists and pharmacists. Each ward had a "medical firm" with a senior physician (consultant) and junior physicians (one registrar and three house officers) as well as a "care coordinator" to assist with patient discharge. The researchers gathered in total 90 hours of

observations, at different periods during the work day from 07:00 to 18:30. The observations included verbal and non-verbal interprofessional interactions, but they also noted intraprofessional and social interactions. Ward-based observations from the nurses' station were conducted. Missed observations occurred at the bedside of patients or ward corridors. Observations of the multidisciplinary team weekly meetings also occurred, where patient care and discharge plans were discussed. The staff's view of interprofessional teamwork was assessed by means of semi-structured interviews.

Assessment of planned interactions during ward rounds showed that nurses rarely attend ward rounds. Reasons for nurses' absence included work pressure (including being short staffed) and multiple medical teams busy with ward rounds at the same time, the erratic times of ward rounds. Other healthcare professionals attending the ward rounds were more on the "outside" and were not included in clinical decision-making. One of the doctors described the interaction between doctor and nurse on the ward as "parallel working", with limited sharing of information. Nurses expressed that doctors didn't communicate well and that they should become more responsive and update nurses on the management plans of patients. One of the nurses commented, "I find as well that you have to say to the doctors, 'Oh, what is happening with this patient, what's changed, what's new?' You have to look for them. It would be nice if they would look for the nurse". In comparison, more positive interactions occurred between nurses, social workers, therapists and care co-ordinators. Planned weekly MDT meetings however proved to have challenges with poor staff attendance. Although the meeting usually lasted for 30 minutes, poor attendance by senior doctors and nurses occurred due to other work obligations. Staff felt that the absence of senior doctors restricted the importance of the MDT meetings, as decisions such as patient discharges could not be planned with a junior doctor and during these meetings some of the other staff would only then find out what was really wrong with a patient. The study suggests that these planned interprofessional activities were not adequately demonstrating collaborative practice. The care co-ordinators and nurses were often used to deliver patient information between the different professional groups (Lewin & Reeves 2011:1595-1602).

An investigation into the delivery of interprofessional care at a community health centre in Texas, USA, demonstrated that a collaborative approach can improve outcomes in patients and result in cost savings. A physician, clinical pharmacist, nurse practitioner and a number of undergraduate students from medicine, nursing and pharmacy formed the team. Over a period of three months, team-building exercises occurred among the undergraduate students at weekly intervals. Initially for the first three meetings exercises were directed by the faculty, thereafter students were leading the team-building exercises and were

supervised by faculty. On a monthly basis, diabetic participants received 15-30 minutes counselling on nutrition, medications and lifestyle modifications. Every two weeks follow-up phone counselling was done. Medication review and adherence counselling were done by the clinical pharmacist and pharmacy students. At yearly intervals, a group of 122 type 2 diabetic patients were followed up over a period of three years. A 10% improvement in HbA_1C levels, a 9% improvement in systolic blood pressures, a 5% improvement in diastolic blood pressure and a 62.6% reduction in triglycerides were demonstrated. The cost savings from improved diabetic goals and outcomes for this study was $256 (Hutchison 2014:568-569).

Nandan and Scott (2014:376-378) describes an IPE model that engages faculty, both clinical and non-clinical (social work and business) professional programme students along with community partners for its planning and implementation. As part of developing the model, the community is invited by the team to submit health-related proposals. The complexity of a proposal (e.g. hypertension among poor socio-economic groups), psychological, and behavioural causes, are considered together with what input from multiple disciplines would be required. The team addresses the issue comprehensively and in a financially sustainable manner. The community is further involved by working with team members to understand the contextual aspect of the illness and to assist in identifying barriers to change and community resources. The IPE curriculum is then developed by IPE team members in collaboration with the community collaborators. Participation is voluntary and students in their final year of studies are invited to enrol. The IPE programme consists of an interdisciplinary capstone course where faculty teaches students by using various educational strategies on the principles of IPE, and students work as a team to understand the health issues and create a management plan while consulting those community members who submitted the proposal. During the subsequent internship the students have to implement the management plan at the internship sites while IPE team members mentor students and demonstrate those interprofessional competencies that are expected of students.

The Teams of Interprofessional Staff (TIPS) project was developed in Canada to provide IPE for practising professionals in order to support and encourage interprofessional practice. The aim of the project was to explore the ability to work effectively both as individuals and as a team and improve patient care. There were five groups of TIPS teams and included an administrator, social worker and medical laboratory technologist, as well as one physician and one nurse. The project included a teaching session on conflict resolution, cultivating a teamwork culture and how to develop a team agreement. The

impact of the TIPS project extended into participants feeling responsible and willing to transfer what they learned into other areas and teams at their hospitals. Participants expressed a change in their perspective and in the way they did things at their workplace. Patient care improved with better working relationships among the team by having a clear understanding of everyone's roles. Overall the study suggested participants' growth in knowledge, perceptions and satisfaction towards interprofessional care (Bajnok, Puddester, Macdonald, Archibald & Kuhl 2012:76-89).

The University of the Western Cape implemented an IPE training programme from January to May 2011 where students were placed in interdisciplinary groups in a rural and underserved municipality. Students who participated were from natural medicine, physiotherapy and nursing. They remarked on the lack of structure for the placement programme and the need to have more interaction between different disciplines to establish interdisciplinary learning. Students highlighted how the IPE experience allowed them to evaluate and prioritise the needs of the community, to create an opportunity to learn about other professions and to compare healthcare approaches. After the IPE placement two thirds of students stated they would return to a rural-based community for future employment (Mpofu, Daniels, Adonis & Karugti 2014:online).

2.2.5 Educational strategies in the delivery of an IPE programme

Killen (2007:80) states that the importance of the learning outcomes, the learning context and the characteristics of the learners should guide you when selecting which teaching strategies to use. Killen further suggests that the following should be asked when selecting which teaching strategy to use in a specific lesson:

- "Do the learners have the necessary knowledge, skills and attitudes to use the strategies that I am considering?"
- "How can I take advantage of learners' prior knowledge?"
- "How much time, space and other resources do I have, and how will these restrict my choice of teaching strategy?"
- "How can I engage the learners in real-life experiences as they learn?"
- "How will my own knowledge, skills and attitudes influence my teaching?"
- "How can I make it easy for learners to learn?"
- "Do I have the knowledge and skills to use the strategies I am considering?"
- "What motivational strategies can I use to foster self-confidence in my learners?"
- "How will I know that I am teaching as well as I possibly can?"

According to Bloom (cited by Killen, 2007: 81) learning outcomes can be grouped into three domains: (1) "cognitive domain, concerned with mental processes; (2) psychomotor domain, concerned with the control of body movements and physical actions; (3) affective domain, concerned with feelings, attitudes and values." The main point of outcome-based Education (OBE) concerns the alignment of outcomes, teaching strategies and assessment as described by Killen (2007:82).

Harden, Crosby and Davis (1999:7-8) define OBE as "an approach to education in which decisions about the curriculum are driven by outcomes the students should display by the end of the course". Outcomes that are clear and unambiguous determine the curriculum content (and its organisation), the teaching methods and strategies, the courses offered, the assessment process, the educational environment and the curriculum timetable. The first requirement of OBE is that the learning outcomes should be identified and communicated to all involved (students, teachers, public, employers and other stake-holders). The second requirement is that OBE should be the decisive factor about the curriculum. OBE has the advantage of preparing future doctors to work in a complex healthcare setting with changing patient and public expectations. The following figure 2.4 is an illustration of the educational environment linking the learning outcomes, teaching and learning strategies and the student in a holistic manner.
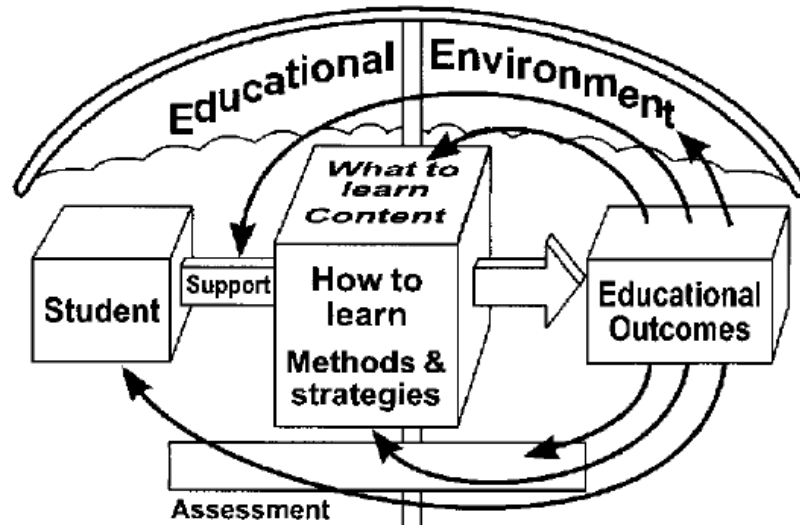
FIGURE 2.4: A MODEL OF CURRICULUM EMPHASISING THE IMPORTANCE OF EDUCATIONAL OUTCOMES IN CURRICULUM PLANNING
[Harden, Crosby & Davis 1999:8]

Maudsley (1999:178) defines PBL as the "acquisition of knowledge arising from working through a progressive framework of problems providing context, relevance and motivation". This style of learning builds on past knowledge, integration, critical thinking, reflection on learning and enjoyment. Goals are achieved through facilitated small-group work as well as independent study. Similarly PBL can be defined as when a small group of students is presented with a problem to solve and use a structured approach to solving it. When the problem is based on a hypothetical patient, the process begins with a brief summary of the patient. The students contribute ideas and note relevant information and then identify issues that need to be explored. One of the main objectives of PBL is to support students in gaining skills for problem-solving and reasoning which they will be able to apply in their professional lives (Dent & Harden 2013:166).

Students learn about a subject through engagement in a real problem. The problem is context-specific to the learning outcome. The students learn by solving the problem. The solution is agreed upon and implemented. A PBL tutor requires training and ongoing support. In addition, a PBL tutor should observe another PBL tutor with students to grasp how to manage a session. The role of the PBL tutor is to facilitate the active process of learning in each student within a group of students, by presenting them with a well-structured problem/ case study. Students learn to work independently, accessing available resources and meet regularly to share their ideas and critically evaluate each other. The PBL tutor facilitates the group by bringing them together as a team, for example where a student feels excluded by a dominating team member. The PBL tutor also monitors the

progress of the team and can advise where needed, if it appears that students are solving the problem/ case with an incorrect approach. The PBL tutor facilitates by introducing critical reasoning early on, as not all students can apply critical reasoning. Having the PBL tutor is very useful in this context. Ultimately as a group, with input from all members, they are able to work individually, use available resources (evidence-based), critically evaluate each other, and *as a* team solve/ answer the well-structured problem/ case study they had been presented with (Dent & Harden 2013:167-172).

Using and implementing PBL can be done through simulation and the use of an SP. According to Barr (cited by Dent and Harden 2013:215) the definition of a SP is someone who has been trained to simulate a real patient so accurately that the simulation cannot be detected by a skilled clinician. Dent and Harden describe the use of a SP in small group sessions as a dynamic educational resource that creates a safe and supportive educational environment. A well-trained SP can give students valuable feedback from a patient's perspective. A student is usually presented with an SP and a realistic problem scenario/ statement (which they will see in future clinical practice) is described and the student has to manage the patient further. As described by Freeth (2007:16) simulation includes simple role play (telephone call), medium and high-fidelity manikin simulation in clinical skills centres and skilled SPs. This form of teaching and learning provides a safe learning environment where mistakes are allowed, repeated practice takes place after feedback or self-assessment, and provides for situations not yet experienced. Careful planning and skilful facilitation are important as some types of simulation offer scope for public embarrassment; naturally people fear failure and embarrassment. A student is presented with a problem-based scenario/ statement that they will see in clinical practice and has to manage the situation further.

Wood (2003:28) highlights that skills such as "communication skills, teamwork, problem solving, independent responsibility for learning, sharing information, and respect of others" are also acquired through PBL. Wood further illustrates the roles of participants during a PBL tutorial with the following figure 2.5.
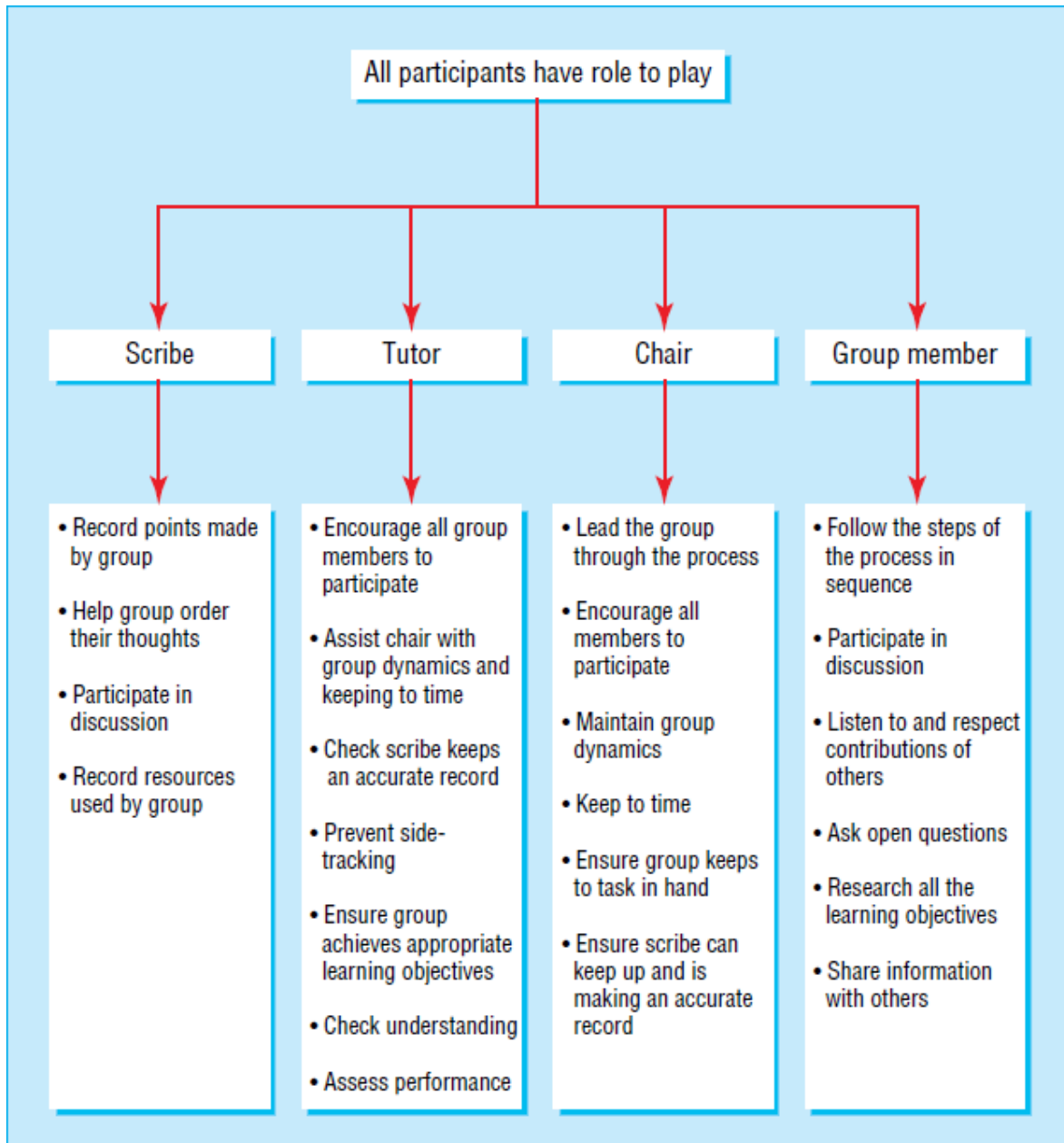
FIGURE 2.5: ROLE OF PARTICIPANTS IN A PBL TUTORIAL
[Wood 2003:328]

The process of learning is reliant on the incorporation of experience and reflection. Reflection can be described as the "conscious consideration of the meaning and the implication of an action, which includes the assimilation of knowledge, skills, and attitudes with pre-existing knowledge." The result of reflection can lead to new interpretations by the student. Guidance by an effective facilitator is required, as reflective thinking does not occur automatically, but can be taught. Debriefing can be described as a student-centred reflective dialogue. To ensure the best possible learning, the skill of the debriefer is essential. It is suggested that debriefing can enhance safe, quality patient care by promoting understanding and supporting the transfer of knowledge, skills and attitudes.

Debriefing facilitated by a person who is competent in the debriefing process is described as one of the processes to achieve the desired outcome in a simulation-based experience. It is essential that the debriefer should understand best practices when structuring the format of the debriefing and when facilitating the reflective conversation. The debriefer should also receive specific instruction through a formal course or by working with an experienced debriefer. The competency of the debriefer should be assessed through the use of an established instrument and through input from both learners and experienced debriefers. The debriefer uses verbal and non-verbal prompts to encourage conversation in an environment that supports trust, open communication, confidentiality, self-analysis and reflection. During the debriefing process, the facilitator provides constructive feedback on participants' decisions and actions and assists participants in conceptualising how the learning derived from the simulation and debriefing can be applied to future clinical practice (Decker, Fey, Sideras, Cabellero, Rockstraw, Boese, Franklin, Gloe, Lioce, Sando, Meakim & Borum 2011:S26-29).

Fey, Scrandis, Daniels and Haut (2014:249-256) explore the students' perspective on learning through debriefing in a group of nursing students following exposure to high-fidelity simulation. Students completed a debriefing facilitator evaluation, the Debriefing Assessment for Simulation in Healthcare-Student Version (DASH-SV). The facilitator is rated on the following six elements: (1) the instructor set the stage for an engaging learning experience, (2) the instructor maintained an engaging context for learning, (3) the instructor structured the debriefing in an organised way, (4) the instructor provoked in-depth discussions that led me to reflect on my performance, (5) the instructor identified what I did well or poorly and why, (6) the instructor helped me see how to improve or how to sustain good performance. Each element is rated from 1 (extremely ineffective/ detrimental) to 7 (extremely effective/ outstanding). The highest score was for the instructor who stimulated in-depth discussions that led students to reflect on their performance. The lowest score was for the instructor not identifying what the student did well or poorly. Students enjoyed the safe environment with simulation because it allowed them more freedom for risk-taking that would not be possible in a real clinical situation. Students further stated that the comment made by the facilitator during the briefing meeting that mistakes are anticipated during the simulation and acknowledging their emotions contributed to creating a safe environment. Debriefing with immediate feedback was described as critical to students' learning; students valued feedback from their facilitators as well as from peer observers. Actions by the facilitator which students described as positive included the ability to empathise, allowing enough time to address all questions, and ensuring that every student participated.

The role of the facilitators at the FoHS, UFS, IPE programme within the small group is to assist students with the active process of learning by assisting the group to discuss problems more easily, instead of telling the group what to do. It is expected of students to develop a comprehensive management plan for a client with a chronic condition. At the end of the programme students and facilitators reflect on their experience and fill in a short questionnaire. Four courses had been presented since the programme was introduced in 2014.

From the literature review the researcher has identified the importance of collaborative practice in the interest of improving health outcomes for individuals, families and communities. IPE definitely has a role in improving healthcare where students are trained on this approach before receiving their qualifications and entering the workplace. Facilitators play an important role in an IPE programme. Literature mainly describes how students experienced IPE. Limited literature is available regarding reflection of facilitators on their experience of an IPE programme. This identifies a gap in the evaluation of the effectiveness of an IPE programme. The educational strategies used for an IPE programme is however well described in literature.

At the FoHS, UFS, the IPE sessions start with the students working as a group with their facilitator and formulating their definition of what collaborative practice comprises in the context of patient care. One important aspect of the sessions is when the students are presented with a case scenario, e.g. a patient in hospital who was recently admitted for a stroke, and together as a team the students have to discuss the various aspects of immediate management, rehabilitation, discharge and follow-up care. This happens in session's two to three, where an SP is used. With each aspect the role of team leader changes, but shared decision-making still takes place. Some of the challenges for the students are shared leadership and teamwork. This occurs when allowing a different professional to be the team leader, to learn from other disciplines what their role is in the delivery of patient care and to involve the patient in what the management plan will be. Some of the challenges for the facilitator are to abstain from controlling the students, but rather facilitating the process of discussion and learning from one other. The facilitator attempts to engage all the different professions, which can be challenging at times. At the end of the programme, students and facilitators reflect on their experience and fill in a short questionnaire.

2.3   SUMMARY OF CHAPTER

In Chapter 2, the researcher conducted a literature review which looked at all the aspects relating to an IPE programme. From the literature, the researcher ascertained the importance of collaborative practice in the interest of improving health outcomes for individuals, families and communities. IPE definitely has a role in improving healthcare where students are trained on this approach before receiving their qualifications and entering the workplace. Facilitators play an important role in an IPE programme, and therefore they should be knowledgeable on the principles of IPE, facilitation and debriefing to ensure that effective learning takes place. Literature mentions mainly how students experienced IPE. Literature that reflects on the role of the facilitator with regard to their experience of IPE is scarce and limited. Some IPE programmes include the community members, pharmacists, psychologists, social workers and administrators. All of these elements were considered in choosing the research method and research instrument for this study.

In Chapter 3 the **Research design and methodology** will be discussed.

CHAPTER 3:
RESEARCH DESIGN AND METHODOLOGY

3.1   INTRODUCTION

In Chapter 2 the theory behind IPE was deliberated and the researcher's train of thought was clarified. In this chapter the chosen research design, methodology and ethical aspects will be explained.

