

**ASSESSING THE PREPARATION, INDUCTION AND PROFESSIONAL DEVELOPMENT EXPERIENCES OF
TEACHER EDUCATORS IN BOTSWANA AND SOUTH AFRICA: RECOMMENDATIONS FOR AN
ANDRAGOGICALLY BASED MODEL**

by

JOSEPH AMOOTI KASOZI

Submitted in fulfilment for the requirements for the degree of

DOCTOR OF PHILOSOPHY
in the Faculty of

EDUCATION
Together in Excellence
at the

UNIVERSITY OF FORT HARE

JANUARY 2015

Supervisor: Professor N S Duku

Co-supervisor: Dr. N Sotuku

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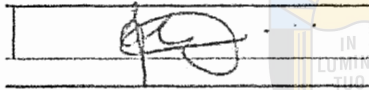


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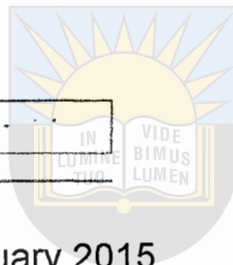
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TO WHOM IT MAY CONCERN



I hereby confirm that I have proofread and edited the following Doctor of Philosophy thesis using the Windows “Tracking” system to reflect my comments and suggested corrections for the student to action:

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Towards the development of an andragogically based model for the induction and professional development of teacher educators in Botswana and South Africa by Joseph Kasozi, submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in the Faculty of Education at the University of Fort Hare.

Brian Carlson (B.A., M.Ed.)

Professional Editor

Email: bcarlson521@gmail.com Cell: 0834596647

DEDICATION

This work is dedicated to all those who in one way or another inspired me in my long search for true professional identity. These include family, friends and fellow professionals in the field of teacher education.



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ACKNOWLEDGEMENTS

A study of this nature cannot be completed without the assistance of other people. I would therefore like to acknowledge the interest, guidance and counsel offered to me by my promoters, Professor N. Duku and Dr N Sotuku. Their support and interest are highly appreciated. My sincere appreciation also goes to my colleagues at the colleges of education in Botswana who kept me inspired throughout the study. Special thanks go to Dr Chepete who helped with the analysis of quantitative data, and Dr Mbengwa who was always there to offer advice and encouragement. My thanks as well go to other colleagues who, in one way or another, lent a helping hand when I called upon them for assistance.

Special mention needs to be made of all teacher educators who completed the questionnaire and those who accepted to be interviewed. May the good Lord reward you for your generosity?

Finally, I would like to thank my wife, son and daughter who have endured my continued long absences from home and the sacrifices they made to provide me space and support to enable me complete these studies.

ACRONMYS

AATE	American Association of Teacher Educators
AACTE	American Association of Colleges of Teacher Education
AERA	American Educational Research Association
AfriATE	Association of Teacher Education in Africa
AM	Andragogical Method
CPD	Continuous professional development
DT&D	Department of Training and Development
HE	Higher Education
HSRC	Human Sciences Research Council
ICT	Information and Communication Technology
MI	Multiple Intelligence
MMR	Mixed methods research
MoESD	Ministry of Education and Skills Development
NCTE	National Council on Teacher Education
NTE	Novice (New) Teacher Educator
OECD	Organisation of Economic Cooperation and Development
OBE	Outcome based education
PD	Professional development
PDP	Personal Development Plan

PIRLS	Progress in International Reading and Literacy Study
PhD	Doctor of Philosophy
PG-CE	Post Graduate Certificate in Education
PGCTE	Post Graduate Certificate in Teacher Education
PGDHET	Post Graduate Diploma in Higher Education and Training
QUAL	Qualitative research
QUAN	Quantitative research
RPL	Recognition of Prior Learning
RSA	Republic of South Africa
SA	Synergistic Andragogy
SADC	Southern African Development Community
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SEALS	South Eastern Academic Libraries Search
SOR	Statement of Relevance
TE	Teacher education
TIMSS	Trends in Mathematics and Science Study
TESSA	Teacher Education in Sub-Saharan Africa
UB	University of Botswana
UFH	University of Fort Hare



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ABSTRACT

Research evidence points to the fact that in most countries teacher educators enter the field of teacher education with little or no preparation (Abell, 1997; Ntoyi&Lefuka, 2001; Robinson & Macmillan, 2006; Snoek, Swennen and van der Klink, 2009). Yet, it is argued that the teacher is the single most important factor determining the achievement of learners and the quality of education (UNESCO, 2008; Snoek, Swennen and van der Klink, 2009; Smith, 2010). Sadly, however, most countries and teacher education institutions have paid little or no attention to the preparation, induction and professional development of those who train these teachers, that is, the teacher of the teachers or the teacher educators (Martinez, 2008; Santoro, Mayer, Mitchell, & White, 2009; European Commission, 2010; van Velzen, van der Klink, Swennen, Yaffe, 2010). This situation probably arises from the general belief that good school teachers are good teacher educators and therefore there is no need to worry about their preparation, induction and professional development. This is the basis upon which this research is premised.

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A mixed methods approach was used to research the following questions:

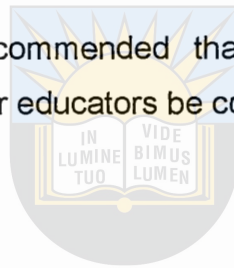
- How are teacher educators in Botswana and South Africa inducted and developed as teachers of adults?
- How do the teacher educators (in Botswana and South Africa) adjust their teaching practice to cater for the needs of their students who are adults?
- What recommendations can be made to improve the preparation, induction and professional development of teacher educators as teachers of adult student teachers?

The sites for the study were four institutions (two faculties of education, one located in Botswana and another in South Africa, and two colleges of education located in Botswana). Out of a possible total of 316 teacher educators at the four institutions 128 responded to a close ended questionnaire that required them to indicate their

autobiographic details, experiences as teachers and teacher educators, and their preparation, induction and professional development as teacher educators. In addition 12 teacher educators with varying experiences in teacher education were interviewed. The purpose of the interviews was to record the experiences of their preparation, induction and professional development as teacher educators. Furthermore, literature from various sources was consulted about the topic under study.

The results confirmed the earlier assertion that there is very little attention paid to the preparation, induction and professional development of teacher educators in the institutions that were studied. Literature also indicated a similar pattern in most teacher education institutions in Botswana and South Africa.

Based on the findings, it is recommended that the preparation, induction and professional development of teacher educators be conducted following the andragogical model.



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KEY TERMS

Teacher education, teacher educator preparation, teacher educator induction, teacher educator professional development, andragogical model, mixed methods research, teacher educator practices

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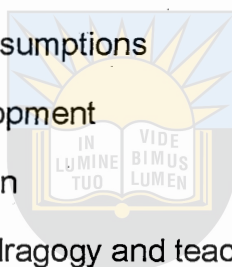


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Chapter 1

Introduction and Background to the Study

1.0 Introduction

It is the contention of this research that the preparation and development of teacher educators in Botswana, South Africa, and probably in the entire sub-Saharan Africa is neglected (Robinson, 1999; Ntoyi & Lefuka, 2001; Moon, 2008; Pansiri, 2011). The neglect is not only in terms of remuneration and career progression, but also in their professional preparation for the task of educating student teachers (who are adults) to be teachers of children and adolescents (Murray and Male, 2005; Martinez, 2008; Moon, 2008; Kasozi, 2009). Characteristically many teacher educators enter the field of teacher education with little or no preparation (Ntoyi & Lefuka, 2001; Robinson & Macmillan, 2006; Snoek, Swennen and van der Klink, 2009).

Yet, there is a growing amount of research evidence in education quality that points to the fact that the teacher is the single most important factor determining the achievement of learners (UNESCO, 2008; Snoek, Swennen and van der Klink, 2009; Smith, 2010). Sadly, however, most countries and teacher education institutions have paid little or no attention to the preparation, induction and professional development of those who train these teachers, that is, the teacher of the teachers or the teacher educators (Martinez, 2008; van Velzen, van der Klink, Swennen, Yaffe, 2010; European Union, 2010; Mayer, Mitchell, Santoro & White, 2011). As Korthagen (2000:139) asserts,

People working in teacher education have often not been formally educated for their roles as teacher educators. Whereas many teacher educators have worked as teachers, there are also many who have a strong academic background, but little or no preparation for teaching. Furthermore, those who are educated as teachers probably have no training in working with adults.

This situation probably arises from the general belief that good school teachers are good teacher educators and therefore there is no need to worry about their preparation,

induction and professional development. It is the intention of this research that this belief be contested and researched more systematically.

The purpose of this research therefore is to assess the preparation, induction and professional development practices of teacher educators at four teacher education institutions in Botswana and South Africa. The outcomes of the assessment should lead to making recommendations of a model that would improve teacher educator preparation, induction and professional development in the two countries. The researcher postulates that the model be anchored on andragogical principles. The justification for this study is that in the broad expanse of literature that was reviewed for this study, no significant research was found that discussed the preparation, induction and development of teacher educators from an andragogical viewpoint. Most scholars discuss the concept of andragogy in relation to adult basic and continuing education, with much of the research focusing on the application of the andragogical assumptions to adults as an entire population rather than specific adult professional groups such as teacher educators. Yet the teacher educators are adults who teach and guide adult student teachers.

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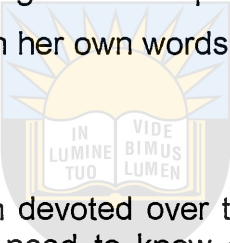
This chapter therefore provides a background to the study; describes the current issues in teacher education in Botswana and South Africa as well as how these are impacted on by teacher educator practices. There is also an indication of the theoretical context of the study. In addition there is a statement of the research problem and the attendant research questions and objectives. The purpose and significance of the research is stated plus a definition of key terms used in the study. The chapter ends with an outline of the rest of the chapters in this report.

1.1 Background to the study

In order to be able to carry out a study of this magnitude, it is important to provide a background to the problem being investigated. In their research on the role and status of teacher educators in the European Union, Snoek, Swennen and van der Klink (2009:10) found out that there is little attention paid to teacher educators in policy

documents. They also noted that the need for induction and further professional development of teacher educators is hardly discussed in international policy documents. Snoek et al. (2009) argued that this is a disturbing trend at a time when the quality of teachers is a major issue that must be addressed if the quality of learning in schools is to be improved. Snoek et al. concluded that policy makers and researchers should together develop ideas for the induction and further development of teacher educators as a specialized professional group (Snoek et al 2009).

In the United States, Cochran-Smith (2003), after an extensive survey of literature, observed that, in contrast to the considerable amount of attention paid to the preparation of teachers, the attention given to the preparation of teacher educators was still scanty (Cochran-Smith, 2003). In her own words Cochran-Smith notes the following situation in the United States:



Enormous attention has been devoted over the last two decades to what K-12 (secondary school) teachers need to know and be able to do in order to be effective in their work with students. In fact, to a great extent “the knowledge question’ has driven the field of teacher education and dominated the literature. Much less attention at the policy level, however, has been devoted to what teachers of teachers need to know.

She notes that even when attention is paid to teacher educators in the literature,

“the topic of discussion is teacher educators themselves, the emphasis tends to be more on demographics and general trends - who teacher educators are, what their backgrounds are, what they teach in methods and foundation courses - than on what they know or need to know and/or on how it is that they learn to teach teachers” Cochran- Smith (2003:5).

After citing several leading researchers in the field of teacher education,(Murray, 2005) posited that throughout the world there are few studies that look at teacher educators’ professional experiences and induction needs as they enter higher education institutions to take on academic roles. This means that teacher educators are an under-researched and poorly understood occupational group (Murray, 2005).

The researcher notes that although these studies were mainly carried out in Europe and the United States, they may be applicable to any part of the world and especially in developing countries such as Botswana or South Africa. It is against this backdrop that the researcher felt that more research on the preparation, induction and professional development of teacher educators be conducted, especially in the Botswana and South African context. These observations form part of the rationale for this research.

1.2 Current issues in teacher education in Botswana and South Africa

In the Botswana context, teacher educators in colleges of education are mainly drawn from four sources: the primary and senior secondary schools, direct from undergraduate in-service training or post-graduate training, or from outside the country as expatriates. Most have, therefore, received training in teaching children and adolescents. They have had little or no exposure to andragogical principles and practices (Kasule, 2003; Kasozi, 2009). A similar situation obtains at other teacher education institutions in that country. In the South African context, teacher education is housed in faculties of education in universities. Teacher educators at this level enter the field of teacher education with little or no exposure to andragogy (Sparrow et al, 2000; Ntoyi & Lefuka, 2001, Mofokeng, 2002; Kasule, 2003; Parker & Deacon, 2004, van Aswegen, 2004) although their core job is to educate adult student teachers. This study should therefore seeks to make teacher educators at all levels, “experience frustration and cognitive dissonance regarding their teaching beliefs and practices. This discomfort may afford them an opportunity to rethink the issues from which their beliefs arise” (Pew,2007:14), In this regard, the researcher argues that there is need to deliberately and systematically prepare present and future teacher educators for their educational role of teaching student-teachers who are adults. In this way their journey of transition from being teachers of children to becoming teachers of adults will be guided and signposted.

A further examination of the South African situation indicates a need to radically change how teachers and, therefore, teacher educators are prepared. Commenting on the new dispensation in post-apartheid South Africa, Baxen (2000) noted that the previous autocratic curriculum, teacher authoritarianism in schools and classrooms, and lived ideological conflicts were being replaced by a new kind of democratic social contract that will be recognisable to people from different ideological sectors of society (Department of Education, in Baxen, 2000). In the same vein, Robinson and Macmillan argued that teachers and by implication teacher educators must be prepared to address this new dispensation (Robinson & Macmillan, 2006). By implication, classroom relationships should be restructured from an authoritarian milieu to a democratic kind. In order to address this, teacher educators need to model democratic practices in their interaction with student teachers. The question is: *What can be done by teacher education institutions to address this challenge?* This researcher proposes that the adoption of andragogically based preparation, induction and continuous professional development approach could in many ways address this situation. From literature that the researcher has interacted with, andragogy by its own tenets is democratic and is anchored on respect and participation of the individual. Herein lies the argument that this can only be achieved by addressing the attitudes and orientations of teacher educators who are preparing teachers who are to handle these “new learners” and the “new” classroom situations. This argument is supported by Stoffels (2008) who found out that, in spite of the fact that Curriculum 2005 (Department of Education, 1997) allows teachers the flexibility to make choices on the content, sequence and methodologies they wish to use in varying classroom situations, many of them abdicate these choices to the commercially prepared teacher support materials.

To date, there is concern about the quality of teaching and learning in South African schools and how to improve it (Shalem, in Baxen, 2000). One approach that is proposed in the outcome based curriculum (OBE) is learner centeredness which is underpinned by the notion that “learning must begin in the life experience of the learners and classroom activities must consequently be learner-centred and equip learners for applying knowledge to real world problems” (Taylor, in Baxen, 2000:495). This situation

calls for new approaches to teacher preparation. Further, Bitzer (2002:159) contends that:

Quality in professional preparation of teachers will also have to include awareness amongst teachers and student teachers as to the most effective teaching practices in any given circumstances, encouraging an attitude of reflection, innovation and professionalism.

From the statement above, it may be argued that andragogical model as proposed by Knowles, Holton and Swanson (2011) is anchored on these very attitudes and teacher educators need to model these if the future teachers they prepare are to use them in schools.

Swarts, as quoted by Bitzer (2002:159) noted that studies in Uganda, Botswana, Zimbabwe and Namibia have also shown that there are huge differences between what teacher educators expect their students to do and what they themselves do (the “do as I say” rather than the “do as I do” syndrome). A similar situation was reported by Stoffels (2008) in South Africa. Teacher educators may talk about the use of learner-centred education and the use of participatory and inquiry-based classroom methods, but rarely use them themselves. Earlier in the 1990s, Gozo (1996) described the situation of teacher centred teaching in colleges of education in the Northern Province under apartheid as linked to the concept of "fundamental pedagogics". He noted that the majority of lecturers in the universities and colleges (at that time) had been brought up on a diet of this approach which insisted on compliance and fear of authority that in turn, encouraged the development of an unquestioning attitude. Critical thought was not encouraged and teaching methods revolved around "telling and informing learners who are expected to be passive and receptive" Gozo (1996:79). This research therefore sought to establish whether this situation has changed in the current political dispensation.

The situation is no different in Botswana where the researcher has observed that teacher educators in colleges of education had a pedagogical rather than an

andragogical orientation. This was also exhibited in their educational practices despite the recommended national policy of encouraging learner-centeredness (Botswana Government, 1994; Kasozi, 2009). This revelation calls for teacher educators to model what they expect their student teachers to do in their future classrooms. This modelling can only be possible if teacher educators have been systematically sensitised and have experienced learner-centeredness through formal training, induction and taking part in professional development activities so that the belief that learning is pedagogical is interrogated (Koufman & Mann, 2010; Godwin & Koshkin, 2013). This exposure could also result in teacher educators' pedagogical orientation being altered (Jamieson-Proctor, 2008). In this way, the adoption of andragogical rather than pedagogical approaches to teaching and learning would be enhanced.

There is also evidence that in Botswana teacher supply, especially at junior and senior secondary levels, has been largely met (Bennell & Molwane, 2007). A question mark, however, remains on teacher quality when measured by attainment, employability and, generally, the fitting into society of the students they teach, as will be discussed later. In this research it is contended that andragogical training of teacher educators would lead them and, by extension, their charges (future teachers), to be more effective practitioners. This would eventually trickle down to the classrooms resulting in improved quality of instruction as well as achieve among school going learners. This contention is anchored on Mezirow's "transformative learning theory" which emphasizes that critical reflective practice can lead to changes in beliefs, attitudes and emotions (Mezirow, 1997). Andragogical training leads to self-direction and "learning how to learn" which has been shown to improve motivation among learners thus leading to a more innovative and creative society (Knowles et al, 2005).

This research, therefore, seeks to advocate for an andragogically based approach to the preparation, induction and professional development of teacher educators in Botswana and South Africa. This approach should help align teacher education to the national educational strategy of using learner centred teaching methods at all levels of education in Botswana (Botswana Government, 2004) and South Africa (Department of

Education, 1997). As the earlier assertion denotes, teacher educators in colleges of education in Botswana use predominantly teacher-centred methods in their educational practices (Kasozi, 2009). Similar findings were reported by van Aswengen (2004) at the Potchefstroom University (now a campus of the University of North West).

There is lot of literature and research reports on teacher training and induction within the SADC region (Motswiri, 1999; Nleya, 1999; Barnes & Varney, 2008). None of this available literature, however, addresses specifically the preparation, induction, and professional support of teacher educators. Again, Mofokeng (2003) and Parker (2007) pointed to the fact that little attention is paid to the development of scholarship in teaching and learning in higher education institutions in South Africa. A cursory look at literature on teacher education in Botswana indicates a paucity of research on advancing the teaching function of lecturers at the University of Botswana, let alone colleges of education (Pansiri, Mhozya, Moletsane & Bulawa, 2011). As earlier stated, on the international scene, teacher educator preparation, induction and professional development has only recently been a subject for research (Goos, 2009; van Velzen et al., 2010; Goodwin and Koshkin, 2013).

Research by Kagan (1992:65-90) showed that teacher preparation has an influence on the methods teachers adopt once they have graduated. Teachers' beliefs lie at the very heart of teaching and often pre-service and practicing teachers do not recognize or value the specific knowledge that is unique and needed within the teaching profession due to their deeply held beliefs (Kagan, 1992; Rogers, 1996; Deurwaarder, 2000). An analogy can be drawn for teacher educators. The teacher educators have to be confronted with their own beliefs if these beliefs are to be altered (Mezirow, 1997; Armitage et al. 2005). The researcher is of the opinion that this may be achieved through reflective and reflexive action which can be facilitated by following andragogical learning principles.

1.3 Theoretical context of the research

This research is theoretically underpinned by Knowles, Holton and Swanson's (2011) assumptions about adult learners and their subsequent assumptions about adult learning and teaching. Knowles (1980) coined the term "andragogy" to address these assumptions. Andragogy is a set of assumptions about how adults learn. It is an approach aimed at helping adults to learn (Reece & Walker, 2005). Knowles (in Bullen, 2004:1) defines andragogy as the art and science of adult learning. This means it is a system of ideas, concepts, and approaches to adult learning. This is as opposed to pedagogy which is defined as the art and science of helping children and adolescents learn. Later Knowles et al (2005, 2011) modified this definition to "*any intentional and professionally guided activity that aims at a change in adult persons*" (Knowles et al, 2005:60) to encompass all forms of adult learning activities and to realign andragogy to the behaviourist view of learning as well as having noted the applicability of the assumptions in a variety of settings like schools, universities, human resource management and industry.

Prior to the emergence of the andragogic model on the education scene, the pedagogic model was applied equally to the teaching of children and adults. This observation illustrates a contradiction in both terms. The notion of an alternative model to teach adults as against children was justified by empirical evidence which indicated that: (a) as adults mature, they become increasingly independent and responsible for their own actions (Bullen 2004:2); (b) adults are often motivated to learn by a sincere desire to solve immediate problems in their lives (Curzon 2005:60); (c) they have an increasing need to be self-directing (Armitage et al.,2004:28), (d) their experiences are an important source of their learning (Taylor and Kroth, 2009), (e) they need to know the relevance of what they are learning and, finally, (f) their motivation to learn is mostly intrinsic (Taylor and Kroth, 2009:174). In many ways the pedagogic model does not account for such developmental changes on the part of adults, and thus produces tension, resentment, and resistance in adult individuals (Knowles in Bullen 2004:2).

Although Malcolm Knowles popularized the concept of andragogy in the 1970s, the term itself was not new. Burge (in Bullen, 2004:3) reports that European adult educators had been using it consistently to refer to two spheres of adult schooling: (a) the practical aspects of adult teaching and learning, and (b) the academic study of adult education. Leder, Pehkonen and Torner (2002:13) argue that the andragogic approach to teaching is consistent with a relativistic view of teaching. They claim that a relativistic orientation toward teaching leads to two key practices typical of the andragogic approach: (1) an emphasis on process; and (2) the dynamic view of teaching. Reece and Walker (2005:22) found that a relativistic view of teaching is based on the context of teaching - the key aspect of which is student understanding. From a relativistic view, the question becomes less of whether a teaching strategy is good or bad, but more a question of the context in which a strategy facilitates student learning (Leder et al., 2002:14). This means that the focus in the teaching and learning process shifts from being teacher dominated to student dominated. The emphasis is on learning rather than teaching. The instructional style, therefore, cannot be determined *a priori*. This is a key point of departure of andragogy from pedagogy that will be returned in later sections of this report.

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1.4 Andragogical assumptions about adult learners and learning

Knowles et al. (2005:60 - 66) suggested that the andragogical model is predicated on six basic assumptions about adult learners, all of which have some relationship to the educators' notions about an adult learners' ability, need, and desire to take responsibility for learning. These are:

- The need to know. Adults need to know why they have to learn something before undertaking to learn it. When adults undertake to learn something on their own, they will invest a considerable energy in probing into the benefits they will gain from learning it and the negative consequences of not learning it. Consequently, the first task of the facilitator of learning is to help the learners become aware of the "need to know" (Knowles et al., 2005). Facilitators have to make an intellectual case for the value of the learning in improving the effectiveness of the

learners' performance or the quality of their lives. They can engage in the use of real or simulated experiences in which the learners discover for themselves the gaps between where they are now and where they want to be (Knowles et al., 2005).

- The learners' self-concept. Adults have a self-concept of being responsible for their own decisions, for their own lives. Once they have arrived at that self-concept, they develop a deep psychological need to be seen by others and treated by others as being capable of self-direction. They resent and resist situations in which they feel others are imposing their wills on them (Knowles et al., 2005). This sometimes presents a serious problem when handling adult learners: The moment an adult walks into an activity labelled "education," "training," or anything synonymous, he or she reverts back to the earlier conditioning in previous school experience, which most often means dependency, folding arms, sitting back, and saying "teach me." (Knowles et al., 2005).

This assumption of required dependency and the facilitator's subsequent treatment of adult students as children create a conflict within the learner that is; the adult's intellectual model - learner equals dependent - and the deeper, perhaps sub-conscious, psychological need to be self-directing. Adult educators should be aware of this problem, and make efforts to create learning experiences in which adults are helped to make the transition from dependent to self-directing learners (Knowles et al, 2005).

- The role of the learners' experiences. Adults come into an educational activity with both a greater volume and a different quality of experience from that of youths and children. By virtue of simply having lived longer, they have accumulated more experience than they had as youths or children. But they also have had different kinds of experience. This difference in quantity and quality of experience has several consequences for adult education (Knowles et al., 2005).

As a group of learners, adults will have a wider range of individual differences than is the case with a group of youths or children. They will be more heterogeneous in terms of background, learning style, motivation, needs, interests, and goals than a given group of youths or children. There is, therefore, a greater emphasis in adult education on individualization of teaching and learning strategies (Knowles et al., 2005).

It also means that for many kinds of learning, the richest resources for learning reside in the adult learners themselves. Hence, the emphasis in adult education is on experiential techniques - techniques that tap into the experience of the learners, such as group discussions, simulation exercises, problem solving activities, case methods, and laboratory methods instead of transmittal techniques. Also, greater emphasis is placed on peer-helping activities (Knowles et al. 2005).

There are, however, potentially negative effects related to the adult learners' experience. As an adult accumulates experience, there is a tendency to develop mental habits, biases, and presuppositions that may cause him or her to close out new ideas, fresh perceptions, and alternative ways of thinking. Accordingly, the adult educator has to try and discover ways to help the adult learner examine his or her habits and biases and open his or her mind to new approaches (Knowles et al., 2005).

Another but more subtle reason for emphasizing the experience of the learners has to do with each learner's self-identity. Young children derive their self-identity largely from external definers - who their parents, brothers, sisters and extended families are; where they live; and what churches and schools they attend. As they mature, they increasingly define themselves in terms of the experiences they have had. To children, experience is something that happens to them; to adults, *experience is who they are*. The implication of this fact for adult education is that in any situation in which the participants' experiences are ignored or

devalued, adults will perceive this as rejecting not only their experience, but rejecting themselves as persons (Knowles et al., 2005).

- Readiness to learn. Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations. An especially rich source of “readiness to learn” is the developmental tasks associated with moving from one developmental stage to the next. The critical implication of this assumption is the importance of timing learning experiences to coincide with those developmental tasks. It is not, however, necessary to sit by passively and wait for readiness to develop naturally. There are ways to induce readiness through exposure to models of superior performance, career counselling, simulation exercises, and other techniques (Knowles et al., 2005).
- Orientation to learning. In contrast to children’s and youths’ subject-centred orientation to learning (at least in school), adults are life-centred (or task-centred or problem-centred) in their orientation to learning. Adults are motivated to learn to the extent that they perceive that learning will help them perform tasks or deal with problems that they confront in their life situations. Furthermore, they learn new knowledge, understandings, skills, values, and attitudes most effectively when they are presented in the context of application to real-life situations (Knowles et al., 2005).
- Motivation. Adults are responsive to some external motivators (better jobs, promotions, higher salaries, and the like), but the most potent motivators are internal pressures (the desire for increased job satisfaction, self-esteem, quality of life, and the like). Tough (in Knowles, 2005) found in his research that all normal adults are motivated to keep growing and developing, but this motivation is frequently blocked by such barriers as negative self-concept as a student, inaccessibility of opportunities or resources, time constraints, and programmes that violate principles of adult learning (Knowles et al., 2005).

Some researchers have, however, argued that these assumptions can also be applicable to children (Kabuga, 1977; Roadermel, 2010). Roadermel (2010) suggests

that the andragogical model's major contribution is the need to be conscious of these assumptions when handling teaching and learning situations for learners of all ages. This researcher proposes that since teacher educators are teachers of adults, they should be aware of these assumptions and use them in the preparation of student teachers. The researcher acknowledges that some andragogical principles may be applicable to the teaching of children, but the apparent lack of exposure to andragogy by teacher educators in Botswana and South Africa leaves them with only pedagogy as the approach to teaching of both children and adults alike.

In describing the implementation of the andragogical learning model, Knowles et al. (2005:115-135) suggested the following steps in designing adult learning events: (1) Preparing the learners for the programme; (2) setting a climate that is conducive to learning [physically comfortable and inviting, and psychologically safe – mutually respectful, collaborative, mutually trustful, supportive, open and authentic - pleasurable and human]; (3) involving learners in mutual planning; (4) involving learners in diagnosing their learning needs; (5) involving learners in forming their learning objectives; (6) involving learners in designing learning plans; (7) helping learners carry out their learning plans; and (8) involving learners in evaluating their learning outcomes, or re-diagnosing their additional learning needs. Key to all these is the placement of the learner at the centre of every stage of the learning process in the andragogical model. The researcher, having examined extant literature, notes the fact that reference to this model; and its incorporation into teacher education in general and teacher educator preparation, induction and continuous professional development programmes in particular, has been minimal.

1.5 Impact of andragogically based teacher educator preparation; induction and professional development on the general quality of education

Recent trends in Botswana and South Africa have highlighted among others, the following, as issues related to teaching and learning in schools. These include a decline in the achievement levels of students at primary, junior secondary and senior secondary

levels as evidenced by TIMSS-2011, PIRLS-2011 and SACMEQ reports (Spoull, 2013; Botswana Government, 2014) plus the seemingly low quality of school graduates. In Botswana, there is also a fear that the National Vision 2016 pillar of “an educated and informed nation” (Botswana Government, 1996) may not be fulfilled. There is also a problem of indiscipline among the nation’s youth, the lack of fulfilment of the national policy on learner-centeredness in schools, plus the decline in the quality of teaching of especially mathematics and science. Other issues are the need to adhere to international best practice in relation to teacher education policies, principles and standards; the need to focus on learning rather than teaching in Botswana’s schools and the problem of teacher educators teaching adult student teachers to be teachers of children and adolescents. These issues further bring into play the role played by teacher educators in the preparation of teachers and the professional support they offer to teachers in schools (Cluxton & Curr, 2004; Ogunniyi, 2005; Tsiwo-Chibugu, 2005; Pheko, 2010). This research intends to propose a fundamental shift in approaches to teacher educator preparation, induction and development which could *trigger* the desired effect of improving the quality of education at the primary and secondary school level. The four areas that will be impacted by the proposal to approach teacher educator practices from an andragogical perspective, and subsequently on the quality of teaching and learning in schools are now outlined in some detail.

1.5.1 The problems of indiscipline among youth in schools

The problems of indiscipline among the youth are often attributed to the educational system. Since the youth are a product of schools, their attitudes and behaviours are often attributed to poor preparation as they go through schools. Research suggests that students are more likely to be less problematic in schools and in society in general when they are motivated and engaged in productive activities which, by extension, are *centred on their needs* (OECD Report, 2009). *Meeting learner needs and engaging students* are two key corner-stones of andragogical approaches to teaching and learning. This can be deduced from the following quote by Knowles,

The crucial importance of equality, openness, democracy, realness,

genuineness, prizing, acceptance, and emphatic understanding on the part of the andragogue makes the andragogical teacher/facilitator accept each participant (student) as a person of worth, respect his (her) feelings and ideas, and seeks to build relationships of mutual trust and exposes his (her) own feelings regarding the relationship between the teacher and adult learner (Knowles in Henschke & Cooper, 2007:4).

It is the contention of this researcher that teacher educators that adopt andragogical approaches in instruction are likely to be mimicked by their students when they graduate as teachers.

1.5.2 The declared educational policy of learner centeredness in schools and colleges

The Revised National Policy on Education (Botswana Government, 1994) advocates that all educational institutions should adopt a learner centred approach to teaching and learning. However, research has shown that teachers still continue to teach the way they were taught using predominantly teacher centred approaches predicated on the teacher directing and controlling almost all classroom activities (Tabulawa, 1998; Tafa, 2001). It can be argued that this is probably rooted in the culture and deeply held belief that the authority to determine what is learned, how it is learned and how it is assessed lies solely with the teacher *or teacher educator* (Tabulawa, 1998). Until recently, teacher education has not deliberately attempted to address this situation in assisting teacher educators and teachers interrogate their beliefs and attitudes to incorporate other points of view. Recent moves to improve the situation has resulted in the development of a Teaching and Learning Policy for institutions affiliated to the University of Botswana (University of Botswana, 2009). The main thrust of the policy is to promote learner centeredness in teaching and learning in institutions affiliated to the University of Botswana.

1.5.3 The need to focus on learning rather than teaching in schools and teacher education institutions

In order to shift from teaching to learning in schools, there is a need to address teacher beliefs of what constitutes learning. Research has indicated that unless this

fundamental issue is addressed, the traditional view of teaching and learning as knowledge transmission and acquisition will persist (Kabuga, 1997). This research therefore proposes that exposing teacher educators to andragogical approaches would assist them prepare student teachers who are learning centred and would in the future facilitate this fundamental shift in their teaching practice.

1.5.4 The problem of teacher educators teaching adult student teachers to be teachers of children and adolescents

Teacher educators need to be sensitive to the fact that the transition from student to student teacher to teacher is complex and arduous. The teacher educators should therefore not only model teaching approaches that are suitable for young learners in school, but they should also remain conscious that their students (teachers) are adult learners (Cluxton & Curr, 2004; Tsiwo-Chibugu, 2005). Preparing, inducting and developing teacher educators using the andragogical model should assist them to address this fundamental issue.

1.6 Research problem and questions

In order to conduct a research of this nature, the researcher should address an identified research problem and formulate research questions and objectives that would guide the research process. What follows is the problem statement, research questions and objectives that guided this research.

1.6.1 Research problem

The following problem statement was investigated:

Although teacher educators in teacher education institutions in Botswana and South Africa are involved in the training/education of adult learners, and efforts are being made to infuse the adult learning paradigm in these institutions, the educators continue to find success in this process elusive and many often abandon it and turn to the more familiar strategy of pedagogy. This has been the situation in colleges of education in Botswana (Kasozi, 2009) and in some teacher preparation institutions in South Africa (van Aswegen, 2004). The situation has further been highlighted by the heightened

interest in handling adult in-service teachers attending upgrading courses at the University of Botswana and some colleges of education in Botswana (Pansiri et al – personal communication) and the researcher’s own experience.

1.6.2 Research questions

This research sets out to investigate the preparation, induction and professional development of teacher educators in Botswana and South Africa with specific reference to their preparation, induction and development as teachers of adults. The following research questions then come to the fore:

- (1) How are teacher educators in Botswana and South Africa prepared, inducted and developed as teachers of adults?

This question is further broken down into the following sub-questions:

- (a) Who are teacher educators in the four selected sites?
- (b) What motivated the teacher educators to join teacher education?
- (c) How were they inducted and developed as teachers of adults?
- (d) Are the educational practices of the teacher educators congruent with adult learning principles?

- (2) How do the teacher educators (in Botswana and South Africa) adjust their teaching practice to cater for the needs of their students who are adults?

- (3) What recommendations can be advanced to improve the preparation, induction and development of teacher educators as teachers of adult student teachers?

These research questions are operationalized into the following research objectives.

The researcher should be able to:

1. Investigate how teacher educators in selected teacher education institutions in Botswana and South Africa are prepared, inducted and

professionally developed as teachers of adults. In this investigation the researcher will:

- a. describe who are the teacher educators;
 - b. explain the teacher educators' motivation to join teacher education;
 - c. describe how they were inducted into teacher education; and
 - d. discuss the common teaching methods they use and whether these have a pedagogical or andragogical orientation.
2. Discuss how the teacher educators (in Botswana and South Africa) adjust their teaching practice to cater for the needs of their students who are adults.
 3. Make recommendations for the preparation, induction and development of teacher educators as teachers of adult student teachers based on andragogical principles.

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1.7 Purpose of the study

The purpose of this study is twofold. The first is to assess the preparation, induction and professional development practices of teacher educators in Botswana and South Africa, specifically, their preparation, induction and professional development as teachers of adults. In this way, the study will describe the professional development journey of teacher educators as teachers of adults as well as document their experiences and opinions on the various stages of this journey.

The second purpose is make recommendations for a model for the preparation, induction and professional development of teacher educators as teachers of adults. The proposed model should contribute towards inculcating a culture of using learner-centred approaches in teacher educators' educational practices. Through modelling, coaching and observation, the student teachers would in turn do the same when they start

teaching in schools.

1.8 Significance of the study

Teacher educators in most countries are a heterogeneous group with varied biographies and backgrounds. This research will, therefore, contribute towards the knowledge of who the teacher educators in Botswana and South Africa are, why and how they joined teacher education, and their induction as well as their professional development journeys. The study will also make recommendations about inducting and developing teacher educators as teachers of adults. In this way the study should assist in addressing issues of neglect in scholarship in teaching at colleges and schools of education in Botswana and South Africa. At the same time findings of the study will enable teacher educators to reflect on and interrogate their beliefs on effective teaching and learning. Finally, the study should make a contribution towards answering the global call for quality teacher preparation for teacher effectiveness (Bonnet, 2007 & 2008; Buetel, 2011). This outcry is louder in developing countries like Botswana and South Africa where there is concern about the declining achievement rates of students at primary and secondary school levels (Bonnet, 2007 & 2008). The study should also make a case for turning teacher educators in Botswana and South Africa into a unique professional group.

1.9 Definition of key concepts

In order to give clarity to the study, the following meanings will be ascribed to the terms and concepts described. This is in recognition of the fact that the meaning of a term or concept is often contextualized and therefore requires clarification at the onset of any research.

1.9.1 Teacher educator

In terms of the Teaching Service Act 24 of 1976 (Botswana 1976:3), "teacher" means any person employed in a post in a government or local authority school or in an aided post on a full or part-time basis and possessing such qualifications as may be

prescribed. In the Republic of South Africa (RSA) National Education Policy, Act 27 of 1996, (RSA, 1996:1) “educator” means any person who teaches, educates or trains other persons in an institution or assists in rendering education services, or education auxiliary or support services provided by or in an education institution. In this study “teacher educator” will refer to a lecturer at a College or School of Education, who guides the instructional process and is engaged in teacher training, usually in his or her field of specialisation.

1.9.2 Teacher education

Teacher education refers to the formal process of preparation, induction and continuing professional development of teachers for professional work in the education system.

1.9.3 Andragogy

Andragogy is the science that studies the education of an adult as a growing person who is led or “accompanied” by another adult with more knowledge (and experience) in order to gain a better understanding of the realities of adult work (Du Plooy & Van Rooy, 1996:4; Quam, 1998:71). In the context of this research the term will also refer to the “art and science of helping adults learn” as coined by Knowles, Holton and Swanson (2005). It will also refer to those educational beliefs, practices and methods that lead learners to become self-directed and autonomous as well as for educators to be “facilitators” of learning rather than as “presenters of content” (Reischmann, 2004). A later definition asserts that andragogy is the art and science of facilitating change in adults through self-directed, student-centred approaches to life-long learning (Caruth, 2013:606).

1.9.4 Pedagogy

Pedagogy is a part of the discipline of education concerned with the accompanying of a child so that he or she can become a responsible adult, as opposed to it being used to describe the study of education and training. In this study, Pedagogy will also refer to

those educational beliefs, practices and methods that relate to the learning of children and adolescents that results in their acquisition of skills, knowledge and attitudes that they will need in the future as they develop into adults (Holmes & Abington-Cooper, 2000).

1.9.5 Adult teaching principles

These are a set of guiding assumptions about adult education, which view the adult as an independent learner (autonomous), often intrinsically motivated (responsible for his or her own learning), goal or performance oriented and having perspective (Knowles in Deurwaarder, 2000:14).

1.9.6 College of Education

This is a higher education institution, offering programmes leading to the award of a diploma in either secondary education or primary education.

1.9.7 School of Education

This is usually a division within a university that is devoted to scholarship in the field of education, which is an interdisciplinary branch of the social sciences encompassing sociology, psychology, linguistics, economics, political science, public policy, history, and others, all applied to the topic of elementary, secondary, and post-secondary education. In this study, 'school of education' will refer to a division within a faculty of education that is devoted to the preparation and development of teachers as well as research and scholarship in teacher education.

1.9.8 Educational practice

Educational practice in the context of this research refers to the tasks that constitute the day to day activities that teacher educators perform in the process of teaching so that learning can take place. It includes all the processes that the teacher educator engages in while planning to teach, how actual teaching takes place and what the teacher educator does to evaluate the teaching.

1.9.9 Induction

In this research, induction will refer to the support and guidance provided to novice teacher educators in the early stages of their careers in teacher education.

1.9.10 Continuous professional development (CPD)

This means supporting people in the workplace to understand more about the environment in which they work, the job they do and how to do it better. It is an on-going process throughout their working lives. In this research CPD means the support given to teacher educators in order to enhance their performance on the job of preparing teachers of the future as well as making their work more fulfilling.

1.10 Chapter overview

Chapter 1 provides an introduction, background, rationale and significance of the study. It also outlines the research problem and research questions. Chapter 2 considers the theoretical underpinnings of andragogy, its history and development. It also discusses the link between andragogy and its application in higher education in general and teacher education in particular. Chapter 3 investigates and reports on teacher educator induction and continuous professional development from different perspectives and teacher education systems. These three chapters constitute the theoretical context of the study.

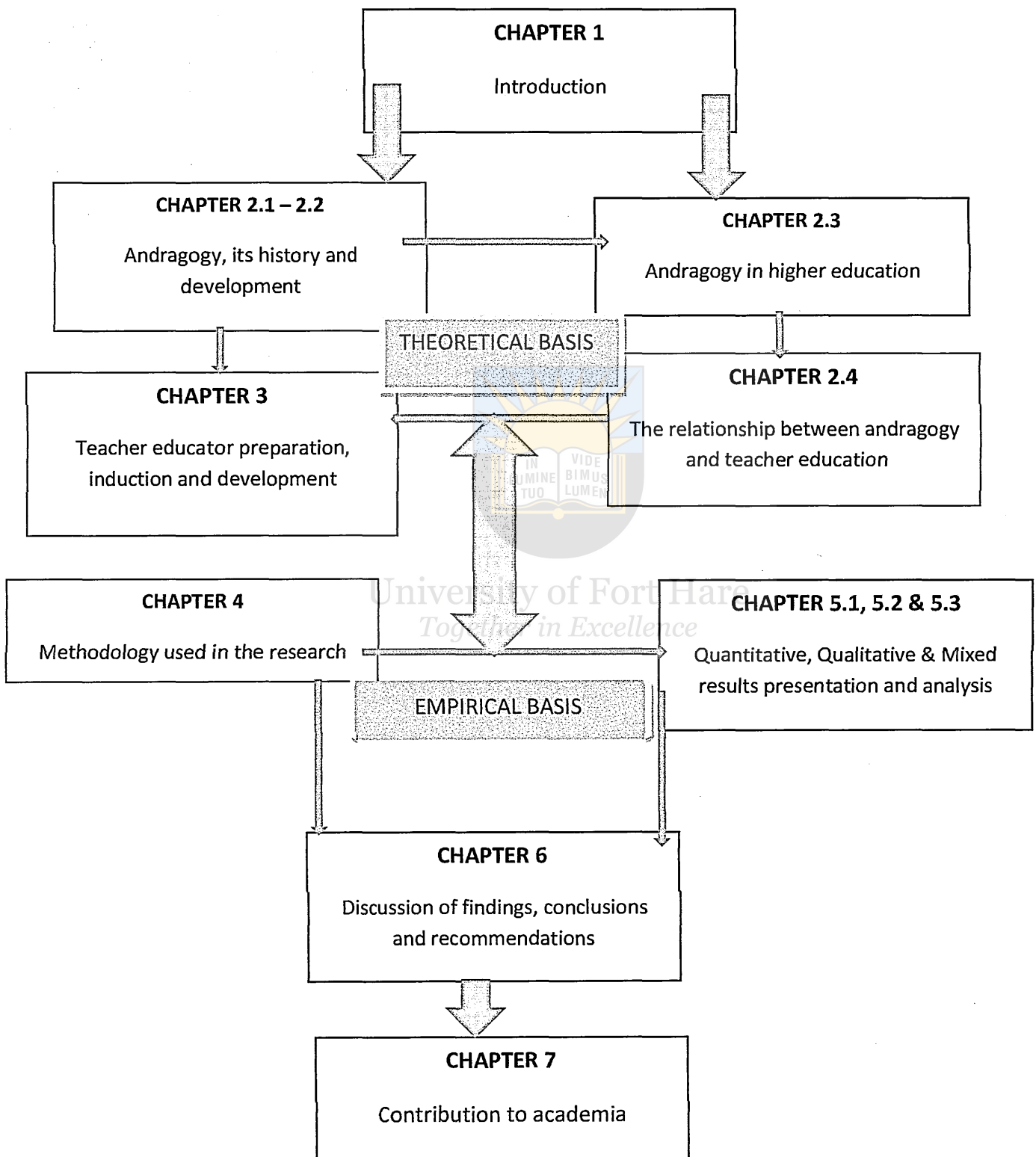
Chapter 4 outlines the methodology used in the study, the research paradigm, the approach and the design. The population, sample and sampling, data collection methods, instrumentation, trustworthiness, reliability and validity, data analysis and ethical consideration are also outlined in this chapter. Chapter 5(1) presents and analyses the quantitative data collected during the research while Chapter 5(2) presents and analyses the qualitative data collected during the research. In chapter 5(3) the quantitative and qualitative results are analysed and integrated in a mixed methods format. Chapter 6 discusses these findings which are used to inform the recommendations of how to prepare, induct and professionally develop teacher

educators as teachers of adults. It also outlines the conclusions and recommendations arising from the research. Chapter 7 discusses possible contributions to academia including a description of the proposed model for the improvement of the preparation, induction and professional development of teacher educators as teachers of adults. Chapters 4-7 constitute the empirical part of this study. Figure 1.3 presents this summary in diagrammatic form.



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Figure 1.1 Conceptual framework of the study



Chapter 2

Andragogy: the concept, theory and philosophy

2.0 Introduction

This chapter reviews literature on andragogy; the concept, theory and philosophy. It begins with the historical foundations of the concept of andragogy. Since andragogy is the theory underpinning this research, it is important to trace and appreciate its developmental and theoretical origins. Andragogy is based on assumptions or principles that are characteristic of the adult learning process. The understanding of what each of the assumptions entails is essential, so that comparisons with concepts in pedagogy can be made and delineated as a theoretical basis for this research.

The chapter begins with an explanation what andragogy is followed by a description of how the concept has evolved over the years. This is followed by a discussion of the andragogical principles when compared to the pedagogical ones. Then there is an exploration of how andragogy, higher education and teacher education are linked. In the next section, the concept of andragogy is examined in some detail.

Literature that informed this study was drawn from a variety of sources. These included the internet where key word searches include: andragogy and its principles; teacher education; teacher educator induction; teacher educator professional development and other related terms. A number of internet databases (subscription and open access) provided data. These were mainly accessed through the South East Academic Libraries Consortium (SEALS). They included, Google Scholar, Taylor and Francis, Science Direct, Sage, ProQuest, Academic Search Premier and ERIC. In addition, the University of Botswana Library as well as Colleges of Education libraries also provided reference support for this study.

2.1 Andragogy: definition and assumptions

Defined as the “art and science of teaching children,” the term *pedagogy* was derived from the Greek word *paid*, ‘child’, and the word *agogus*, ‘leader of’, (Ozuah, 2005:83). In contrast, the term *andragogy* was also derived from the Greek word *andros*, meaning ‘adult man’, and *agos*, meaning ‘I guide’. This is the point departure when it comes to the beliefs that underpin the two concepts. Pedagogy places the teacher in a position of authority; he/she knows everything while the student is a follower who knows little or nothing. This fundamental point will be returned to from time to time as andragogy and pedagogy are explored. Initially however, the definition and history of the term is investigated.

The term *andragogy* was first introduced by Alexander Kapp in 1833, and was referred to again in 1926 by Eduard Lindeman (Lee, 1998; Zmeyov, 1998; Rachal, 2002). In the United States, the term was reintroduced by Malcolm Knowles in 1968, who popularized it as a new label for a new methodology that separated adult schooling from pre-adult schooling (Merriam, 2001; Sopher, 2003a). From that time, the term has been used to compare and contrast adult learning principles with pedagogical principles, and has been defined as the “art and science of helping adults learn” (Knowles, 1980(b); Lee, 1998; Cullen, 1999; Rachal, 2002). Until recently, there has been no consensus on a working definition of andragogy (Caruth, 2013). Having looked at 21 definitions of andragogy, Caruth (2013:606) offers the following working definition of the term: “The art and science of facilitating change in adults through self-directed, student-centred approaches to life-long learning.” This was after she identified four recurring themes in the 21 definitions, namely: art and science, problem or project centred, real-life experiences, and continuous learning. Although this definition was arrived at after a thorough analysis by various authors, the simple and straight forward definition offered by Knowles (1980(b):43) of andragogy as the “the art and science of helping adults learn” will anchor discussions of this research. This is to clearly contrast it with pedagogy as “the art and science of helping children learn” (Knowles, 1980(b):43).

The origin and inception of andragogical concepts and ideas were strongly influenced by humanistic philosophy that focused on the development of the individual in personal and social environments, and the role, responsibility and accountability of the individual in his or her own learning (Zmeyov, 1998; Sopher & Henschke, 2011). From his observation of adult learners, Knowles identified that the learning process and approach that adults follow was different from that of younger learners (Fall, 2001). He then developed the original set of assumptions through a combination of his observations of adult learners, humanistic principles, and Lindeman's original model, which included readiness to learn, experience, life centred orientation to learning, self-directedness, and age-related differences (Rachal, 2002; Wang, 2004). The purpose of the assumptions, therefore, was to distinguish adult learners from children in the learning process (Lee, 1998). Having described andragogy and what it entails, the review now turns to the history of the concept and its development.