3.2   THEORETICAL PERSPECTIVES ON THE RESEARCH DESIGN

3.2.1   Theory building

Leedy and Ormrod (as quoted by de Vos, Strydom, Fouché & Delport 2011:63) suggest the following characteristics of a quantitative design; that it is used "to answer questions about relationships among measured variables with the purpose of explaining, predicting and controlling phenomena." They also state that researchers choose this design in order to remain "detached from research participants", which will allow them to reach unbiased conclusions. In this study, the researcher aims to explain the facilitators' perspective on the IPE programme in an unbiased manner.

Fouché and Schurink (as quoted by de Vos *et al* 2011:307) describe that qualitative researchers in contrast construct their own design as they proceed. They use one or more existing strategies as a guideline. The qualitative researcher wants to understand rather than explain "with the subjective exploration of reality from the perspective of an insider as opposed to that of an outsider", which is principal in quantitative research.

With a cross-sectional research design data are obtained from a cross-section of the population at a specific point in time. This fact indicates that data were gathered once from a specific sample (Botma, Greeff, Mulaudzi & Wright 2010:113).

The chosen research method for this project was a quantitative, cross-sectional online survey with some open-ended questions. This was the most appropriate design to investigate the facilitator's perspective in the current and future IPE programme at the FoHS, UFS.

3.3   RESEARCH METHOD

The methods used in the study were a literature review and an online survey. In the next paragraphs, the researcher will discuss each of these methods.

3.3.1   Literature review

Fouché and Delport note that a literature review is important as it assists to clearly understand the nature and the meaning of the research problem identified. It places the researcher's efforts into perspective by refining the research question and reduces the possibility of choosing an irrelevant topic by considering what has been done previously in the area of research interest (de Vos *et al.* 2011:135).

When conducting research, it is important to demonstrate that a researcher has critically evaluated the current relevant knowledge base through reading broadly. This shows an in-depth understanding of the subject matter. It is important for the researcher to identify gaps in previous research and to indicate how his/ her research will address those gaps. By conducting a thorough literature review the researcher ensures that duplication of research already conducted does not happen. This also aids researchers in how to conduct their research and may well assist in refining the research topic (Botma *et al.* 2010:64).

Cresswell (2003:66) explains the relevance of the literature review as "to present results of similar studies, to relate the present study to the ongoing dialogue in the literature, and to provide a framework for comparing results of a study with other studies".

In Chapter 2, the researcher presented a theoretical overview with key terms which were used to conduct a literature search for the study (cf. Figure 2.2). Following the literature review, the researcher was able to formulate the research problem, identify the study objectives and choose the most appropriate method to answer the research question.

3.3.2   Online survey

Botma *et al.* (2010:133-137) discuss the use of a questionnaire. In quantitative research designs, there are five data gathering methods which include the questionnaire survey. A structured questionnaire contains fixed questions with a pre-coded response options. It does not allow for the participant to elaborate or clarify their responses. Usually it can be completed over the telephone, face-to-face or posted to the participant. When the researcher wants to determine an attitude (or perspective), a statement is written and the

participants are asked to what extent they disagree or agree with the statement. Questionnaires can have varying degrees of arrangement. With close-ended questions participants must select which response is most appropriate for him or her. With open-ended questions participants must write their own responses. One of the benefits of a questionnaire is collecting a large amount of data within reasonable limits of time. A negative however, is that misunderstanding may arise with no way of clarification, leaving the researcher unsure whether a response was made in full understanding of the question.

According to Nesbary (in Cresswell 2003:155-156) a survey design can be used to describe attitudes or opinions of a population. Data collection may also involve the creation of an internet survey and administering it online.

Grinnell and Unrau (as quoted by de Vos *et al.* 2011:189-190) recommend the use of electronic surveys over paper-based questionnaires and note that data are directly entered into an electronic computerised database whereby mistakes are limited. In this way, almost all potential errors with data collection are eliminated.

Based on these facts, the researcher decided that the most appropriate method of data collection would be through an electronic (internet-based) questionnaire survey. The purpose of the online survey was to elicit the facilitators' perspective (their opinions and attitudes) of the IPE programme at the FoHS, UFS. Participants were informed that completion of the online survey implied their informed consent. For more honest responses (not influenced by bias from other facilitators), the researcher opted for an online survey and not a focus group to answer the research question. An added benefit was that each participant could complete it at leisure, which increased the response rate. In constructing the online survey, the researcher only used English as language of communication as the IPE programme and information were only available to facilitators in English. The researcher adhered to certain basic principles in constructing questions. The questions were brief and clear, with the style of questioning familiar to respondents. All questions were relevant to the concepts of the study. The researcher attempted to avoid leading and biased questions. The researcher used open-ended questions to discover what was really important to participants and to get an answer to a question with many possible answers (Botma *et al.* 2011:190-196).

The online survey was constructed from the objectives of the study. The questionnaire included four main sections: personal information of participant, perspectives on the current

IPE programme, other factors that could affect the health of patients, and participants' perspective on future IPE programmes (Appendix A).

Section 1: **Personal information** asked questions about the participant's gender, age, qualifications, academic role in undergraduate medical education and participation as facilitator in IPE programme since inception.

Section 2: **Collaborative practice** asked questions about the participant's work environment, the various professionals they are in contact with at their workplace and the need for an interprofessional healthcare team.

Section 3: **Current IPE programme** asked questions about the participants' knowledge of IPE, the need for an IPE programme for undergraduate students, usefulness of the IPE programme to the participant's academic discipline, playing the role of a facilitator, students achieving the outcomes, the case study with the standardised patient, challenges faced as a facilitator, highlights as a facilitator and suggestions to change the current IPE programme

Section 4: **Other factors that affect the health of patients** asked questions about polypharmacy, socio-economic circumstances, psychiatric diseases and lack of community resources.

Section 5: Recommendations were invited on future IPE programmes about who else should be included, a case scenario and continuing as a facilitator.

3.3.3   Target population

In this study, the target population and the survey population consisted of all the facilitators of the IPE programme at the time of the study at the FoHS, UFS.

3.3.4   Description of sample and sample size

The sample size consisted of the total number of 34 facilitators involved in the IPE programme at the time of study. The researcher who conducted the study was also a facilitator, but was not included in the study. The researcher obtained a list of all facilitators of the IPE programme being investigated from the IPE programme coordinators. The information obtained did not state the gender or the academic discipline/ department the

facilitator was from. It did however appear to be four males and 30 females on the list obtained, as identified by their first names.

3.3.5 The pilot study

A pilot study adds rigour to the research and is done to ensure that the questions are clear, without bias and to determine the amount of time needed to complete the questionnaire. The purpose of a pilot study is to improve the effectiveness and success of the study (de Vos *et al.* 2011:241-242). The pilot study must be executed in the same way as the proposed study. If a pilot study is not done, the researcher will not know if the proposed data collection method will be effective. When respondents are selected accurately this contributes to meaningful insights that can be used to modify the final questionnaire. To achieve this the questionnaire (Appendix A) was answered online, in November 2015 by two facilitators involved in the IPE programme at the FoHS, UFS. Analysis of pilot study data was conducted by the researcher and the EvaSys officer.

3.3.6 Data gathering

Data were collected by means of an online survey (Appendix A). The researcher used EvaSys, a web-based survey programme for creating and distributing the online survey (which was available only in English). The researcher was assisted by an EvaSys officer in this process. The researcher and the EvaSys officer discussed and confirmed the methods to create and distribute the online survey on the EvaSys system, to collect responses and to extract results from the EvaSys system, and the timeframe needed. The data were captured in an EvaSys project agreement signed by both the researcher and the EvaSys officer. After creating the online survey on the system, the EvaSys officer emailed the test questionnaire to the researcher for approval according to the time frame. As changes were needed, the researcher emailed the details of such changes to the EvaSys officer. Emailing the corrected questionnaire repeatedly between the researcher and EvaSys officer occurred until the online survey was ready to be distributed to the participants. The EvaSys officer opened the online survey collector and distributed the survey via email to the participants. The participants received an email link to access and complete the online survey. The EvaSys system processes responses to online surveys automatically and no further data capturing were required. Reminders were sent to non-responders every two weeks until April 2016.

3.3.7 Data analysis

Results of the survey were available immediately after a response had been submitted. The EvaSys system provided certain data analysis (means, frequencies, etc.). Further analysis of data was done by the researcher in consultation with the supervisor of the study. Open-ended questions were analysed by the researcher and categorised into themes, categories and sub-categories.

3.4 VALIDITY AND RELIABILITY

3.4.1 Validity

Cresswell (2003:195) describes validity as the strength of qualitative research. It is used to determine whether the findings are accurate from the perspective of the researcher, the participant, or readers of the account. It also indicates if the conclusions of the study were accurately based on its design and interpretation (Botma *et al.* 2010:174).

Questions were designed after a literature review. Questions were formulated according to objectives. Researcher bias was reduced with the completion of an online questionnaire. The researcher completed a qualitative workshop which assisted with interpreting and analysing the open-ended questions.

3.4.2 Reliability

Cresswell (2003:158) explains that reliability affirmatively answers the following question: "If an instrument is used a second time, will the scores remain stable?" As described by Botma *et al.* (2010:177) "reliability represents the consistency of the measure achieved". Reliability was ensured with the questionnaire being evaluated by a research evaluation committee after ethics approval. Thereafter a pilot study was conducted. Results of the pilot study were checked with the study supervisor and EvaSys officer.

3.5   ETHICAL CONSIDERATIONS

3.5.1   Approval

Approval for the research project was obtained from the Faculty of Health Sciences Research Ethics Committee, the Head of the School of Medicine, the Dean of the Faculty of Health Sciences at the UFS as well as the Vice-Rector, Academic at the UFS, and listed under Ethics number 176/2015 (cf. Appendix B and Appendix C). As no patients are involved in this study, approval from the provincial executive was not necessary.

3.5.2   Consent

Informed consent was implied with completion of the online survey. Prior to participation, a short overview of the study and its purpose was provided to the participants with an explanation of what was required from them.

3.5.3   Right to privacy

No names or personal identifiers appeared on any completed online survey that was subjected to statistical analysis. All information was managed in a strictly professional and confidential manner. Only the researcher and the EvaSys officer would be able to identify the participants who completed the online questionnaire. Participants could withdraw from the project at any time.

3.5.4   Confidentiality

Number coding was used on the EvaSys system to ensure the confidentiality of the participants' responses. Should the research results be published in a journal, the names of participants will not be disclosed.

3.6   SUMMARY OF CHAPTER

This chapter provided a discussion of the methodology that was used to implement this study. A quantitative, cross-sectional study design was chosen with an online survey. All 34 facilitators from the IPE programme at FoHS, UFS were sampled. Approval to conduct the study was obtained from the Research Ethics Committee of the FoHS, UFS.

In Chapter 4, the **Results, analysis and discussion of the closed-ended questions of the online survey** will be discussed.

CHAPTER 4:

RESULTS, ANALYSIS AND DISCUSSION OF THE CLOSED-ENDED QUESTIONS OF THE ONLINE SURVEY

4.1 INTRODUCTION

In Chapter 3 the methodology of the research project was discussed and the layout of the online survey explained. In this chapter, the analysed data of the closed-ended questions of the online survey were summarised, presented as figures and tables, and then followed by a discussion. A total of 34 facilitators were included in the study, with only 23 facilitators completing the online survey. This was a response rate of 67.6%.

4.2 SURVEY IMPLEMENTATION AND FEEDBACK

The research project consisted of an online survey to evaluate facilitators' perspectives on the IPE programme at the FoHS, UFS.

The pilot study was completed by two facilitators who participated in the last IPE programme in February 2015. Due to the small number of facilitators (34), the researcher included these facilitators in the main study. A few minor amendments were made to the questionnaire.

After completion of the pilot study, the link to complete the online survey (on EvaSys) was emailed to the remaining 32 facilitators. Reminders were emailed automatically every two weeks to facilitators to complete the online survey. The researcher emailed facilitators in March 2016 who still had not completed the survey. The researcher thereafter called facilitators who had not completed the survey. This contributed to a higher response rate. Two of the facilitators who did not respond were not employed at the FoHS of the UFS during the study period and declined to participate in the study. It is possible that the remaining facilitators who did not respond did not have time to complete the survey due to work obligations. In April 2016, the online survey was closed and data analysis was started.

4.3   DEMOGRAPHIC INFORMATION

In this section from the first part of the online survey the respondents' demographic information is displayed and interpreted.

4.3.1   Gender of respondents

The response rate for this question was 91.3% (21). Of those, 90.5% (19) were female and 9.5% (2) were male.

Discussion: For this study, this was an expected finding as the sample (34) consisted of 30 females and four males. Academic staff at the FoHS, UFS comprise of male and female persons. Nevertheless, in the researcher's opinion the School of Nursing and School of Allied Health have more female than male academic staff which could explain the findings from this study.

4.3.2   Age groups of respondents
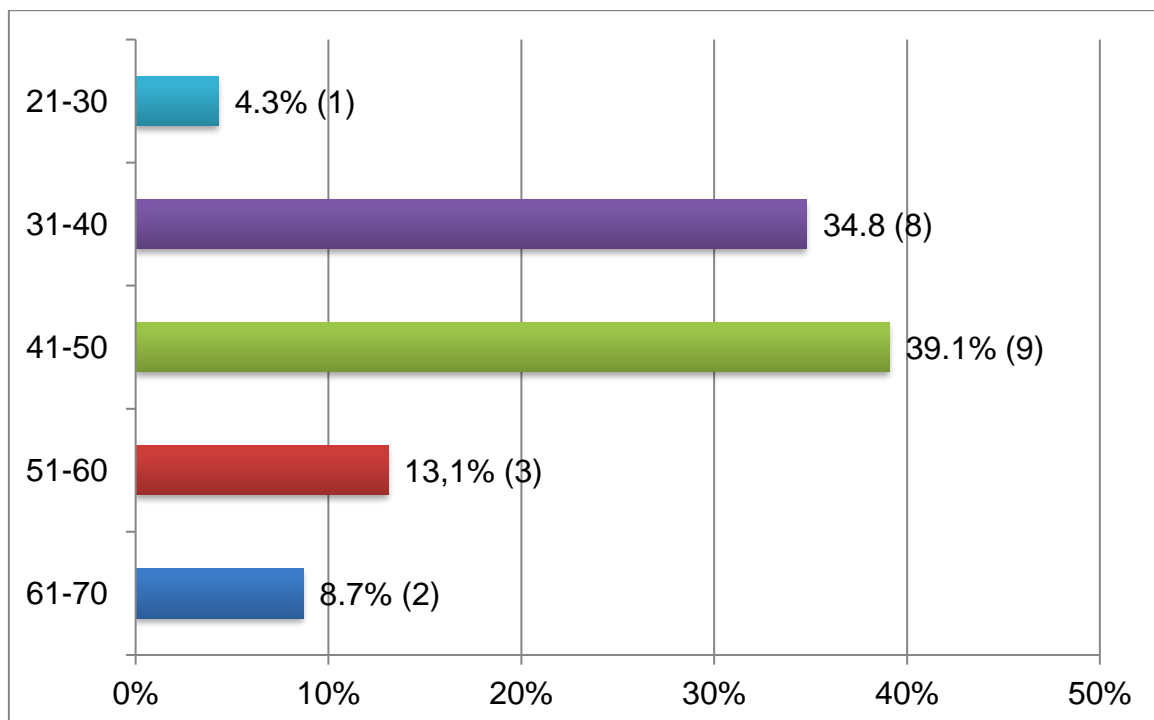
FIGURE 4.1: AGE GROUPS OF RESPONDENTS (N=23)

As illustrated in figure 4.1, of the 23 respondents, 4.3% (1) were between the ages of 21-30 years, 34.8% (8) were between the ages of 31-40 years, 39.1% (9) between the ages of

41-50 years, 13.1% (3) between the ages of 51-60 years and 8.7% (2) between the ages of 61-70 years.

Discussion: This clearly demonstrates that the majority of respondents were between the ages of 31-50, which is what the researcher expected to find with regard to the academic staff complement of the university.

4.3.3   Institution where respondents completed their undergraduate training
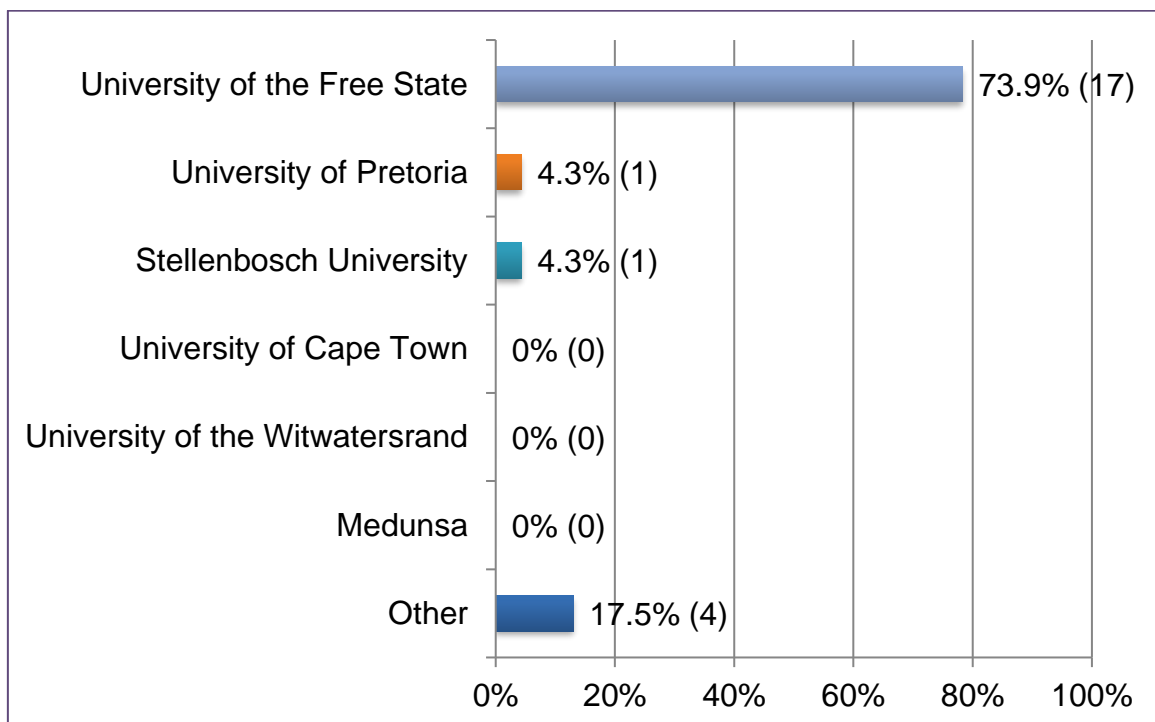
FIGURE 4.2: INSTITUTION WHERE RESPONDENTS COMPLETED HIS/ HER UNDERGRADUATE TRAINING (N=23)

As illustrated (cf. Figure 4.2), 73.9% (17) of respondents completed their undergraduate studies at the University of the Free State. Of the remaining respondents, 4.3% (1) each, completed their undergraduate training at the Nurses' College of the Free State, the University of Potchefstroom, Stellenbosch University, University of Pretoria and the University of Kwa-Zulu Natal.

Discussion: The majority of respondents completed their undergraduate studies at the UFS, which is what the researcher expected to find. It is possible that respondents completed their undergraduate studies and remained in the Free State to pursue postgraduate studies and sought employment at the UFS.

4.3.4 Professional qualifications of respondents
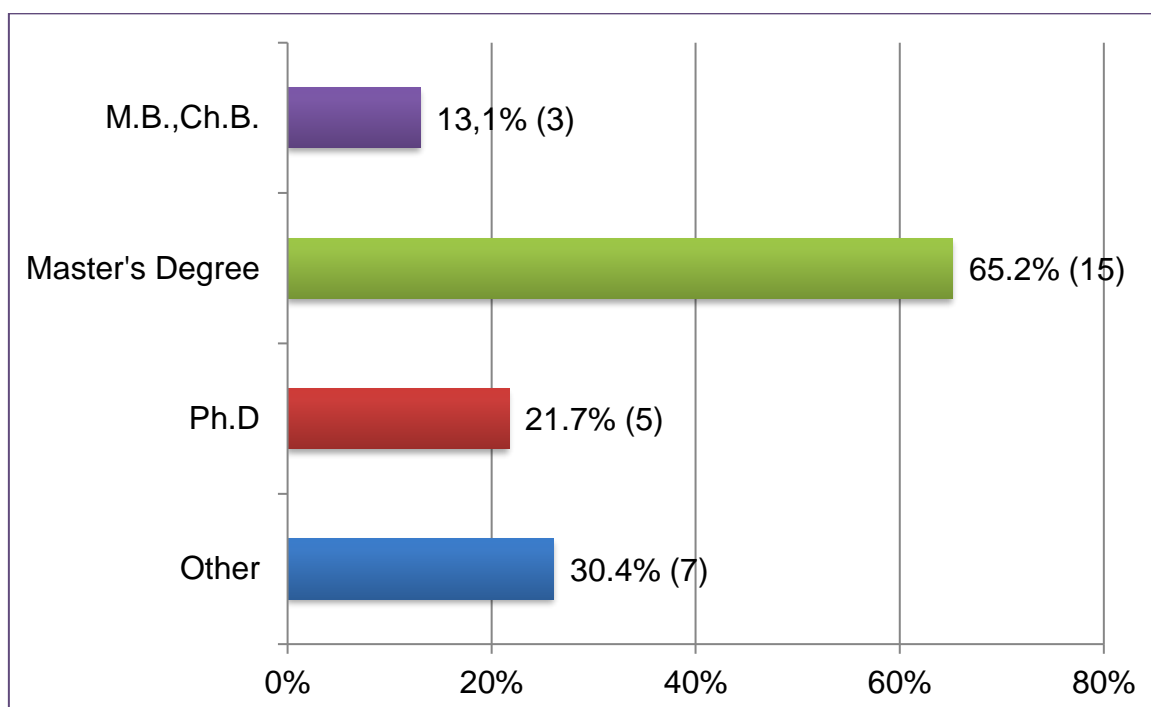
FIGURE 4.3: RESPONDENTS' PROFESSIONAL QUALIFICATIONS (N=23)

The professional qualifications of respondents (cf. Figure 4.3) included 65.2% (15) with a Master's degree, 13.1% (3) a Bachelor's degree in Medicine and 21.7% (5) with a PhD degree. Other professional qualifications included a Diploma in Nursing Education; Advanced Bachelor's in Nursing Science; BSc (Physiotherapy); BCur and BA Cur; BSc; and M. Optometry for a total of 30.4% (7) of respondents.