2.2 Andragogy, its history and development

Organized education as it is known today can be traced to the middle ages in Europe when the church formed cathedral schools to train young men to become priests (Ozuah, 2005). According to Forrest and Peterson, the methods used in these schools were based on four main assumptions (Forrest & Peterson, 2006:113-122). First, children who entered these schools did not know what they needed to know for learning to occur. They therefore were entirely reliant on their teachers. Second, the focus was on what was to be learned and not the development of the student. Third, external rather than internal motivation, through reward and punishment, was the best way to make children learn. Finally, the experiences that children brought with them were irrelevant or inconsequential to what was to be learned (Ozuah, 2005; Forrest & Peterson, 2006). Since it was children who enrolled in these schools, the process of teaching them became known as *pedagogy*, an ancient Greek term meaning "education of children" (Forrest & Peterson, 2006:114).

Stemming from the above observations, when missionaries came to Africa in the 18th and 19th century, they brought with them a concept of education rooted in theological principles. Their purpose of education was to teach children (and adults) the ability to read the scriptures and civic information (Kabuga, 1977; Bangura, 2005). After independence, however, there has been an attempt in the public school systems to gradually overcome the influence of religion in education (Mautle, 1994; Ntseane, 2005). Nonetheless, the power and influence of the church on educational content and teaching methods has been so strong for so long that the pedagogical methodology associated with it became the only acceptable style of teaching children and, eventually, adults in religious and secular institutions (Ozuah, 2005). This resulted in the use of pedagogy by adult educators based on the assumptions and principles originally developed for children to teach adult learners as well (Forrest & Peterson, 2006).

Conversely, the roots of present day adult teaching and learning can be traced to the ancient philosophers, Socrates, Aristotle, and Plato, whose primary students were adults seeking enlightenment to enhance their social roles and identities (Ozuah, 2005; Forrest & Peterson, 2006). Problem solving and the promotion of autonomous learning using the Socratic method were derived from historical observations regarding an inherent adult need to be self-directed and learner centred instead of subject centred (Knowles, 1984; Ozuah, 2005). Hebrew and Greek educators also applied andragogical concepts in their choice of terms when educating adults (Henschke & Cooper, 2006).

From an African perspective, the African traditional teaching systems were supposed to help societies reach the highest level of important societal values such as *botho* or humanism. By having *botho* the individual then becomes part of “an empowered group of people who are honest, accommodating, sharing, committed to safe life at all costs and respecting the young and the old” (Ntseane, 2005:2). As will be discussed later, *Botho* is premised on the concept of humanism and, therefore, shares the same philosophical platform as andragogy (Bangura, 2005:10).

2.2.1 History of andragogy in Europe and the USA

In the late 1800s and early 1900s, it became apparent in the west that traditional pedagogical principles, when applied to an adult workforce faced with economic and political pressures for growth, were not working (Savicevic, 1991, 2006b). This is because in pedagogical theory all learning is supposed to prepare students (children) for the future (Forrest & Peterson, 2006). In order to effect immediate change and enable the fresh application of acquired knowledge, educators soon realized the important role of experience. This was in direct contradiction to the pedagogical principle that a student should be a “blank slate” or “empty vessel” in order for learning to take place. Drawing from prior experience allowed adults to make meaning of the new knowledge, thereby making application much easier (Forrest & Peterson, 2006).

During this period scholars in Germany, the Netherlands and the United Kingdom continued their quest to find better ways of improving worker education resulting from the social and economic pressures prevailing in the early part of the 19th century (Savicevic, 1991,2006b). In the United States, the American philosopher, Eduard Lindeman, in 1926 posited several assumptions about adult education. He argued that the best approach to adult learning was through problem solving rather than the learning of content. In this way he advocated student-centred learning as well as taking into account the significance of experience in providing meaning to life events (Fall, 2001; Wang, 2004; Ozuah, 2005). Lindeman’s basic assumptions about adult learning were the precursor to the drawing up of adult learning principles as they later came to be known (Lee, 1998; Rachal, 2002).

While the term ‘andragogy’ had been linked to adult education as early as 1833 by Alexander Kapp (Hensckle, 2010), it went into abeyance in the mid-1900s as a result of the outbreak of the Second World War, when interest in andragogy and adult education in general decreased. However, the problem of providing adequate and appropriate adult education to support the war effort remained (Hensckle, 2010). Interest in adult education was rekindled in Europe after the Second World War when in Germany, Poggeler began to review andragogy in a scientific light by studying systematic forms of

the concept (Savicevic, 1991; 2006b). In the Netherlands, Ten Have modified the term to 'social agogy' to identify a broader meaning inclusive of social influences, internal and external (Savicevic, 1991; 2006b).

The 1950s saw the emergence of the humanism and progressivism movements. These were later to have a strong influence on adult educational change. The focus of the humanistic psychology movement was on the individual; specifically self-esteem, self-actualization and the development of the entire person as a unique individual (Pattison in Hensckle, 2010). Carl Rogers, a renowned humanist, promoted the theoretical principles that postulated that the individual is in charge of his or her own learning. These principles complemented the andragogical assumptions of autonomy and self-directedness (Zmeyov, 1998; Tisdell & Taylor in Hensckle, 2010). Carl Roger was probably the first to introduce the concept of an educator being a facilitator rather than a teacher. This was long before Malcolm Knowles popularised it (Knowles, 1990; Wang in Conaway, 2009).

In addition the progressive social reform movement placed education at the heart of social reform (Pattison in Conaway, 2009). John Dewey and Paulo Freire were among the early proponents of progressivism. It complemented humanistic andragogical principles of autonomy and self-directed learning. Dewey and Freire viewed the purpose of adult education as bringing about social change (Tennant & Pogson, 1995; Pattison in Conaway, 2009). Furthermore, progressive principles were echoed in the writings of Freire, Lindeman, Dewey, Rogers, and Knowles, in terms of learner centeredness, the teacher as facilitator, and social activism (Pattison in Conaway, 2009).

The 1960s was a period when many educational researchers attempted to conceptualise, theorise as well as operationalize adult education. Gibb in 1960 postulated that adult learning as dependent on experience was problem centred, meaningful, and self-directed (Brookfield in Conaway, 2009). Drawing upon humanistic and progressive principles, Knowles in 1962 began to set the stage for his future concepts of andragogy by actively promoting student centeredness and acknowledging

student needs until, finally, in 1968, he officially re-introduced and adopted the term 'andragogy' (Knowles, 1984; Rachal in Conaway, 2009). Knowles then defined andragogy as the "art and science of helping adults learn" (Knowles, 1984; Knowles et al, 2005).

The 1970s and 1980s were probably the two decades that saw an exponential growth of the use of the term 'andragogy'. A lot of research and writings about the subject were done during this period (Knowles, 1984; Conaway, 2009). In his publication, *The Modern Practice of Adult Education: Andragogy versus Pedagogy*, Knowles postulated that educators should be facilitators and guides rather than being providers of knowledge. He also introduced the original four andragogical assumptions: self-concept, experience, readiness to learn, and orientation to learning (Knowles, 1970; Wang, 2004; Conaway, 2009).

In the late 1970s a team of researchers at the University of Nottingham (the Nottingham Group) came together with the aim of studying various andragogical assumptions (Savicevic, 1991; 2008). This task force, however, expanded the view of andragogy to include a more socialistic, egalitarian set of assumptions based on Paulo Freire's ideas (Savicevic, 1991; 2006b, Conaway, 2009).

2.2.2 Opposition to considering andragogy as an adult learning theory

Despite the fact that adult education was becoming popular as a component of education in general, andragogy as a concept was not universally accepted. Hartree in 1984 for example suggested that Knowles' andragogical principles were merely descriptions of the ideal adult student as we expect him to be (Hartree, in Sipe, 2001; Merriam, 2001; Kerka, 2002; Conaway, 2009). In the same vein, Houle (in Savicevic, 2008) in his publication *Design of Education*, argued that andragogy was more about technique(s) and less about organizing principles. Meanwhile, Jarvis (in Savicevic, 2008:365) viewed andragogy as a reaction to the romantic, humanistic movement of the 1960s rather than a true educational theory.

The biggest proponents and advocates of andragogy, however, included Brookfield, who in 1986 heralded andragogy as the most popular concept in the training and education of adults to date (Brookfield, 1986; Wang, 2004) and Fall(2001), who viewed Knowles's work as a key contribution to the literature on adult learning (Conaway 2009).

The works of Merriam and Caffarella (1999) continued to classify andragogy as a theory of adult learning while Davenport and Davenport (1985:157) had made further reference to andragogy as a "theory of adult learning, theory of technology of adult learning, method of adult education, technique of adult education, and a set of assumptions" (Merriam, 2001; Rachal, 2002, Conaway, 2009). Furthermore, Justice and Griffin publicly referred to andragogy as a theory of education, despite the fact that there was no evidence to support andragogical principles (Justice, 1997; Savicevic, 1991 & 2008, Conaway, 2009).

In order to classify a theory as 'scientific', it must be empirically tested and validated, having taken note of the variables therein. This is especially true in learning theories where a psychological basis has to be established (Block in Conaway, 2009). In this regard, only a few research studies have attempted to empirically validate andragogy as a learning theory (Rachal, 2002; Wilson, 2005, Conaway, 2009). This is why Jarvis (in Conaway, 2009) claimed that although the theory of andragogy was considered an established doctrine due to its popularity, the lack of sufficient research did not justify its position as a theory (Brookfield, 1986, Conaway, 2009). Subsequently, in his 1997 paper, Ferro maintained that there was very little empirical evidence to support a valid theoretical basis for andragogy to be considered a theory (Ferro, 1997, Cullenin Conaway, 2009). Rachal in 2002 challenged researchers to validate their blind acceptance of andragogy as a theory by first determining its operational definitions. He indicated that one of the reasons that may have inhibited the pursuit of its validation is illustrated by the definition of andragogy: in that theorists are influenced more by the "art" rather than the "science" of how adults learn (Rachal, 2002:210-227).

As a result of the controversy and debate resulting from the andragogical assumptions and theoretical intentions proposed by Knowles (1970), he made revisions to his original propositions. He acknowledged that *maybe*, andragogy was “less of adult learning theory than a set of assumptions about learning; or a conceptual framework that serves as a basis for an emergent theory” (Knowles, 1989:112). He also accepted that distinction between andragogy and pedagogy may not always be clearly defined as earlier postulated. This is why the revised edition of his 1970 publication was called *From Pedagogy to Andragogy* (Knowles, 1980; Lee, 1998, Conaway 2009). This time around, Knowles presented the concepts of pedagogy and andragogy “as a linear continuum, with instructional orientation flowing from teacher to learner centred along the individual’s developmental path” (Conaway,2009:20). Pedagogy and andragogy were viewed as a journey along a continuum of learning and change (Knowles, 1980; Lee, 1998; Merriam, 2001; Conaway, 2009). Using this analogy, it was possible to travel along this journey as one goes through several experiences that are a source of learning. These experiences accumulate as one gets to the middle and towards the end of the journey. Under pressure to provide empirical support for andragogy as a theory, Knowles revised his reference to andragogy as a situational model of human learning, rather than an actual theory (Knowles, 1980; Conaway, 2009).

Despite the controversy that surrounded andragogy as a theory, a set of principles and assumptions, or instructional methodological guidelines, Conaway (2009) argues that “it is still considered the best method of adult instruction by many leaders in adult education”. This is supported by adult education *gurus* like Jarvis, Brookfield, Feuer and Geber, and Knowles (Wang, 2004; Conaway, 2009) and has been known to support an instructional style that is positive for adult facilitators and students. It should be noted however that these assumptions have still not been specifically applied to teacher educator preparation, induction and professional development in the Botswana and South African contexts. Yet andragogy has the potential to offer alternative avenues towards inculcating learner centredness in schools and higher education.

In addition, it could be argued that andragogy is not culturally bound. It has been used in Africa, Europe, North and South America and Australia. It is not content or context bound. It has been applied in the sciences, teacher education, higher education as well as human resource development (Knowles, et al, 2005). Andragogy has had the greatest impact on educational practice where, for example, Knowles and associates (1985) reported that in one study participants in a six months programme were able to move from where they perceived “learning” as something to be “consumed” (i.e. a consumer orientation) to one that is “internalized” as their own prized responsibility. This happened in three stages, the first being self-assessment where they realized that the learning is for them and that the process of learning changed them. Then, they were helped to assess their performance and to transfer what they had learned to different settings using learning contracts. Lastly, they were helped to direct their own learning through applying what they had learned to novel situations and at a much larger scale, through experimentation, mentorship and simulations (Knowles, et al, 2005). In the next section a comparison between pedagogical and andragogical principles is made to provide a basis for subsequent propositions.

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2.2.3 Pedagogical assumptions

In this section, a discussion of pedagogical assumptions is done to enable one to compare and contrast them to the andragogical ones. Gehring (2000) and Ozuah (2005) assert that, pedagogical theory stresses five major points: the lack of experience, dependency (in terms of self-concept), and external motivation, content oriented learning, and readiness to learn. Owing to the fact that they have lived for a short time, children have not yet gained much useful experience from many life events or developmental tasks. In pedagogical thinking, teachers assume (wrongly!) that any experience children have is irrelevant and negligible (Ozuah, 2005, Conaway, 2009). This is the reason why children rely on the teacher and/or adult guidance to fill the emptiness and provide the information (usually with predetermined course content) to create a frame of reference upon which to build new learning (Knowles, 1980, Conaway, 2009).

The role of experience in learning in children

Again, the little experience children bring with them to the learning encounter is said to be limited to their restricted reasoning ability since they are still in Piaget's preoperational stage when fantasy is perceived as reality. In the same way when children are in the concrete operational stage, they perceive situations in concrete terms and therefore are not able to apply or transfer the information toward other situations or learn from them (Piaget, 1972; Ginsburg in Conaway, 2009).

The need for dependency among children

The other factor is that children are by nature dependent on adults. This does not only relate to basic requirements of food, clothing and shelter, but encompasses learning. They therefore need greater direction and guidance. As they get older however, children begin to slowly take up new roles that usher them into greater responsibility. They become more responsible for their own action and therefore their own learning (Forrest & Peterson, 2006; Conaway, 2009). This in essence means that naturally children have to look up to their teachers, coaches or guardians as to what is to be learnt and how the learning is to take place (Ozuah, 2005).

Motivation to learn among children

Stemming from the discussion about the amount of experience children bring to the learning encounter, it becomes clear that motivation to learn among children is mostly extrinsic rather than intrinsic. This is mainly a result of the fact that the learner has played little or no part in determining the learning needs. In this way therefore the child's motivation is the rewards that he/she expects at the end of the learning process. This could be in the form of praise, grades, acceptance or the negative consequences that may be associated with failure. (Knowles, 1985; Ozuah, 2005; Conaway 2009). This assertion agrees with Piaget's Concrete cognitive operational thinking that postulates that children start thinking in the abstract, late in the formal operational stage. They are not able to apply current learning to future endeavours (Piaget, 1972; Knowles, 1985; Berk, 2004; Conaway, 2009).

Content rather than process orientation to learning

Given the degree of dependency that children have on their teachers, there seems to be a valid argument that what they learn should be organised and packaged from without. What children learn therefore is organised into a formal curriculum with objectives, topics and sub-topics. Assessment of learning is also determined *a priori*. This is the type of instructional methodology found in most school systems. What is learnt therefore *must of necessity be known* by the teacher (Forrest & Peterson, 2006; Conaway, 2009).

The child's need to learn

In pedagogy, the goal of learning is not to solve (immediate) life problems but rather to use acquired knowledge and skills at some future point (Knowles, 1985; Ozuah, 2005; Forrest & Peterson, 2006). The need to learn is therefore determined by the teacher or parent and the child has little part to play in that decision. It follows therefore what is to be learned should be measurable with predetermined outcomes and goals. Knowles (1985) argued that these set of assumptions clearly differentiated learning among pre-adults from that of adults. The assumptions that set andragogy apart are now discussed.

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2.2.4 Andragogical assumptions

According to Knowles (1970) andragogy was initially premised on four assumptions namely: the adult learner is self-directed; that adult learner motivation to learn is to solve immediate problems as opposed to use the knowledge in the future; that the adult learner brings into the learning encounter rich and diverse experiences which should serve as a basis for learning and adult learning is problem rather than content (or subject) centred (Knowles, 1970; Merriam, 2001; Conaway, 2009). Two more assumptions; intrinsic motivation and the need to know were added in 1984 and 1990 respectively (Knowles, 1984b; Knowles 1990; Conaway, 2009).

Although there are arguments that andragogy is not a true “theory of learning” in the operational definition or empirical research sense, its strength in adult learning literature cannot be disputed. Its strength lies in the assumption upon which it is based as well as

the definition of basic adult characteristics (Knowles, 1980). Knowles himself referred to andragogy as “another model of assumptions about learners to be used alongside the pedagogical model of assumptions” upon which a future theory can emerge (Knowles, 1980:43; Merriam, 2001). Therefore, the definition of each assumption is clearly indicative of its intent and ability to support adult learning and specifically, andragogy. These assumptions are now presented here in some detail.

2.2.4.1 Self-directedness

Self-direction is a characteristic of adults. Several authors in adult education allude to this basic principle of adulthood (Linderman, 1926; Rogers, 1969; Knowles, 1975; Brookfield, 1986; Cullen, 1999; Conaway, 2009). It follows therefore that when adults engage in a learning activity, they need to have a say in its planning, execution, assessment and evaluation. If this is not done, Knowles contended they may resent or even resist attempts to limit their ability to be self-directed (Knowles, 1980; Fall, 2001; Conaway, 2009). Other scholars concurred and suggested that actually self-direction is a sign of maturity as one grows from a stage of dependency to that of independence (Davenport & Davenport, 1984; Brookfield, 1986; Conaway, 2009). Adult learners therefore need recognition as self-directing individuals who are capable of making independent decisions. They are also able to recognise their strengths and weaknesses and take corrective measures if need be (Soper and Henschke, 2011; Knowles, et al., 2005). This is why Brookfield suggested that “self-directedness is the taking control of educational goal setting” while Knowles idea was that for adults; self-direction means “the initiatives to design learning experiences, evaluate learning, locate resources, and diagnose needs are also critical components” (Brookfield, 1986; Knowles in Conaway, 2009:36).

In summary, the observations made by Tice in 1997 give coherence to Knowles principle of self-directedness. This relates to the fact that adult learners are more self-directed than younger students and that therefore find learning more meaningful than younger learners. They bring a higher level of maturity and commitment to learning and

than younger learners. Their experience tends to enhance a self-directed learning environment (Tice, 1997; Conaway, 2009).

The concept of adult self-directed learning has not been without controversy. Chene (1983:438-47) for example, questioned whether autonomy in learning is a viable premise on which to base a theory of learning. An andragogical learning experience, seeking to provide maximum autonomy, fundamentally assumes that adults are qualified and capable of determining what and how they want to learn, and that each adult learner is the final judge of the value of the learning. The danger in this position is that any and all learning is seen as equal in value: whatever one person learns is as valid and worthwhile as what anyone else learns. In other words, there is a radical individualizing, solipsistic (the belief in the self as the only reality) potential within andragogy.

For Chene (1983), the andragogical position is deficient in three ways. First, if adults are in educational programmes about which they know little, they cannot be expected to determine what learning activities and resources are appropriate and suitable for the tasks at hand. Beginning learners in particular are unable to plan and evaluate learning in a topic about which they are relatively unprepared. Second, while knowledge is socially created from meaningful experience, knowledge in itself can be an object of learning (Berger and Luckman in Chene, 1983). An example includes the disciplines based on science (like medicine) or professional practices (such as law) have unique bodies of knowledge to be comprehended and understood by learners. In these domains, learning must reach some benchmarked level or standard; that is, evaluative decisions about what has been learned should not be left to student self-assessments. In short, all "learning" is not equal in the eyes of each learner. Finally, regardless of the extent to which a programme leader tries to act as a facilitating co-learner, the function of the teacher as judge is often still required. In this capacity, the teacher's function is to validate or affirm the quality and degree of what the person has learned. For Chene (1983), educational practice is about more than just motivational readiness: criteria of learning should be met, and the acquisition of new abilities should be confirmed - both

of which require the presence of an instructor in a mode of judge or evaluator. This important point of departure will be returned to in later sections. Despite these criticisms, self-direction remains a key tenet of adult learning. Based on the role played by self-direction in learning by adults, which is premised on past and current situations, attention now turns to “experience” as an assumption in andragogy.

2.2.4.2 Experience

One indisputable factor in adult learning is that the adult comes to the learning encounter having gone through many experiences. These experiences shape who the adult is and serve as a rich reservoir of learning. Quite often, the adult learner’s experiences point to his or her identity (Knowles, 1970, 1984, 1990; Davenport & Davenport, 1984; Brookfield, 1986; Knowles, et al., 2005). As the person matures, the experiences gained take on a different quality conducive to learning, as they become more traditionally associated with adult social roles, expectations, and social identity (Knowles, 1984 in Conaway, 2009). More specifically, the social, occupational, psychosocial, and family contexts in life situations in which experiences occur create and promote learning opportunities for adults by orienting current and prior experiences to life, developmental tasks, and expectations (Knowles, 1984; Zmeyov, 1998, Conaway, 2009). In turn, these life events and transitions also promote learning through the interpretation and transformation of experience gained into knowledge (Tennant & Pogson, 1995; Merriam, 2001). The interpretation of experience and the experiences themselves are social phenomena, which can be meaningful or meaningless, depending on the use adults make of them (Jarvis, 1987; Merriam & Caffarella, 1999; Kerka, 2002). Personal beliefs and values, as well as socio-cultural expectations or norms, shape the frameworks or schemas through which we evaluate events by filtering them for meaningfulness (Gagne, 1971; Brookfield, 1986; Jarvis, 1987; Mezirow, 1991; Sinnott, 1994). In his seminal publication, *The Meaning of Adult Education*, Lindeman stated, “Adult education is a process through which learners become aware of significant experience. Recognition of significance leads to evaluation. Meanings accompany experience when we know what is happening and what importance the event includes for our own personalities” (Linderman in Fall, 2001:169). Berger (2001)

reiterated Lindeman's theory when she stated that "experiences give rise to cognitive disequilibria and reflection, which can result in new views of one's self and meaning of one's life" (Berger, 2001:508). Experiences and the meanings we associate with them do play an important role in the cognitive, intellectual, aesthetic and affective development of adults, especially with regard to expertise, personality formation, social roles, and learning (Tennant & Pogson, 1995; Washbourn, 1996, Conaway, 2009).

Cognitive psychologists Piaget and Bruner underscored the intertwined relationship between experience and learning, in that learners tend to reconstruct experiences to fit existing personal and social schemas for complete understanding (Piaget, 1972; Bruner, 1966; Tennant & Pogson, 1995). Brookfield (1986), Merriam (1991) and Sinnott (1994) further supported Piaget and Bruner's constructionist viewpoint in their assertion that adult transitions between physical, psychological and social developmental phases provide the cognitive opportunity to rearrange and interpret past experiences.

Conaway quoting Forrest & Peterson argued that life experience is the textbook for adult learning because it provides the context and framework from which adults can infer meaning and integrate new experiences, thereby creating new meaningful learning (Forrest & Peterson in Conaway 2009). This textbook is written, rewritten, read and revised as the adult goes through one learning encounter to the next. It is imperative therefore that what new knowledge or skill is to be introduced to the adult learner should be based on prior experience. There is evidence to indicate that given such a scenario, learning tends to be more successful (Tice & Imel in Canaway, 2009). In the same vein, when one adult learner's experience is integrated with academic work and that of others, new meanings may be created. As earlier stated, experience is central to adult learning, whether the facilitator intentionally caters for it or not (Berger, 2001; Laher, 2007).

2.2.4.3 Readiness to Learn

Readiness to learn among adults maybe triggered by a new developmental task, a wish to change or grow in a career, a new role imposed on the adult by circumstances or just

simply the desire to learn (Brookfield, 1986; Knowles, 1984; Knowles et al., 2005). This is what Merriam (in Canaway, 2009:40) refers to as “teachable moments”. Therefore adults need to experience this “need to learn” if learning is to be successful. If this urge stems from within the learner, success is likely to be achieved (Ozuah, 2005).

2.2.4.4 Need to Know

Earlier on, it was argued that children may not be inclined to need to know what is to be learned before it is learned. This is because their needs are determined by their teachers, parents or guardians. Adults however have to know and appreciate what is to be learnt and how it relates to their needs (Fall, 2001; Laher, 2007; Canaway, 2009). It is there the responsibility of the facilitator to raise their awareness if for some reason adults are not yet aware of such a need (Knowles, 1990; Canaway, 2009).

Knowing why a task is to be done increases motivation and promotes commitment, accountability and responsibility in the adult learner. This in turn relates to the next assumption which is intrinsic motivation (Knowles, et al., 2005).

2.2.4.5 Intrinsic Motivation

Resulting from the adult’s need for self-direction, motivation to learn often stems for an inner desire to achieve a self-determined goal. This assumption explains why many adults return to school after formal schooling. In most cases this urge is a result of wanting to better their lives or simply to find inner satisfaction or self-actualisation. Justice (1997) found out the urge to self-actualise increased for those above forty as opposed to the younger adult, who engaged more in vocational skills acquisition. This tendency agrees with Maslow’s theory of hierarchy of needs which are associated with the person’s biological developmental stages (Huitt, 2007). As a result of this Harrir (in Canaway, 2009) found that adult students had a higher level of motivation than younger traditional students. They also tended to take their studies more seriously. In the same vein, adults tend to be more problem centred as opposed to merely accumulating knowledge or skills to be utilised at a later date (Knowles, 1984). This then guides us to the last of Knowles assumptions about adult learning which is: orientation to learning.

2.2.4.6 Orientation to Learning

Knowles (1980 (a), and later Davenport & Davenport (1984) as well as Laher (2007); indicated that orientation to learning tends to move from subject centred to problem centred with a person's development and maturity. The adult main interest in learning is to solve immediate problems as opposed to preparing oneself for the future. As a result of the need to solve problems that are "here and now" and those to arise in the immediate future, the adult's orientation is to acquire knowledge and skills that will enable him or her apply and cope with the issues at hand (Lee, Cullen, Fall in Canaway, 2009). This orientation is linked to the earlier assumption that adults have accumulated a large amount experience by the time they venture into a new learning encounter. This is why the adult learning curriculum should as much as possible be problem-oriented rather than subject oriented, with case studies, real life scenarios, and as earlier stated geared to assisting the learner to solve problems that are life-centred.

Most of the literature on andragogy cited above is drawn from European and American studies. There is, however, a growing belief that the assumptions that Malcolm Knowles popularised could be found even in the African traditional teaching and learning systems since both of them belong to the realm of humanistic philosophy. As an example, the concept of *ubuthu* comes to the fore.

2.2.5 Andragogy and ubuntu

According to Bangura (2005:1) *ubuntugogy* "transcends pedagogy (the art and science of teaching), andragogy (the art and science of helping adults learn), ergonagy (the art and science of helping people learn to work), and heutagogy (the study of self-determined learning). He defines *ubuntugogy* as "the art and science of teaching and learning undergirded by humanity towards others." Bangura (2005:7) accepts that "compassion, warmth, understanding, caring, sharing, humanness, etc., are underscored by all the major world orientations (including andragogy); *Ubuntu*, however, serves as "a distinctly African rationale and gives a distinctly African meaning

to, and a reason or motivation for, a positive attitude towards the other” (Bangura, 2005:10). When these aspects are compared to the andragogical tenets, a convergence is noticed, as Knowles (1990) acknowledges the crucial importance of equalness, openness, democracy, realness, genuineness, prizing, acceptance and emphatic understanding, all of which should be displayed by an andragogue. The andragogical teacher/facilitator accepts each participant (student) as a person of worth, respects his feelings and ideas, and seeks to build relationships of mutual trust and exposes his own feelings regarding the relationship between the teacher and adult learner (Hensckle & Cooper, 2006).

When one compares the tenets of *ubuntu* and those of andragogy, the following similarities and differences emerge. In *Ubuntu*:

- “*umuntungumuntungabantu*”: i.e. “a person is a person through other persons.” Western humanism tends to underestimate or even deny the importance of religious beliefs; *Ubuntu* or African humanism is decidedly religious.
- *ubuntu* hinges upon its consensus building. African traditional culture has an almost infinite capacity for the pursuit of consensus and reconciliation. African style democracy operates in the form of (sometimes extremely lengthy) discussions. In essence, *Ubuntu* requires an authentic respect for human/individual rights and related values, and an honest appreciation of differences.
- *Ubuntu* rests upon dialogue, with its particularity, individuality and historicity. *Ubuntu* inspires one to expose oneself to others, to encounter the differences of their humanness in order to inform and enrich one’s own.
- The individualism in *Ubuntu*, however, is different in that it takes into account the rest of society all at once without the atomist conception of the Cartesian collective. The individual has a direct relationship with others. As these relationships change, so do the characters of the individuals. In this context, the word “individual” signifies a plurality of personalities corresponding to the

multiplicity of relationships in which the individual in question stands. Being an individual, by definition, means "being-with-others." "With-others" is not an additive to a pre-existent and self-sufficient being; instead, both this being (the self) and the others find themselves in a whole wherein they are already related. This is all somewhat boggling for the Cartesian mind, whose conception of individuality must now move from solitary to solidarity, from independence to interdependence, from individuality vis-à-vis community to individuality à la community. In the West, individualism often translates into rugged competition. Individual interest is *modus vivendi*, and society or others are regarded as a means to individual ends. This is in stark contrast to the African preference for co-operation, group work or *shosholozza* ("work as one", i.e. team work). *Ubuntu* discourages the notion that the individual should take precedence over community.

- The emphasis on the "on-going-ness" of the contact and interaction with others on which the African subjectivity feeds suggests a final important ingredient of the "mutual exposure" that is mandated by *ubuntu*, i.e. respecting the historicity of the other.
- The flexibility of the other is well noted in *ubuntu*. In other words, for the African humanist, life is without absolutes. An *ubuntu* perception of the other is never fixed or rigidly closed; rather, it is adjustable or open-ended. It allows the other to be, to become. It acknowledges the irreducibility of the other, i.e. it never reduces the other to any specific characteristic, conduct or function. This underscores the concept of *ubuntu* which denotes both a state of being and one of becoming. As a process of self-realization through others, it simultaneously enriches the self-realization of others (Bangura, 2005:7-13).

From the above discussion, the researcher postulates that there is a connection between *ubuntu* and andragogy in relation to co-operative learning and consensus building, continuity and learning built onto previous experience, plus the wish to self-actualize as one learns.

In his study of andragogy, Kabuga (1977) made an impassioned plea for the adoption of andragogy at all levels of education, especially in Africa where he perceived pedagogical methods “to be oppressive, domesticating and silencing since it is the voice and ideas of the teacher that were superior, unchallenged, and one way traffic” (Kabuga, 1977:250). Kabuga’s reasoning stems from the following:

- Pedagogical methods encourage memorization rather than thinking ahead.
- It is oppressive to the learner in terms of what content is to be learned, as well as the techniques to apply in learning and teaching.
- Andragogical techniques assist the learner “learn how to learn” and solve the problems at hand.
- Andragogy is premised on a dynamic culture.
- Andragogues have a positive self-concept of being capable of self-directing and autonomous (capable of diagnosing one’s educational needs, planning own learning experiences and developing a suitable learning climate).
- Peer learning is a feature of andragogy.
- Andragogy is dialogical with the teacher serving as a guide, facilitator, resource person and manipulator of the environment for the learner to gain experiences that will meet his learning needs.
- Andragogical learning is problem centred rather than content centred.

Kabuga argued that andragogy is liberating in that it empowers the learner to believe in herself/himself, to think and create. It puts an end to the dilemma of student versus teacher contradictions of “the teacher teaching, the student is taught, the teacher thinks and the student is thought about, the teacher knows everything and the student knows nothing”. It shatters the myth that knowledge is the private property of teachers and advocates for the belief that the teacher merely helps another person to learn. It helps one to learn and utilize available resources in order to be a fully functional liberated human being (Kabuga, 1977: 156).

2.3 Andragogy in higher education

In order to justify the recommendation to anchor teacher educator preparation, induction and professional development on andragogical principles, it is important to consider its application in higher education. Yoshimoto, Inenaga and Yamada (2007) compared the use of andragogy and pedagogy in higher education in Germany, UK and Japan. They noted that the influence of andragogy on learning outcomes in higher education has not been fully investigated. They further noted that there was a need for universities to be more accountable to society in the present climate of austerity and the knowledge economy and that there was also a need to use alternative approaches to pedagogy as more and more adults join higher institutions of learning as a result of the fact that knowledge nowadays becomes rapidly out-dated in the present knowledge-based economy.

To illustrate this they introduced the concept of elite *versus non-elite students* (traditional versus and non-traditional students). They argued that pedagogy is about teaching (knowledge acquisition) and andragogy is about providing learner support. In addition to Knowles's (1985) five andragogical assumptions (at the time), they added one that relates to time. They postulated that as a person matures, his/her time for learning is constrained by other social roles. His/her geographical location also may limit the opportunity to learn and lead to another time constraint.

Yoshimoto et al. (2007) indicated that in the UK and Japan, the university is perceived as a place of schooling education and socialization of young secondary school leavers and, therefore, universities tend to equip young students for the job market by equipping them with generic skills and competencies. In Germany, however, the emphasis is on subject-specific skills and professionally-articulated competences that are closely linked to professional requirements (Brennan, Johnston, Shah, Woodley & Little, 2001; Inenaga, 2005). They noted that work experience and internship are becoming integral aspects of higher education in the three countries.

In higher education, Knowles (1975) advocated the use of learning contracts to cater for the inherent need of adults to be self-directed and, therefore, a need for a conscious effort to be taken by the educator to involve the adult learner in planning and evaluating a learning encounter. He thought that the act of a teacher giving a grade was incongruous with the adult's self-directedness. He saw external assessment as a sign of disrespect and dependency, and prescribed a process of learner self-evaluation in which the educator helped the learners get evidence for themselves about their progress towards their educational goals (Knowles 1980). In this way he advocated for the use of alternative methods of assessment, particularly performance related or authentic assessment and the use of portfolios.

The use of andragogy in some South African higher education institutions has a long history. In a seminal paper published in the *Journal of Lifelong Education*, Cretchley and Castle (2001:487-501) explored the compatibility of Outcome Based Education (OBE), Recognition of Prior Learning (RPL) and Adult Education in higher education institutions in South Africa. They noted that during the apartheid era, andragogy provided some space for resistance by empowering the individual. This was in direct opposition to the general education that "was dominated by the goals and philosophies of an undemocratic state which had a firm grip on formal education at primary and secondary level" (Cretchley & Castle, 2001:487). They however, further went on to indicate that while the use of the Outcomes Based Education (OBE) model in higher education (which in itself has elements of andragogy) was an attempt to correct the previous situations; it was still fraught with numerous problems. These problems arose from the fact that where mass-based external assessment applies (as in higher education), self-evaluation (a key component of andragogy) is only possible as formative evaluation during a course. It is almost impossible to carry this out in summative certificating and comparative evaluation or assessment. They further argued that the prior specification of outcomes in the OBE model is in direct conflict with the andragogical principle of "learner autonomy". By specifying outcomes beforehand, there is tacit control on what a learner can achieve. Cretchley and Castle (2001) went further to explain that some

learnings may be ignored because they are difficult to describe as outcomes. Learning from unexpected outcomes may also be ignored.

Cretchley and Castle (2001) also noted that while Knowles(1984b) recognized the impossible task of involving all learners in diagnosing their learning needs and evaluating outcomes of a course involving a large number of participants, he advocated representation by proxy and accepted that at least when using the OBE model learners will be overly aware of the outcomes. He accepted that conceptually OBE is not inherently at odds with the principles of andragogy but recognized that the implementation of OBE, particularly in a mass system directed towards national qualifications, places practical constraints on how far the ideals of andragogy can be realized (Cretchley & Castle, 2001:499). Having looked at the link between andragogy and OBE, attention is now turned to another important consideration in higher education, the recognition of prior learning.

2.3.1 Andragogy and recognition of prior learning (RPL) in higher education

With regard to the concept of recognition of prior learning (RPL) Cretchley & Castle (2001:487-501) noted that this concept upholds the andragogic principle that the individual's self-concept and life experience form both a resource and a constraint for further learning. Andragogy and RPL acknowledge that learning is a process which continues throughout life, and that learning may take many forms and that the aim is to achieve personal development, and to prepare adults for future work, education or training opportunities. They both value self-evaluation and reflection as means to gaining understanding of the self and what is learned.

The major difference between RPL and andragogy is that while the focus for andragogy is on the processes of learning, RPL is concerned with assessment and outcomes (Fraser, and Challis in Cretchley & Castle, 2001). In andragogy, the emphasis is on knowledge creation; in RPL, it is on presenting evidence of learning to the standard required by the institution for accreditation.

RPL threatens the following andragogical principles; namely that of ensuring relevance of material to the learner, and the maintenance of adult learner autonomy. RPL requires the adult learner to transcribe the personal, contextual knowledge gained from experience into the more abstract and generalized forms of knowledge recognized by assessors and disciplinary experts employed in higher education (Johnston and Usher 1997). The balance of power rests with the institution, rather than the learner, to define what material is relevant in an RPL application.

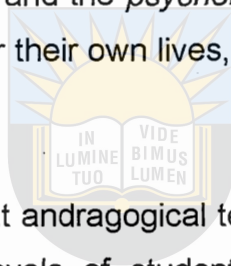
The researcher notes the value of RPL since it complies with the andragogical principles of allowing individual pace and levels of learning, making allowance for psychological and individual differences and enabling learners to utilize previous learning.

From this discussion, it can be noted that when implementing andragogy in a higher education environment there are several challenges that one has to take cognizance of. A case in point is the requirement to adhere to universal time-based calendars that govern formal education (Cretchley & Castle, 2001). Learners must spend a specified period of time at a particular level at the end of which they proceed to the next level or are certified. Those who fail can repeat or drop out. The other challenge is automatic promotion with a token pass. This means that a learner is locked in time units of the system and cannot proceed faster or slower than the rest of the group. This is counter to the principal of "self-pacing" advocated by andragogy. The National Qualifications Frameworks that govern certification in many countries has implicit hours of learning and employers release workers to study for a specified period of time (Cretchley & Castle, 2001).

2.3.2 The influence of andragogical principles when used in higher education

The blanket application of andragogy in higher education was challenged by Marques (2006) who studied the influence of andragogical techniques when applied to 19-50 year olds in a college business and management class at a university. She compared the application of the adult learning concept when compared to a day class of 19 to 30

year olds with an evening class of students over 30 years of age. She argued that adult roles differ significantly as the adult moves from one development stage to another. She acknowledged that these differences were discernible in the two groups with the older group responding more positively to the andragogical techniques like self-direction and motivation. Marques also argued that these differences can also be discerned from the definition of adults offered by Knowles et al. (1998, 2005). Knowles and associates define an adult from four perspectives: the *social* definition, which is “when we start performing adult roles, such as the role of full-time worker, spouse, parent, voting citizen, and the like”; the *biological* definition which is the age of reproducing; the *legal* definition which is the age to vote, obtain a driver’s license, and marry without seeking consent from parents or guardians, and the *psychological* which includes arriving at a self-concept of being responsible for their own lives, of being self-directing (Knowles et al., 2005:64).



Marques (2006) noted however, that andragogical techniques (like self-study, thorough pre-class preparation, and high levels of student interactive learning), were quite successful for part time students above 30 years of age. She believed that:

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- “The need to know” can be achieved by involving learners in mutually setting their own goals.
- The “self- concept” of dependency is temporary because at the start of a course they expect “to be taught”. They “initially expect a *lecturer* instead of a *facilitator* in front of the classroom”.
- The “role of learner experience” may be minimal, but the students are more receptive to insight and provide a “double loop of learning”. Defined as the rejection or modification of a goal in the light of experience (Argyris & Schon, 1978), double loop learning is a process of detecting and trying to correct errors as well as questioning the underlying policies and objectives. Double loop learning allows one to make corrections that are not superficial but deep and

have a longer lasting effect. In other words it enables the learner to get to the root cause of the error rather than addressing the symptoms.

- “Readiness to learn” is achieved when students project into the future about what is to be learned and how it will be applicable to their future.
- “Orientation to learning” is providing materials that are current and relevant to real life situations.
- “Motivation” is increased when learners participate in setting learning goals based on their personal perspectives and future perspectives (Marque,2006:40-41)

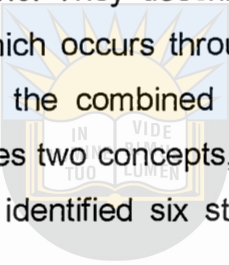
Marque (2006:42) provides the following insights into the successful handling of 19 to 30 year olds:

- (a) The facilitator should show a willingness to be honest and open.
- (b) He or she should allow a student to evaluate his/her teaching in the middle of a course.
- (c) He/she should be up-to-date with current and contemporary issues.
- (d) He/she should give students a voice in the course structure with the “curriculum built around the student’s needs and interests.
- (e) Provides students with some choice on how they should be assessed.

While the above principles may not relate directly to teacher educators’ preparation, induction and professional development, they provide a basis for them to use in their educational practices. Marqueus (2006) concludes that the andragogical techniques used for 19-30 year olds in her classes were suitable for preparing them to be active and productive members of the workforce whose *curiosity* (“the need to know” - point 1 in the andragogical model) gets encouraged; they will develop a better *self-concept* (“the learners’ self-concept” - point 2 in the andragogical model), and will consequently feel less inhibited to share their *own experiences* (“the role of the learners’ experiences” - point 3 in the andragogical model) in problem-solving and output-enhancing activities at work. Recognizing a *receptive climate* toward their input, these

workers will, in turn, be more willing to *learn from co-workers and work processes* (“readiness to learn,” and “orientation to learning” - points 4 and 5 in the andragogical model), and will become *more motivated* (“motivation” - point 6 in the andragogical model) overall in and outside of the work environment (Marques, 2006:43). Having recognized the value of andragogy in a higher education environment with students of varying ages, attention is now moved to an examination of andragogy as a co-operative endeavour in higher education.

Another andragogical approach that is used in higher education is what is termed ‘synergistic andragogy’ (SA). The term was coined by Taylor, Kroth and Lyndner (2010:1-11) at the University of Idaho. They describe synergistic andragogy in higher education as “a type of learning which occurs through the interaction of two or more groups of adult learners such that the combined effect is greater than the sum of individual group learning.” It combines two concepts, synergy and andragogy, to create a powerful learning process. They identified six steps that would enable synergistic andragogy to take place:

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1. Identify two or more adult learning groups.
 2. Identify a common theme central to both groups.
 3. Identify a learning objective or end result for students to achieve.
 4. Provide different means of andragogical instruction.
 5. Bring groups together for a common learning experience.
 6. Evaluate.

Taylor et al. concluded, that although there are drawbacks to SA (for example, time for meetings, organizational challenges, and the mixing of two groups with different identities), it has the potential to be a powerful tool in research and practice, that is, bringing the knowledge and experience of multiple groups together to produce a better end result. By incorporating andragogical principles, participants develop more powerful learning experiences and become more motivated to learn. SA has the ability to create cohesive learning environments that could go beyond a given learning project. Having

considered the application of andragogy in higher education settings, attention is now turned to the important link between andragogy and transformative learning.

2.3.4 Andragogy and transformative learning

Transformative learning theory supports the principles of self-directedness of the learner. It is a type of deep learning that goes beyond memorisation and recall (Mezirow, 2000:3-33). According to Mezirow "transformative learning is the process of using aprior interpretation to construe a new or revised interpretation of the meaning of one's experience in order to guide future action." (Mezirow, 1996:158).

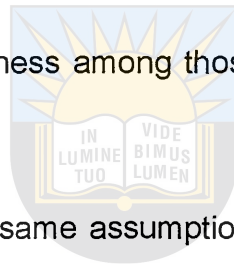
The theory advocates for the active involvement of the learner in the learning process and therefore learning through experience. In doing this, the learner critically analyses the learning situation and reflects on the current and previous experiences. Mezirow, (2000) further suggests that transformation learning follows a series of stages, namely: (1) a disorienting dilemma (like moving from a school to a higher education environment); (2) self-examination with feelings of anger, fear, guilt, shame or frustration; (3) a critical assessment of assumptions; (4) a recognition that discontent and the process of transformation are shared with others; (5) an exploration of options for new roles, relationships and actions; (6) planning a course of action; (7) acquiring knowledge and skills for implementing the new plans; (8) provisionally trying out the new roles; (9) building competence and self-confidence in new roles and relationships; and (10) a reintegration into one's life new *learnings* on the basis of conditions dictated by one's new perspective (Mezirow, 2000). This transformative learning is advocated in situations where there is a desire to change the world view of a learner or where there is a mismatch between theory and practice. It could be argued that in order to enable teacher educators to reflect on their deeply held beliefs about teaching and learning a deliberate approach undergirded by the transformative learning theory may be recommended.

Transformative learning is fostered through:

- Providing students with learning experiences that are direct, personally engaging and stimulate reflection upon experience (Pohland and Bova, 2000; MacLeod *et al.*, 2003; Mallory, 2003; Feinstein, 2004; King 2004).
- Use of varied media to foster transformative learning; such media could be novels, journal writing, on-line writing.
- Timing of transformative experiences to coincide with learners' readiness to transform.
- Providing support for the learners to through the difficult stage of disorientation.

However, transformative learning can be inhibited by:

- Rules and sanctions
- Closeness that inhibits openness among those involved in cooperative learning projects (Taylor, 2007:174).



Transformative learning shares the same assumptions and actions as action research. These include participation, dialogue, reflection and the need for action (Taylor, 2007). In sum, although Taylor (2007) argued that transformative learning has replaced andragogy as the iconic philosophy in adult education. This researcher believes that the two are not competing theories but rather complementary ones. This is premised on the fact that they both emphasize the central role of the learner, the value of learning from experience, trust among the facilitator and the learner, voluntary participation and the element of being co-learners thus diffusing the power of the teacher versus the learner (Eisen, 2001; Knowles *et al.*, 2005).

2.3.5 Andragogy in higher education – a summary

Literature cited in this section justifies the study and application of andragogy in higher education settings. Teacher education in many contexts is a form of higher education and therefore should benefit from andragogy. That is why Savicevic (2008) argues that:

...the democratic policy of education must be integral (holistic) and equally attentive to the learning and education of children, young people and adults.

Such philosophy requires a shift in traditional education policy, reorganization of the educational institutions, and especially requires a shift in professional education of teachers, associates and tutors. However, there are some shortages in andragogical preparation of future teacher candidates (Savicevic, 2008:362).

It was the object of this research to make a contribution to this end.

2.4 The relationship between andragogy and teacher education

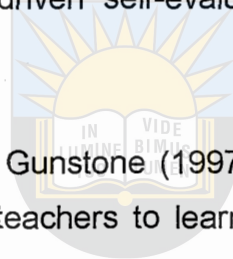
Extant literature indicates that there is a close relationship between adult education and teacher education since the two disciplines are guided by related principles. This relationship is further underscored through the analysis of the work of Bollough (1997), Northfield and Gunstone (1997), Knowles (1980b) and Rogers (1996). This analysis takes the form of a comparison of the adult education principles developed by Knowles (1980b) and Rogers (1996) with the teacher education principles developed by Northfield and Gunstone (1997) and by Bollough (1997).

2.4.1 A comparison of andragogical assumptions, adult education principles and teacher education principles

Bollough (1997:21) developed the following teacher education principles. The teacher educator should:

- Recognise that student teacher identity is vital as a starting point.
- Recognise “selves” in the context of the wider world of education.
- Understand the “social philosophy” and aims of education in a democracy.
- Be supportive and respectful of an individual as an adult learner fully capable of making reasonable judgment about his or her own learning and the direction of that learning.
- Build trust and respect through open articulation of reasons behind programme decisions and allow for criticism.
- Accept that learning is only possible if “the learner is willing to learn”. Learning is the responsibility of the learner.

- Recognize that educational outcomes are unpredictable and educational aims are flexible. While a few can be measured, most learning is idiosyncratic and probably not measurable. The **competency model** of education (which advocates for learners to acquire pre-determined competencies) as advocated by many educationists therefore impoverishes teachers and teacher education.
- Appreciate that each person makes teacher education meaningful in his or her own way.
- Accept that programme continuity is only possible through continuous systematic reflection, for example, using personalised teaching texts.
- Recognise that sharing is central to one's professional development.
- Accept that on-going data driven self-evaluation is important in professional development.



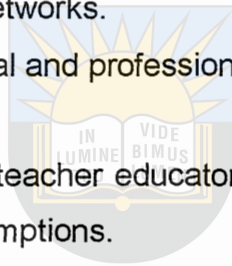
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On the other hand, Northfield and Gunstone (1997:48-72) identified two purposes of teacher education. The first is for teachers to learn and apply important ideas about teaching and learning. The second is to present teacher education in ways that achieve a balance between the existing context and the role of teaching and the possibility of improving teaching and learning. They then go on to advocate that teacher education should enhance the value of teacher knowledge and the generation of such knowledge. Hansen and Wenestam (2000:8) stated that teacher knowledge has two dimensions. One dimension is the knowledge that accumulates from everyday events, situations and problems which eventually form a personal database of world knowledge. The second dimension is "documented knowledge" or "frozen knowledge" which is secure, valid and defensible, one that can be controlled and investigated. Such knowledge constitutes the curriculum, official documents, teaching guides, and so on. The competency model is heavily reliant on the "frozen knowledge" with little attention being paid to knowledge gained outside the official curriculum.

From the above purposes, Northfield and Gunstone (1997:49) developed a set of principles based on the following assumptions about teacher education.

Teacher education should:

- Model the teaching and learning approaches that it advocates.
- Promote the vision of the teaching profession.
- Recognize prior and present experiences of (student) teachers.
- Encourage respect for teacher knowledge and understanding.
- Maintain a close relationship with schools and the profession.
- Support teachers' efforts to understand and improve learning opportunities for their students.
- Recognize that learning about teaching is a collaborative activity conducted with others in small groups and networks.
- Be involved in personal, social and professional development of teachers.