Discussion: It is a promising finding that academic staff who participated as facilitators obtained postgraduate qualifications, with a Master's or PhD degree being the dominant postgraduate qualification. It illustrated a strong "academic foundation" of facilitators of the IPE programme. However, the researcher cannot assume that it would benefit facilitators and students for the IPE programme or influence respondents' perspectives of the IPE programme.

4.3.5 Academic discipline best describing the respondents

The School of Allied Health characterised 47.8% (11) of respondents. Individual departments contributed as follows: Exercise and Sports Sciences 4.3% (1), Nutrition and Dietetics 4.3% (1), Occupational Therapy 13.1% (3), Optometry 4.3% (1) and from

Physiotherapy 21.7% (5). The remaining respondents were 34.9% (8) from the School of Nursing and 17.4% (4) from the School of Medicine.

Discussion: Respondents from the School of Allied Health dominated, suggesting they would be the majority of facilitators of the IPE programme. The School of Medicine had the lowest number of facilitators which could suggest that some of the non-responders were from the School of Medicine, or fewer staff members from the School of Medicine are involved as facilitators in the IPE programme. Should this be the case, the School of Medicine staff should be encouraged to participate as facilitators. The highest number of undergraduate students participating in the IPE programme is from the School of Medicine; therefore, one would expect higher numbers of staff participating as facilitators.

4.3.6   Academic role of respondents
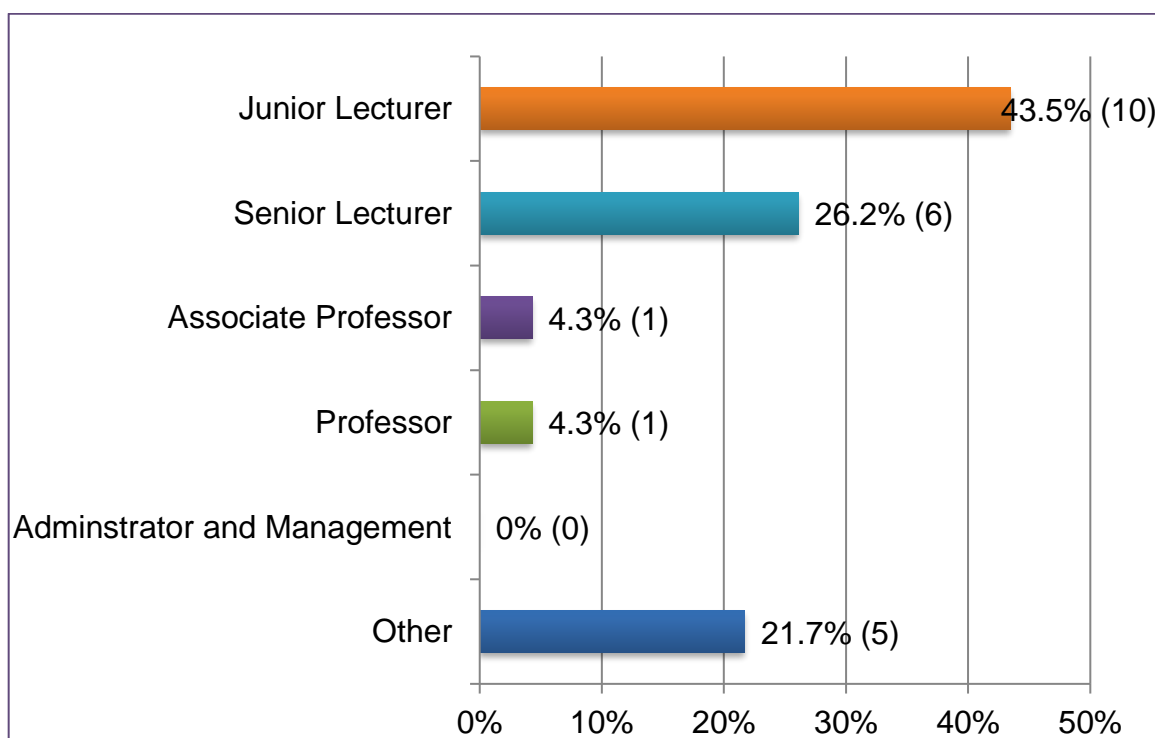
FIGURE 4.4: RESPONDENTS' CURRENT ACADEMIC ROLE (N=23)

Figure 4.4 indicates that 43.5% (10) of the respondents were junior lecturers, 26.2% (6) senior lecturers, associate professor and professor academic roles stood at 4.3% (1) each. Other academic roles of facilitators included undergraduate programme coordinator, lecturer and programme coordinator at 21.7% (5).

Discussion: The majority of respondents who participated as facilitators of the IPE programme were junior academic staff. The IPE programme was only recently introduced

and it is possible that junior lecturers were more motivated to investigate the impact of the IPE programme on their own discipline-specific academic context.

4.3.7   Number of years involved in undergraduate health education

Facilitators with more than ten years' experience were 39.1% (9). Those with five to ten years' experience were 34.8% (8) and those with less than five years' experience were 26.1% (6).

Discussion: Almost 3/4 of the respondents had more than five years' experience in undergraduate health education.

4.3.8   Number of hours per week lecturing vs. teaching or training in a clinical environment
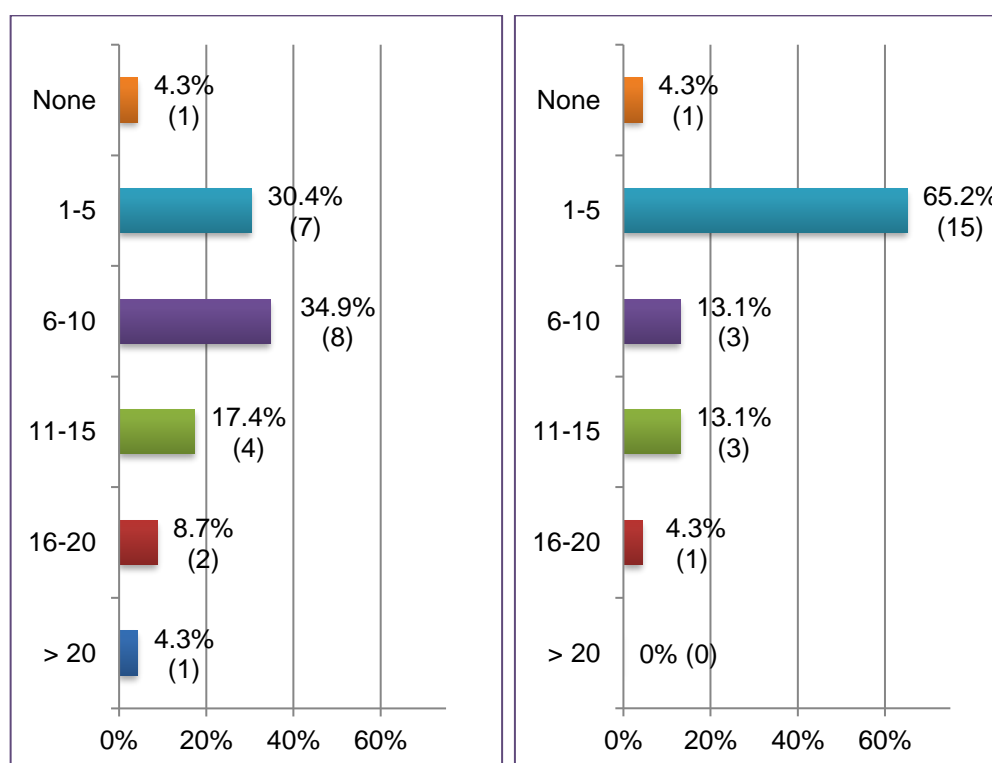
FIGURE 4.5: NUMBER OF HOURS PER WEEK LECTURING (LEFT) VS TEACHING OR TRAINING IN A CLINICAL ENVIRONMENT (RIGHT) (N=23)

Figure 4.5 indicate the following regarding the number of hours per week a respondent is lecturing a class of undergraduate students in their discipline. Of respondents 34.9% (8) were spending 6-10 hours per week lecturing undergraduate students in their discipline, 30.4% (7) were spending 1-5 hours per week and 17.4% (4) were spending 11-15 hours per week. The highest number of hours a respondent was lecturing students in their own

discipline were 8.7% (2) of respondents, with 16-20 hours, and those exceeding 21 hours per week were 4.3% (1) of respondents. One respondent was not involved in lecturing undergraduate students in his/ her discipline.

Figure 4.5 further compares the number of hours per week a respondent teaches/ trains undergraduate students in a clinical environment that involves patients. Of the 23 respondents, 65.2% (15) spent 1-5 hours doing this. This was followed by 13.1% (3) spending 6-10 hours and 13.1% (3) spending 11-15 hours per week, each lecturing students in their own academic discipline. One respondent spent 16-20 hours per week lecturing students while there was one respondent who was not involved in teaching students in the clinical environment.

Discussion: The main outcome of the IPE programme is to promote collaborative practice, with the view that undergraduate students will be able to work interprofessionally in the workplace after graduation and improve health outcomes of patients, their families and communities. A potential concern identified is that 65.2% (15) of respondents (cf. Figure 4.5) were spending only 1-5 hours per week in a clinical environment with undergraduate students. It is possible that some of the non-responders were spending more time in clinical practice than could be shown in the results. It is important that facilitators should actively practise the principles of collaborative practice in their own clinical field, to set an example to future healthcare practitioners. Facilitators also need to be knowledgeable on current healthcare problems of patients, families and communities to add authenticity to the IPE programme and be equipped to answer students' questions relating to clinical practice of the case study of the IPE programme. This probably indicates the need to include practicing healthcare workers as facilitators.

4.3.9   Number of hours per week seeing patients

As illustrated in figure 4.6, 69.6% (16) of respondents were not involved in any clinical work that involved seeing patients, while 17.5% (4) performed six to ten hours clinical work per week. Also identified was that 4.3% (1) of respondents respectively performed one to five hours, eleven to fifteen hours and more than twenty hours clinical work each.

Discussion: It is a concern that 69.6% (16) of respondents were not practising in their clinical field. However, it was not expected that 4.3% (1) of respondents were spending in excess of 20 hours per week consulting patients and still had time to participate in the IPE programme. It is also a positive finding that 17.5% (4) of respondents were consulting

patients for 6-10 hours per week. It adds value to the IPE programme when facilitators are practising in their clinical related area. Facilitators can also benefit from the IPE programme and apply these principles in their own workplace to improve health outcomes in their patients, families and communities. Alternatively, it could suggest due to work obligations in the clinical field that some healthcare educators (non-respondents) do not have additional time to act as IPE programme facilitators during working hours.
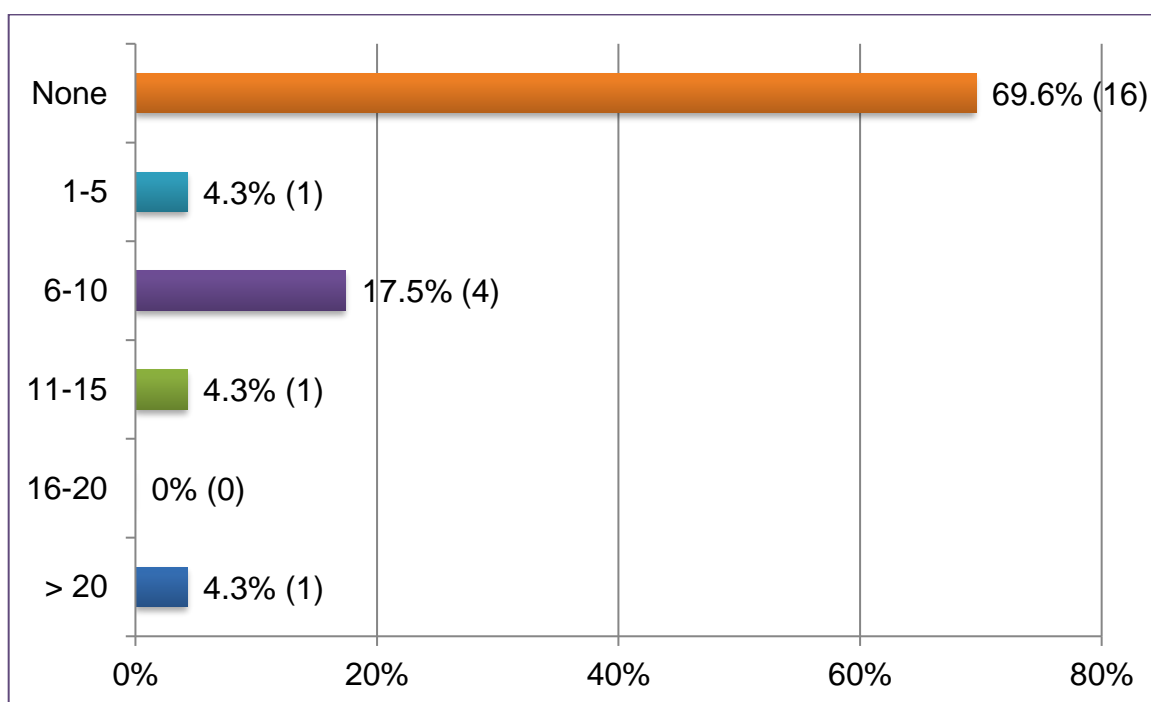
FIGURE 4.6: NUMBER OF HOURS PER WEEK SEEING PATIENTS (N=23)

4.3.10   Number of times acting as facilitator in the IPE programme

One respondent did not answer the question and one respondent was not sure. Of the remaining respondents, 22.7% (5) had facilitated all three IPE programme courses since its inception. Only 40.9% (9) had participated in two courses and 31.9% (7) of respondents had participated in one course.

Discussion: It is not known in 32.4% of non-responders how many times they had participated in the IPE programme since inception. However, it appears that respondents are increasingly participating in all IPE programmes since inception in 2014. Of note, this was only the third time since the IPE programme had been piloted.

4.4   COLLABORATIVE PRACTICE

The following questions in the online survey referred to the respondent's work environment, other than the interprofessional education programme.

4.4.1   Work environment of respondents relating to collaborative practice

TABLE 4.1: RESPONDENTS' WORK ENVIRONMENT (N=23)

	Agree	Unsure	Disagree
Where I am working is an environment of collaborative practice	78.3% (18)	8.7% (2)	13.0% (3)
Where I am working there is mutual respect and trust in the workplace	65.3% (15)	21.7% (5)	13.0% (3)
Where I am working I know and understand the roles of the other Professionals that I work with	95.7% (22)	4.3% (1)	0.0% (0)
Where I am working there is good communication between colleagues	56.6% (13)	39.1% (9)	4.3% (1)
Where I am working conflict is dealt with in a constructive manner	43.5% (10)	39.1% (9)	17.4% (4)
Where I am working good teamwork is taking place	60.9% (14)	26.1% (6)	13.0% (3)
Working as an interprofessional healthcare team is necessary to improve the quality of patient care?	100% (23)	0.0% (0)	0.0% (0)
Hospital patients are better prepared for discharge when they receive inter-professional care	91.3% (21)	8.7% (2)	0.0% (0)

Table 4.1 refers to the work environment of respondents. It was found that 78.3% (18) of respondents agreed that they worked in a collaborative practice work environment, while 8.7% (2) of respondents were unsure. A work environment with mutual respect and trust in the workplace was acknowledged by 65.3% (15) of respondents, while 21.7% (5) were unsure and 13.0% (2) disagreed. It was further identified that 95.7% (22) of respondents agreed they knew and understood the roles of other professionals that they work with, however 4.3% (1) of respondents were not sure. Just over half, 56.5% (13), of the respondents agreed that there was good communication between colleagues where they work. However, 39.1% (9) of respondents were unsure and another 4.3% (1) disagreed to this. Less than half of respondents, 43.5% (10), agreed that conflict in their workplace was dealt with in a constructive manner, 39.1% (9) were unsure and 17.4% (4) disagreed. Almost two thirds, 60.9% (14), of respondents agreed that good teamwork was taking place in their work environment, 26.1% (6) were unsure and 13.0% (3) disagreed. All respondents, 100% (23), agreed that an interprofessional healthcare team was necessary to improve the quality of patient care. All (except two respondents who were unsure) agreed that hospital patients are better prepared for discharge when they receive interprofessional care.

Discussion: The following refers to the core competencies of the IPE collaborative expert panel (cf. 2.2.1) which are included in the outcomes of the IPE programme at FoHS, UFS. Of respondents, 21.7% (5) were either unsure or did not experience their own workplace as a collaborative practice environment. This could be due to the fact that 69.6% (16) of respondents were not working in clinical practice seeing patients. By contrast it does not identify why 78.3% (18) of respondents experienced working in a collaborative practice environment. It is still possible that interprofessional working relationships are occurring outside of clinical practice of the respondents who agreed that they experienced this. Perhaps the researcher was not clear in constructing the question, as the intent of collaborative practice is patient-, family- and community-centred. It is of concern that only 65.3% (15) of respondents experience mutual respect and trust in the workplace. These are values/ ethics that students are expected to achieve at the end of the IPE programme. Facilitators can benefit from the IPE programme and hopefully work on creating a better work environment for themselves, but it remains a concern that this was identified. Almost all respondents knew the roles of the professionals they work with in their work environment. Although 69.6% (16) of respondents were not in clinical practice, this is a positive finding in line with the core competencies of an IPE collaborative expert panel (cf. 2.2.1). This would add value to the session of role clarification in the small groups with the facilitator. Communication between colleagues in any work environment leads to achieving the objectives of the institution. With 43.4% (10) of respondents' unsure or not experiencing good communication between colleagues, the concern is raised that facilitators are facilitating undergraduate students to develop good communication strategies although this is not happening in their own work environment. There should be an intervention in the workplace of respondents to improve their own work environment. Conflict resolution and teamwork are equally important for an institution to achieve their objectives; in fact, they are components of the outcomes of the IPE programme. This also relates to collaborative practice to improve health outcomes. An unexpected finding was that only 43.5% (10) of respondents experienced good conflict resolutions while 60.9% (14) experienced good teamwork in their work environment. All these are objectives which the IPE programme intends undergraduate students to learn. Dealing with conflict in a constructive manner through effective communication strengthens and creates a more effective team. Facilitators of the IPE programme should be able to "lead by example" and practise these same values in their work environment. It is a key finding that all respondents agreed that working as an interprofessional team is necessary to improve patient care.

4.4.2   The various professionals (healthcare and non-healthcare) that respondents are in contact with daily at their workplace

Three from the 23 respondents did not answer the question. Of those who responded, 65.0% (13) were in contact with 1-3, 25.0% (5) with 4-6 and 10.0% (2) with 10-12 various professionals (healthcare and non-healthcare) on a daily basis in their workplace.

Discussion: The respondents were exposed to other professionals in the workplace which could be of benefit to teaching the principles of interprofessional and collaborative practice in the workplace to undergraduate students of the IPE programme.

4.5   CURRENT   INTERPROFESSIONAL   EDUCATION   PROGRAMME PARTICIPATION

4.5.1   Respondents' theoretical knowledge on IPE

Of the 23 respondents, 69.6% (16) described their theoretical knowledge of IPE as "knowledgeable", 21.7% (5) had "in depth knowledge" and 8.7% (2) had "no knowledge" about IPE.

Discussion: It appears that almost all respondents had theoretical background on IPE which would have prepared them for the IPE programme. However, some of the challenges for their role of facilitator identified from respondents' suggestions, as discussed in Chapter 5, included more training in IPE principles, small group facilitation and debriefing. The need for more training was also identified in 8.7% (2) of facilitators who had no knowledge on IPE, but who participated as facilitators.

4.5.2   The need for an IPE programme for undergraduate students

As illustrated in figure 4.7 the need for an IPE programme for undergraduate students was regarded as "essential" by 73.9% (17) of respondents and 26.1% (6) thought it was "useful". The question relating to the usefulness of the current IPE programme was answered by 22 respondents. Being "essential" was the opinion of 63.6% (14) of respondents and "useful" was the opinion of 36.4% (8) of respondents.
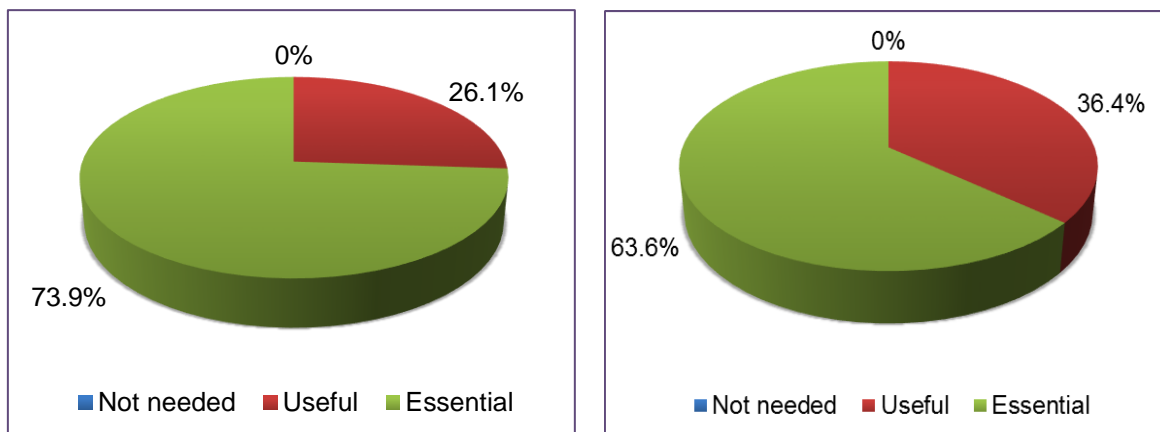
FIGURE 4.7: THE NEED FOR AN IPE PROGRAMME FOR UNDERGRADUATE STUDENTS (LEFT) (N=23) VS USEFULNESS OF THE CURRENT IPE PROGRAMME FOR THE RESPONDENT'S ACADEMIC DISCIPLINE (RIGHT) (N=22)

Discussion: Earlier all respondents agreed that working as an interprofessional healthcare team was necessary to improve the quality of patient care (cf. Table 4.1). Findings (cf. Figure 4.7) confirm a need for an IPE programme for undergraduate students and that it is useful for the respondents' academic discipline. These findings are in line with what the researcher hoped to prove.