These assumptions talk directly to teacher educators whose professional development should be guided by the same assumptions.

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From these teacher education assumptions Northfield and Gunstone (1997:48-56) developed the following set of teacher education principles:

1. The (student) teacher has needs and prior experiences that must be considered in planning and implementing a teacher education programme. The nature and intensity of these needs should shift through the teacher education programme.
2. The transition of the (student) teacher as a learner is fundamental and difficult. This transition can be facilitated by the teacher working in collaboration with colleagues through introducing teaching as a collaborative process, through group work and team teaching.
3. The (student) teacher is a learner who is actively constructing ideas based on personal experience.
4. Teacher education should model the teaching and learning approaches that it advocates in schools.

5. The (student) teacher should see the teacher education programme as a worthwhile experience in its own right.
6. Teacher education programmes are by nature incomplete. They are only a starting point because teacher education is a life-long, career-long study of teaching and learning.

Placing the andragogical assumptions (Knowles, 1980b) side by side with the adult education principles (Rogers, 1996) and the teacher education principles proposed by Bollough (1997) as well as by Northfield and Gunstone (1997), the relationship between adult and teacher education emerges. The relationship is with particular reference to the purpose, motivation and methods used in both adult education and teacher education, as illustrated in Table 2.1 (Kasozi, 2009:73-74).

Table 2.1 The relationship between adult education principles (Rogers, 1996) and teacher education principles proposed by Bollough (1997) as well as Northfield and Gunstone (1997)

Andragogic assumptions (Knowles (1980b: 43-44))	Adult education principles (Rogers 1996: 60-70)	Teacher education principles (Bollough 1997:21-22)	Assumptions about teacher education (Northfield & Gunstone 1997:49)
Adult learners tend to be self-directed.	Adult learners have a balanced judgment about themselves and others. They have perspective and tend to exercise autonomy.	Teacher education must use the identity of the (student) teacher as a starting point for learning. Teacher education must be supportive of and respectful of the individual as an adult learner fully capable of making reasonable judgment about his or her own learning and the direction of that learning.	The (student) teacher is a learner who is actively constructing ideas based on personal experience.
Adult learners have experiences that they	Adult learners bring a range of experiences	To teach is to testify and also to care about,	Teacher education must be based on the

value as a learning resource for them and others.	and knowledge relevant to the learning tasks.	converse and connect with others whose experiences differ from our own.	recognition of prior and current experiences of (student) teachers, and should encourage respect for teachers.
Adult learners have a need to satisfy real life tasks or problems	Adult learners come to education with set intentions. Each person makes education meaningful in his or her own way.	Teacher education should aim at creating means that enable students to forge their own sense of continuity through attending systematically over time to their experience of teacher education and development as teachers.	Teacher educators need to be advocates for the profession and supporters of (student) teachers' attempts to improve teaching and learning opportunities for their students.
Adult learners see education as a process of developing increased competence to achieve their full potential.	Adult learners bring certain expectations about education itself.	The purposes of teacher education must be explicit and open to scrutiny in order to make them meaningful to (student) teachers.	Teacher education involves the personal, social and professional development of (student) teachers.

It is the contention of this researcher that teacher educator preparation, induction and professional development should, therefore, take cognizance of these principles since they apply to the entire teacher education sector.

Based on the foregoing discussion, it emerges that at the theoretical level, the assertion that adult education is analogous to teacher education can be established. This is supported by the fact that those who join teacher education programmes are adults. Furthermore, the review of literature has revealed that the principles that underpin adult education are similar to those that guide teacher education. This means, therefore, that adult education and teacher education practices have a lot in common. This is because student teachers are adults and should therefore be respected for their own self-worth; and that they should be helped to use their own experiences as a major source of their own learning. The student teachers should be assisted to recognize the need to continually reflect on their learning, seek new knowledge and devise new methods of teaching and learning throughout their lives.

Having established this important link between adult education and teacher education, it is imperative that teacher educators should be aware and be well informed about this link. The researcher wishes to advance an argument that; this can only be established through their being prepared, inducted and developed in an andragogically rich environment. It is the object of this research to recommend a model that may allow this to happen.

In the United States, application of andragogical principles has been found to be useful in mentoring programmes during initial teacher training and continuing professional development (Rice, 2006). Andragogical tools help bridge the gap between theory and practice in that andragogy encourages reflective practice, experiential learning, and the application of knowledge to real life situations (simulations, use of video-taped lessons, micro-teaching, case studies, school based experiences and action research). Pearson (2000), however, notes that the lack of facilities and basic learning materials, large student numbers and institutional expectations may constrain such developments but need not prevent them, provided the teacher is sufficiently creative and committed, and is provided, through training, with the knowledge and skills essential to transfer the learner-centred philosophy to practice. He further argues that teacher educators need to move away from the reliance on the 'technical-rational' models of training (where tenuous links are made between theory and practice), towards more reflective models, (where the link between theory and practice is explicit, reciprocal and developmental). He suggested a teacher education model based on a combination of behaviourist, constructivist as well as cognitive theories. Pearson's model has the following stages:

Stage 1: Critical analysis

The analysis of the literature through reflection on the student teacher's own experience, and in providing models of effective practice that, in turn, are analysed in the light of the theory.

Stage 2: Designing a learning experience

This learning experience may focus on one or more component skills or strategies or, at a subsequent stage, of development and synthesize them to produce a more integrated lesson.

Stage 3: Peer teaching

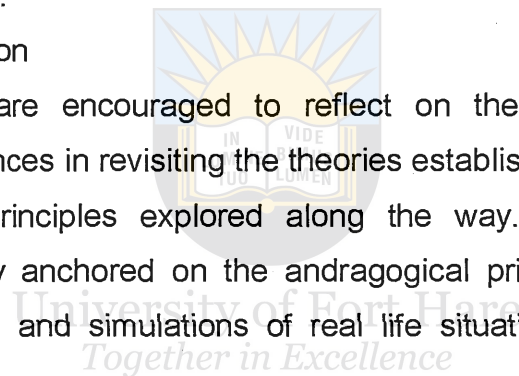
Peer teaching results in putting theory into practice as well as developing empathy for learners among student teachers who are simulating students in real classrooms.

Stage 4: Peer evaluation

Peer evaluation is a powerful tool in changing behaviour and in building self-confidence in the student teacher. This is especially true when it is combined with self-evaluation. Peer observers, however, may need some guidelines on what to look out for as well as how to give their feedback.

Stage 5: Reflection in Action

Here student teachers are encouraged to reflect on the four-stage process by synthesizing their experiences in revisiting the theories established at the onset, and the teaching and learning principles explored along the way. As can be observed, Pearson's model is firmly anchored on the andragogical principles of learning from experience, self-direction, and simulations of real life situations, self-evaluation and reflective action.



2.4.2 Teacher education models that embrace andragogy

Among the many teacher education models available in the literature, two models deserve scrutiny. This is because they provide insight into what this research is about. This is the issue of andragogy in teacher educator preparation, induction and professional development. They include those that were suggested by Carrington (2009) who investigated the use of simulations for online pre-service student teachers. This was in response to an identified gap between what pre-service student-teachers learn and what they practice in schools (Cole & Knowles, 2000; Ramsey, 2000; Sorin, 2004). In this she uses andragogy as her theoretical framework. She concluded that using an online programme *Class-sim* embraces the following andragogical principles:

- Flexibility to learn at anytime, anywhere and at own pace

- An interactive design
- Learner centeredness
- An ability to motivate and facilitate self-direction
- The use of real life scenarios to link theory and practice thus strengthening the link between theory and practice.

She argues that there is a need to provide a strong link of theory to practice when designing online (virtual) learning experiences for adult student teachers. This research therefore will carefully scrutinise this model with regard to teacher educator preparation, induction and professional development.

Another model was suggested by Korthagen and Kessels (Korthagen & Kessels 1999:4-17). This model stemmed from recognition that there is a poor link between theory and practice among student teachers. Korthagen et al., argued that this is brought about by three factors namely:

- An “apprenticeship of observation” by teacher candidates, for 12 to 15 years, before they opt to train as teachers. They would have therefore developed certain pre-conceptions about teaching through observation.
- The “feed forward problem” that is brought about by the fact that in pre-service training teacher candidates will not have encountered the problems that exist in real classrooms. In the process they resist certain forms of learning at the time of first exposure to teaching since the value of theory is not yet clear to them.
- The fact that teachers (in real classrooms) must “think on their feet” with little time to think and plan since many classroom problems require immediate concrete answers or action as opposed to what happens in a pre-service classroom environment.

In their model they suggested that teacher education should be guided by the philosophy of reflective practice. They argued that this would to a large extent address this theory-practice gap. As a follow up to this argument, Korthagen and Kessels (1999:13) suggested the ALACT model for teacher preparation where:

1. action,
2. looking back on action,
3. awareness of essential aspects.
4. creating alternative methods of action, and
5. trial, which is in itself a new action and therefore the start of a new cycle, would to a large extent reduce this gap.

Korthagen and Kessels (1999) note, however, that in order for the model to be effective there is need for a strong link between teacher education institutions and schools. These links should be more explicit than in the current models in use in most countries. This researcher argues that this model could equally apply to teacher educator preparation, induction and professional development since teacher educators also have to be highly reflective in their practices, in addition to the need for them to keep in touch with the realities of what is going on in schools.

2.5 Summary

This chapter has considered the theoretical underpinnings of andragogy, its history and development. The key andragogical assumptions, theories and philosophies have been explored and debated. There has also been an attempt to establish a link between andragogy and philosophical concepts like *botho* (humanness). The relationship between andragogy and teacher education has been established. The missing piece however, is the linking of andragogy to teacher educator preparation, induction and professional development. This is the object of this research. In the next chapter, the preparation, induction and professional development of teacher educators will be discussed. This will serve as a background to the methods, design and the construction of the research instruments.

Chapter 3

Teacher educator induction and continuous professional development

3.0 Introduction

In the previous chapter the theoretical aspects that underpin andragogy were discussed. There was also an exposition of the practical application of andragogy in higher education in general and teacher education in particular. Since this study is about teacher educators, this chapter reviews and discusses teacher educator preparation, induction and professional development from different teacher education systems. In this way, the review of relevant literature serves as a baseline survey for the empirical part of the study. The purpose of this literature survey is to identify and review secondary information on teacher educator preparation, induction and professional development. It sets the context of the empirical study and therefore is exploratory in nature. The literature study brings together the state of art information on teacher educator preparation, induction and professional development. This serves as a basis for the methodology to be used in the research and as a framework for the construction of data collection tools. The chapter begins with a description of who teacher educators are, what their work entails and generally their identity. This is followed by a brief summary of research studies on teacher educator preparation, induction and professional development conducted in various countries. The chapter ends with a summary of what has been presented.

3.1 Who are teacher educators?

Before delving into a detailed discussion of teacher educator preparation, induction and professional development, it is important to establish from the literature who teacher educators are. In terms of the Teaching Service Act 24 of 1976 (Botswana 1976:3), "teacher" means any person employed in a post in a government or local authority

school or in an aided post on a full or part-time basis and possessing such qualifications as may be prescribed. In the Republic of South Africa (RSA) National Education Policy, Act 27 of 1996, (RSA, 1996:1) "educator" means any person who teaches, educates or trains other persons in an institution or assists in rendering education services, or education auxiliary or support services provided by or in an education institution. In his study Kasozi (2009) referred to "teacher educator" as a lecturer at a College of Education who guides the instructional process and is engaged in teacher training, usually in a field of specialization. However, Lanier and Little in Ducharme and Ducharme (1996:528) assert that:

Teachers of teachers what they are like, what they do, what they think are systematically overlooked in studies of teacher education. Even researchers are not exactly sure of whom they are. While it is known that a teacher educator is one who teaches teachers, the composite of those who teach teachers is loosely defined and constantly changing.

Earlier on Russell and Korthagen (1995) had simply defined teacher educators as "teachers of teachers." Shagrir (2010), however, defines a teacher educator as any teacher who prepares student-teachers to become members of the teaching profession. These include all of the staff members involved in the processes and stages of professional preparation and not only the faculty members who focus on practical work, teaching theories, didactics and pedagogy (Shagrir, 2010:46). Koster et al. (2005), however, defined teacher educators as people "who provide instruction or who give guidance and support to student teachers, and who thus render a substantial contribution to the development of students into competent teachers" (Koster et al., 2005:157). Khan and Halai (2008) contended that the term seems to be a relative concept and its meaning varies from context to context and that while it is often used for those who teach teachers in teacher education institutions, many researchers argue that it is ill defined. For example, Ducharme (1993:6) defined teacher educators as "those who hold tenure-line positions in teacher preparation in higher education institutions, teach beginning and advanced studies in teacher education, and conduct research or engage in scholarly studies germane to teacher education." Some other

researchers expand the definition to include those teachers in schools who are responsible for supervising student teachers on teaching practice, or those responsible for mentoring novice teachers and, in some cases, even those responsible for in-service teacher development (Barkunet, 1990).

In their attempt to define who teacher educators are, Ben-Peretz, Kleeman, Reichenberg and Shimoni (2010) concluded that one distinguishing characteristic that sets teacher educators apart from either lecturers or teachers in schools is their “double commitment” as models to students who have to constantly keep in mind that these students are future teachers of children and adolescents (Ben-Peretz et al., 2010:119).

The researcher acknowledges that these definitions of teacher educators are mostly drawn from Europe, Australia and the United States. This could be attributed to there being very little research on teacher educators in Africa in general, and Southern Africa in particular. In this region little is known about who teacher educators are, what they do and where they come from. This is why in the context of this research teacher educators are defined as those who hold teaching positions in colleges and faculties of education. This definition excludes teachers in schools who are responsible for mentoring and supervising student teachers during the practicum or those responsible for teacher professional development in schools. This definition is thus anchored on that provided by Ducharme (1993), Koster et al. (2005), Kasozi (2009) and the MOFET institute (in Ben-Peretz et al., 2010). What follows are brief reports of research studies on teacher educator preparation, induction and professional development conducted in various countries.

3.2 The induction of new teacher educators

Induction into teacher education is important in order to facilitate a seamless transition from what novice teacher educators have previously been doing. Murray (2005) noted that the induction of new teacher educators is an area that is under-researched and understood and posited that this is an area requiring further study and inquiry. This

section, therefore, discusses teacher educator induction practices in various countries. As will be noted there are common features and subtle differences resulting from the different philosophies and policies that guide teacher education in a given country or education system.

3.2.1 Teacher educator induction in Australia

Martinez (2008) reports on his research at some Australian teacher education institutions. He reminds us of the two tensions teacher educators experience as they transit from school teachers to teacher educators, namely: “developing a pedagogy” for higher education based on initial teacher education work” and “becoming research active” (Martinez: 2008:36). He also identified the following as induction challenges, namely (1) the handling of new learners from children to adults, (2) issues of autonomy that the new teacher educator experiences on joining a teacher education institution, (3), the sheer size of the teacher education institution which is normally larger than schools and the different structures therein, (4) the work environment, including the increased demand to use technology in planning, teaching and assessment, (5) the need to model what the teacher educator expects the student teachers to do in schools, and, lastly, (6) the emphasis on research-linked progression and promotion.

To overcome these challenges, Martinez (2008) recommends developing a curriculum and pedagogy in academic induction programmes that build upon the resources that all new academics bring, while offering them information about their new workplace and facilitating opportunities for reflection and inter-disciplinary networking so that they can see more clearly the specifics of their own discipline contexts within the whole. (Martinez, 2008:49).

The challenge then is for academic developers designing induction curriculum to promote the generic professional knowledge base for effective teaching in higher education that supports student learning, and to recognize and respect particular discipline-specific contributions and tensions. In this, academic induction can safely

assume that participants are already experts of some sort – are smart adults capable of analysing and applying generic principles to their own knowledge context.

Martinez (2008:36) advocates for “induction programmes to establish appropriate adult learning environments”. The curriculum and *pedagogy* of these programmes should be planned in such a way that academics from different disciplines work together across disciplines. This would help them understand more fully the particularities of their own field that are often taken-for-granted. As a result there has been an establishment of special interest groups in “trans-disciplinary studies” within higher education.

Furthermore, Martinez (2008), recommends that “induction for all new academics be a well-articulated, integrated package that better reflects the lived experience of new academics juggling the demands of teaching, research, administrative and service components of their new work. In this, all aspects of academic induction should be informed by systematic and accurate information about career entry, its challenges, needs, assumptions and potential (Martinez, 2008:49). In this, she confirms the general assertion that teacher educators face a dilemma since they are already professional teachers and joining teacher education is viewed by most as a mere extension of their professional career as teachers (Murray, 2002; Smith, 2003; van Velzen et al., 2010).

In another study in Australia, Mayer, Allard and Bates (2011) studied how beginning teacher educators coped with the “Trinity of Higher Education: Research, Teaching and Service”. Many of Teacher Educators they studied accepted that they joined teacher education by accident after being on a Master in Education course or after being part-time tutors. Their motivation ranged from having attended workshops or stakeholder meetings at teacher education institutions to being lured by the “seductiveness of academic life”.

According to Mayer et al. (2011), the biggest challenge of novice TEs was the development of “teacher educator pedagogy” and the absence of preparation for becoming a teacher educator. Mayer et al (2011) note the following tensions as illustrated in Table 3.1.

Table 3.1 Tensions experienced by novice teacher educators

Teacher	Versus	Novice teacher educator
Teaching experience in schools	Versus	No teaching experience in higher education
Professional knowledge	Versus	Research and knowledge generation
Action research	Versus	Conventional research
Qualitative studies	Versus	Quantitative studies
Normative	Versus	Analytical
Personal	Versus	Intellectual
Particular	Versus	Universal
Experiential	Versus	Theoretical

They suggest self-study as a means of professional growth for teacher educators. Some of these tensions will be investigated in relation to teacher educator induction in the institutions under this study.

3.2.2 Teacher educator induction in England

In England, research in teacher education in general and teacher educator induction in particular has burgeoned in the last two decades. To assist in guiding the induction of new teacher educators in England, Boyd, Harris and Murray (2007) through ESCALATE have developed guidelines for the induction of newly appointed lecturers in initial teacher education. Boyd et al quote Murray (2002) who sees new teacher educators (NTEs) as moving from being *first order practitioners* – that is school teachers – to being *second order practitioners* as teacher educators. This in itself causes tensions since

they once worked in the *first order setting* of the school sector as experts; they now work in the *second order setting* of Higher Education as novices. For those working mainly as initial teacher educators their academic 'discipline' is their knowledge of schooling, of the first order context; but, as second order practitioners, teacher educators induct their students into the practices and discourses of both school teaching and teacher education (Boyd et al., 2007:3).

With specific reference to England, Boyd et al.(2007) recommended that the following key questions be addressed when setting up an induction programme for NTEs:

1. What attitudes and aspirations about moving into higher education (HE) does the novice teacher educator (NTE) have?
2. What does s/he see as induction priorities, given the role description for her/his work?
3. What strengths does the NTE bring from teaching pupils (and perhaps adults)?
4. What knowledge of educational leadership and administration does the NTE bring?
5. What strengths in scholarship and research does the NTE bring?
6. How could the NTE and those responsible for induction in the institution most effectively build on these strengths?
7. What are the institutional/departmental expectations of the NTE, especially with regard to scholarship and research activity?
8. What are the probationary requirements? What timeframe is the NTE given for achieving these? Is the induction programme clearly designed to help meet these?
9. If the NTE is part-time then how will s/he gain access to formal and non-formal learning? (Boyd et al., 2007:7).

Boyd et al. (2007) argue that there are six possible areas that NTEs need to be reviewed on and developed. These are:

- Role design

- Organizational learning
- Pedagogy of initial teacher education
- School based role
- Formal post graduate training
- Scholarship and research activity (Boyd et al., 2007:9)

In addressing these issues, the key questions would be: What is the current situation in these areas with regard to induction of NTEs in Botswana and South Africa? How might these areas be developed and, finally, how do these areas relate to other areas of teacher education like supervision of the practicum plus the overall coherence of teacher educator induction? Research by Boyd et al (2007) provided insight for this study since this research assessed the preparation, induction and professional development of teacher educators in Botswana and South Africa.

Research in England (*and elsewhere*) has indicated that teaching skills acquired in schools are not adequate to teach about teaching (Murray, 2005a&b; Boyd et al., 2006). NTEs therefore need assistance in handling teaching adult students. It was postulated that in England this induction is left to chance and is often informal. The need for NTEs and teacher educators in general to “model” for students what they are going to teach in schools plus the need to be assisted to grapple with assessment in higher education were some of the challenges identified by Boyd and colleagues (Boyd et al., 2007:13).

In a later publication, Murray (2010) noted that provision for teacher educators’ induction and further professional development in universities in England is often uneven and sometimes inadequate (see, *inter alia*, Boyd et al., 2005, 2007; Murray & Male, 2005; Murray, 2008). She emphasized that professional development is paramount in ensuring thriving teacher education communities and maintaining research-informed teaching in pre-service and in-service courses for teachers. Professional development of teacher educators would also contribute to building capacity in the broad field of educational research. She noted that a number of factors

seem to contribute to this. These include: the uneasy positioning of TEs' identities between schools and higher education, challenges in the shift from teaching children to teaching adults who are beginning or serving teachers, plus meeting the requirements of higher education academic work, especially research and publication. She noted further that supporting TEs as scholars and researchers is often overlooked, with the greatest threat to TE identity emanating from the view held by most academics in the UK of what constitutes 'acceptable' and 'conventional' research outputs. She was of the view that what most academics regard as acceptable or conventional research is often underpinned by scientific/positivistic conceptualizations of what constitutes quality research (Groundwater-Smith & Mockler, 2006). The scientific/positivistic paradigm therefore guides the criteria for research audits and research assessment exercises - in the United Kingdom.

Murray (2010), however, contended that devising a generic induction programme for NTEs is a challenge because they are a very diverse group. Cases in point were the diverse views of TEs in higher education on research. Some viewed it as "practical enquiry, routinely undertaken by reflective practitioners; others saw it as engaging in and publishing their own research; yet some saw research as a highly 'theoretical' activity, practiced and owned by 'academics' and essentially separate from their practice as teacher educators (Murray, 2010:199).

Murray (2010) identified the fact that TE's work in varied of settings. This makes it difficult to recommend common generic induction procedures. She however, noted the need to reconcile and provide "congruence between the development of an individual as a researcher or scholar *and* as a teacher educator and a practitioner in higher education" Murray (2010:200).

Earlier on, Murray (2008) had found that most of the professional learning of NTEs took place in "micro-communities of practice" and that this learning was often tacit and informal. This led her to propose a module which would bring together "formal learning and informal work based learning" as part of the Post Graduate Certificate in Higher

Education (PGC-HE). The following principles undergirded the PGC-HE induction module:

- To ground the work in what current research indicated about academic learning, with particular reference to teacher education;
- To ensure that the enquiry focus was individual, deriving from the personal interests, experiences and practices of each academic and generated through the analysis of her/his informal learning in the workplace;
- To ground the work in the biographical and professional experiences of individuals, aiming to draw on the existing knowledge, skills and dispositions that each brought from previous careers in schools or other educational settings;
- To ensure that the research generated by each teacher educator had the potential to contribute to further professional development for the individual, including furthering her/his awareness of the work of teacher educators as an occupational group.
- To ensure that the research that TEs undertook had general relevance to contemporary issues in the field of teacher education. (Murray, 2010:201-202).

Murray (2010) recommended having peer support structures in addition to formal appraisal and induction systems as well as the keeping of “critical incident” diaries. The literature and findings by Murray (2007, 2008, and 2010) and Boyd et al (2007) provide, in part, a basis upon which to anchor the empirical part in this study. Principally, the researchers seemed to advocate for an andragogical approach to teacher educator induction.

3.2.3 Teacher educator induction in Israel

Research at the MOFET institute in Israel provides insight into teacher educator preparation, induction and professional development. In researching teacher educator induction in Israel, Shagrir (2010) presents three domains that have assisted eleven novice teacher educator inductions in that country who participated in self-study projects. These are: (a) building the professional self; (b) being a member of a community of professionals; and (c) enhancing professional practical skills. The eleven TEs argued that teacher education is a *profession* because of the existence of an independent body of knowledge that possesses its own structure, knowledge base, terms and concepts, and the fact that its practitioners are professionals (Cochran-Smith, 2005; Korthagen and Vasalos, 2005; Murray et al., 2009). They further contend that the teacher education profession has four partners, namely the teacher educators, teacher education institutions, student teachers and the body of knowledge.

This professional group defined a “teacher educator” as any teacher who prepares student-teachers to become members of the teaching profession. These include all of the staff members involved in the processes and stages of professional preparation, and not only faculty members who focus on practical work, teaching theories, didactics and pedagogy (Shagrir, 2010:46).

Literature also indicates that in Israel there are institutions that provide professional development courses or special one year workshops that are run to induct novice teacher educators (Shagrir, 2010). But these often take place before TEs start teaching and do not offer support for continuous professional growth. There are also programmes offered by MOFET Institute which offers an intercollegiate framework for professional development.