4.5.3 Usefulness of an IPE programme for undergraduate students and healthcare delivery

Table 4.2 illustrates the usefulness of an IPE programme for undergraduate students and healthcare delivery. Eighty-seven percent of respondents (20) agreed that after an IPE programme undergraduate students would better understand clinical problems they would face in future, 8.7% (2) disagreed and 4.3% (1) were unsure. Almost all respondents, 95.7% (22), agreed that IPE is important to healthcare delivery and only 4.3% (1) were unsure. The majority of respondents, 69.6% (16), were confident of their role as facilitator, 26.1% (6) were unsure and 4.3% (1) disagreed. It was identified that 39.1% (9) of respondents disagreed and 17.4% (4) were unsure if more training with small group discussions were needed. However, 43.5% (10) of respondents agreed it was needed. More than half of respondents, 56.5% (13) agreed that more training in conducting a debriefing session was needed, 26.1% (6) disagreed and 17.4% (4) were unsure. It was also found that 87.0% (20) of respondents agreed they would encourage other colleagues to act as facilitators, 8.7% (2) were unsure and 4.3% (1) disagreed. Concerning the session that involved role clarification of the various disciplines, 87.0% (20) of respondents agreed it was useful, 8.7% (2) were unsure and 4.3% (1) disagreed. The case study of the stroke patient used to promote collaborative practice, was viewed by 78.3% (18) of respondents as useful, 13.0% (3) were unsure and 8.7% (2) disagreed. Just over half of respondents, 52.2% (12), agreed

it was useful to use an SP who was unable to speak, 34.8% (8) were unsure and 13.0% (3) of respondents disagreed. Feedback from the SP at the end of the session was deemed useful by 78.3% (18) of respondents, 13.0% (3) were unsure and 8.7% (2) of respondents disagreed. Almost two thirds of respondents, 65.3% (15), agreed that students were able to demonstrate shared decision-making and shared power, through effective communication and collaboration, 21.7% (5) were unsure and 13.0% (3) disagreed.

TABLE 4.2: USEFULNESS OF AN IPE PROGRAMME FOR UNDERGRADUATE STUDENTS AND HEALTHCARE DELIVERY (N=23)

	Agree	**Unsure**	**Disagree**
With interprofessional education healthcare students understand better clinical problems they will face in future practice	87.0% (20)	4.3% (1)	8.7% (2)
Interprofessional education is important for healthcare delivery	95.7% (22)	4.3% (1)	0.0% (0)
I am confident of my role as facilitator	69.6% (16)	26.1% (6)	4.3% (1)
More training as a facilitator with a small group of students is required	43.5% (10)	17.4% (4)	39.1% (9)
More facilitator training on conducting a debrief session is needed	56.5% (13)	17.4% (4)	26.1% (6)
I would encourage other colleagues from my academic discipline to act as facilitators	87.0% (20)	8.7% (2)	4.3% (1)
The session that involved role clarification of the various disciplines of students in promoting collaborative was useful	87.0% (20)	8.7% (2)	4.3% (1)
The case study that was used of a 65-year-old who suffered a stroke was a good choice to promote collaborative practice	78.3% (18)	13.0% (3)	8.7% (2)
Using a standardised patient who was unable to speak was useful	52.2% (12)	34.8% (8)	13.0% (3)
This case study allowed for students from all the different disciplines to actively engage in collaborative practice	65.3% (15)	30.4% (7)	4.3% (1)
Feedback from the standardised patient at the end of the simulation to the students were useful	78.3% (18)	13.0% (3)	8.7% (2)
Students were able to demonstrate shared-decision making and shared power through effective communication and collaboration	65.3% (15)	21.7% (5)	13.0% (3)

Discussion: All respondents previously concurred that an interprofessional healthcare team was necessary to improve the quality of patient care (cf. Table 4.1). The majority of respondents agreed that with exposure to IPE healthcare students would better understand clinical problems they will face in future. More than 20% of respondents did not agree that the case study was useful. Just over half of respondents agreed that using an SP who could not speak was useful. This suggests that the case study for future IPE programmes should be reviewed for a more collaborative approach and that the SP should be able to speak. Of value was the feedback from the SP at the end of the simulation, which is important feedback for the students working as a collaborative team on whether they had displayed a patient-centred approach. Of concern is that a third of students did not exercise

shared decision-making and shared power through effective communication and collaboration, especially as effective communication and teamwork are two of the key competencies of an IPE programme. It is possible that the case study allowed for less collaboration as is reflected in this finding. Just over 30% of respondents were not confident for their role as facilitator, with just over half suggesting more training was needed to conduct debriefing sessions. These findings correlate with suggestions from respondents for future IPE programmes as discussed in Chapter 5. A highlight identified was that almost all respondents would encourage colleagues to act as facilitators, which illustrates the benefit of the IPE programme for undergraduate students as well as facilitators. Almost all respondents indicated earlier that they understood the role of professionals in their own work environment (cf. 4.5.1) and almost 90% agreed that the session regarding role clarification was useful. This finding indicates that a key principle of the IPE programme was being achieved.

4.5.4   Undergraduate students who collaborated less actively with this case study

The response rate for this question was 65.2% (15). As seen in figure 4.9, 40% (6) of respondents believed that Optometry students did not actively engage or engaged less in collaborative practice with this case study. The other disciplines were 33.3% (5) from Nutrition and Dietetics, Medicine 13.3% (2), Nursing 6.7% (1) and Occupational Therapy 6.7% (1) of respondents' perceptions.
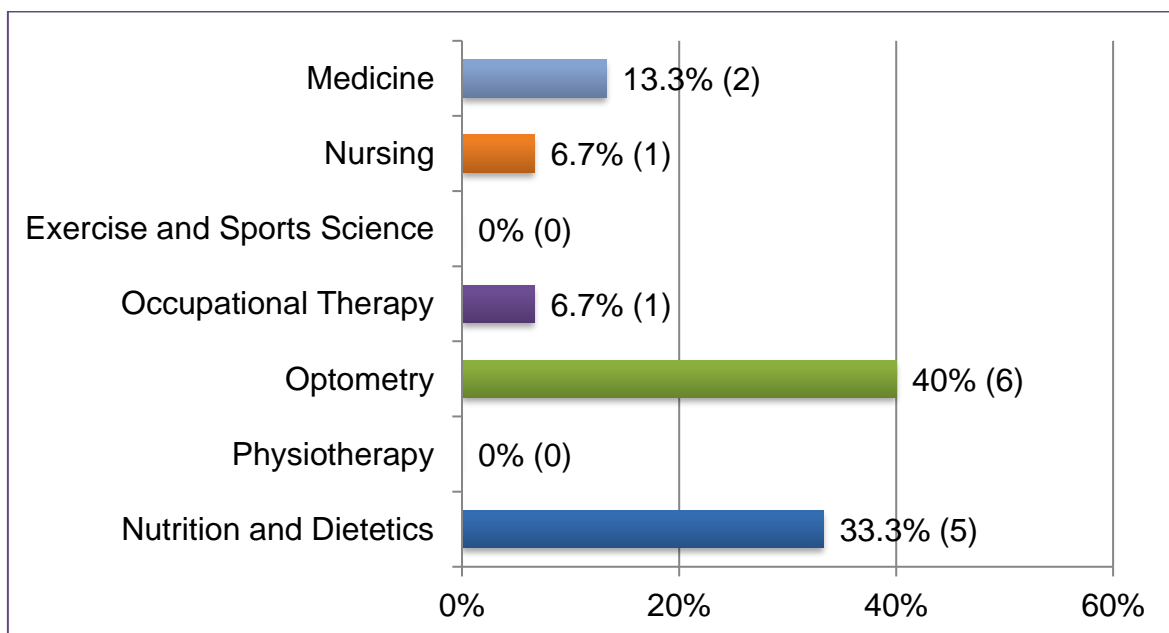
FIGURE 4.8: UNDERGRADUATE STUDENTS WHO COLLABORATED LESS ACTIVELY WITH THIS CASE STUDY (N=15)

Discussion: It is a concern that respondents indicated that some student groups were collaborating less with this case study. This finding is further correlated by facilitators identifying the case study as one of the obstacles they faced (cf. 5.3), where some respondents commented that it was a challenge to make one client applicable to all professions and highlighted that Optometry and Exercise and Sport Science students were less involved in the sessions, possibly for this reason. The results are however skewed with 34.8% (8) of participants not responding to this question. With regard to changes recommended for future IPE programmes, eight respondents indicated a change in the case study as discussed in Chapter 5. The researcher also participated in IPE sessions as a facilitator and is in agreement that the case study should be changed to a scenario which allows for more collaborative practice. The case study used at the time of the study was that of a stroke patient who was unable to speak.

4.6   OTHER FACTORS AFFECTING THE HEALTH OF PATIENTS

All respondents agreed that socio-economic circumstances, psychiatric diseases and lack of community resources could lead to the deterioration of health in a patient. Only 8.7% (2) of respondents were unsure if polypharmacy and medication errors could lead to deterioration of health in a chronic care patient. The remaining 91.3% (21) of respondents agreed that it could (Table 4.3).

Discussion: Literature has confirmed that these factors can lead to deterioration in the health of patients (cf. 2.2) and this is addressed in some IPE programmes. In addition, 78.3% (18) of respondents agreed that undergraduate social work students and 56.5% (13) agreed that undergraduate psychology students should be included in future IPE programmes, as described in Chapter 5. In the researcher's experience as a medical doctor all these factors can contribute to health deterioration in some patients and referral to a psychologist or/ and social worker is required in some clients. The social worker and psychologist are part of the collaborative practice team. It would also benefit these students to be part of the IPE programme and prepare them for collaborative practice. This is further discussed in Chapter 5.

TABLE 4.3: OTHER FACTORS AFFECTING THE HEALTH OF PATIENTS (N=23)

	Agree	Unsure	Disagree
In a chronic care patient, factors such as polypharmacy and medication errors can lead to deterioration of health	91.3% (21)	8.7% (2)	0% (0)
Socio-economic circumstances (poverty, homelessness, single income parent, poor sanitation facilities, etc.) can lead to deterioration of health in a patient	100% (23)	0% (0)	0% (0)
Psychiatric diseases (substance abuse, depression, psychosis, etc.) can lead to deterioration of health in a patient	100% (23)	0% (0)	0% (0)
Lack of community resources (medication out of stock, long waiting lists for surgeries and referrals to specialist outpatient care, etc.) can lead to deterioration of health in a patient	100% (23)	0% (0)	0% (0)

4.7   RESPONDENTS CONTINUING AS FACILITATOR FOR FUTURE IPE PROGRAMMES

The response rate for this question was 100% (23). Eighty-seven percent of respondents (20) would continue as facilitator for future IPE programmes. Only 4.3% (1) of respondents were unsure and 8.7% (2) would not continue as facilitator in future IPE programmes.

Discussion: It is important to identify why some respondents would not continue as facilitators and why some were unsure whether they would continue in future IPE programmes. The researcher did not address this in this study. The success of the IPE programme requires facilitators to be committed. It is, however, an optimistic finding that 87.0% (20) of respondents would continue as facilitators of future IPE programmes.

4.8   SUMMARY OF CHAPTER

In this chapter, the results of the closed-ended questions from the online survey were displayed and briefly discussed.

Important findings from these results are summarised and include the following:

Respondents were predominantly female, which could suggest the gender of facilitators of the IPE programme was also predominantly female (cf. 4.3.1). More than 80% of respondents were from the School of Allied Health and the School of Nursing where the academic staff is predominantly female, which could explain the finding.

It was identified that the majority of respondents were spending less than five hours per week in a clinical environment teaching students (cf. 4.3.8). More than two thirds of respondents had no exposure to seeing patients in their own clinical field. The main outcome of the IPE programme is to promote collaborative practice, where students will be able to work interprofessionally in the workplace. It highlights the possibility to involve practising healthcare workers as facilitators in future IPE programmes. To add authenticity to the IPE programme facilitators should be working interprofessionally and be current on healthcare problems of patients, families and communities. It could also suggest that healthcare educators are unable to attend IPE programme due to work obligations in their clinical field.

It appears that facilitators are increasingly participating in the IPE programme since it was piloted in 2014.

The core competencies and outcomes of an IPE programme (cf. 2.2.1) includes delivering patient-, client-, family-, community-centred care, role clarification, teamwork and shared leadership as well as effective communication within the team. It was indicated by 21.7% (5) of respondents that they either did not work in/ were unsure if their work environment was a collaborative practice environment. It is possible that the question was not clear to respondents, as it referred to clinical practice. A third of respondents did not experience mutual respect and trust in their work environment. Just over 40% of respondents were unsure or did not experience effective communication in their own work environment. Only 43.5% (10) of respondents experienced good conflict resolution and 60.9% (14) good teamwork in their work environment. These are the same core values/ ethics that the IPE programme wants to instil in undergraduate students. However, respondents agreed unanimously that an interprofessional team was necessary to improve patient care. It is possible that facilitators, and recruiting more staff, could also benefit from the IPE experience. It is hoped that with IPE exposure, future graduates will have a positive experience of their work environment as opposed to the respondents who were never exposed to IPE during their undergraduate training.

Some respondents did not find the specific case study useful and suggested a change in the case study as also discussed in Chapter 5. This affected the outcomes of the IPE programme; where optometry students for instance were less involved (collaborative practice) and where a third of undergraduate students were not displaying shared decision-making and shared leadership due to the limitations of the case study. This fact highlights the need for a change in the case study so that all students can actively engage.

Some respondents were not sufficiently prepared for their role as facilitator and requested more training (debriefing, small group facilitation). This correlates with suggestions from facilitators for future IPE programmes as discussed in Chapter 5.

A positive finding was that almost all respondents would encourage colleagues to act as facilitators in future IPE programmes, which could suggest that respondents are seeing the benefits of the IPE programme for undergraduate students as well as themselves. However, some respondents indicated they would not continue as facilitators in future IPE programmes, it would be important to identify why. This could be further explored in a follow-up study.

The majority of respondents were optimistic about including undergraduate social work and psychology students in future IPE programmes. This is in accordance with literature suggesting that neglecting these factors could lead to the deterioration of health in patients (cf. 2.2). It would benefit these students and health sciences students if they were included. In clinical practice, they are part of the MDT in the management of some patients and therefore should not be excluded in future IPE programmes.

In this chapter the results, analysis and discussion of the quantitative findings of the questionnaire survey were discussed. Thereafter important findings were summarised.

In the following chapter, the **Results, analysis and discussion of the open-ended findings of the online survey** will be discussed.

CHAPTER 5:
RESULTS, ANALYSIS AND DISCUSSION OF THE OPEN-ENDED QUESTIONS OF THE ONLINE SURVEY

5.1   INTRODUCTION

In Chapter 4 the results of the closed-ended questions were analysed and discussed. In this chapter, the open-ended questions will be categorised and tabled, followed by an extensive discussion on the outcomes.

5.2   REPORTING DATA ANALYSIS AND DESCRIPTION OF THE OPEN-ENDED QUESTIONS

The researcher simplified the analysis and reporting of data so that each question from the online survey will be discussed separately. This will follow the chronology of the online survey.

The responses were analysed by the researcher and arranged into themes, categories and subcategories.

The themes with related categories and subcategories will be presented in tables and each category will be discussed separately. Each subcategory will be followed by the coding of the respondent to simplify the reporting. Most of the responses will be given as direct quotes. In cases where a response is relevant to more than one theme and category, the researcher used only specific content from responses applicable to those subcategories. Respondents' statements can be identified numerically.

Some of the responses were in Afrikaans and therefore the researcher translated these into English. The researcher took care in expressing the meaning of the original response. Direct quotes of English responses are presented in tables as normal text, enclosed by double quotation marks. Translations of direct quotes are presented similarly, but in italics. For example: "Not experienced in facilitating group work" [R19] is respondent nineteen's own words, but *"Some of the sessions came across as very artificial"* [R16] is a translation of respondent sixteen's response. In tables and text the themes are numbered, the categories are indicated in bold and the subcategories are underlined.

5.3   CHALLENGES FACED BY FACILITATORS CONDUCTING IPE SESSIONS

The response rate for this question was 87% (20).

TABLE 5.1: CHALLENGES FACED BY FACILITATORS CONDUCTING IPE SESSIONS (N=22)

THEMES	CATEGORIES
1. Students	**Factors influencing student engagement** Fatigue • "Keeping a high level of enthusiasm amongst students who were dead tired at times." [R7] Absence • "Building relationships of trust - due to being absent." [R13] • "Not all students could be present each week, influencing group coherence." [R14] Prompting required • "Encouraging the students to get involved." [R22]. • "To get students actively involved in shared decision-making." [R14] • "To make sure everybody contributes." [R10] • "To get someone to take charge of the situation and talk to the patient." [R8] • Doing the first debriefing session: students nervous on how to 'start' the conversation. [R9]
2. Facilitator	**Preparedness for the role of facilitator** Facilitator work environment • "Work environment of a theatre and ward was not a familiar work environment for myself to effectively facilitate." [R18] Educational background of facilitator • "No previous education/short learning programme in IPE." [R18] • "Not experienced in facilitating group work." [R19] Unclear to facilitator • "Some assignments/outcomes were unclear." [R6] • "I was not sure what was expected of me as a facilitator." [R12] • "Did not have enough information about the whole process and could not answer students' questions." [R6]" • "Orientating the students for the first sessions, as they were all nervous and unsure." [R9] • "Just to initially get the group started, they were a bit unsure how to proceed." • "Facilitation of other professions' students." [R4] Facilitator absenteeism

	"I could not be there every week and alternated with another facilitator." [R20]
3. **IPE programme**	**Programme planning** Venue • "Crowded" [R11] Scheduling • "Time schedule did not fit every group's needs, all departments not present for all IPE sessions." [R11] • "Not all students were present due to time table implications." [R2] Student groups • "Not having enough students from the smaller allied health professions in each group - a group without all the team members defeats the purpose somewhat." [R17] **Programme content** Structure • *Some of the sessions came across as very artificial."* [R16]. Case study • Difficult to make one client applicable to all professions." [2] • "I found the biokineticist not necessarily involved with the first 3 sessions. The optometrist is not very actively involved." [R20]." Training of SPs • "Standardised patients were not trained or prepared well enough for the session. Feedback from standardised patient superficial." [R15]

5.3.1   Theme 1: Students

The first theme emerging from the challenges faced by the facilitator during IPE sessions was **Students** (cf. Table 5.1)**.** Only one category emerged from this theme**, Factors influencing student engagement.**

Factors influencing student engagement

Data analysis and description: In this category six respondents' comments were about factors that influence student engagement during the IPE programme. Three subcategories were identified, namely Fatigue, Absence, and Prompting required. Being a competent facilitator is also directly influenced by the undergraduate students in their specific small group.

- Discussion: From the responses received the researcher concluded that one of the challenges faced by facilitators was factors influencing student engagement. The success of the IPE programme is directly influenced by student engagement during all sessions. It was clear that fatigue influenced student engagement. "Keeping a high level of enthusiasm amongst students who were dead tired at times" [R7]. It is critical for students to be present at all sessions and this definitely poses a challenge to facilitators. Student absenteeism influenced building relationships of trust within the group and also affected group coherence. Respondents experienced that students required prompting to engage in sessions which included shared decision-making and engaging with the SP. "Encouraging students to get involved." [R13].

Only one facilitator experienced no challenges.

5.3.2   Theme 2: Facilitator

The following theme identified from facilitators' responses concerned the **Facilitator**. This theme was categorised as **Preparedness for the role of facilitator** (cf. Table 5.1).

Preparedness for the role of facilitator

Data analysis and description: Eight respondents' comments were about the facilitator being properly prepared for his/ her role. Although there was consensus that the facilitator should be well equipped for small group facilitation sessions in the IPE programme, it was clear that not all respondents were prepared for their role to facilitate. Four subcategories were identified, namely Facilitator work environment, Educational background of facilitator, Unclear to facilitator, and Facilitator absenteeism.

- Discussion: The work environment of one respondent did not expose him/ her to an environment that could effectively help in the facilitation of a small group of students. Some respondents did not have any educational training on IPE or facilitating group work which could have prepared them better to be a facilitator. "No previous education/ short learning programme in IPE" [R18]. Respondents were unclear with regard to their role, the expected outcomes and felt that due to a lack of information they could not answer students' questions. Student engagement was also influenced by respondents who were unsure of how to orientate students and how to initiate sessions with students. One respondent did not participate in all four sessions and had to alternate with another facilitator, which could influence group coherence, trust and the process of learning for

students in that group. In the researcher's opinion, the facilitator is the "glue" that keeps the small group of students together. Preparedness for the role of facilitator is vital to achieve student outcomes. Learning occurs through debriefing after every session and this is led by facilitators who should be well prepared for their role.