To illustrate this, Shagrir (2010) describes a one year professional development project for teacher educators in Israel. In the model novice TEs meet once or twice a week

during their 1st or 2nd year of joining teacher education. The participants came from various teacher education institutions where they were lecturers and/or mentors of student teachers in schools. A senior teacher educator coordinated the project with the assistance of a professional academic advisor.

Each meeting comprised of a lecture on a topic in the curriculum and a workshop. The workshop was meant to connect theory and practice, raise issues of concern, share challenges and successes, seek and offer advice. In this way, the NTEs were able to reflect on how to bridge the gap between theory and practice and the gap between teaching children/adolescents and adult student teachers. Research by Shagrir (2010) which described a unique model for teacher educator induction informed this researcher's quest to recommend a suitable model for the induction and professional development of teacher educators in Botswana and South Africa.

3.2.4 Teacher educator induction in Canada

In Canada, Kosnik, Cleovoulou, Fletcher, Harris, McGlynn-Stewart and Beck (2011) investigated the following questions:

- Who should be a teacher educator?
- Do teacher educators need special training in a Canadian context?

Kosnik et al., highlighted the paucity of research on teacher educator preparation in that country. They noted the difficulty of providing an accurate portrait of a typical Canadian teacher educator because of the plurality of those in the profession. They also noted that most teacher educators enter teacher education with little or no preparation. Kosnik et al. went on to report about the activities of a group that called itself *Becoming a Teacher Educator* (BTE). The group met once a month to carry out various professional development activities that included:

- discussing scholarly articles
- observing and interviewing teacher educators
- inviting guest speakers (both new and experienced teacher educators)
- reviewing websites of schools of education

- hearing presentations by members of BTE on their research
- discussing experiences of members who secured part-time positions in teacher education
- discussing applying for jobs
- examining different types of universities (teaching-focused or research-intensive)
- analysing curriculum methods and foundation course outlines and
- providing feedback on research proposals, grant applications and American Educational Research Association (AERA) proposals.

This was as a form of self-study that assisted in their self-initiated professional development. They defined self-study as “a component of reflection in which teachers systematically and critically examine their actions and the context of those actions as a way of developing a more consciously driven mode of professional activity” (Samaras & Freese in Kosnik et al., 2011:352). In this way they were able to form a professional community that supported its members during the stressful period of transition from being school teachers to becoming teacher educators in a higher education environment.

Work by Kosnik et al., (2011) has significance to this research since the professional group was *self-initiated* in order to *address an identified need*, with the *approaches being selected by the participants* in the study with little guidance from without the group. In this way, their *modus operandi* sets them apart as true andragogues. As Samara and Freese (2009) surmise, self-study has an andragogical connotation in that: “Self-study is constructivist because it includes elements of on-going inquiry, respects personal experience, and emphasizes the role of knowledge construction. The collaborative component of self-study acknowledges the important role of social construction of knowledge.” (Samara and Freese, 2009:1). The researcher’s quest in arguing for an andragogically based model for the preparation, induction and professional development of teacher educators could to a large measure draw from the experiences of Kosnik et al. (2011).

3.2.5 Teacher educator induction in the Netherlands

In the Netherlands, Lunenberg (2002:264-276) identified the need to develop a curriculum for beginning teacher educators in teacher education institutions as well as in schools. He identifies six groups of competencies that teacher educators should possess. The suggested competencies were based on the Dutch professional teacher education standards developed by the Dutch Association of Teacher Educators (VELON). The standards describe five groups of competencies which are:

1. subject competencies
2. pedagogical and didactic competencies
3. organizational competencies
4. communicative competencies
5. Competencies for learning and growing.

Later a sixth group was added to the list. This is “institution specific competence” to cater for variation in institutional visions and missions.

Lunenburg (2002) suggested that a curriculum for beginning teacher educators should recognize that “teacher educators” are “good teachers” with the following extras:

- Understand student teachers as adult learners
- Bridge the gap between theories and practices
- Use the congruence principle (teacher educators as role models). They have to explain to the student teachers the HOW and the WHY they do WHAT they do.
- Reflect at two levels: at the level of their teacher education practices and at the level of the student teachers’ practices (Lunenburg, 2002:265).

With regard to what educational approach to follow when helping NTEs, Luneburg (2002) identified the following from the literature. The curriculum for induction and professional development should:

- stimulate beginning teacher educators to inquire into their own teacher education practices;
- Help beginning teacher educators participate in discourse communities and to communicate with experts;
- combine learning outside the classroom to support learning in the classroom;
- reflect, organize structured feedback and document their learning process; and
- acknowledge inspiration as a source of learning (Luneburg, 2002:269-270).

In order to achieve the objectives set out above, Lunenburg (2002:271) recommended that the following educational approaches could be used to develop beginning teacher educators:

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- Use primary sources, concrete experiences and meaningful contexts to stimulate active learning.
- Stimulate changing perspectives and problem solving to deepen the theoretical knowledge and skills of the learner.
- Make assessment part of the process including “authentic assessment” to enhance the ability to take responsibility for NTEs’ own learning.
- Take account of developments in education including the use of information and communication technology.

Lunenburg (2002) then went on to propose the following outline for the curriculum of beginning teacher educators:

1. At institutional level, beginning teacher educators should do a self-analysis in relation to the six identified groups of competencies as well as inquire into their own teaching and learning. This should culminate in drawing up a personal development plan (PDP). Execute the PDP using daily experiences (reflective) as an important input and documenting the various activities by developing a portfolio (authentic assessment). This process should be supported by an experienced coach (mentor) who would offer structured feedback.
2. Participate in a course that has three components:
 - a. Skills training on solving problems in teacher education practice especially in relation to congruence in levels of teaching, differences in the teacher and teacher educator, (skills in communication, pedagogy and didactics, planning, reflection and assessment).
 - b. Collegial participation (a discourse community) in small groups to stimulate inquiry in one's theories and practices, help each other change perspectives, solve problems, and reflect. The use of INTERVISION methods should be employed by the facilitators. According to Lunenburg (2002), *intervision* is a form of inquiry where a small group of people come together to get input from peers on issues and problems. It is a form of peer coaching with the objective of sharing and questioning common concerns. It enables participants to develop skills and insight of jointly seeking solutions. It is a form of self-study that allows participants to be more autonomous and effective while at the same time promoting solidarity between people facing similar challenges.
 - c. Theoretical background offered by course facilitators and guest experts to stimulate the use of different perspectives. In this area the main focus may be developing pedagogical and didactical as well as communicative competencies. Assignments may be given based on the congruence between teaching, teacher education and learning as a teacher educator.

3. Inspiration and vision. Participants should be encouraged to confront their own inspiration and vision and compare this with the institutional vision plus the way these visions are visible in their daily practice. A yearlong assignment may be given for beginning teacher educators to work in small groups. The use of ICT may come in handy here.

Still in the Netherlands, Beijaard (2011) traced the professional development of teacher educators with specific reference to developing their professional identity. He describes identity as “to be who you are”. In this he identified three types of identities, namely, *identity as a person*, *role identity* and *social identity*. The integration of the three results in the development of a *professional identity*. He noted that *identity as a person* denotes one’s personal qualities, norms, values, convictions, interests, opinions and needs. *Role identity* relates to expertise in a certain field, role modelling, being a coach or mentor, being a colleague, or researcher. Finally, *social identity* relates to being a teacher, teacher educator or researcher.

Beijaard (2011) postulated that teacher educators develop their professional identity through socialization into the culture of the profession, through attendance of formal courses and other forms of formal learning, and through reflection. He affirms the use of the following andragogical tools in developing the professional identity of teacher educators: giving meaning to experience through discussions with peers and submitting oneself to formal peer reviews; planning one’s own learning path through “showing agency” and taking initiative as well as negotiating one’s own learning path; and carrying out self-evaluation following explicit procedures and objective verifiable criteria.

2.3.6 Teacher educator induction in South Africa and Botswana

Although there are no documented teacher educator induction programmes that can be easily discerned from the literature in South Africa, Mofokeng (2002), who investigated INSET activities in universities in South Africa, noted the need for university lecturers to continuously develop their teaching, research and community engagement skills and competencies if they are to remain abreast with emerging issues and not become

“dinosaurs imprisoned in academic ivory towers”. He concluded that since university lecturers are adult learners, andragogy should inform their professional development and in-service education and training (INSET) activities. He further noted that lecturers (including teacher educators) indicated a desire, potential and capacity for self-motivation and self-direction. As previously indicated, these are some of the key tenets of andragogy.

Schulze (2003) reported the need for teacher educators at the University of South Africa to undergo training after the introduction of Outcomes Based Education in the late 1990s. This training was to assist them cope with the new curriculum underpinned by democratic, constructivist and outcomes based principles. As discussed earlier in Chapter 2, Outcomes Based Education has many features that relate to andragogy.

Wasendango and Machingambi (2011) investigated the need for academic induction in three South African universities. They highlighted the heightened need for this induction especially after the massification and amalgamation of the higher education sector in the post-apartheid era. Their study established that induction at universities is often limited to human resource-related issues and sometimes teaching and learning but little attention is focused on research. They further noted that new lecturers were challenged by the methods used in assessment, notably self and peer assessment plus the use of level descriptors. The induction programme that was described by Wasendango and Machingambi (2011) included the use of portfolios, peer and self-assessment. These are methods of assessment advocated by an andragogue.

Wasendango and Machingambi recommended that induction should assist new lecturers to reflect on “a gradual shift of emphasis from pedagogics towards andragogics” since university students are adults (Wasendango & Machingambi, 2011:6). They report on the excitement that participants had when they were exposed to (andragogical) teaching techniques like cooperative learning, active learner engagement and theories like constructivism and humanism. They also acknowledged the difficulty that most new lecturers faced in catering for diverse groups of students

with different learning styles. In final analysis they recommended that mentors be appointed to guide new university lecturers through the early stages of university teaching. Although their research was general to all new lecturers, it applies equally to teacher educators entering the higher education sector.

2.3.7 A summary of teacher educator induction in various countries

To bring it all together, the researcher reports on a recent comparative study by Van Velzen, van der Klink, Swennen and Yaffe (2010) who investigated the following question with regard to Israel, the United Kingdom (UK) and Australia:

How do novice teacher educators (NTE) experience their induction?

In this study they wanted to establish what the induction needs of NTEs are and what induction activities take place in the three countries. Their investigations revealed that most NTEs are teachers and had been involved in teacher education at the school level as school or subject supervisors/mentors of student teachers on teaching practice. They also found out that novice TEs are already subject content experts who advance to join teacher education institutions.

Van Velzen et al., (2010) then went further to investigate what is known about teacher educator (TE) induction in the three countries. Their findings revealed that TE induction is different from that of teachers in that in this case the new members have had prior experience in teaching. They, however, cautioned against the belief "that good teachers make good teacher educators" (Korthagen et al., 2005:110). TE induction can be described as 2nd phase induction because, while NTEs are still teachers, their demands are different from those of classroom teachers. According to Van Velzen et al. (2010:63), a framework or coherent theory of TE induction has not yet been developed and they urged experienced teacher educators to pursue this line of research.

Swennen et al., (2009) described the impediments that novice TEs meet as they transit from teachers to TE. These include the lack of opportunities to communicate and collaborate with colleagues; the many different tasks that they have to carry out; the limited resources and; the lack of work space plus high workloads. This is coupled with

the low status of TEs within academia. In order to “survive” TE induction, Swennen et al., (2009) proposed that NTEs should display the following characteristics:

- The courage to learn by trial and error
- Being pro-active in engaging with colleagues and other relevant groups
- Re-living one’s experiences through reflecting on concerns of your students
- Involvement in meaningful research.

Van Velzen et al. (2010) in their research on novice TEs made the following findings that relate to the strengths and challenges of novice TEs. Those who had been teachers relied on their experience as teachers to communicate, motivate and support students’ reflections. These were also organized and flexible and were willing to share and develop ideas with colleagues. In this way they were able to contribute towards curriculum reforms. Their main challenges, however, related to the use of adequate learning styles, coping with student motivation, preparing lessons, assessment and examining students’ work. Other challenges stemmed from the use of independent versus structured learning, lecture versus group interaction, as well as how to deal with students with low motivation. They also noted that despite the fact they were in a new environment, no one seemed sympathetic to them as beginners dealing with new tasks and duties.

Stemming from these challenges, Van Velzen et al. (2010:72-73) recommended the following:

- TEs should be life-long learners willing to work on their own professional development.
- There is a need to develop a comprehensive human resource development strategy that includes induction and professional development by offering varied learning opportunities throughout the TEs’ careers.

- There is a need for additional large scale, in-depth research on formal and informal induction practices/purposes, outcomes and factors that contribute positively or negatively to the quality of induction.

In their research across three counties, they also noted the problems associated with such research. These included:

- A need to establish the relative impact of institutional conditions on induction experiences.
- A need to build more vocabulary, e.g. INTERVISION, in teacher education.

It is from these aforementioned points that this researcher wishes to recommend a model for the preparation and induction of teacher educators in Botswana and South Africa.

Having discussed the preparation and induction of teacher educators in different counties and context, attention is now turned to their professional development beyond induction.

3.3 Professional development of teacher educators beyond induction

This section discusses what literature says about teacher educator professional development beyond induction. It draws from the work of Goodwin and Koskin (2013) who outlined the knowledge that teacher educators should possess; Jasman (2010) who viewed professional development as a journey within and outside teacher education. In a similar vein, Tillema & Kremer-Hayon (2005) tackled teacher educator professional development as resolving “professional dilemmas” while Bullock and Christou (2009) proposed professional development of teacher educators through self-study. *These studies are now reported on in some detail.*

3.3.1 What knowledge should guide teacher educator professional development?

In order to appreciate the professional development needs of teacher educators, there is a need to designate the unique knowledge bases that teacher educators should possess. Godwin and Koskin (2013) related the concept of professional development to developing an identity or “becoming” (Godwin and Koskin, 2013:334). They highlighted the need for teacher educators to “know” what they should teach. They attempted to answer the following questions:

- What should teacher educators know?
- How should they be prepared to assume their role?

In response to the first question, they argued that the persistent impression in the USA that teaching ability is innate and that pedagogy is unnecessary, that good teaching relies primarily on content knowledge and ‘verbal ability’ (Goldhaber and Brewer 1995; US Department of Education 2002; Walsh 2001, in Godwin and Koskin, 2013) is untenable. They proposed that learning to teach is complex and requires the acquisition of specialized knowledge and professional methods through formal study and apprenticeship (Cochran-Smith 2004; Shulman, in Godwin and Koskin, 2013). They supported the argument put forward by Loughran (2008) that there should be a pedagogy of teacher education which ‘involves a knowledge of teaching about teaching and a knowledge of learning about teaching and how the two influence one another’ Loughran (2008:1180).

They advanced five knowledge domains for teaching. These are:

- (1) **personal knowledge**/autobiography and philosophy of teaching; (to interrogate held beliefs, (mis) conceptions, and restructuring their “cognitive maps” with new or reformed understandings).
- (2) **contextual knowledge**/understanding learners, schools, and society; (multi-layered and includes knowledge of schools and communities where present and future teach. There is also the knowledge of students as adult learners, the

historical, political, cultural knowledge as well as the cultural; knowledge of and about research – including self-study research within and among teacher educator communities.)

(3) **pedagogical knowledge**/content, theories, teaching methods, and curriculum development; (representing ways of thinking about what to do as subject knowledge, learning and development theories and methods of teaching. As curriculum makers, teacher educators can contingently respond to the needs of students and not just to the official curriculum. There is need to “model” the pedagogies that their students will enact while at the same time developing a pedagogy of teacher education)

(4) **sociological knowledge**/diversity, cultural relevance, and social justice; (Teacher educators need to be knowledgeable about diversity, inclusiveness, social justice and anti- oppressive practices) and

(5) **social knowledge**/cooperative, democratic group process, and conflict resolution (teacher educators as social beings just like the students they teach. They are agents of change for the “now” and “the yet to be” There is need to harness the energies of their students as well as their colleagues.

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Teacher educators need to have a broad mandate, an expansive world-view, a collaborative approach, and the skills to enact a rich curriculum (Godwin and Kosnik, 2013). They could however not answer the second question except to posit that “This question can only be addressed if the profession first agrees on a fundamental principle – that teacher educators need formal preparation and induction.” (Godwin and Kosnik, 2013:243). This researcher is of the view that indeed teacher educators need preparation and induction in order to prepare them for the challenges of higher education and prepare them to be more effective teachers of teachers.

3.3.2 Teacher educator professional development as a “journey”.

Since teacher educators are still teachers, their professional learning continues throughout life. Jasman (2010) used the metaphor of a “journey, passport, visa and border crossing” to investigate her own professional learning journey as a teacher

educator. She notes that 'the university is a place of knowledge and reflection and the school is a place of action' (Clandinin & Connelly in Jasman, 2010:308). The "territories of the teacher and teacher educator are: 'professional knowledge contexts constituted by professionally shared stories' (Clandinin & Connelly in Jasman, 2010:308).

In this professional development journey the passport is what the teacher carries as a professional. This can be defined as an ideologically-, attitudinally-, intellectually- and epistemologically-based stance on the part of the individual in relation to the practice of the profession to which s/he belongs, and which influences her/his professional practice as a classroom teacher, researcher, college lecturer, university academic and policy adviser (Evans in Jasman, 2010:309).

The Visa denotes the purpose of the travel and thus the legitimacy with which one can travel to another "country" as part of the professional learning journey. These countries on the TE professional journey include research on oneself and others, university and school teaching, professional development and educational consultancy, a supporter of teacher research, school experience supervisor and critical friends (Jasman, 2010:309).

"Luggage" is the "personal practical knowledge" that the teacher educator carries along the journey through the "border" which can be open or closed requiring negotiation with "gatekeepers" to enter other professional knowledge contexts. The "countries" are work environments in schools, colleges and universities in which working and learning takes place (Jasman, 2010:309).

Continuing with the metaphors of a professional journey, Jasman (2010: 310) continues to denote the "tourists" as the teacher educators when they visit, observe, enjoy and learn from being in a different place. In this way they have a vested interest in appreciating the differences between their own knowledge context and that of the other. They learn within the existing culture but are not primarily there to try to change it. Teacher educators as "migrants" is when they are pursuing further study where the emphasis is on developing new skills and/or personal practical knowledge to use in

different situations and for different purposes - the learning takes place by being positioned in a new professional knowledge context (Jasman, 2010:315).

When teacher educators are “reluctant travellers” – this is the case of academics or teachers who are required to travel away from their familiar territories, and who resist making the journey and seem unable to appreciate the destination. They do not understand the language and culture and see no value in learning about it (Jasman, 2010:316). Teacher educators are “travel agents” or “tour guides” - as in the case when classroom teachers open their doors to others or arrange for learning journeys in their own territories so that others can become border-crossers and engage in professional learning through understanding of another’s personal practical knowledge or professional knowledge context. “*Trekkers*” - are teacher educators or teachers who are doing the journey the hard way, finding it slow and arduous through unfamiliar terrain and with inadequate maps to negotiate their way. In the case of “explorers/cartographers”- these are academic associates who journey into unfamiliar territory and begin to chart their travels; they record the nature of their professional learning, identifying what they brought with them and the changes in practices that are coming from making the journey (Jasman, 2010:320-321).

As can be deduced from Jasman’s (2010) exposé of the teacher educator’s professional learning journey, there is a need to provide a road map, luggage, passport and all at the beginning of the journey. It is the contention of this researcher that these are best provided through a well-structured and well-executed teacher educator preparation and induction programme. In this way, the various professional challenges (or dilemmas) that new teacher educators face can be resolved. The next section explores these dilemmas.

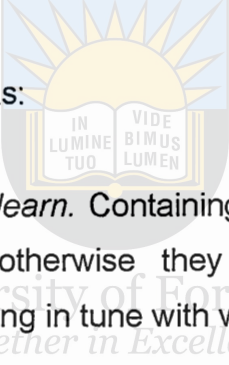
3.3.3 Resolving professional dilemmas as a way of developing professional knowledge of teacher educators

New teacher educators face a number of professional dilemmas. These range from motivating adult student teachers, the skill of professional reflexivity, individual versus

group work as well as the fact that the teacher educator has to model handling of student teachers who are adults as well handling of children and adolescents.

Tillema & Kremer-Hayon (2005) used the concept of “dilemmas” to investigate teacher educator professional development. They noted that TEs face dilemmas arising from the incongruence between their beliefs and practice. They argue that in the process of resolving these dilemmas they construct their own *personal knowledge* to overcome them. In this way they eventually develop their own pedagogy of teaching about teaching. Tillema and Kremer-Hayon’s purpose for their study was to “build a pedagogy” of teaching about teaching based on their practice (Tillema & Kremer-Hayon, 2005:205). Their studies involved teacher educators in the Netherlands and Israel.

They identified the following dilemmas:

- 
- *Motivating and stimulating to learn.* Containing dilemmas such as motivating the student teachers because otherwise they stay uninterested; helping and supporting their learning; staying in tune with what they think, ‘knowing-what-they know.’
 - *Reflecting on practice teaching.* Containing issues such as: overcoming a strong practice orientation in students; providing relevant knowledge to students; getting in touch with practice and theory. One dilemma that was repeated frequently was: ‘Often students lack the necessary words to express what it is that drives them in teaching. When one tries to conceptualize what they have been doing, it becomes quiet. How do we talk about our experiences?’
 - *Building on one’s own professionalism.* Containing dilemmas such as: staying motivated because in spite of many external demands; dealing with pressure and innovation as highlighted in the example such as ‘I like to stay tuned to and

remaining interested in developments in order to prepare my lessons well; adapting my teaching continuously but I lack the time.'

- *Improving one's teaching as a teacher-educator.* Containing dilemmas such as: looking for improvements in one's lessons, not getting re-utilized; applying knowledge in one's teaching; staying fresh; focusing on excellence in competencies and performance in teaching.
- *Guidance and mentorship of students.* Containing dilemmas such as: being a good guide and mentor; responding well to students' demands; giving personal attention; staying emotionally involved. An example was: 'I like being mature towards my students; getting to know them, and having an eye for differences *but* I do not often get enough time to see them.'
- *Partnership with colleagues' versus individualism.* Containing dilemma topics such as: having interesting partnerships with schools; being in line with practice teaching in schools; dealing with work load and stress, achieving less change and mobility in my environment (sic); working with my colleagues to achieve a common approach in our teaching.
- *Conservatism versus constructivism.* Containing statements such as: 'I achieve better results by employing constructivist methods, but which methods shall I recommend to my students?'
- *Authoritative versus permissive teaching styles.* Containing statements such as: 'Depending upon the learning styles of the students, for some, authoritative and teacher focused teaching works better, but which style should one employ?'

- *Guidance versus mentorship.* Containing statements such as: 'I prefer to guide my students and let them develop competencies gradually, since they need to become autonomous professionals, *but* my students expect me to tell them what to do; they openly demand to learn by way of implementing my suggestions.'
- *Accountability.* Containing statements such as: 'We as teacher-educators are expected to account for our students' achievements; in order to be accountable for students' development, we must have autonomy in making decisions; how can we be accountable for what we have not identified?'
- *Creating flexible versus rigid style of relationships with students.* Containing statements such as: 'I prefer flexibility, but sometimes, depending on the situation at hand, I get rigid.'
- *Partnership with colleagues' versus individualism.* Containing statements such as: 'I am aware of a preference for partnership advocated in the professional literature; I am more productive when working alone, and that is how I prefer to work.'
- *Educational policy.* Containing statements such as: 'Are teachers better prepared in teachers' colleges or in universities? Sometimes I wonder if I could contribute more if I were to teach in a teachers' college' (Tillema& Kremer-Hayon, 2005:207-208).

In an attempt to overcome the dilemmas mentioned above the TEs provided the following solutions:

- '*Try being the initiator of learning instead of the school teacher.*' You as a teacher-educator are responsible for bringing about authentic learning in your students, but the question is: do they want this all the time? Students are

sometimes very passive; we, therefore, we need to motivate students while at the same time letting them decide for themselves.

- *'Strive for an expanded instead of a restricted professionalism.'* You have to focus on your own style of teaching and try to be an authentic teacher to your students. This means that you need opportunities to experiment and to address new ways of teaching. There are so many developments going on right now. It is a matter of staying in touch with new developments.
- *'Stay focused on inquiry and study in your teaching.'* It is all about finding a balance between experiencing and interpreting or learning from it. Learning to see what is important in their environment.
- *'Take reflection as an internal instead of an external learning goal.'*
All of my teaching is focused on reflection, but it is difficult to convince students of the importance of reflection. We need to get students to internalize what we teach and to be convincing to students. It is all about improving the quality of reflection. Your responsibility for learning and teaching can make a big difference with students, in quality and in their level of reflection.
- *'Coaching is a prime route for teaching how to teach, not delivery.'*
A delivery stance is out of the question, of course; you are primarily a coach to your students, but they expect a different role from you; they often seem more satisfied with their passive role, it seems. The focus on learning to teach changes one's role into a coach, but what is the right amount of support and guidance you can offer? The question is, when do you know if you have taught enough and when do you turn it over to them?
- *'Consulting and seeking advice from senior teachers (educators).'*

Why shouldn't I benefit from others who have experienced similar dilemmas? We learn a lot from our senior colleagues. They are a rich source of knowledge.