5.3.3   Theme 3: IPE programme

In this theme, **IPE programme,** the researcher identified 2 categories, namely **Programme planning** and **Programme content** (cf. Table 5.1).

Programme planning

Data analysis and description: In this category three respondents' comments were linked to the planning of the IPE programme. Three subcategories were identified, namely <u>Venue</u>, <u>Scheduling</u> and <u>Student groups</u>.

* <u>Discussion</u>: The researcher identified the following factors which posed challenges to the facilitator. Venues used during sessions were not spacious enough for all the groups of students, "Crowded" [R11]. Absence from sessions was caused by the IPE schedule not accommodating students' academic programmes. The practical implementation of the interprofessional education principle was affected by the fact that not every small group contained student members from all the different professions at the FoHS. "Not having enough students from the smaller allied health professions in each group - a group without all the team members defeats the purpose somewhat" [R17].

Programme content

Data analysis and description: In this category four respondents' comments were linked to the IPE programme content. Three subcategories were identified, namely <u>Structure</u>, <u>Case study</u> and <u>Training of SPs</u>.

* <u>Discussion</u>: The setting for IPE is classroom-based with a SP. This is the reasonable choice at present to coordinate all students from the various schools and to accommodate facilitators. However, one respondent experienced some of the sessions as artificial. The specific case study which excluded some students from actively participating also influenced student participation during sessions.   "I found the biokineticist not necessarily involved with the first 3 sessions. The optometrist is not

very actively involved" [R20]. Feedback from SPs plays an integral role in the students' learning process and perhaps the SP's were not trained well enough to provide adequate feedback to students. "Standardised patients were not trained or prepared well enough for the session" [R15].

5.4 SUGGESTIONS TO OVERCOME FACILITATOR CHALLENGES

The response rate for this question was 73.9% (17).

TABLE 5.2: SUGGESTIONS TO OVERCOME FACILITATOR CHALLENGES (N=17)

THEMES	CATEGORIES
1. **Students**	**Factors influencing student engagement** Improve student engagement • *"Fewer students per group will be better. For example, one member of each professional group."* [R16] • "Help the group organise themselves initially. Better explanation beforehand." [R8] • "To provide the students with a good example (for example a video clip) of how they should act within an IPE session." [R14] • "To give the students ample opportunity to practice IPE principles." [R14] • One facilitator allocated to 1 group for all the sessions. [R13] • "Just ask everybody to say something." [R10]
2. **Facilitator**	**Preparedness for the role of facilitator** Facilitator training • Develop short learning programmes on interprofessional education for facilitators. [R18] • "Effective and well-prepared orientation to the facilitators." [R6] • "Every facilitator must do a workshop before doing facilitation." [R12] • "The longer one does facilitation, the better it becomes." [R4] • "Short training on how to debrief students." [R9]
3. **The IPE programme**	**Programme planning** Venue • "Breaking up into smaller venues." [R11] Scheduling • "Providing each group their own time line, following an introduction session." [R11] • "Medical students were sometimes back from night duty - could be rescheduled?" [R7]

	• "Timetable planning." [R2] • "Logistics stay a challenge." [R4] Recruit more staff • "Get more lecturers involved from all the schools within the health faculty." [R14] Student academic programme • "Give a mark or make it part of the assessment in semester 10. Certificate of attendance." [R22] **Programme content** Case study • "Design case scenarios where the working environment is a commonplace that all professions are exposed to." [R18] Training of SPs • *"The general setup and the SP must be trained well to make the simulations as realistic as possible."* [R16] • "Training of standardised patients well ahead of time." [R15]

5.4.1   Theme 1: Students

The first theme emerging from suggestions to overcome facilitator challenges was **Students** (cf. Table 5.2).   Only one category emerged from this theme, **Factors influencing student engagement**.

Factors influencing student engagement

Data analysis and description: In this category six respondents' comments were about factors related to student engagement during the IPE programme. One subcategory was identified, namely Improve student engagement.

• Discussion: It is possible to better prepare students before attending the IPE programme. This could possibly happen by providing students with a video clip on Blackboard. "To provide the students with a good example (for example a video clip) of how they should act within an IPE session" [R14]. Having a specific facilitator allocated to one group is not always possible due to work commitments of the facilitator, and it is important that students build trust amongst themselves and with the facilitator. The researcher is aware that it is not always possible in a small group to have a student from each professional group.   Physiotherapy, Optometry and Occupational Therapy Departments have fewer students compared to the Schools of Medicine and Nursing. This is also why some small groups could have two or more students from the same profession and lack a participant from a different profession. All participating students

are in their fourth year of studies. *"Fewer students per group will be better. For example, one member of each professional group"* [R16]. A possible solution would be to include more junior students from the smaller departments to ensure that each professional group is represented in every small group.

5.4.2   Theme 2: Facilitator

The second theme emerging from suggestions to overcome facilitator challenges was **Facilitator** (cf. Table 5.2). One category emerged from this theme, **Preparedness for the role of facilitator**.

Preparedness for the role of facilitator

Data analysis and description: In this category five respondents' comments were about factors related to preparing the facilitator for IPE programmes. One subcategory was identified, namely Facilitator training.

- Discussion: It appears that some respondents were not properly prepared for their role as facilitator, and a need for better training and orientation was identified. This need included training on how to conduct debriefing sessions. Literature also emphasises the critical role which debriefing has for students who learn through feedback from facilitators (cf. Chapter 2). "Develop SLPs on interprofessional education for facilitators" [R18]. Before the IPE programme commences, there is a workshop for facilitators to introduce them to and prepare them for the IPE programme. It is possible that some respondents were not able to attend the workshop. In addition, the programme coordinators should look at the content of the workshop and make changes as identified.

5.4.3   Theme 3: IPE programme

The last theme that emerged from suggestions to overcome facilitator challenges was **The IPE programme** (cf. Table 5.2). Two categories emerged from this theme, **Programme planning** and **Programme content**.

Programme planning

Data analysis and description: In this category six respondents' comments were about factors related to planning of the IPE programme. Four subcategories were identified, namely <u>Venue</u>, <u>Scheduling</u>, <u>Recruit more staff</u> and <u>Students' academic programmes</u>.

- <u>Discussion</u>: From the researcher's experience as a facilitator, appropriate venue size poses a challenge to accommodate all students at the same time, and it is not always possible during all 4 sessions for students to divide into smaller venues. For the first and fourth sessions, all students are gathered together in a big lecture hall which is still too small to accommodate everyone. A possible solution would be to provide each group with their own time schedule, but with regard to how the sessions are currently structured and students' academic programmes, this would not be possible. "Medical students were sometimes back from night duty - could be rescheduled?" [R7]. Since 2016, students were deployed to the Southern Free State for a one-week period of collaborative practice, performing health screening of learners and diabetic patients. The IPE programme which commenced in 2014 prepare students for this rotation. Currently there is no mark allocation during the IPE programme, but since inception of the Southern Free State rotation there is a mark allocation for this rotation. In the researcher's opinion, there should be no mark allocation for the IPE programme. "Give a mark or make it part of the assessment in Semester 10. Certificate of attendance" [R22]. In the researcher's opinion, it would be beneficial to recruit more lecturing staff. IPE is crucial to prepare students for collaborative practice and staff members could also benefit from joining students in the Southern Free State in this activity. "Get more lecturers involved from all the schools within the health faculty" [R14].

Programme content

Data analysis and description: In this category three respondents commented about factors related to the content of the IPE programme. Two subcategories were identified, namely <u>Case study</u> and <u>Training of SPs</u>.

- <u>Discussion</u>: It is important that the specific case study constructed has the potential for collaborative practice. Earlier respondents identified the case study (cf. Table 5.1) as one of the challenges they faced as facilitators. "Design case scenarios where the working environment is a common place that all professions are exposed to" [R18]. The case study of stroke patient who was unable to speak excluded especially the

Optometry students during the immediate phase of treatment. A need for training of SPs was also identified. During the debriefing sessions, they play a critical role to students' learning. A well-trained SP will also add to the authenticity of the IPE programme if a real patient is not used. "Training of standardised patients well ahead of time" [R15].

Two respondents indicated that they were undecided on suggestions to overcome facilitator challenges.

5.5   HIGHLIGHTS EXPERIENCED AS FACILITATOR

The response rate for this question was 91.3% (21).

TABLE 5.3: HIGHLIGHTS EXPERIENCED AS A FACILITATOR (N=21)

THEMES	CATEGORIES
1. Students	**Students achieving key competencies** Teamwork • "Collaboration, group cohesion, see how students improve from one session to the other." [R4] • *"Students' collaboration."* [R16] • "The teamwork between disciplines was great." [R8] • "Group worked well together." [R10] • "Students' active participation". [R7] • "Involvement or willingness to participate. [R15] • "Students that initially are hesitant (and likely negative) towards the activities start to take part in the session with proper guidance." [R11] • "Eventually even the more quiet ones participated." [R8] • "It was interesting to see how the different disciplines interact with each other." [R12] • "Of their own accord started to really interact as professionals - collaborating, asserting themselves when necessary, listing to each other, coming up with plans together." [R17] Role clarification] • "Students' respect and politeness towards one another regarding each other's professions and what role can each one play." [R18] • "Seeing students interact and come to their own right for the benefit of the patient." [R20] • "Appreciation of each other's roles among the students in my team." [R17]

	Values
	• "There was a real sense that day of self- and mutual respect." [R17]
	• "Students' respect and politeness towards one another regarding each other's professions and what role can each one play." [R18]
	Shared leadership
	• "Each student 'taking control' when they thought it to be the "right" time." [R7]
	• "Asserting themselves when necessary." [R17]
	• "Shared power." [R2]
	Professional development
	• "Growth in the group between the sessions." [R9]
	• "The students' growth in the process". [R2]
	• "Seeing how the students grow and learn, developing themselves." [R14]
	• Seeing the learning that takes place" [R19]
	General positive experiences of the IPE programme
	• "Positive feedback" [R9]
	• "Students' positive attitude" [R15]
	• "The hope they have for IPE." [R14]
	• "The last session was nice - the students have bright ideas and really practical plans for the future." [R13
2. Facilitators	**Experiences that impacted on the facilitator**
	Facilitator enjoyment
	• "I enjoyed the debriefing session after the SP."[R13]
	Facilitator growth/learning
	• "I really learned a lot from all the students." [R23]
	• "Learning from the students what their opinion is about each other."[R22]
	• "You learn more about other medical professions and see how all work together to make a collaborative decision on patient" [R21]
	• "Communication skills" [R22]

5.5.1   Theme 1: Students

The first theme emerging from the highlights experienced as a facilitator was **Students** (cf. Table 5.3).   Two categories emerged from this theme, **Students achieving key competencies** and **General positive experiences of the IPE programme**.

Students achieving key competencies

Data analysis and description: In this category fifteen respondents' comments were about factors related to students achieving key competencies of the IPE programme. Five subcategories were identified, namely <u>Teamwork</u>, <u>Role clarification</u>, <u>Values</u>, <u>Shared leadership</u> and <u>Professional development</u>.

- <u>Discussion</u>: It was clear from the responses that the student outcomes/ key competencies of the IPE programme were being achieved. There was good teamwork with active participation of students. "Collaboration, group cohesion, see how students improve from one session to the other" [R4]. Students were taking on their professional roles while collaborating and were able to demonstrate patient-centred care. It was clear through communication with team members that they understood their role and the roles of the other professionals in designing and executing a treatment plan for the case study. "Appreciation of each other's roles among the students in my team" [R17]. Students could actively participate, demonstrating mutual respect towards the other professionals.   Shared leadership was clearly demonstrated during the case study with students "taking control" at the right time and asserting themselves as required. "Shared power" [R2].   Respondents were also able to observe the professional growth of students from one session to the next.

General positive experiences of the IPE programme

Data analysis and description: In this category four respondents' comments were about factors related to general positive experiences of facilitators during the IPE programme. No subcategories were identified.

- <u>Discussion</u>: Students generally indicated positive feedback and a displayed a positive attitude towards the IPE programme and their future as healthcare practitioners. "The hope they have for IPE" [R14].

5.5.2   Theme 2: Facilitators

The second theme emerging from the highlights experienced as a facilitator was **Facilitators** (cf. Table 5.3). One category emerged from this theme, **Experiences that impacted on the facilitator**.

Experiences that impacted on the facilitator

Data analysis and description: In this category four respondents' comments were about factors related to experiences that impacted on the facilitator. Two subcategories were identified, namely <u>Facilitator enjoyment</u> and <u>Facilitator growth and learning</u>.

- <u>Discussion</u>: The researcher mentioned the possibility of facilitators benefiting from the IPE programme (cf. Chapter 4). These results support the assumption that respondents were learning from students and were able to improve their communication skills. "You learn more about other medical professions and see how all work together to make a collaborative decision on the patient" [R21].

5.6   CHANGES RECOMMENDED FOR THE CURRENT IPE PROGRAMME

The response rate for this question was 73.9% (17).

TABLE 5.4: WHAT FACILITATORS WOULD LIKE TO CHANGE ABOUT THE CURRENT IPE PROGRAMMES (N=17)

THEMES	
1. **Facilitators**	**Factors that influence the facilitator** Training of facilitators - "Lecturers/ facilitators need to be well prepared and trained. Not all staff involved are confident in facilitating a simulation session and performing a good debriefing session." [R14] - "Measures to be taken when students do not attend - especially feedback given to facilitator who never know how she can 'fill the gap' of a specific student [who represents a profession] and then never attends to become part of team. It creates a big gap in students' exposure." [R7]
2. **IPE programme**	**Programme planning** Communication of information - "Adequate information and effective communication between all the stakeholders as well as the facilitators." [R6] Participants - "Involve all the mentioned professions." [R9] Analysis of students' experience - "Students should write down reflection, to be analysed further." [R23] **Programme content** Structure

	• "Maybe more patient interaction and less team building activities on the first session." [R21] • "More practical and flexible and less rigid following international/ global interprofessional principles." [R18] Case study • "I think the scenario must be one that really gives opportunity for all disciplines to play an equal role." [R17] • "More case studies." [R22] • "Problem-based learning to be more discipline-specific, allowing students to realise when they are needed, and when they should step away." [R11] • "Adding family concerns such as which wheelchair to buy for a patient (money vs. practicality vs. best health benefits). Currently it is more clinically orientated, but psychosocial matters are tougher to address if each team member has their own point of view." [R11] • "Scenarios" [R19] • "The case to another one or different cases." [R4] • "The scenario/case study used." [R15] • "The SP should be different." [R13] Training of SPs • "I also think that a simulated patient that is trained to give constructive feedback - both positive and negative - is vital. The entire purpose of collaborative practice is for the benefit of the patient; therefore the team needs to be exposed to his/her first-hand narrative of the experience." [R17] • "Proper training of SP on how to provide feedback to students" [R13]

5.6.1   Theme 1: Facilitators

The first theme emerging from the changes recommended for future IPE programmes was **Facilitators** (cf. Table 5.4).   One category emerged from this theme, **Factors that influence the facilitator**.

Factors that influence the facilitator

Data analysis and description: In this category two respondents' comments were about factors that influence the facilitator. One subcategory was identified, namely Training of facilitators.

- Discussion: A need for training of facilitators in preparation of the IPE programme was identified, as some respondents were not confident in debriefing after the simulation. Respondents were also not prepared to deal with students who did not attend all sessions, which defeats the goal of interprofessional collaboration. "Measures to be taken when students do not attend - especially feedback given to facilitator who never knows how she can 'fill the gap' of a specific student [who represents a profession] and then never attends to become part of the team. It creates a big gap in students' exposure" [R7]. There is a facilitator workshop before the IPE programme commences. It is strongly suggested that debriefing and "filling the gap" of a specific profession by the facilitator should be addressed in the workshop.

5.6.2   Theme 2: IPE programme

The second theme emerging from the changes recommended for future IPE programmes was **IPE programme** (cf. Table 5.4).   Two categories emerged from this theme, **Programme planning** and **Programme content**.

Programme planning

Data analysis and description: In this category three respondents' comments were about factors related to the IPE programme planning.   Three subcategories were identified, namely Communication of information, Participants and Analysis of students' experiences.

- Discussion: Programme coordinators should ensure that facilitators receive all relevant information before the start of the IPE programme. It was also suggested that all professions should be involved. Currently the IPE programme is only for students from the FoHS. The particular respondent did not specify which professions should be involved. In the researcher's opinion, the debriefing sessions after each IPE session already includes students' reflection. The facilitators themselves have debriefing sessions where students' reflections can be raised. This could suggest that facilitators need training on debriefing. "Students should write down their reflection, to be analysed further." [R23]. Previous research investigated students' experience after completing the IPE programme at the FoHS.   Facilitators and students alike complete questionnaires at the end of the IPE programme.

Programme content

Data analysis and description: In this category nine respondents' comments were about changes related to the IPE programme content.   Three subcategories were identified, namely <u>Structure</u>, <u>Case study</u> and <u>Training of SPs</u>.

- <u>Discussion</u>: Suggestions to change the structure of the IPE programme and sessions were made. Session should involve more patient interaction and should be flexible to adapt to the South African context. Seven respondents clearly indicated that the case study should be amended. "The case to another one or different cases" [R4]. The case study used was more clinically orientated and involved only the SP. "Adding family concerns such as which wheelchair to buy for a patient (money vs. practicality vs. best health benefits). Currently it is more clinically orientated, but psychosocial matters are tougher to address if each team member has their own point of view" [R11]. Once again, the need to train the SP was highlighted (cf. Table 5.2). "Proper training of SP on how to provide feedback to students" [R13].

Two respondents did not see the need for any changes to the current IPE programme.

5.7   FUTURE IPE PROGRAMMES

5.7.1   Including undergraduate social work students in future IPE programmes

The response rate for the closed ended question, "Should undergraduate social work students be included in future IPE programmes? Agree/ Unsure/ Disagree" was 100% (23). The response rate for the open-ended question, "Why in your opinion?" was 73.9% (17).

Of the 23 respondents, 78.3% (18) agreed with this statement and. 21.7% (5) were unsure if undergraduate social work students should be included.

TABLE 5.5: INCLUDING UNDERGRADUATE SOCIAL WORK STUDENTS IN FUTURE IPE PROGRAMMES (N=17)

THEMES	CATEGORIES
1. **Their importance in the health care of a patient/ community problem**	**Improvement in patient/ community health outcomes** • "Big part of aftercare." [R22] • "The outcome for the patient depends entirely on how well he/ she can adapt to/ manage his/ her circumstances after discharge. In this regard the social worker is vital to assess and manage the patients' social circumstances in collaboration with particularly the allied health care professionals." [R17] • "They can help with patient education and help with patient treatment once discharged from hospital." [R21] • "They play a very important role in community re-integration." [R2] • "Especially for the chronic patient/ neuro patient who requires specific community reintegration." [R9] • "Patients are referred to them." [R10] **Social determinants of health** • "Due to the underlying social determinants of health." [R20] • "In real life, most patients (especially in government hospitals) have social problems and need to be referred to social workers." [R8] • "Numerous issues or problems identified in the community could be addressed by social worker." [R15] • "Often there are socio-economic problems that need to be addressed by someone experienced in solving these problems." [R19] • "Social factors play a significant part in the health care and well-being of a patient. With support from social services there may be significant improvement in health care and status of a patient." [R18] • "Social workers are better prepared to deal with the socio-economic circumstances of the patients. They will assist in a more holistic treatment management plan of patients." [R12] • *"Needed in some cases where social support is needed."* [R16]
2. **Add value to the IPE programme**	**Benefit for undergraduate social work students** • "Gives them insight into the clinical problems encountered, not only the social problems if they work with patients with health concerns."[R11] • "Patient scenarios in the IPE sessions are based on a person in the acute phase of treatment. It could be beneficial for a social worker to experience this part of a person's

	treatment, but I'm not sure to what extent." [R14]
	Benefit for undergraduate health sciences students
	• "It is important for all professionals to know exactly what and how a social worker can help the patient. Everyone knows the social workers are available, but not always sure when they should be contacted/ why." [R9]
	• "The exposure of healthcare students to the social worker could enhance collaboration in future." [R4]
	Clinical Authenticity
	• "Because in the clinical field this group of professionals are mostly not readily available and the professionals on the ground need in any case to make a plan in handling such cases." [R7]

5.7.1.1 Theme 1: Their importance in the health care of a patient/ community problem

The first theme emerging from whether undergraduate social work students should be included in future IPE programmes was, **Their importance in the health care of a patient/ community problem** (cf. Table 5.5). Two categories emerged from this theme, **Improvement in patient/ community health outcomes** and **Social determinants of health.**

Improvement in patient/ community health outcomes

Data analysis and description: In this category six respondents' comments were related to the importance of social workers in the health care of a patient/ community problem. No subcategories were identified.

Discussion: One of the roles a social worker plays is in the aftercare of patients following discharge from hospital. The social worker usually assists with the rest of the collaborative team on the management plan before a patient is discharged. "They can help with patient education and help with patient treatment once discharged from hospital" [R21]. Literature (cf. Chapter 2) has also identified that socio-economic circumstances can negatively affect the health of a patient. With support from a social worker there is a better prognosis of improvement in the health of a patient.

Social determinants of health

Data analysis and description: In this category seven respondents' comments were related to the importance of social workers in the health care of a patient/ community problem. No subcategories were identified.

- Discussion: "In real life, most patients (especially in government hospitals) have social problems and need to be referred to social workers" [R8]. As part of the collaborative practice team, a social worker is specifically prepared to deal with the socio-economic circumstances of patients. "Social workers are better prepared to deal with the socio-economic circumstances of the patients. They will assist in a more holistic treatment management plan of patients." [R12].