- *'Studying the pedagogical literature.'*

The growing number of educational studies and research studies enrich our pedagogical knowledge, but how can we use it in guiding us in coping with problems?

- *'Sharing deliberations regarding dilemmas with the students.'*

One teacher-educator expressed the difficulty she had in deciding when to allow student-teachers the freedom to experiment with teaching methods in the context of their practicum. 'I am aware of the importance of developing student teachers' autonomy,' she said, 'but what if she fails, what about the pupils?' 'Is it fair to let her experiment at the expense of pupils' learning?'

- *'Dealing with students differently.'*

One needs to be aware of your students, to accept them as young professionals; that is, learning to see their strengths and weaknesses and trying to deal with them. You could do this by finding opportunities to adapt your teaching to situations they encounter and by linking content to issues of importance to them.

- *'Accepting your students' ideas.'*

Your task is to promote active learning and integrate ideas; concepts must be discovered. Supporting and scaffolding can be very dogmatic, and they should not be. Offering more freedom to learn, means finding other ways of addressing students.

- *'Cooperative learning is a main approach to teaching.'*

You try to focus on a person's skill-development and, at the same time, get students to be cooperative learners. How does one stimulate students to be open

and to learn in their own way in a group of students in which they adapt to one another? (Tillema & Kremer-Hayon, 2005:209 - 211).

With hindsight, this researcher acknowledges that the dilemmas that Tillema & Kremer-Hayon experienced are similar to the ones he and his colleagues at the institution where he works experience on a daily basis. This was part of his motivation to undertake this study. There is therefore a need to put mechanisms in place to ameliorate the impact of these dilemmas on teacher educators' professional practice.

3.3.4 Teacher educator professional development through self-study

Another study by Bullock and Christou (2009) suggested that self-study is a methodology that provides a way for teacher educators to describe and interpret their pedagogies of teacher education. It extends the principles of reflection-in-action and reflection-on-action established by Argyris, and Schön, (1978). They also argued that such reflection often features rich descriptions of the problems that experienced teacher educators come across in their practices.

However, Ben-Perez, Kleeman, Reichenburg and Shimoni (2010), who were extensively involved in the planning, managing and implementing teacher educator professional development (TEPD), found out that the professional development needs of teacher educators revolved around four mental images that should guide teacher educators' professional development. These are (1) the teacher educator as a 'model pedagogue' developing pedagogical knowledge; (2) the teacher educator as 'reflective, self-studying practitioners'; (3) teacher educators as 'collaborators in the process of developing professional identities' and (4) teacher educators as 'career self-managers' (Ben-Perez et al., 2010:111). An examination of all these mental models point toward developing teacher educators from an andragogical perspective since the first recommends that teacher educators should be inducted and developed in the handling of adult students, while the second alludes to the use of self-studies, narrative inquiries, and case studies, all of which are recommended andragogical methods of teaching and learning (c.f. Knowles et al, 2005). The third and fourth mental models relate to the

andragogical principle of “readiness to learn” which is related to the various stages of the teacher educators’ careers (c.f. Knowles et al., 2005).

3.4 A summary of salient features on teacher educator preparation, induction and professional development

To wrap up the review of extant literature on teacher educator preparation, induction and professional development in various countries, the following features as they relate to andragogy can be discerned:

- (a) Teacher educator induction practices vary in different countries and educational systems. While there are formal courses designed to prepare teacher educators in England, Israel and the Netherlands, these courses rely heavily on the rich experiences novice teacher educators bring with them into teacher education from schools (Murray, 2010; Shagrir, 2010; Lunenburg, 2005). This in effect confirms that teacher educator induction in these countries conforms to the andragogical principle of learning from and through experience. There is, however, a paucity of published research on teacher educator induction in Africa.
- (b) The induction needs of novice teacher educators include the need to acquire competencies in teaching adults, reflective practice, scholarship in teaching and learning, scholarship in research and publication, assessment in higher education, as well as modelling how to teach in schools while satisfying the needs of the adult student teachers. This observation is gleaned from published research from Europe, Australia, USA and Canada (as indicated in section 3.2.2 to 3.2.5).
- (c) The recognition that novice teacher educators are a diverse group despite the fact that most of them enter teacher education as trained experienced teachers. As a result it is difficult to recommend a hard and fast generic programme for their induction. Any induction programme, however, should have certain salient features, among them the need for self-study, co-operative learning, learning in formal and

informal settings, and the use of mentors (Martinez, 2008; Murray, 2010; Shagrir, 2010; Koskin et al., 2011; Saito, 2013).

(d) In terms of professional development, it has been established from extant literature that there is a need for teacher educators to continually work on their professional development. One of the metaphors proposed is to view professional development as a journey (Jasman, 2010), and that the teacher educator on this journey faces dilemmas that he/she must continuously resolve (Tillema et al., 2005). In addition, Saito (2013), having reviewed 47 articles on teacher educator induction and professional development, proposes that novice teacher educators should identify a zone of proximal development anchored on solving the *cognitive* (knowledge generation and development), *social* (interacting and working with others) and *ethical* (identity, values and attitudes) problems they face as they join higher (teacher) education institutions. It is proposed that this is done through traditional training courses, peer mentoring, joint reflection and self-study.

(e) Finally, there appears to be a complete absence of published research on the preparation, induction and professional development of teacher educators as a unique professional group in Botswana and South Africa. The little available literature discusses the need for induction and professional development of teaching staff joining higher education institutions in general (Mofokeng, 2002; Wadesango & Machingambi, 2011). It is the object of this research to make a contribution to that end.

3.5 Summary

In summary, this chapter has provided a definition of teacher educators and has explicated the definition as used in this research from other definitions provided by various sources. There has also been an extensive exposition of how teacher educator induction and professional development takes place in various countries. This was to indicate the "state of the art" knowledge on this subject as a launch into the

methodology part of this study. It is, however, clear from the literature consulted that the professional development of teacher educators, let alone their induction, has (until recently) been neglected (Smith, 2003; Martinez, 2008; van Velzen, 2010; Mayer et al., 2011). But, as Mayer, Mitchell, Santoro and White(2011) assert,

“If we are to break the cycle associated with ‘falling into’ teacher education work; becoming a teacher educator must be a career pathway of choice that is well supported, where prospective teacher educators are well prepared, drawing on a rigorously theorized knowledge base, and where career trajectories and transitions within academe are clear, achievable and relevant.”(Mayer et al., 2011).

This was, in part, the mission of this study.



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Chapter 4

Methodology used in the Research

4.0 Introduction

Proposing a model for the induction and professional development of teacher educators requires the researcher to consider the facts on the ground and to solicit the views of those whom the model is intended to assist. It is against this background that a dynamic and pragmatic stance was taken by the researcher in relation to the methodology he employed for the study. This study therefore utilized a pragmatic, mixed methods methodology (Green, Caracelli & Graham, 1989; Clark & Creswell, 2008; Tashakkori & Tiddie, 2010; Cohen et al., 2011; Creswell, 2003, 2014).

It is, however, important to explain the theoretical underpinnings of the methods that are applied in such a study. According to Schwartz (in Mafuwane, 2011:68), research methodology is a theory of how an inquiry should proceed. It involves an analysis of assumptions, principles and procedures in an approach to inquiry. Research methodology explains the procedures and processes involved in data collection, analysis and reporting. This chapter, therefore, outlines the methodology used in this study.

Figure 4.1 provides a framework of how the chapter is organised. Initially there is a theoretical discussion of the various research paradigms, approaches, strategies, designs and methods that were available to the researcher to choose from. This is followed by a detailed description of the theory and application of the pragmatic research paradigm, mixed methods approach, the survey and case study designs and how these relate to the study.

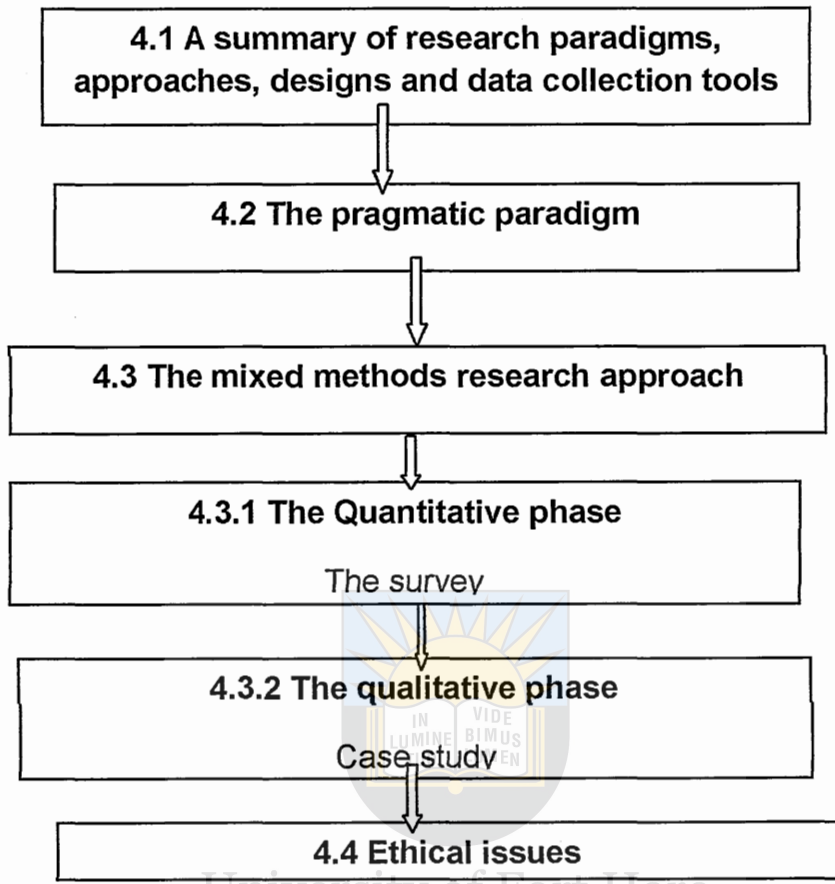


Figure 4.1 Organisation of chapter 4

4.1 A summary of various research paradigms, approaches designs and data collection tools

The term 'paradigm' is associated with Thomas Kuhn (1962, 1970) who defines it as the underlying assumptions and intellectual structure upon which research and development in a field of inquiry are based. Patton (2002), however, described paradigm as a world view, a general perspective; a way of breaking down the complexity of the real world. Creswell (2014), however, refers to research paradigms as worldviews and distinguishes three of them as post-positivist, interpretivists and pragmatist worldviews. For purposes of this research, Creswell's typology of research paradigms will be followed. The appreciation of the various research paradigms at the disposal of the researcher assists him or her not to be prisoner to one research approach and associated designs. As Holden and Lynch (2004) contend, a review of

research philosophy is a vital aspect of the research process as it opens the researchers' mind to other possibilities, which can lead to both an enrichment of their research skills and enhance their confidence that they are using the appropriate methodology. Therefore, a description of the various associated approaches and research designs now follow starting with the post-positivist paradigm.

The post-positivist paradigm (sometimes referred to as the positivist paradigm) is associated with the "scientific" method of carrying out an investigation which often involves hypothesis testing through conducting surveys or experiments in order to collect quantitative or numerical data. The positivists also allude to the belief that any phenomenon is predictable and that generalizations can be made from a small sample to apply to large populations. True positivists believe that there is one reality that can be verified through observation. Positivists approach research deductively and use research designs like tests, experiments and surveys (Cohen et al., 2011; Creswell, 2003, 2014). The positivist research design starts with the identification of a topic, reviewing previous literature, formulating a hypothesis, preparing a research design, collecting and analysing data and, finally, reporting the findings.

The interpretivists, on the other hand, are associated with subjectivity and multiple realities. They tend to research issues from a personal experience perspective. Their findings are often not generalizable to entire populations but are rather specific to particular situations and circumstances. They are often associated with the collection of qualitative data that leads to multiple interpretations (Cohen et al., 2011; Creswell, 2003, 2014). Just like positivists, the researcher first identifies a topic, reviews literature, designs the research, collects qualitative data, analyses the data and further elaborates on the underlying concepts and theories and, finally, reports the findings. Interpretivists collect data through observations, analysis of documents and narratives, interviews, case studies and audio-visual materials. They use thick descriptions to detail their findings (Cohen et al., 2011; Creswell, 2003, 2014).

The pragmatic (mixed method) research paradigm combines the features of the two paradigms and therefore allows the researcher to mix and match as s/he finds appropriate as elaborated in section 4.2.

Cohen et al. (2011) add critical theory as a fourth research paradigm. Critical theorists investigate the underlying reasons why things are the way they are. Cohen et al. (2011:31) argue that critical theory does not merely describe or give an account of society and behaviour, but works towards the realisation of equality and democracy of its members. Critical researchers do not merely stop at descriptions, but work towards challenging and changing the *status quo*. Critical theorists advocate methods that allow all involved in the research to have a voice, thus the use of participatory action research and critical ethnography. Other writers (e.g. Creswell, 2003, 2014), however, view critical theorists as belonging to the interpretivists' school of thought.

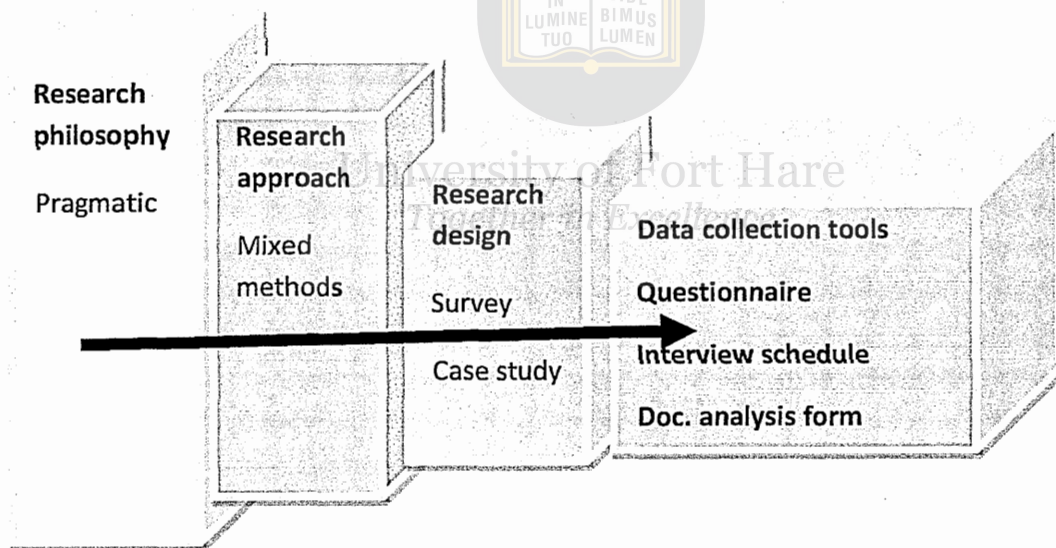


Figure 4.2 The relationship between research philosophy, approach, design and data collection methods (based on Creswell 2003, 2014)

4.2 The pragmatic research paradigm

A pragmatic research paradigm was used in this research. Pragmatic research is not committed to any one system of philosophy or reality. The focus is on the “what” and

“how” of the research problem (Creswell, 2003:11). It places the “research problem” at the centre of the research process and applies all approaches to understand the problem. In this way data collection and analysis methods are chosen as those most likely to provide insight into the question without any philosophical allegiance to any alternative paradigm (Mackenzie & Knipe, 2006). In this paradigm, therefore, both quantitative and qualitative approaches are used. It is intuitive and holistic, inductive and exploratory in nature. It provides comprehensive answers to research questions, going beyond the limitations of a single approach (Mackenzie & Knipe, 2006; Commonwealth of Learning, 2004; Creswell, 2014). Since this is the paradigm that this study followed, a detailed description of the mixed method approach is provided.

4.3 The mixed methods research approach

Before delving into the detailed description of the mixed methods approach, it is important to describe what a research approach is. A research approach is an indication of how the research is to be conducted. It outlines the broad procedures emanating from a selected paradigm and informs the design of the study. Creswell (2003) distinguishes three research approaches, namely quantitative, qualitative and mixed research approaches. Babbie and Mouton (2001), however, consider these as paradigms. For purposes of this research, the three will be treated as approaches to avoid the terminological confusion linked with research paradigm that are more than three depending on which author is being quoted and the field of study in which the research is being conducted. As earlier indicated, the three approaches are premised on different philosophical assumptions as to what constitutes knowledge, the nature of inquiry and the detailed ways of collecting evidence, analysing and reporting findings. According to Crotty (in Creswell, 2003), any research proposal is premised on: (1) what theory of knowledge is embedded in the research: Is it objectivist or subjectivist? (2) what philosophical stance is embedded in the methods used to collect data: Is it positivistic, interpretive or pragmatic? (3) What methodological plan of action will link methods to outcomes: Is it experimental research, survey research or ethnographic research? (4) what design and data collection tools are used: Is it surveys using

questionnaires; case studies or; using interviews or document analysis (Creswell, 2003, 2014). As indicated in Figure 4.2 these relationships are interlinked by the underlying philosophy embedded in the larger box to the left.

The mixed methods approach is a relatively new approach that has become popular since the early 1980s and 1990s (Creswell, 2014). The approach has been particularly popular in educational, health and social research (Johnson and Turner, 2003). Creswell (2014) defines it as an approach to inquiry that combines qualitative and quantitative forms of research starting with a mix (pragmatically) of philosophical assumptions all the way through to data collection, interpretation, analysis and reporting of findings. The mixed method approach to research, therefore, involves gathering of both numeric information as well as text information. This may occur when one phase of the research uses quantitative methods while another phase uses qualitative methods. Alternatively, within this approach, the elements of mixed model research are employed in that both quantitative and qualitative research approaches in one stage or across several stages of the research are envisaged. The approach has also been referred to as integrating, synthesis, quantitative and qualitative, multi-method or mixed methodology (Creswell, 2014; Bryman, 2006; Tashakkori & Tiddie, 2003).

Advantages of the mixed methods approach include but are not limited to the fact that the mix (triangulation) of qualitative and quantitative data results in greater validity. This is in addition to the fact that there is an element of completeness in the picture created of the phenomenon under investigation. Another advantage is that the use of qualitative and quantitative approaches offsets weaknesses of either approach resulting in stronger inferences. The combination of approaches may also help in answering different questions arising from the research. As an illustration, collection of quantitative data can be followed by qualitative explanation in what Plano (in Doyle, Brady and Bryne, 2009) called "putting meat on the bones". In a similar vein, a hypothesis developed from a qualitative investigation can be tested using quantitative methods. In some cases, a qualitative study may help generate items for a quantitative study. Table 4.1 illustrates

the stages that were involved in conducting the research using a mixed methods research approach.

Table 4.1 Stages involved in conducting the research using a mixed methods research approach (based on Creswell, et al., 2003; Creswell and Plano Clark, 2007)

		Notes
Research Paradigm	Pragmatic	Positivist + interpretivists paradigms are combined.
Research Approach	Mixed methods	Quantitative and qualitative approaches are used.
Research Design	Explanatory- sequential quan → qual	The quantitative phase precedes the qualitative phase.
Data Collection Methods	Survey → interviews + document analysis	A survey is conducted in the quantitative phase, followed by interviews of selected cases and document analysis in the qualitative phase.
Data Collection Tools	Questionnaire Interview schedule Document analysis form	A questionnaire is used to collect quantitative data. An interview schedule and a document analysis form is used to collect qualitative data.

The decision to use a mixed method research approach was guided by the following:

The type of research question

The type of research question guides the researcher on whether to use quantitative (QUAN) and qualitative (QUAL) data collection methods concurrently or sequentially. If sequentially, which one should come first? In the case of this study quantitative data was first collected so as to answer in part the research questions: *How are teacher educators in Botswana and South Africa inducted and developed as teachers of adults? And, how do they adjust their teaching practice to cater for the needs of their students who are adults?* In this way biographic information about the teacher educators was collected, including the number of years they were teachers in schools, and/or as teacher educators in a faculty or college of education. The close-ended questions also solicited information on teacher educator preparation, induction and professional development. Data from the quantitative (*quan*) phase was then used to determine the cases (teacher educators) that participated in the subsequent qualitative (*qual*) phase. The use of acronyms (*quan*) and (*qual*) is drawn from suggestions by Morse (in Creswell, Plano-Clark, Guttman and Hanson 2003:168)

Which one has priority?

Creswell et al. (2007) contend that determining which phase of a mixed methods research study has priority depends on several factors. These include a consideration of the practical constraints of collecting data, the need to understand one form of data before moving on to the other, and the preference of the target audience for the research (Creswell et al., 2007:172). In terms of this study the qualitative (*qual*) phase had priority over the quantitative (*quan*) phase since the information collected from the quantitative phase was mainly used to provide a "skeleton" for the data collected in the *qual* phase which put "flesh on the bones" by providing an in-depth understanding (through the use of open interview questions and analysis of key documents) of issues surrounding the preparation, induction and professional development of teacher educators at the four case sites in Botswana and South Africa.

Integration

Integration was done at the analysis, interpretation and discussion stages. Based on the typology of mixed methods research design proposed by Creswell and Plano-Clark (2007), this study falls in the category of explanatory (follow-up explanatory and participant selection) mode I (Creswell and Plano Clark, 2007) as illustrated in Figure 4.3. Creswell and Plano Clark (2007) provided four typologies of mixed methods research approach. The first is mixing through triangulation where qualitative data and quantitative data are collected at the same time with both methods being given equal weighting. The second is the embedded design which involves having one method playing a dominant role while the other is used to support the dominant one. The third is the exploratory design which is sequential. Collection of quantitative data is preceded by the qualitative phase. The purpose of collecting qualitative data is to assist in the development and testing of quantitative data collection instruments. It is also known as the instrument development or the taxonomy development model (Creswell and Plano Clark, 2007).

The fourth is the sequential explanatory design where quantitative data is initially collected followed by qualitative data collection. This is the design that was used in this study. Quantitative data was initially collected as a form of situational analysis in order to select participants for the qualitative phase. In this way, the qualitative phase had priority over the quantitative phase (Creswell and Plano in Doyle, 2009.) as illustrated in Figure 4.3

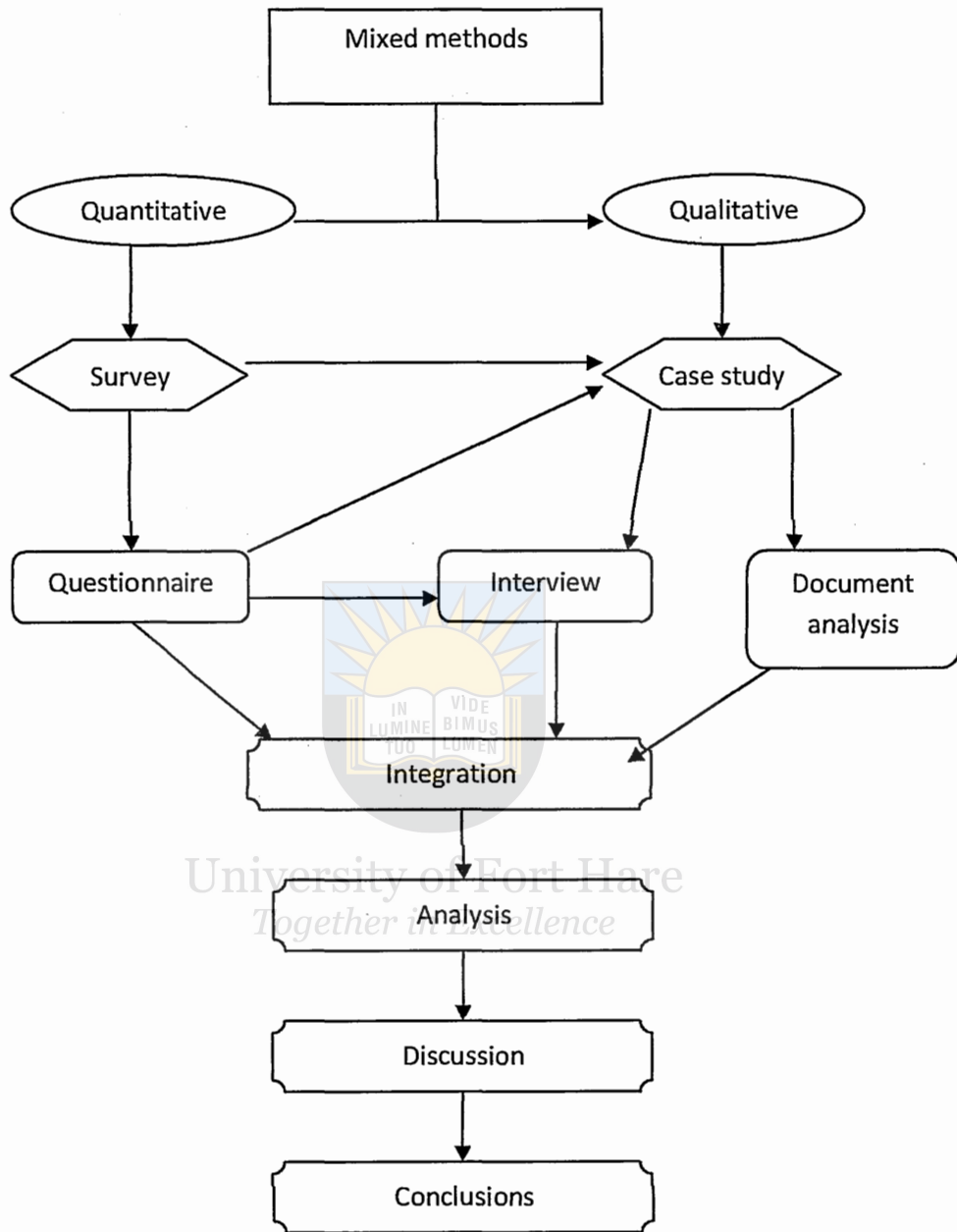


Figure 4.3 Illustration of the point at which data was integrated (based on Creswell & Plano Clark, 2007)

4.3.1 How does the mixed method approach relate to this study?

In the case of this study a mixed method approach was used in that in the first (quantitative) phase a survey of teacher educators in four teacher education institutions in Botswana and South Africa was done. Data was collected by using a questionnaire that had close ended questions. In the second (*qualitative*) phase, twelve teacher educators at four sites (in Botswana and South Africa) were interviewed using an interview schedule with open-ended questions. In this way, the researcher fulfilled the fundamental principle of mixed research in which the researcher mixed paradigms, methods and procedures in as much as this resulted in complementing of strengths and reducing weaknesses of the individual approaches (Creswell, 2003, 2014). The mixed methods approach also offered the researcher the opportunity to corroborate and complement data collected using different data collection methods. A case in point for this study was that the researcher was able to validate data gathered through the use of questionnaires with data from in-depth interviews and document analysis. It is postulated that this culminated in the superior evidence of the results.