5.7.1.2   Theme 2: Add value to the IPE programme

The second theme emerging from whether undergraduate social work students should be included in future IPE programmes was, **Add value to the IPE programme** (cf. Table 5.5). Three categories emerged from this theme, **Benefit for undergraduate social work students, Benefit for undergraduate health sciences students** and **Clinical Authenticity.**

Data analysis and description: In this theme five respondents' comments were related to undergraduate social work students adding value to the IPE programme. For the purpose of this section, all three categories are discussed together. No subcategories were identified.

- Discussion: The current structure of the IPE session in the acute phase of managing a patient, could benefit undergraduate social worker students to experience this phase. "Gives them insight into the clinical problems encountered, not only the social problems if they work with a patient with health concerns" [R11]. Undergraduate health sciences students could also benefit by realising the role a social worker plays, which will aid them in future practice. "It is important for all professionals to know exactly what and how a social worker can help the patient. Everyone knows the social workers are available, but not always sure when they should be contacted/ why" [R9]. How social work students would fit in with the case study presented a challenge as described by one respondent who was unsure. "It could be beneficial for a social worker to experience this part of a person's treatment, but I'm not sure to what extent" [R14]. In

the researcher's opinion, social workers are not always readily available in some rural areas. The healthcare practitioner in these areas at times has to take on additional roles. The researcher's conviction is echoed by the majority of respondents that both undergraduate social work and health sciences students will benefit from the IPE programme. "Because in the clinical field this group of professionals are mostly not readily available and the professionals on the ground need in any case to make a plan in handling such cases" [R7].

5.7.2 Including undergraduate psychology students in future IPE programmes

The response rate for the closed ended question, "Should undergraduate psychology students be included in future IPE programmes? Agree/ Unsure/ Disagree" was 100%. Of the 23 respondents, 56.6% (13) agreed with this statement, 30.4% (7) were unsure and 13.0%(3) disagreed. The response rate for the open-ended question, "Why in your opinion?" was 73.9% (17).

TABLE 5.6: INCLUDING UNDERGRADUATE PSYCHOLOGY STUDENTS IN FUTURE IPE PROGRAMMES (N=17)

THEMES	CATEGORIES
1. **Their importance in the health care of a patient/ community problem**	**Improvement in patient/ community health outcomes** • "Could improve healthcare outcomes." [R4] • "All patients have psychology needs." [R10] • "A lot of the patients have emotional problems due to their disability or illness and do need assistance for emotional problems. A lot do not have the necessary life skills to overcome challenges or to make the changes in their lives to adjust to challenges." [R12] • "Mental health issues prominent in communities." [R15 • *"Needed in some cases where psychological support is needed". [R16]* • "Psychologists are a vital and integral part of the heath care professions team. Medical problems do not just affect the physical body, but always affects and involves the person on a psychological level too. Much of the outcome for the patients depends on his/her ability to cope with the diagnosis, and make the lifestyle changes required." [R17] • "Dealing with illness has a psychological impact for individuals and the care-givers. Emotional and psychological challenges may hamper the improvement in the health status of the individual by address matters

	that extend beyond the patient and to the care-givers." [R18]
2. Add value to the IPE programme	**Case study** • "Especially in the patient after a stroke who cannot speak, depression is a very real concern and the group even spoke of consulting a psychologist." [R8] • "Can help with the whole process as only the biological and social to an extent is addressed in the bio-psycho social model." [R21] • "During the simulated session as I remember, there was very little indication that a psychology session is required. This is something that you should be aware of and know that if you notice certain signs, you should contact them. But it would be quite a waste for them to be part of all the sessions, as they are structured currently." [R9] • No need." [R22] **Benefit for undergraduate psychology students** • "Due to the current lack of access to psychological services in the community. It will enhance the psychologists' training while providing some access to the community." [R20] **Benefit for undergraduate health sciences students** • "Exposure of students to other professions outside healthcare could be very useful." [R4] • "I agree because it is necessary for them to see the entire (complex) treatment process a patient needs to go through and may have a better "big picture" regarding his/her psychological aspects in total." [R14] **Clinical authenticity** • "Because in the clinical field this group of professionals are mostly not readily available and the professionals on the ground need in any case to make a plan in handling such cases." [R7] • "Depending on the type of client." [R2] • "Could add value to the experience." [R19] • In practice psychologists are limited in providing information to the health team by law; they contribute very little to the clinical management of the patient in a team setting. Individually their services may need to be incorporated when treating a patient, but I doubt they will be able to contribute with a simulation session." [R11]

5.7.2.1 Theme 1: Their importance in the health care of a patient/ community problem

The first theme emerging from whether undergraduate psychology students should be included in future IPE programmes was, **Their importance in the health care of a patient/ community problem** (cf. Table 5.6). One category emerged from this theme, namely **Improvement in patient/ community health outcomes.**

Improvement in patient/ community health outcomes

Data analysis and description: In this category seven respondents' comments related to the importance of a psychologist in the health care of a patient/ community problem. No subcategories were identified.

- Discussion: It was clearly identified that mental health problems can impact on the health of a patient and the value of a psychologist was highlighted. "Psychologists are a vital and integral part of the health care professions team. Medical problems do not just affect the physical body, but always affect and involve the person on a psychological level too. Much of the outcome for the patient depends on his/ her ability to cope with the diagnosis, and make the lifestyle changes required" [R17]. Both patients and caregivers can benefit from the psychological support offered with the inclusion of these undergraduate students which could lead to better health outcomes. In reality, from the researcher's experience, the psychologist is a crucial part of the collaborative practice team.

5.7.2.2 Theme 2: Add value to the IPE programme

The second theme emerging from whether undergraduate psychology students should be included in future IPE programmes was **Add value to the IPE programme** (cf. Table 5.6). Four categories were identified, namely **Case study**, **Benefit for undergraduate psychology students, Benefit for undergraduate health sciences students** and **Clinical Authenticity.**

Data analysis and description: In this theme eleven respondents' comments were related to undergraduate psychology students adding value to the IPE programme. For the purpose of this section, all four categories are discussed together. No subcategories were identified.

- Discussion: It emerged that having undergraduate psychology students participate in future IPE programmes could add value to the IPE programme. "Could add value to the experience" [R19]. This would also address the biopsychosocial aspects affecting the health of a patient. As the sessions and the case study are currently structured, it would not benefit psychology students to participate. "During the simulated session as I remember, there was very little indication that a psychology session is required. This is something that you should be aware of and know that if you notice certain signs, you should contact them. But it would be quite a waste for them to be part of all the sessions, as they are structured currently" [R9]. With clinical practice in rural areas, psychologists are often not available and healthcare workers must also assume this role. "Because in the clinical field this group of professionals are mostly not readily available and the professionals on the ground need in any case to make a plan in handling such cases" [R7]. However, as part of a collaborative practice team, psychologists do not contribute much to the management of a patient in the acute clinical setting. They offer more value in the individual treatment of a patient. This collaboration is not possible with the structure of the simulation which applies a team approach more than an individual approach. "In practice psychologists are limited in providing information to the health team by law, they contribute very little to the clinical management of the patient in a team setting. Individually their services may need to be incorporated when treating a patient, but I doubt they will be able to contribute with a simulation session" [R11].

5.7.3   Including community member (patients) in future IPE programmes

The response rate for the closed ended question, "Should community members (patients) be included in future IPE programmes? Agree/ Unsure/ Disagree" was 100%. Of the 23 respondents, 47.8% (11) agreed to this statement, 30.4% (7) were unsure and 21.8% (5) disagreed. The response rate for the open-ended question, "Why in your opinion?" was 65.2% (15).

TABLE 5.7: INCLUDING COMMUNITY MEMBERS (PATIENTS) IN FUTURE IPE PROGRAMMES (N=15)

THEMES	CATEGORIES
1. Their importance in the health care of a patient/ community problem	**Improve patient/ community health outcomes** • "It is most often the community members (family/ carers) that are directly involved in the care of a patient." [R7] • "The patient is an integral part of a family, a household, and a community and his/her medical problems affect everybody in their lives." [R17]

	• "The patient and family should form part of the team to improve health outcomes." [R4]
2. **Add value to the IPE programme**	**Benefit of the undergraduate students** • Not such a "protected environment" if a real patient is used?" [R8] •]*"Interprofessional education is a protected environment. In preparing students for real contact with patients' families. The role of community members should be played by SPs. "* [R16] • "It is very unnerving for a patient to be surrounded by so many unsure students. They also might not be able to provide such valuable feedback (language barriers/ understanding of situation). It would be ideal, but logistically I cannot see it happening." [R9] **Clinical Authenticity** • Patients are much more complex than any simulation will be able to provide. Their responses, fears and joy are difficult to mimic. This will provide a more realistic environment to students. [R11] • "To address real life situations." [R12] • After training community members, I believe they can give valuable feedback regarding patient care, especially about communication from the 'team'" [R14] • "Community member may play a supportive role by providing health workers with valuable information about the community and surrounding environment of the patient. Often health workers have expectations and make suggestions to patient's without having an in-depth knowledge of the environment of the patient and can lead to treatment failure and non-compliance. Community members can provide us with insight into limitations which we are not aware of" [R18] • Patients should participate and take responsibility for their own health. We cannot do to them; we should be doing with them." [R20] • "Don't know how." [R10] • Not sure if it would add so much value." [R19 • "Who are you going to get involved?" [R22]

5.7.3.1 Theme 1: Their importance in the health care of a patient/ community problem

The first theme emerging from whether community members (patients) should be included in future IPE programmes was **Their importance in the health care of a patient/**

community problem (cf. Table 5.7). One category emerged from this theme, **Improve patient/ community health outcomes**.

Improve patient/ community health outcomes

Data analysis and description: In this category three respondents' comments were related to their importance in the health care of a patient/ community problem. No subcategories were identified.

- Discussion: It was suggested the patient and their family should be part of the IPE programme and that it could lead to improvement in health outcomes. "The patient and family should form part of the team to improve health outcomes" [R4]. It would benefit undergraduate health sciences students to be exposed to a real patient/ community member and to manage the situation as a collaborative practice team. Family members/ carers could be included as they are also involved in the care of patients. "The patient is an integral part of a family, a household, and a community and his/ her medical problems affects everybody in their lives" [R17].

5.7.3.2 Theme 2: Add value to the IPE programme

The second theme emerging from whether community members (patients) should be included in future IPE programmes was **Add value to the IPE programme** (cf. Table 5.7). Two categories emerged from this theme, **Benefit of the undergraduate students** and **Clinical Authenticity**.

Data analysis and description: In this theme eleven respondents' comments were related to adding value to the IPE programme. For the purpose of this section, both categories are discussed together. No subcategories were identified.

- Discussion: The IPE programme is currently classroom-based and creates a protective environment for students, which could potentially change if real patients are used. Some respondents were unsure if community members should be used as patients. "*Interprofessional education is a protected environment. In preparing students for real contact with patients' families. The role of community members should be played by SPs.*" [R16]. Whereas other respondents believed having real patients would create a more realistic environment. "To address real life situations" [R12]. Students, facilitators and IPE programme coordinators would further benefit from the patients' feedback

regarding patient care. They would also be able to provide valuable insight to limitations of which students, facilitators and programme coordinators are not aware of. "Not sure if it would add so much value" [R19], the researcher disagrees to this finding. It could be unsettling for a patient to be surrounded by so many students and not be able to provide relevant feedback. Language barriers could also be a problem. "It is very unnerving for a patient to be surrounded by so many unsure students. They also might not be able to provide such valuable feedback (language barriers/ understanding of situation). It would be ideal, but logistically I cannot see it happening" [R9]. It is the researcher's opinion that a well-trained patient/ community member may still provide valuable feedback and insight into their health problems and social determinants of health. Another respondent suggested that the IPE programme should be conducted with patients who would then take more responsibility for their health. "Patients should participate and take responsibility for their own health. We cannot do to them, we should be doing with them" [R20]. It was also questioned who would be used for the IPE programme if patients were included. In the researcher's opinion, this could potentially be a problem if community members (patients) are not able to attend all the sessions. "Who are you going to get involved?" [R22].

5.7.4   Describe a case scenario you wish to be used in future IPE programmes

The response rate for this question was 82.6% (19).

TABLE 5.8: SUGGESTIONS FOR FUTURE CASE STUDY (N=19)

THEMES	CATEGORIES
1. **Emergencies and intensive care**	• "Resuscitation high fidelity simulation." [R4] • "Maybe an awake but ventilated multi-trauma ICU patient." [R9] • "Pneumonia." [R13] • "*Burn wounds, spinal cord injuries and acute psychiatric.*" [R16] • "Psychology like suicide and aftercare." [R22]
2. **Patient-, family- and community-centred**	• "I think the different stages of illness were well presented. Follow-up case in the community." [R2] • "Breaking bad news with SP." [R4] • "Holistic scenario. A mother with an ill toddler that need to be hospitalised (IMCI guideline), having other children/elderly parents she also needs to take care of at home" [R7] • "Quadriplegic patient (C4), used to be a carpenter with a wife who is 5 months pregnant and works as a shop assistant.

	The patient's mother and wife are not on speaking terms, and the patient's father has lung cancer. After this patient's *tragi* is removed and he finished his rehabilitation, home care should be established." [R11] • "IPE programme to be taken to communities to make students aware of where and how patients live." [R12]
3. **Chronic health**	• "Patient co-infected with HIV and TB." [R8] • "Hypertensive patient defaulting on meds and not keeping to diet. Diabetic patient with complications. Lung TB - newly diagnosed with house contacts. Asthma." [R13] • "Patient suffering from diabetes." [R15] • "Patient with lifestyle diseases make good scenarios." • "Any multisystem disease/disorder. Or a scenario where the patient has numerous morbidities with associated social and psychological challenges. Emphasis in IPE should be more towards primary healthcare." [R18] • "A patient who is already in a step-down clinic, to see the other professions work in more detail, not just the doctors and nurses mainly." [R21]
4. **Surgical**	• "I suggest a patient that has undergone or will undergo heart surgery, for they have not only physical changes and challenges, but also psychological and emotional changes that need to be addressed." [R14]
5. **Neurology**	• "Neuro and spinal scenarios are the areas where the most collaboration is required." [R9]
6. **Obstetric**	• "Maybe a postnatal patient." [R20]
7. **Paediatric**	• "Households were children are diagnosed with malnutrition." [R20]
8. **Designed by students/ patients**	• "Authentic case." [R23]

5.7.4.1 Theme 1: Emergencies and intensive care

The first theme emerging from suggestions for future case study was **Emergencies and intensive care** (cf. Table 5.8)**.** There were no categories or subcategories identified for this theme.

Data analysis and description: In this theme five respondents' comments were related to emergency and intensive care for a future case study.

- Discussion: It appears that facilitators had a variety of ideas for emergency and intensive care cases. Suggestions included a high-fidelity resuscitation simulation and an awake but ventilated multi-trauma patient. "Maybe an awake but ventilated multi-trauma ICU patient" [R9]. For smaller groups of students, this would not be possible due to limitations regarding the venue and equipment needed. An emergency and intensive care case study could pose a challenge by excluding some student professions during the acute management of the patient. However, a psychiatric case study would make it possible to include social work and psychology students. The majority of respondents indicated that these students should be included in future IPE programmes (cf. 5.7).

5.7.4.2   Theme 2: Patient-, family- and community-centred

The second theme emerging from suggestions for future case study was **Patient-, family- and community-centred** (cf. Table 5.8)**.** There were no categories or subcategories identified for this theme**.**

Data analysis and description: In this theme five respondents' comments were related to a patient-, family- and community-centred case for a future case study.

- Discussion: Respondents' suggestions focused on the different stages of an illness and included a follow-up of a case in the community. "IPE programme to be taken to communities to make students aware of where and how patients live" [R12]. Another respondent suggested a case study involving breaking bad news. Comprehensive and complex case studies include the patient, parent or spouse and extended family members with additional psychosocial problems. "Holistic scenario. A mother with an ill toddler that needs to be hospitalised (IMCI guideline), having other children/ elderly parents she also needs to take care of at home" [R7]. The students' rotations in the Southern Free State expose students to home visits and follow-up case studies in the community. They also experience the psychosocial component of patients in the community and the resources available to assist patients. It is possible to add an additional SP in the planning of future case studies. The SP could act as a child/ spouse/ extended family member.

5.7.4.3 Theme 3: Chronic health

The third theme emerging from suggestions for a future case study was **Chronic health** (cf. Table 5.8)**.** There were no categories or subcategories identified for this theme**.**

Data analysis and description: In this theme six respondents' comments were related to a chronic health case for a future case study.

- Discussion: Proposed case studies included a patient co-infected with TB and HIV; lifestyle diseases such as diabetes and hypertension, complicated by non-compliance and development of disease complications. "Any multisystem disease/ disorder. Or a scenario where the patient has numerous morbidities with associated social and psychological challenges. Emphasis in IPE should be more towards primary healthcare" [R18]. These case studies are "outside-of-the-hospital" and focus more on primary healthcare. These could make good case studies, as TB and HIV have a high prevalence in South Africa and non-communicable diseases (diabetes and hypertension) are on the increase.

5.7.4.4 Theme 4: Surgical

The fourth theme emerging from suggestions for a future case study was **Surgical** (cf. Table 5.8)**.** There were no categories or subcategories identified for this theme**.**

Data analysis and description: In this theme one respondent's comment was related to a surgical case for a future case study.

- Discussion: "I suggest a patient that has to undergo or had undergone heart surgery, for they have not only physical changes and challenges, but also psychological and emotional changes that need to be addressed" [R14]. This case study would also address the psychosocial aspects in the patient's life and would include other professions such as a psychologist (cf. 5.7).

5.7.4.5 Theme 5: Neurology

The fifth theme emerging from suggestions for future case study was **Neurology** (cf. Table 5.8)**.** There were no categories or subcategories identified for this theme.

Data analysis and description: In this theme one respondent's comment was related to a neurological case for a future case study.

- Discussion: The respondents commented that neurology and spinal conditions are areas where collaboration was most needed. In the researcher's opinion, such a case study could possibly exclude or limit optometry and nutrition and dietetics students. "Neuro and spinal scenarios are the areas where the most collaboration is required" [R9].

5.7.4.6 Theme 6: Obstetric

The sixth theme emerging from suggestions for a future case study was **Obstetric** (cf. Table 5.8). There were no categories or subcategories identified for this theme.

Data analysis and description: In this theme one respondent's comment was related to an obstetric case for a future case study.

- Discussion: "Maybe a postnatal patient" [R20]. The researcher is not sure how a collaborative approach can be applied. The respondent should have elaborated more on the case study content.

5.7.4.7 Theme 7: Paediatric

The seventh theme emerging from suggestions for a future case study was **Paediatric** (cf. Table 5.8). There were no categories or subcategories identified for this theme.

Data analysis and description: In this theme one respondent's comment was related to a paediatric case for a future case study.

- Discussion: This idea is relevant to the South African context where one of the causes for child mortality is malnutrition. Poverty is a contributing factor. Also to be considered are children or pensioners who are heading family households following the death of a parent(s). "Households where children are diagnosed with malnutrition" [R20].

5.7.4.8 Theme 8: Designed by students/ patients

The eighth theme emerging from suggestions for a future case study was **designed by students/ patients** (cf. Table 5.8). There were no categories or subcategories identified for this theme.

Data analysis and description: In this theme one respondent's comment was related to a case designed by students/ patients for a future case study.

- Discussion: "Authentic case" [R23]. Such an option would be a risk to the success of the IPE programme. It would be a better option to have healthcare workers with patients assisting in the design of the case study. Students and patients do not possess sufficient experience as healthcare practitioners and programme coordinators to construct a good quality case study.

One respondent commented "None."

5.7.5   Additional suggestions for future IPE programmes

The response rate for this question was 60.9% (14).

TABLE 5.9: ADDITIONAL SUGGESTIONS FOR FUTURE IPE PROGRAMMES (N=14)

THEMES	CATEGORIES
1. IPE programme	**Programme planning** Scheduling • "Since all the classes are scheduled on specific days/ time slots - it does imply that personnel who have class commitments during the same time will (never) be exposed to IPE. Unsure how to address this problem...?" [R7] Including other faculties • "You are already doing good work, you could maybe add e.g. economics, discipline, theology, law" [R23] Not classroom-based • "IPE could be done effectively in CBE or community through shadowing, case studies and simulation." [R4] **Programme content** Case study • "Address paediatric patients and the unique problems that that poses to the team." [R17] • "Students of different professions develop scenarios for the different groups. [Peer to peer development]. Students would learn from their own shortcomings when

	developing scenarios and then addressing one." [R18]
	• "I am happy with the current case scenario. Neuro and spinal scenarios are the areas where the most collaboration is required. I would also think maybe an awake but ventilated multi-trauma ICU patient would be interesting. As there is lots of evidence re what physios and OTs can do in terms of in ICU rehabilitation, but we as healthcare workers only see the 'out of it' patient who cannot do anything. And this is where much needed rehab should commence to improve long term QOL as well as decrease the length of hospital stay." [R9]
2. Students' academic programme	**Adapt curriculum** "Import IPE principles into local curriculums of each school within the faculty." [R14]

5.7.5.1 Theme 1: IPE programme

The first theme emerging from suggestions for future IPE programmes were **IPE programme** (cf. Table 5.9). Two categories emerged from this theme, **Programme planning** and **Programme content**.

Programme planning

Data analysis and description: In this category three respondents' comments were related to suggestions for future IPE programme planning. Three subcategories were identified, namely Scheduling, Including other faculties and Not classroom-based.

- Discussion: Since its inception the IPE programme has been scheduled to fit into the academic programme of all undergraduate health sciences students. However, it remains a challenge at times. It happens for instance that some students are in the Southern Free State and have to return to Bloemfontein to attend the IPE programme. It is also possible that academic and clinical staff face scheduling challenges with their own work obligations. The researcher admits that this poses a problem. It appears to be a good idea to include other faculties to add authenticity to the IPE programme, but the selected case study, venue size and scheduling could pose potential obstacles. "You are already doing good work; you could maybe add e.g. economics, discipline, theology, law" [R23]. Since 2016 students are exposed to one week of collaborative community based practice in the Southern Free State. The classroom-based IPE

programme is intended to prepare students for this week. "IPE could be done effectively in CBE or community through shadowing, case studies and simulation" [R4].

Programme content

Data analysis and description: In this category three respondents' comments were related to suggestions for future IPE programme content. One subcategory was identified, namely Case study.

- Discussion: It was suggested that paediatric patients should be addressed in the case study as previously discussed (cf. Table 5.8). Again, it was suggested that students should themselves develop the case study (cf. Table 5.8). Students lack the experience of qualified healthcare practitioners and therefore should not be expected to develop the case study. "Students of different professions develop scenarios for the different groups [peer to peer development]. Students would learn from their own shortcomings when developing scenarios and then addressing one" [R18].

5.7.5.2 Theme 2: Students' academic programme

The second theme emerging from suggestions for future IPE programmes was **Students' academic programme** (cf. Table 5.9). One category emerged from this theme; **Adapt curriculum**.

Adapt curriculum

Data analysis and description: In this category one respondent's comment was related to adapting the students' curriculum in future. No subcategories were identified.

- Discussion: It was suggested that the IPE principles should be "imported" into the curriculum of each school. Currently this has already been established through the students' participation in the IPE programme and their one-week rotation in the Southern Free State. During this rotation, collaborative practice takes place and marks are allocated to students.

Six respondents had no comments.

5.7.6 Recommendations for future inclusion in IPE programmes

The response rate for this question was 52.2% (12).

TABLE 5.10: RECOMMENDATIONS FOR FUTURE INCLUSION IN IPE PROGRAMMES (N=12)

THEMES	CATEGORIES
1. **Students**	• "Radiography students from CUT." [R4] • "Maybe a social worker if the case scenario is constructed with more social and community information." [R9] • "All students that could be involved in community development issues - natural sciences and education for example." [R15] • "You are already doing good work, you could maybe add e.g. economics, discipline, theology, law." [R23]
2. **Patient-, family- and community- centred team**	• "Home-based care workers." [R11] • "Everyone that form part of the health management of a patient." [R12] • "Other sectors involved in Primary Health Care. Environmental, occupational health, building land infrastructure, water & sanitation, transport etc." [R18]
3. **Academic staff**	• "Program developers within each of the disciplines." [R14] • "A fulltime researcher or senior lecturer that can oversee activities in the community to build a sustainable community-based programme." [R20]

5.7.6.1 Theme 1: Students

The first theme emerging from suggestions for future IPE programmes were **Students** (cf. Table 5.10). No categories or subcategories were identified.

Data analysis and description: In this theme four respondents' comments were related to which other undergraduate students should be included in future IPE programmes.

• Discussion: Respondents suggested including radiography students, social work students and students from other faculties (economics, theology and law). "All students that could be involved in community development issues - natural sciences and education for example" [R15]. This is in line with previous findings (cf. 5.7), where the majority of respondents agreed that it would be beneficial to include students from outside the Faculty of Health Sciences in future IPE programmes. Should other

students be included, the case study should be carefully constructed to allow for their participation.

5.7.6.2 Theme 2: Patient-, family- and community-centred team

The second theme emerging from suggestions for future IPE programmes was **Patient-, family- and community-centred team** (cf. Table 5.10). No categories or subcategories were identified.

Data analysis and description: In this theme three respondents' comments concerned the inclusion of a patient, family and community centred team in future IPE programmes.

- Discussion: One respondent offered a generalised comment to include everyone who formed part of the health management of a patient. It was also suggested to include home-based care workers. "Other sectors involved in primary health care. Environmental, occupational health, building land infrastructure, water & sanitation, transport etc." [R18]. IPE programme coordinators would battle to include all these people identified. Schedule, venue and student groups had already been identified as challenges facilitators faced (cf. 5.3).

5.7.6.3 Theme 3: Academic staff

The third theme emerging from suggestions for future IPE programmes concerned **Academic staff** (cf. Table 5.10). No categories or subcategories were identified.

Data analysis and description: In this theme three respondents' comments were related to additional academic staff being included in future IPE programmes.

- Discussion: "A fulltime researcher or senior lecturer that can oversee activities in the community to build a sustainable community-based programme" [R20]. This does not directly relate to the IPE programme, but to the Southern Free State one-week collaborative practice rotation. Since 2016 a fulltime facilitator and project manager had been appointed to oversee the students' programme in the community. Each school has a representative working with the project manager to oversee the joint academic programme for all health sciences students. "Programme developers within each of the disciplines" [R14]. There are also plans to create a centre of excellence to oversee research in the Southern Free State.

Three respondents had no comments.

5.8   SUMMARY OF CHAPTER

Respondents experienced a number of challenges during the IPE programme. A major concern was the factors influencing student engagement. These included student fatigue, where prior to attending an IPE session some of the medical students had been on overnight duty in the hospital. Student absenteeism influenced building relationships of trust in the small groups. Respondents lacked training on and experience of basic IPE principles, how to conduct a session, engage students to actively participate and to conduct debriefing sessions. They were not clear about their role and felt they could not answer students' questions due to a lack of information. The success of the IPE programme is greatly influenced by well-prepared facilitators. Another important aspect was the venue size that could not accommodate all small groups of students at the same time. Some of the small groups of students did not have a representative from the allied health professions and facilitators expressed their frustration as this defeated the purpose of IPE. It is foreseen that, this may continue in future IPE programmes due to higher numbers of undergraduate students in nursing and medicine, than in the other professions. Respondents were concerned that the present case study excluded some of the professions such as exercise and sports science and optometry students from actively engaging in all sessions.

Respondents also offered solutions to many of the challenges they faced. It was suggested that students should be better prepared before attending sessions, possibly by placing a video clip on Blackboard. A possible solution for the lower number of students from the School of Allied Health Professions would be to include junior undergraduate students. Currently the IPE programme was attended only by fourth-year students in all professions. Respondents requested training on conducting debriefing sessions and for a short learning programme on IPE to be developed. It is noted that currently there is a facilitator workshop hosted before the IPE programme starts. The workshop should also include information on potential pitfalls the facilitator might face, e.g. how to deal with student/ profession absenteeism. Possibly not all respondents were able to attend the workshop. Providing each small group with their own timeline could prove impossible in terms of coordinating between the four different schools' own academic programmes. It was further suggested to involve more lecturers from the schools to act as facilitators. Case studies should be designed in such a manner that all professions could engage and contribute. Case studies should also involve more patient interaction and address the psychosocial aspects that

affect the health of a patient. Training of the SP would increase the authenticity and improve feedback given to undergraduate students.

Several highlights were experienced by respondents. The key competencies/ outcomes of the IPE programme were clearly achieved as observed by respondents. Undergraduate students demonstrated teamwork, clear role identification, shared leadership and practised patient-, client-, family- and community-centred care. Undergraduate students also in general displayed a positive attitude towards the IPE programme and their future as healthcare practitioners. Facilitators were also benefiting from the experience.

The majority of respondents indicated that undergraduate social work and psychology students should be included in future IPE programmes. It was generally felt that their importance in the care of a patient and community problem should not be overlooked; they would improve the clinical authenticity of the IPE programme which would add to the value of the programme, and their presence would be to the benefit of undergraduate health sciences students. The majority of respondents indicated that community members (patients) should not be included in the IPE programme as this was a "protected" environment for students. It could also be unnerving for patients to be surrounded by so many students and not be able to provide valuable feedback.

Suggestions for future case studies to be used in the IPE programme included a chronic health case, a patient-, family- and community-centred case, as well as emergencies and intensive care cases. In a case study constructed to include psychosocial problems within the community, additional SPs to play the roles of spouse, child or extended family member would be required.

In Chapter 6 the results from this study will be summarised and an attempt made to answer the research questions.

CHAPTER 6:
CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

6.1 INTRODUCTION

In the preceding chapter, the results of the open-ended questions were analysed and discussed. In this chapter, the conclusions from the study will be described. The researcher will also attempt to answer the research question (cf. 1.3) with the associated objectives of the study. This chapter will conclude by listing the limitations of the study and offering recommendations for the coordinators of the IPE programme at the FoHS, UFS.

6.2 CONCLUSIONS FROM THE STUDY

6.2.1 Answering the objectives of the study

The need for IPE was identified by the WHO to address health systems that are failing to meet the health needs of patients, families and communities. It has been suggested that with collaborative practice the best quality care is delivered (cf. 1.1).

Key outcomes of an IPE programme include clarification of roles, teamwork and communication (cf. 2.2.1). The researcher identified that some IPE programmes could include patients, undergraduate social work and psychology students. In such cases, psychosocial aspects along with the biological aspects would be addressed by the case study. It was further identified that faculty training and development was ideally needed as an IPE programme differs from the academic content taught to undergraduate students (cf. 1.2).

Facilitator confidence for their role included the ability to create a positive group culture; ensuring students in the group felt that their contributions were valued. Facilitators should also understand the IPE principles and theory. Unpreparedness for their role could potentially lead to missed teachable opportunities. Co-teaching with an experienced facilitator could aid novice facilitators and change negative perceptions regarding the IPE programme. It was also noted that facilitators should model the same interprofessional principles that were taught to students (cf. 2.2).

Objective: To determine the facilitators' perspective regarding current and future IPE programmes at the FoHS, UFS.

This objective addressed research questions (i) and (ii) (cf. 1.3). An online survey was used to address this objective. All participants of the study were facilitators of the IPE programme at the FoHS, UFS. All participants had access to the internet to complete the online survey.

Just over 70% of respondents described the need for an IPE programme as "essential" for undergraduate health sciences students. All respondents, however, concurred that working as an interprofessional healthcare team is necessary to improve the quality of patient care. Just under 10% of respondents had no prior knowledge of IPE but participated as facilitators. Not all respondents were sufficiently prepared for their role or how to deal with some of the challenges they faced. A definite need for more facilitator training was confirmed. The venue used for the majority of the sessions was too small to accommodate all small groups of students, which was regarded as a problem. The case study of the stroke patient who could not speak did not allow for all student professions to actively participate. Respondents suggested that future case studies should be constructed to allow for more active collaboration that would also address the psychosocial aspect, as this could affect the health of a patient. Many respondents commented that one of the highlights they experienced was observing the key competencies/ outcomes of the IPE programme being achieved by undergraduate health sciences students. Just over 70% of respondents agreed that it would be beneficial to undergraduate health sciences students if undergraduate social work and psychology students were included in future IPE programmes. Less than 50% of respondents agreed to including community members (patients) in future IPE programmes. The need to better prepare undergraduate students on what would be expected of them before commencement of the IPE programme was also identified. Thorough training of the SPs was recommended to improve feedback to students and to create a more authentic IPE programme. Future case studies should be constructed to include psychosocial problems and the community with the involvement of a child, spouse of extended family member. Chronic diseases like HIV, TB and lifestyle diseases were also suggested as options for future case studies. The majority of respondents (87.0%) would continue to act as facilitators in future IPE programmes and would encourage colleagues to become involved as well.

Even though it is important that facilitators should model the IPE principles taught to undergraduate students, this was not evident in the work environment of some respondents. More than a third of respondents did not experience good teamwork, mutual respect or trust,

or noted that effective communication in their work environment was unsatisfactory. Over 60% did not experience good conflict resolution, which indicates poor communication in the work environment.

6.2.2   Summarising the results for an answer to the aim of the study

The aim of the study was to investigate the facilitators' perspective on the current and future IPE programme at the FoHS, UFS. The importance of and the need for an IPE programme for undergraduate health sciences students were expressly identified by respondents. Respondents described the challenges they faced while conducting IPE sessions and suggested solutions to address these challenges. Challenges included student engagement that was negatively influenced by student fatigue, absenteeism, not having all professions represented in each small group, and students not prepared for what was expected of them. Not all respondents were prepared for their role as facilitators as they were unsure how to manage pitfalls while conducting sessions and how to conduct debriefing sessions. It was suggested that undergraduate students should be better prepared for future IPE programmes before attending. Additional facilitator and SP training were needed. The current case study did not allow for active collaboration of all students and should be reviewed. Undergraduate students from other faculties and additional academic staff should also be invited to participate in future IPE programmes. Respondents observed that the key competencies/ outcomes of the IPE programme were being achieved, although these IPE principles were said not to be present in the work environment of many of the respondents. A very positive finding was that many of the facilitators expressed their willingness to continue their involvement in future IPE programmes and would recommend their colleagues to become involved.

6.3   RECOMMENDATIONS, LIMITATIONS AND CONTRIBUTION

6.3.1   Recommendations from the study

From the results, the following recommendations were formulated to assist programme coordinators in planning future IPE programmes at the FoHS, UFS:

- Undergraduate students should be better prepared on what is expected of them before the IPE sessions start. Information on the IPE programme should be available on Blackboard for undergraduate students to access.

- All facilitators should attend a compulsory workshop before acting as a facilitator in the IPE programme.

- The facilitator workshop should address the issues of how to facilitate small group discussions, conduct debriefing sessions and how to manage potential pitfalls (student fatigue, absenteeism, not being able to answer a student's question, etc.) that could arise during a session.

- Novice facilitators should shadow an experienced facilitator conducting the IPE sessions.

- SPs used should be well trained for their role and how to give feedback to students.

- Venue size should be suitable to accommodate all students in their small groups simultaneously.

- Lower numbers of undergraduate students from the School of Allied Health Professions may be supplemented by inviting junior students to take part in the IPE programme. This would allow each profession to be represented in each small group of undergraduate students.

- Undergraduate psychology and social work students should be included in future IPE aspects to address the biopsychosocial model of health and illness.

- Case studies should be constructed to allow for active participation from all professions.

- Case studies should include the patient and child, spouse, and/ or extended family member(s).

- Facilitators and the rest of the academic staff at the FoHS, UFS could benefit from workshops that address mutual respect, trust, teamwork, communication and conflict resolution in their own work environment.

- Practising healthcare workers should be invited to join the IPE programme as facilitators, especially as many of the facilitators were not spending much time in clinical practice.

The researcher recommends further research regarding the following:

- The facilitators' perspective should be evaluated annually by means of an anonymous questionnaire.

- An inquiry should be addressed to facilitators of the Southern Free State students' collaborative practice if the IPE programme effectively prepared students for this one-week rotation.

- Students who completed the IPE programme and are practising as healthcare workers should be questioned regarding the key outcomes. Were these present in their working environment once they started practising?

6.3.2   Limitations of the study

Only 23 from a total of 34 possible facilitators completed the online survey, with a low response rate. Some of the respondents indicated they would not continue as facilitators in future IPE programmes; this statement was not investigated. Researcher bias could have influenced the findings as the researcher was also a facilitator. However, the researcher attempted to minimise this through an online survey and by not participating as a respondent in the study.

6.3.3   Contribution of the research

The study provided valuable insight regarding how facilitators experience the IPE programme and confirmed that undergraduate students were achieving the intended key outcomes/ competencies of the IPE programme.

These findings will be reported to the coordinators of the IPE programme in order to improve future IPE programmes.

The researcher will publish the results and recommendations which could assist other institutions to improve their IPE programmes.

6.4   CONCLUDING REMARKS

The idea for this study was informed by the question, "What are the facilitators' perspectives of the current and future IPE programmes at the FoHS, UFS?" In order to address this question, the researcher conducted an in-depth literature review with regard to IPE. A cross-sectional study was conducted by the researcher with an online survey as the research instrument. Information on the study and a hyperlink to complete the survey online were emailed to 34 facilitators. A questionnaire was constructed with closed and open-ended questions, which allowed for respondents to elaborate on the relevant answers.

Results include recommendations for better preparation of undergraduate students, increased training of facilitators and SPs; a venue that can accommodate all undergraduate student groups; and the case study used should allow for active collaboration of all professions. The majority of respondents opted to include undergraduate psychology and social work students in future IPE programmes as this would address the biopsychosocial aspects of health and would be to the benefit of all students. Undergraduate health sciences students were demonstrating the principles of an IPE programme (cf. 2.2.1) which include practising patient-/ client-/ family- and community-centred care, healthy teamwork, effective communication, shared leadership as well as mutual respect for and trust in the other professions. Respondents experienced professional development and growth and would encourage other colleagues to participate in future IPE programmes.

A third of respondents did not experience mutual respect and trust in their work environment. Just over a third of respondents did not experience effective communication in their own work environment. Only 43.5% (10) of respondents experienced satisfactory conflict resolution and 60.9% (14) good teamwork in their work environment. It is vital that the principles of an IPE programme should be modelled in the facilitator's work environment.

The coordinators of the IPE programme will be informed of the findings.

REFERENCES

Anderson, E.S., Cox, D. & Thorpe, L.N. 2009. Preparation of educators involved in interprofessional Education. *Journal of Interprofessional Care* 23(1):81-94.

Anderson, E.S, Thorpe, L.N. & Hammick, M. 2011. Interprofessional staff development: Changing attitudes and winning hearts and minds. *Journal of Interprofessional Care* 25(1):11-17.
http://informahealthcare.com/doi/abs/10.3109/13561821003721311
Retrieved on 10 May 2015.

Arenson, C., Umland, E., Collins, L., Kern, S.B., Hewston, L.A., Jerpbak, C., Antony, R., Rose, M. & Lyons, K. 2015. The health mentors programme: three years experience with longitudinal, patient-centred interprofessional education. *Journal of Interprofessional Care* 29(2):138-143.
http://informahealthcare.com/doi/pdf/10.3109/13561820.2014.944257
Retrieved on 3 May 2015

Bajnok, I., Puddester, D., MacDonald. C.J., Archibald, D. & Kuhl, D. 2012. Building positive relationships in healthcare: Evaluation of the teams of interprofessional staff interprofessional education program. *Contemporary Nurse* 42(1):76-89.
http://eds.b.ebscohost.com/eds/pdfviewer/pdfviewer?sid=2a84cc38-460a-4fbd-a782-57692c329803%40sessionmgr114&vid=3&hid=114
Retrieved on 10 June 2015

Barr, H. & Low, H. 2011. Centre For The Advancement Of Interprofessional Education (CAIPE). *Principles of Interprofessional Education.*
http://caipe.org.uk/resources/principles-of-interprofessional-education/
Retrieved on 29 May 2015

Botma, Y., Greeff, M., Mulaudzi, F.M. & Wright, S.C.D. 2010. *Research in Health Sciences.* South Africa: Nozuko Makhuva

Centre For The Advancement Of Interprofessional Education (CAIPE). 2002. *Defining Interprofessional Education (IPE).* http://caipe.org.uk/resources/defining-ipe/
Retrieved on 29 May 2015

Cresswell, J.M. 2003. *Research Design. Qualitative, Quantitative and Mixed Methods Approaches.* 2nd ed. California: Sage Publications Inc.

Decker, S., Fey, M., Sideras, S., Caballero, S., Rockstraw, L., Boese, T., Franklin, A.E., Gloe, D., Lioce, L., Sando, C.R., Meakim, C. & Borum, J.C. 2013. Standards of best practice: Simulation standard VI: The debriefing process. *Clinical Simulation in Nursing* 9(65):S26-S29.
http://www.nursingsimulation.org/article/S1876-1399%2813%2900079-0/pdf
Retrieved on 20 May 2015

Dent, J.A. & Harden, R.M. *A Practical Guide for Medical Teachers.* 2013. 4th ed. London: Elsevier Ltd.

Derbyshire, J.A., Machin., A.I. & Crozier, S. 2015. Facilitating classroom based interprofessional learning: A grounded theory study of university educators' perception of their role adequacy as facilitators. *Nursing Education Today* 35(1):50-60.
http://ac.els-cdn.com/S0260691714001853/1-s2.0-S0260691714001853-
main.pdf?_tid=936c0c38-1e3e-11e5-9d98-
00000aab0f6b&acdnat=1435569161_7955c39bc6d
Retrieved on 3 May 2015

de Vos, A.S., Strydom, H., Fouché, C.B. & Delport, C.S.L. 2011. *Research at Grass Roots for the social sciences and human service professions.* 4th ed. Pretoria: Van Schaik Publishers

Egan-Lee, E., Baker, L., Tobin, S., Hollenberg, E., Dematteo, D. & Reeves, S. 2011. Neophyte experience of interprofessional education: implications for faculty development. *Journal of Interprofessional Care* 25(5):333-338.
http://informahealthcare.com/doi/pdf/10.3109/13561820.2011.562331
Retrieved on 3 May 2015

Fey, M.K., Scrandis, D., Daniels, A. & Haut, C. 2014. Learning Through Debriefing: Students' Perspectives. *Clinical Simulation in Nursing* 10(5):249-256.
http://www.sciencedirect.com/science/article/pii/S1876139914000103#
Retrieved on 3 May 2015

Hall, L.W. & Zierler, B.K. 2015. Interprofessional Education and Practice Guide No.1: Developing faculty to effectively facilitate interprofessional education. *Journal of Interprofessional Care* 29(1):3-7.
http://informahealthcare.com/doi/pdf/10.3109/13561820.2014.937483
Retrieved on 3 May 2015

Harden, R.M., Crosby, J.R. & Davis, M.H. 1999. AMEE Guide No.14: Outcome-based education: Part 1-An introduction to outcome-based education. *Medical Teacher* 21(1):7-14.
http://0-
eds.a.ebscohost.com.wagtail.ufs.ac.za/eds/pdfviewer/pdfviewer?vid=2&sid=516db5d7-6e5b-4795-a841-419e832d07b5%40sessionmgr4004&hid=4203
Retrieved on 9 September 2015

Haverkamp, B.E. & Young, R.A. 2007. Paradigms, Purpose, and the Role of Literature: Formulating a Rational for Qualitative Investigations. *The Counselling Psychologist* 35(2):265-294.
http://0-tcp.sagepub.com.wagtail.ufs.ac.za/content/35/2/265.full.pdf+html
Retrieved on 2 May 2015

Hutchison (jnr), R.W. 2014. Treating diabetes in underserved populations using an interprofessional care team. *Journal of Interprofessional Care* 28(6):568-569.
http://informahealthcare.com/doi/pdf/10.3109/13561820.2014.917408
Retrieved on 2 May 2015

Interprofessional Education Collaborative Expert Panel. 2011. *Core competencies for interprofessional collaborative practice: Report of an expert panel*
http://www.aacn.nche.edu/education-resources/ipecreport.pdf
Retrieved on 2 May 2015

Killen, R. 2007. Teaching Strategies for Outcomes-Based Education. 2nd ed. Cape Town: Juta Ltd.
Kirkpatrick, D. 1954. Four levels of training evaluation. The Kirkpatrick model.
http://www.kirkpatrickpartners.com/OurPhilosophy/TheKirkpatrickModel/tabid/302/Default.aspx
Retrieved on 29 May 2015

Lewin, S. & Reeves, S. 2011. Enacting 'team' and 'teamwork': Using Goffman's theory of impression management to illuminate interprofessional practice on hospital wards. *Social Science & Medicine* 72(10):1595-1602.
http://ac.els-cdn.com/S0277953611002115/1-s2.0-S0277953611002115-
main.pdf?_tid=28bc89b4-7288-11e5-a1d0-
00000aacb362&acdnat=1444836663_8b3b8890fc6deabe5f381a8d89a2228b
Retrieved on 2 May 2015

Lindqvist, S.M. & Reeves, S. 2007. Facilitators' perceptions of delivering interprofessional education: a qualitative study. *Medical Teacher* 29(4):403-405.
https://www.uea.ac.uk/documents/4006821/4007300/FMH+-+CIPP+-
+Facilitators+Perceptions.pdf/803ea93f-8742-4ccb-b3c2-0468ea0367b6
Retrieved on 2 November 2016

Mazarin, J (n.d). Facilitator of Learning: Definition & Concept.
http://study.com/academy/lesson/facilitator-of-learning-definition-lesson-quiz.html
Retrieved on 2 May 2017

Maudsley, G. 1999. Do We All Mean the Same Thing by "Problem-based Learning"? A Review of the Concepts and a Formulation of the Ground Rules. *Academic Medicine* 74:178-185.
http://journals.lww.com/academicmedicine/toc/1999/02000file:///C:/Users/JOLEENPC/Do
wnloads/Do_we_all_mean_the_same_thing_by__problem_based.16%20(1).pdf
Retrieved on 13 October 2015

Mpofu, R., Daniels, P.S., Adonis, T.A. & Karuguti. W.M. 2014. Impact of an interprofessional program on developing skilled graduates well equipped to practise in rural and underserved areas. *Rural and Remote Health* 14:2671.
http://www.rrh.org.au/articles/subviewnew.asp?ArticleID=2671
Retrieved on 2 May 2015

Nandan, M. & Scott, P. 2014. An innovative interprofessional education model to engage community and nonclinical participants. *Journal of Interprofessional Care* 28(12):376-378.
http://informahealthcare.com/doi/pdf/10.3109/13561820.2014.895978
Retrieved on 2 May 2015

Pitout, H., Human, A., Treadwell, I. & Sobantu, N.A. 2016. Healthcare students' perception of a simulated interprofessional consultation in an outpatient clinic. *Innovations in Education and Teaching International* 53(3):338-348.
http://www.tandfonline.com/doi/pdf/10.1080/14703297.2014.993417
Retrieved on 30 November 2016

Roberts, L.D. & Forman, D. 2015. Interprofessional education for first year psychology students: career plans, perceived relevance and attitudes. *Journal of Interprofessional Care*
http://www.tandfonline.com/doi/abs/10.3109/13561820.2014.967754
Retrieved on 3 May 2015

Theunissen, A.L. 2013. An exploration of the experiences and perceptions of health and allied health care students regarding interprofessional collaboration and education in a rural clinic setting in South Africa. (Unpublished Masters Thesis.) University of Stellenbosch, Stellenbosch.
file:///C:/Users/JOLEENPC/Downloads/theunissen_exploration_2014.pdf
Retrieved 2 May 2015

United Nations Scientific and Cultural Organisation (UNESCO). 1997. *International Standards Classification on Education*
http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm
Retrieved on 3 May 2015

Wood, D.F. 2003. ABC of learning and teaching in medicine: Problem based learning. *British Medical Journal* 325(7384):328-330.
http://0-www.ncbi.nlm.nih.gov.wagtail.ufs.ac.za/pmc/articles/PMC1125189/pdf/328.pdf
Retrieved 10 March 2015

World Health Organisation (WHO). 2010. *Framework for Action on Interprofessional Education and Collaborative Practice*
http://whqlibdoc.who.int/hq/2010/WHO_HRH_HPN_10.3_eng.pdf?ua=1
Retrieved on 2 May 2015

World Health Organisation (WHO). 2006. *Working together for health. The World Health Report.*
http://www.who.int/whr/2006/whr06_en.pdf?ua=1
Retrieved 2 May 2015
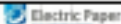
APPENDICES

APPENDIX A: RESEARCH INSTRUMENT

APPENDIX B: ETHICS COMMITTEE APPROVAL LETTER

APPENDIX C: PERMISSION LETTER UFS MANAGEMENT

APPENDIX D: PROOF OF LANGUAGE EDITING

APPENDIX E: PLAGIARISM SCREEN

APPENDIX A: RESEARCH INSTRUMENT

EvaSys	THE FACILITATORS' PERSPECTIVE OF INTERPROFESSIONAL EDUCATION AT THE	Electric Paper

University of the Free State — EvaSys 2015

EVASYS External and Internal Users

The Facilitators' Perspective OF INTERPROFESSIONAL EDUCATION AT THE FACULTY OF HEALTH SCIENCES, UNIVERSITY OF THE FREE STATE

Mark as shown: ☐☒☐☐☐ Please use a ball-point pen or a thin felt tip. This form will be processed automatically.
Correction: ☐■☐☒☐ Please follow the examples shown on the left hand side to help optimize the reading results.

1. Participant demographic information

Instructions for respondents of online questionnaire:

Please respond to every question, as applicable.

Please answer the questions as candidly and comprehensively as possible.

1.1 Gender — ☐ Male ☐ Female
1.2 Age (in years) — ☐ 21-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ 61-70
1.3 Institution where participant completed his/her undergraduate training — ☐ University of the Free State ☐ University of Pretoria ☐ Stellenbosch University ☐ University of Cape Town ☐ University of the Witwatersrand ☐ Medunsa ☐ Other
1.4 Please specify if other

1.5 Professional qualifications (Please mention all and specify)
☐ M.B.,Ch.B ☐ Master's degree ☐ Ph. D ☐ Other
1.6 Please specify if other

1.7 Which academic discipline best describes you?
☐ Medicine ☐ Nursing ☐ Exercise and Sports Sciences ☐ Nutrition and Dietetics ☐ Occupational Therapy ☐ Optometry ☐ Physiotherapy ☐ Other
1.8 Please specify if other

1.9 What is your current academic role? — ☐ Junior lecturer ☐ Senior lecturer ☐ Associate professor ☐ Professor ☐ Administrator and Management ☐ Other

1. Participant demographic information   [Continue]

1.10 Please specify if other

1.11 How many years have you been involved in undergraduate health education?

☐ None ☐ <1 ☐ 1-2
☐ 3-4 ☐ 5-6 ☐ 7-8
☐ 9-10 ☐ ≥ 11

1.12 How many hours per week are you lecturing a class of undergraduates students in your discipline?

☐ None ☐ 1-5 ☐ 6-10
☐ 11-15 ☐ 16-20 ☐ ≥ 21

1.13 How many hours per week do you teach/train students in a clinical environment that involves patients?

☐ None ☐ 1-5 ☐ 6-10
☐ 11-15 ☐ 16-20 ☐ 21-25
☐ 26-30 ☐ 31-35 ☐ 36-40
☐ ≥ 41

1.14 How many hours of your work week is spent seeing patients?

☐ None ☐ 1-5 ☐ 6-10
☐ 11-15 ☐ 16-20 ☐ ≥ 21

1.15 Since the start of the Interprofessional Education programme at the Faculty of Health Sciences, 3 courses have been presented. How many times have you been a facilitator?

☐ None ☐ 1 ☐ 2
☐ 3 ☐ I'm not sure

2. Collaborative practice

Question 2.1 to 2.7 refers to your workplace (not the IPE programme) as a respondent.

2.1 Where I am working is an environment of collaborative practice   ☐ Agree   ☐ Unsure   ☐ Disagree

2.2 Where I am working there is mutual respect and trust in the workplace   ☐ Agree   ☐ Unsure   ☐ Disagree

2.3 Where I am working I know and understand the roles of the other Professionals that I work with   ☐ Agree   ☐ Unsure   ☐ Disagree

2.4 Where I am working there is good communication between colleagues   ☐ Agree   ☐ Unsure   ☐ Disagree

2.5 Where I am working conflict is dealt with in a constructive manner   ☐ Agree   ☐ Unsure   ☐ Disagree

2.6   Where I am working good teamwork is taking place   ☐ Agree   ☐ Unsure   ☐ Disagree

2.7 List the various professionals (healthcare and non-healthcare) that you are in contact with daily at your workplace

2.8 Working as an interprofessional healthcare team is necessary to improve the quality of patient care?   ☐ Agree   ☐ Unsure   ☐ Disagree

2.9 Hospital patients are better prepared for discharge when they receive interprofessional care   ☐ Agree   ☐ Unsure   ☐ Disagree

3. Current Interprofessional Education Programme participation

3. Current Interprofessional Education Programme participation [Continue]

3.1	Which best describes your theoretical knowledge on interprofessional education	☐ No knowledge	☐ Knowledgeable	☐ In depth knowledge
3.2	Having an interprofessional education programme for undergraduate students are?	☐ Essential	☐ Useful	☐ Not needed
3.3	With interprofessional education healthcare students understand better clinical problems they will face in future practice	☐ Agree	☐ Unsure	☐ Disagree
3.4	Interprofessional education is important for healthcare delivery?	☐ Agree	☐ Unsure	☐ Disagree
3.5	How useful do you feel the current IPE programme is to your academic discipline?	☐ Essential	☐ Useful	☐ Not needed
3.6	I am confident of my role as facilitator	☐ Agree	☐ Unsure	☐ Disagree
3.7	More training as a facilitator with a small group of students is required?	☐ Agree	☐ Unsure	☐ Disagree
3.8	More facilitator training on conducting a debrief session is needed?	☐ Agree	☐ Unsure	☐ Disagree
3.9	I would encourage other colleagues from my academic discipline to act as facilitators?	☐ Agree	☐ Unsure	☐ Disagree
3.10	The session that involved role clarification of the various disciplines of students in promoting collaborative was useful?	☐ Agree	☐ Unsure	☐ Disagree
3.11	The case study that was used of a 65 year old who suffered a stroke was a good choice to promote collaborative practice?	☐ Agree	☐ Unsure	☐ Disagree
3.12	Using a standardised patient who was unable to speak was useful?	☐ Agree	☐ Unsure	☐ Disagree
3.13	This case study allowed for students from all the different disciplines to actively engage in collaborative practice?	☐ Agree	☐ Unsure	☐ Disagree
3.14	Feedback from the standardised patient at the end of the simulation to the students were useful	☐ Agree	☐ Unsure	☐ Disagree
3.15	Students were able to demonstrate shared-decision making and shared power through effective communication and collaboration?	☐ Agree	☐ Unsure	☐ Disagree
3.16	In your opinion which students did not actively or engage less in collaborative practice with this case study management (select all that is applicable)	☐ Medicine	☐ Nursing	☐ Biokinetics (Exercise and Sports Medicine)
		☐ Occupational Therapy	☐ Optometry	☐ Physiotherapy
		☐ Nutrition and Dietetics		

3.17 List some of the challenges you faced as facilitator conducting the IPE session

```
[                                                                    ]
[                                                                    ]
[                                                                    ]
[                                                                    ]
```

3. Current Interprofessional Education Programme participation   [Continue]

3.18 What suggestions do you have to overcoming these challenges?

3.19 List some of the highlights you experienced as a facilitator

3.20 What would you like to change about the current IPE programme?

4. Other factors that affect the health of patients:

4.1 In a chronic care patient, factors such as polypharmacy and medication errors can lead to deterioration of health in the patient ☐ Agree ☐ Unsure ☐ Disagree

4.2 Socio-economic circumstances (poverty, homelessness, single income parent, poor sanitation facilities, etc.) can lead to deterioration of health in a patient ☐ Agree ☐ Unsure ☐ Disagree

4.3 Psychiatric diseases (substance abuse, depression, psychosis, etc.) can lead to deterioration of health in a patient ☐ Agree ☐ Unsure ☐ Disagree

4.4 Lack of community resources (medication out of stock, long waiting lists for surgeries and referrals to Specialist outpatient care, etc.) can lead to deterioration of health in a patient? ☐ Agree ☐ Unsure ☐ Disagree

5. Future IPE programs

5.1 Social worker undergraduate students should be included in future IPE programmes? ☐ Agree ☐ Unsure ☐ Disagree

5.2 Why in your opinion?

5.3 Psychology undergraduate students should be included in future IPE programmes? ☐ Agree ☐ Unsure ☐ Disagree

5. Future IPE programs   [Continue]

5.4   Why in your opinion?

```
[                                                                    ]
[                                                                    ]
[                                                                    ]
```

5.5   Community members (patients) should be
      included in future IPE programmes?   ☐ Agree   ☐ Unsure   ☐ Disagree

5.6   Why in your opinion?

```
[                                                                    ]
[                                                                    ]
[                                                                    ]
```

5.7   Describe briefly a case scenario you wish to be used in future IPE programmes

```
[                                                                    ]
[                                                                    ]
[                                                                    ]
```

5.8   What other suggestions do you have for future IPE programmes?

```
[                                                                    ]
[                                                                    ]
[                                                                    ]
```

5.9   I will continue as a facilitator for future IPE
      programmes?   ☐ Agree   ☐ Unsure   ☐ Disagree

5.10 Who else would you include in future IPE programmes?

```
[                                                                    ]
[                                                                    ]
[                                                                    ]
```

APPENDIX B: ETHICS COMMITTEE APPROVAL LETTER

UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VRYSTAAT
YUNIVESITHI YA
FREISTATA

UFS·UV
HEALTH SCIENCES
GESONDHEIDSWETENSKAPPE

IRB nr 00006240
REC Reference nr 230408-011
IORG0005187
FWA00012784

29 September 2015

DR JP CAIRNCROSS
CLINICAL SKILLS AND SIMULATION UNIT
FACULTY OF HEALTH SCIENCES
UFS

Dear Dr JP Cairncross

ECUFS NR 176/2015
DR JP CAIRNCROSS
CLINICAL SKILLS AND SIMULATION UNIT
PROJECT TITLE: THE FACILITATOR'S PERSPECTIVE WITH INTERPROFESSIONAL EDUCATION AT THE FACULTY OF HEALTH SCIENCES, UNIVERSITY OF THE FREE STATE

1. You are hereby kindly informed that the Ethics Committee approved the above project after all conditions were met. The following document was submitted:

    • *The signed permission from UFS Authorities (EC42) has to be submitted before the study may be conducted*

2. This decision will be ratified at the meeting scheduled for 15 October 2015.

3. The Ethics Committee functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act. No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2006); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; The International Conference on Harmonization and Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH Tripartite), Guidelines of the SA Medicines Control Council as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the Ethics Committee of the Faculty of Health Sciences.

Yours faithfully

DR SM LE GRANGE
CHAIR: ETHICS COMMITTEE

Cc: Prof WJ Steinberg

APPENDIX C: PERMISSION LETTER UFS MANAGEMENT

EC42

UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VRYSTAAT
YUNIVESITHI YA
FREISTATA

UFS·UV

HEALTH SCIENCES
GESONDHEIDSWETENSKAPPE

APPROVAL FORM: UFS AUTHORITIES /
GOEDKEURINGSVORM: UV OWERHEDE

FOR PARTICIPATION OF STUDENTS/STAFF OF THIS FACULTY IN RESEARCH
PROJECTS
*VIR DEELNAME VAN STUDENTE/PERSONEEL VAN HIERDIE FAKULTEIT AAN
NAVORSINGSPROJEKTE*

Name & student/ staff number
Naam & studente-/personeelnr DR JOLEEN CAIRNCROSS / 0875562
Department
Departement CLINICAL SKILLS & SIMULATION UNIT
Tel nr & e-mail
Tel nr & e-pos 084 890 1001   cairncross jp@ufs.ac.za
Study leader(s)
Studieleier(s) PROF STEINBERG   Tel: 082-203 4723

Title of project / *Titel van projek*
FACILITATORS' PERSPECTIVE WITH INTERPROFESSIONAL
EDUCATION AT THE FACULTY OF HEALTH SCIENCES, UFS

Who will be involved in the study? Please tick (✓) in appropriate box. /
Wie sal by die studie betrek word? Merk (✓) asseblief in die gepaste blokkie.

	YES / JA	NO / NEE		YES / JA	NO / NEE
Personnel *Personeel*	✓		Students *Studente*		✓

Please attach the protocol for the study and the Ethics Committee application form.
Kindly note that it is the responsibility of the researcher(s) to ensure that all relevant signatures
are obtained before this signed form is returned to the Ethics Committee Administration Division
(D104) Francois Retief Building, Faculty of Health Sciences, UFS. The protocol may, however,
be submitted for Ethics Committee approval while signatures are being obtained. /

Heg asseblief die protokol vir die studie hierby aan, asook die Etiekkomitee aansoekvorm
*Neem asb kennis dat dit die verantwoordelikheid van die navorser(s) is om te verseker dat alle
toepaslike handtekeninge verkry word voor hierdie getekende vorm terugbesorg word aan die
Etiekkomitee Administratiewe kantoor (D104) Francois Retief-gebou, Fakulteit
Gesondheidswetenskappe, UV. Die protokol mag intussen ingehandig word vir Etiekkomitee
goedkeuring terwyl handtekeninge bekom word.*

EC42

A.

Approved / Goedgekeur	Rejected / Afgekeur

HEAD OF SCHOOL /
HOOF VAN DIE SKOOL

SIGNATURE / HANDTEKENING   DATE / DATUM   22/9/15

COMMENTS / KOMMENTAAR: Comprehensive study protocol - well dre.
Letter to DVC academic addressed to Prof HR Bay ?

B.

Approved / Goedgekeur	Rejected / Afgekeur

DEAN OF THE FACULTY /
DEKAAN VAN DIE FAKULTEIT

SIGNATURE / HANDTEKENING   DATE / DATUM

COMMENTS / KOMMENTAAR:

Dean: Faculty of Health Sciences
University of the Free State

2 3 -09- 2015

Dekaan: Fakulteit
Gesondheidswetenskappe
Universiteit van die Vrystaat

C.

Approved / Goedgekeur	Rejected / Afgekeur

DEAN: STUDENT AFFAIRS /
DEKAAN:
STUDENTEAANGELEENTHEDE

(If research will include students on campus and if questionnaires will be distributed in hostels on campus) /
(Indien navoring studente op kampus insluit en indien vraelyste versprei gaan word in koshuise op kampus)

SIGNATURE / HANDTEKENING   DATE / DATUM

COMMENTS / KOMMENTAAR:

D.

For studies in the Faculty of Health Sciences only / Vir studies by die Fakulteit van Gesondheidswetenskappe alleenlik

For studies on UFS Campus /
Vir studies op UV Kampus

Approved / Goedgekeur	Rejected / Afgekeur

Approved / Goedgekeur	Rejected / Afgekeur

VICE-RECTOR: RESEARCH /
VISE-REKTOR: NAVORSING

SIGNATURE / HANDTEKENING   DATE / DATUM

COMMENTS / KOMMENTAAR:

APPENDIX D: PROOF OF LANGUAGE EDITING

Dr Annemie Grobler

PhD (English), APEd (SATI) member 1002105

Language practitioner - translation, text editing and proofreading

anyaproofreading@gmail.com

PO Box 35002

Faunasig

9325

Cell nr 0845102706

This is to certify that the following document has been professionally language edited:

THE FACILITATOR'S PERSPECTIVE OF INTERPROFESSIONAL EDUCATION AT THE FACULTY OF HEALTH SCIENCES, UNIVERSITY OF THE FREE STATE

Author: Dr JP Cairncross

Nature of document: Mini-dissertation, M.HPE, UFS

Date of this statement: 30 January 2017

AM Grobler

APPENDIX E: PLAGIARISM SCREEN

turnitin

Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author: Joleen CAIRNCROSS
Assignment title: Turnitin Assisgnment Draft
Submission title: Final mini dissertation
File name: IPEReport29Jan2017JoleenFinal.do...
File size: 4.92M
Page count: 135
Word count: 33,896
Character count: 207,443
Submission date: 30-Jan-2017 02:46PM
Submission ID: 764273801

AN INVESTIGATION TO DESCRIBE THE FACILITATORS' PERSPECTIVE WITH INTERPROFESSIONAL EDUCATION AT THE FACULTY OF HEALTH SCIENCES AT THE UNIVERSITY OF THE FREE STATE

by

Dr J.P. Cairncross

A mini dissertation submitted in partial fulfilment of the requirements for the degree

Magister in Health Professions Education (M.HPE)

in the

DIVISION OF HEALTH SCIENCES EDUCATION
FACULTY OF HEALTH SCIENCES
UNIVERSITY OF THE FREE STATE
BLOEMFONTEIN

January 2017

Supervisor: Prof W.J. Steinberg
Co-Supervisor: Dr J. Bezuidenhout