4.3.2 Limitations of the mixed methods approach and how the researcher minimized their impact

One limitation of the mixed methods approach is that the researcher needs to be conversant in both quantitative and qualitative research. In order to gain familiarity with the methods the researcher attended a workshop on quantitative data collection and analysis. He also consulted peers in the languages and social sciences to gain insight into interview construction and transcription as well as analysis. This was in addition to having done a thorough literature study of social research methodology that included the works of Babbie & Mouton (2001); Cohen et al. (2011); Creswell (2003, 2014), Saldana (2011); Tashakkori and Tiddlie (2003) and other authorities in the area of social and educational research.

The second limitation is that the mixed methods approach is multi-disciplinary in nature and is often “associated with researchers with different skills working collaboratively rather than individually” (Creswell et al., 2013:542). In this case, however, the

researcher was able to read and consult widely colleagues and co-workers in addition to consulting his research promoters. In addition, the researcher has been involved in a number of multi-disciplinary research assignments and therefore possessed reasonable insight into the various approaches that he used in this type of research. In spite of all these, the final decision to use the mixed method approach was informed by the nature of the study, the research questions, plus the circumstances and conditions under which the study was carried out.

Another limitation that was identified by Creswell (2003) is the fact that mixed methods research is a relatively new approach that has not been widely accepted as an authentic form of inquiry by some academics and researchers. As Jayanti (2011) noted, even the criteria for its evaluation is an evolving one when compared to other forms of inquiry. She suggests that since the approach often involves quantitative and qualitative forms of evidence, its evaluation relies on these established approaches. This in itself is a source of confusion and argument among diehard positivists and interpretivists who claim that mixed methods cannot be claimed as a stand-alone research approach. The researcher, however, was fortunate that his supervisors and the faculty provided no resistance to his wish to conduct the research in this manner.

The other limitation of the mixed method approach is the belief among many scholars that quantitative and qualitative approaches cannot be mixed in one study since they have different ontological and epistemological origins (Doyle, 2011). Other researchers, however, (Johnson and Onwuegbuzie, 2003, 2007; Creswell and Plano, 2007; Jayanti, 2011; Creswell, 2014) have suggested ways of countering this belief by suggesting that the philosophical underpinnings of the mixed methods approach are rooted in *pragmatism* which has its own unique (albeit combined) ontology and epistemology. They argue that positivism and anti-positivism lie at opposite ends of an ontological/epistemological continuum with pragmatism being at the centre. This is the position that this researcher subscribes to. The following sections describe the quantitative and qualitative aspects (within the mixed method approach) used in this study.

4.3.3 The quantitative phase

From a theoretical standpoint, the quantitative approach has its roots in the positivistic paradigm. It emphasises the quantification of research data by assigning numbers to a given phenomenon. The main strengths of this approach include the following:

- Data collected using this approach is quantifiable, reliable and generalizable to some larger population (Weinreich, 2006:2).
- Using assigned numbers to record observations and other data enables other researchers to replicate, confirm, refine or refute such findings.
- It is possible to subject data to sophisticated, statistical analysis and modelling procedures. This may uncover interesting and important relationships that are not visible to the naked eye (Guide Star Research in Mbengwa, 2006:111).
- The approach firmly follows the original set of research goals, arriving at more objective conclusions, testing hypotheses and determining the issues of causality (Mbengwa, 2009);
- It eliminates or minimizes subjectivity of judgment and allows for longitudinal measures of subsequent performance of research subjects (Silverman, 2000:3).

The key limitations of the quantitative approach include the fact that the approach decontextualizes human behaviour in a way that removes the event from its real world setting and ignores the effects of variables that have not been included in the model (Weinreich, 2006:2). Some researchers consider quantitative methods as simplifications of qualitative methods which can only be meaningfully employed when qualitative indicators have shown that a simplification of identified relations is possible (Sarantakos, 2002:55). Quite often quantitative approaches fail to contextualize the phenomenon under investigation and, therefore, the inability to control the environment where the investigation is taking place. Silverman (2000: 5-7) argued that quantitative approaches do not encourage the evolving and continuous investigation of a research phenomenon.

In this study the associated research design in the quantitative phase was the survey which will now be described.

4.3.3.1 The survey

The survey is one of the most commonly used research designs in educational studies. It is a research design that examines the relationship that occurs between one or more variables without any planned intervention (Welman, Kruger and Mitchel, 2006). It has its roots in positivism and, therefore, it is often used to describe, confirm, infer or deduce answers from a given phenomenon. Surveys often involve the use of questionnaires or interviews to collect data. This data is collected from a sample that is often drawn from a larger population.

According to Kelley, Clark, Brown and Sitzia (2003), survey research has the following advantages over other forms of research:

- The research produces empirical data based on real world observations.
- Although data is collected from a sample of the population, the outcomes can be generalized to the population.
- Surveys produce a large amount of data in a relatively short time and at a low cost. This data can be processed statistically to allow generalizations, indicate patterns or predict outcomes (Kelley et al., 2003; Cohen et al, 2009).

In spite of these advantages, Kelley et al. (2003) cautions that data collected through surveys may lack detail or depth and that, when a self-report questionnaire is used to collect data, the rates of return are low especially when the questionnaires are sent by post or through e-mail.

In the case of this research, the survey was designed to *describe who teacher educators are, and how they are prepared for their role as teacher educators handling adult student teachers*. In addition, the survey was *to establish the most popular*

teaching approaches that teacher educators use as a way of determining whether these are akin to methodologies associated with andragogy. The choice of this design (within the mixed method approach) was informed by the fact that the researcher would be able to get data from a large number of teacher educators at the selected sites at a reasonable cost and within the time available for him to complete his studies.

4.3.3.1.1 Population and sampling

In terms of the characteristics of the population under investigation, the survey targeted all teacher educators at the four selected sites. This is a form of purposive sampling as the researcher purposefully selected the sites where the study was to be conducted and the subjects to be studied. According to Jupp (2006) purposive sampling is a form of non-probability sampling in which decisions concerning the individuals (and sites) to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness of the member to participate in the research. Maxwell in Tiddie and Yu further define purposive sampling as a type of sampling in which, "particular settings, persons, or events are deliberately selected for the important information they can provide that cannot be gotten as well from other choices" (Tiddie & Yu, 2007:77). According to Tiddie and Yu (2007) some types of research design necessitate researchers taking a decision about the individual participants who would be most likely to contribute appropriate data, both in terms of relevance and depth. Researchers who use this technique carefully select subjects based on study purpose with the expectation that each participant will provide unique and rich information of value to the study. As a result, members of the accessible population are not interchangeable and sample size is determined by data saturation not by statistical power analysis. In purposive sampling, the researcher has to have clear criteria for the selection of participants.

Since this was an explanatory research design (Creswell & Plano Clark, 2011), there was no intention to generalize the findings to the population, non-probability sampling procedures were deemed adequate. Again, according to Greemstein (2001), non-probability sampling is of great value in understanding how social processes operate,

especially on topics in which relatively little research has been conducted or theory is not well developed. This was the case for this research where there has been little research conducted in relation to preparation, induction and professional development of teacher educators in Botswana and South Africa.

The fact that all teacher educators at the selected sites were targeted was to enable the researcher to collect quantitative data from as many respondents as possible so that he could select cases for the next phase of the study. The population of teacher educators was easily identifiable (all teaching staff at faculties or colleges of education at the selected sites). The outcomes of this phase of the research were, however, not meant to be generalized to other sites or cases in Botswana and South Africa (Cohen et al., 2009) but rather to assist the researcher to select cases and frame questions for interview to be conducted in the qualitative phase of the study. Sampling for this study could be described as purposive. This was based on the typology of mixed methods sampling proposed by Teddlie and Yu (2007) outlined in Figure 4.4

Stage 1	A purposeful selection of sites where the research is to be conducted
Stage 2	Administration of questionnaires to all teacher educators at the purposefully selected sites.
Stage 3	Sequential selections of cases to interview.
Stage 4	Selection of documents that enrich numerical and narrative data collected in stages 2 and 3.

Figure 4.4 Stages involved in the realization of the samples for the study (based on Tiddie and Yu, 2007)

In total 316 teacher educators made up the population involved in the survey (see table 4.1). According to Creswell (2014:157), surveys can be longitudinal with data being collected over a long time or cross sectional with data being collected at the same time. In the case of this study, a cross-sectional approach was used with the researcher

personally distributing and collecting the data collection instrument (the questionnaire) at the same points in time. The questionnaire as a data collecting instrument used in this study will now be described and discussed in some detail

4.3.3.1.2 The questionnaire

A questionnaire is a self-report data collection instrument that is filled out by those who participate in the research (Johnson and Turner, 2003). Items in a well-constructed questionnaire should be related to the research objectives, and they should be in a language that is simple, clear and precise and easily understood by the respondents. Questionnaires are either open ended or close ended or mixed. The type of questionnaire used in a research depends on the objectives, research questions and the overall methodology of the study.

The purely qualitative questionnaire is unstructured, exploratory and open ended. The aim is to allow respondents to answer using their own words. This type of questionnaire is often used in exploratory studies (Johnson and Turner, 2003). Open-ended questionnaire have the advantage that they do not influence the respondent to choose an answer from a given list. In this way the respondent can give his or her own opinion. The main disadvantages of open ended questionnaires include the fact that their analysis is time consuming since coding can only be done after administering the questionnaire. In case a respondent does not understand a question, he or she may provide an unusable answer. Again, there is need for the respondent to have the skill to respond and write down an appropriate answer.

The purely quantitative questionnaire has structured close-ended questions. Respondents are expected to answer all the questions and all items provide the same possible responses. The response categories may be in a form of a rating scale, ranking, semantic differentials or a check list. There may however be "contingency" questions to direct them to questions which are specific to their characteristics (e.g. teacher educators that had undergone induction as opposed to those who did not).

The mixed questionnaire is a self-report filled out by respondents and contains both open ended and close-ended questions. In some case, one item may be mixed where a respondent may be asked to give his or her own answer (Johnson and Turner, 2003). The questionnaire closed type with all items being close ended.

In the case of this research, a close ended questionnaire was used to gather information from teacher educators at (a) a faculty of education in Botswana (b) two colleges of education in Botswana, and (3) a faculty of education of a higher education institution in South Africa. The questions asked respondents for their age range, educational backgrounds, work experience, induction and professional development as teacher educators, as well as their views about teaching student teachers when compared to teaching primary or secondary school teachers. There was also a question requiring them to indicate the teaching methods they frequently use. The purpose of the questionnaire was to enable the researcher to gain insight into these issues and allow him to select participants for the qualitative phase of the study. Data gathered through the questionnaire was meant in part to respond to the first research question: *How are teacher educators in Botswana and South Africa inducted and developed as teachers of adults?*

The main advantages of using self-administered questionnaires when compared to interviews include the fact that it is cheaper, quick and it eliminates bias from the interviewer. It is also anonymous since the respondent may complete the questionnaire in private (Babbie and Mouton, 2001). Data collected through questionnaires can also be standardized and therefore easily analysed. Some of the weaknesses of survey research relate to its being artificial and does not take account of the natural environment where the investigated phenomena occur. Questionnaires (especially those sent by post or e-mail) often have low return rates.

4.3.3.2 How was the quantitative phase conducted?

The quantitative phase involved three stages. These were (a) drafting the questionnaire, (b) piloting the draft and, finally, (c) administering the questionnaire. These are now presented in detail.

(a) Construction of the questionnaire

The researcher first undertook a survey using a questionnaire to gather information about the teacher educators (at two colleges of education plus a faculty of education in Botswana; and at a higher education institution offering teacher education programmes in South Africa). The questionnaire was meant to gather respondents' biographic data, backgrounds, and their routes of entry into teacher education, as well as their induction and professional development as teacher educators. The questionnaire also explored their orientations to teaching and learning by indicating the most common teaching methods they employed in their educational practice. This served as a *situational analysis* of the teacher educator landscape in the identified institutions.

The questionnaire (Appendix1) comprised of three sections. Section A gathered data on the participants' biographic information; it contained 9 items. Section B was about teacher education preparation and induction; it comprised two items which were subdivided into sub-items that requested respondents to indicate whether they had received training in teacher education or not as well as the institution where they had received the training. There were also sub-items that required the respondent to indicate how long the training had taken and whether it included an aspect of handling adult learners. The second item requested respondents to indicate whether or not they had received induction when they joined a teacher education institution or faculty. The sub-items under this item requested information on the organizers of the induction, the type of induction, its length plus its effectiveness. Section C captured information about teacher educator practices and their coping strategies in teaching; it contained five items two of which were Likert type.

In summary the questionnaire sought the following information:

- Biographic data about the teacher educators

- Institution where the teacher educator works
- Age of the teacher educator
- Educational and professional qualification
- Courses the Teacher Educator(TE) handles
- Number of years of teaching at a pre-primary/primary school/secondary school
- Number of years as a teacher educator
- Occupation before joining teacher education
- Nature of induction and CPD including:
 - Did the educator undergo induction?
 - Entity that organized the induction
 - Length and nature of induction
 - What approaches were used during induction?
 - Did induction involve how to handle adult students?
 - Is the educator involved in CPD activities?
 - What type of CPD activities is he/she involved in?
 - General orientation towards teaching and research
 - The most popular teaching and learning methods

(b) Piloting of the questionnaire

In order to increase validity, the questionnaire was piloted with three experienced teacher educators working at a college that was not part of the four sites identified for the study. These teachers were deemed by the researcher to be knowledgeable about issues of induction, professional development and educational practices in teacher education in general since they had been in the field of teacher education for more than 10 years. All the three had doctoral degrees in their specialised fields of study and were therefore familiar with the research process. The reviewers were asked to comment on whether:

- The questions were correctly framed to solicit the expected answers.

- The contents and language were appropriate for the target population
- The instructions were clear.

Comments received from the reviewers were then used to refine the questionnaire. Initially the draft questionnaire had both structured and open ended questions but one reviewer suggested that the entire questionnaire should consist of only close-ended questions. It was also suggested that the final question about the most common methods used by teacher educators be turned into a Likert-scale type for ease of analysis. There were also minor corrections of the language and grammar that were identified by some of the reviewers. These suggestions were incorporated in the revised questionnaire. In the next section, a description of how the questionnaire was administered is given.

(c) Administering the questionnaire (including sampling and gaining entry)

All teacher educators at the four sites where the research was conducted were requested to complete the questionnaire. All in all there were 316 teacher educators who made up the population. One reason for administering the questionnaire to all teacher educators was to obtain as much information as possible from as many teacher educators as possible. In this way, each member the target population was given an equal chance to complete the questionnaire. Table 4.2 summarizes the target population of the study and percentage of those who eventually responded to the questionnaire by institution.

Table 4.2 Target population of the study and percentage of those who eventually responded to the questionnaire by institution

Institution	Number questionnaires distributed	Number of questionnaires returned	%
A	126	40	31.7
B	56	37	66.1
C	102	33	32.4

D	32	18	56.3
Total	316	128	40.5

In order to ethically gain access to the participants, permission was sought from the deans and principals of the institutions where the research took place. The researcher met the heads of these institutions on separate dates prior to briefing the academic staff about his research. At these meetings he introduced himself, indicated the purpose of the research and how he intended to conduct it. He also informed them that he had obtained a research permit from the Ministry of Education and Skills Development in Botswana as well as an Ethical Clearance Certificate from the Ethics Committee of Fort Hare University. On the agreed dates, at two campuses (B and D), the researcher moved from office to office requesting teacher educators to complete the questionnaires. At the other campuses (A and C), the researcher distributed the questionnaires during faculty meetings where almost all teacher educators were gathered. At this stage the no systemic sampling was done since the purpose was to scan the teacher educator terrain in the selected institutions. The distribution of questionnaire to the entire population of teacher educators at the four sites arose from the desire to learn more about their experiences of induction and professional development as teacher educators. The responses to the questionnaire were to guide the researcher to determine the cases he was going to interview in the qualitative phase. The second purpose was to gather information that would be used to frame the interview questions. Lastly, data from the questionnaire would inform the development of a model for inducting and supporting teacher educators. In addition, data gathered through the questionnaire would be compared to that obtained through the interview.

With regard to site selection, the only criteria for the choice of the sites was that at least one site in each country trains teachers for primary schools and the other trains teachers for secondary schools or both. Institutions A and D train teachers for primary and secondary schools while institution B trains teachers for primary schools only and institution C trains teachers for secondary schools only. Having provided the theoretical

background and procedures performed in the quantitative component of the research, attention is now turned to the qualitative phase.

4.3.4 The qualitative phase

In a similar manner to the preceding section, the description of the qualitative phase of this study will start with a theoretical perspective on what qualitative research is; followed by an explanation of what case studies are. There is also a description of how the data collection instruments were developed, piloted and administered.

The qualitative approach is associated with the interpretivists' paradigm where the researcher believes that human action can only be studied from inside with the goal of describing and understanding; rather than explaining and predicting human behaviour. The main benefits of using the qualitative approach include:

- Enabling researchers to elicit rich, detailed data that allows participants' ideas to remain intact – thereby providing the context for detailed interpretation (Weinreich, 2006:2). In this way the results obtained are sufficiently detailed to enable the reader to understand the idiosyncrasies of the situation (Neill, 2006:3).
- Qualitative research attempts to depict the fullness of experience and in a meaningful and comprehensive way (Winget, 2005:3) and data collection, analysis and interpretation are performed in flexible ways.
- The qualitative research approach does not detach research subjects from their natural settings or their operational terms (Silverman, 2000:8).

The qualitative approach has several drawbacks. These include the fact that researchers using this approach are unlikely to avoid subjectivity which may compromise the reliability and validity of the outcomes and it is not easy to detect or prevent bias from the researcher (Mbengwa, 2006:113). Again, qualitative data is difficult and laborious to analyse requiring linguistic and sometimes written communication expertise. Without such expertise the researcher may deviate from the

original objectives of the research in response to the changing nature of the context in which a phenomenon is being investigated. The qualitative approach requires highly experienced researchers to obtain the targeted information from respondents as Weinreich (2006:2) posits. The common research designs associated with qualitative research include: case studies, ethnographic studies, narrative, phenomenology and grounded theory (Marshall & Rossman, 2011; Creswell, 2014). In this study the research design used in the qualitative phase was the case study. The case study will now be described as a research design.

4.3.4.1 Case studies

A case study is an in-depth examination of one example of a set phenomenon. It is designed to illustrate a general principle using a specific instance (Cohen et al., 2009). Gay, Mills and Airasian (2009) describe a case as a “bounded system” that could be an individual teacher, classroom, college or even a nation. A comprehensive definition of case study research is, however, provided by John W Creswell who describes a case study as a qualitative design in which the researcher explores in-depth a programme, event, activity, process, or one or more individuals. The case is bound in time and activity and the researcher uses a variety of data collection procedures over a period of time (Creswell, 2014:241). Case studies are suited to answering the “how” and “why” questions about a contemporary set of events over which the researcher has no control (Yin, 2003:9). In addition, Yin provides a technical definition of a case study as an empirical inquiry that investigates a contemporary phenomenon within its real life context especially when the boundaries between phenomenon and context are not clearly evident (Yin 2003:13). What follows is a description of how the case studies were conducted, including case selection, the development of the interview schedule and the document analysis form, their piloting and how these instruments were used to collect data.

For this study, the cases were selected at two levels namely the research sites (Institution A, B, C and D) for the study and individual cases (12 teacher educators from the four institutions). A brief profile of the research sites where the study was conducted

is shown Table 4.3. Profiles of individuals that were interviewed were not pre-determined. They were selected after the analysis of the questionnaire and the help of gate-keepers and other knowledgeable persons (see section 4.3.4.1.2)

Table 4.3 Profile of institutions where the research was conducted

Pseudo name of institution:	A
Profile of the institution	<p>Training educators at undergraduate and graduate levels for all levels of education. The faculty had 128 teacher educators in May 2013.</p> <p>The faculty is made up of 9 departments, namely, Adult Education; Educational Foundations; Educational technology; Family and Consumer Science; Language and Social Science Education; Mathematics and Science Education; Nursing Education; Physical Education, Health and Recreation; Primary Education.</p>

University of Port Harcourt
Together in Excellence

Pseudo name:	B
Profile of the institution	<p>A college of education training teachers for primary schools at diploma level. The college had 56 teacher educators in May 2013.</p> <p>It is made up of 16 teaching departments, namely, Agriculture; Art Craft and Design; Communication and Study Skills; English; Guidance and Counselling; Home Economics; Mathematics; Music; Physical Education; Religious Education, Science; Setswana; Social Studies; Special Needs Education; Teaching Practice.</p>

Pseudo name:	C
Profile of the institution	A college of education training teachers for junior

	<p>secondary schools at diploma level. The college had 102 teacher educators in May 2013.</p> <p>It is made up of 16 teaching departments, namely, Agriculture; Business Studies; Communication and Study Skills; English; Foundations of Education; Guidance and Counselling; Home Economics; Mathematics; Library Studies; Moral Education; Physical Education; Religious Education, Science; Setswana; Social Studies; Special Needs Education; Teaching Practice.</p>
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Pseudo name:	D
Profile of the institution	<p>A faculty of education in a university in the South Africa. The faculty had 32 teacher educators in May 2013.</p> <p>It offers teacher education programs in initial and general education plus further education and training. These programs are offered at certificate, diploma, undergraduate and post graduate levels.</p>

Advantages of case studies

A case study has the following advantages when compared to other forms of inquiry:

- As a result of the researcher investigating phenomena close to reality a lot of detailed data is gathered. In this case study results resonate with the researcher's experiences because it is tangible and illuminative (Gay et al., 2009).
- Rather than the case study being used to prove something, it rather allows the researcher to learn something from what is being investigated (Eysenck in Flybjerg, 2006). Results from a case study are not only interpreted by the researcher but also by the researched and the audience for whom the research is carried out (Gay et al., 2009).

- Case studies can deal with a full variety of evidence that may include observations, interviews, documents and artefacts. This allows the researcher to “paint” a fuller “picture” of the phenomenon under investigation (Yin, 2003).

Perceived shortcomings of case studies and how they were resolved

Case study research is often confused with the case study teaching method where “facts” and settings may be altered to demonstrate a point more effectively (Yin, 2003). To overcome this misconception, the researcher must report all evidence in a fair manner and clearly refrain from biasing the outcomes of the investigation. In addition there is a misconception that one cannot generalize from a single case; therefore, the single-case study cannot contribute to scientific development. The counter argument is that this is not unique to case study research. A single experiment, for example, cannot be used to form generalizations. One needs to perform several experiments under different conditions in order to generalize. Multiple case studies can result in similar theoretical generalizations as opposed to statistical generalizations to populations (Yin, 2003). In this regard, therefore; the case study is most useful for generating hypotheses, whereas other methods are more suitable for hypothesis testing and theory building (Flybjerg, 2006).

The other criticism levelled against case study research relates to the length of time it takes to conduct the study and the large number of documents generated as a result. Yin (2003) argues that this misconception arises out of associating a case study with ethnographic methodologies of collecting data. Rather, present day technology allows a faster turnaround time for case study research since there is software to analyse interview data and provide briefer summaries of findings. In addition, not all case studies depend on the cited data collecting methods; one could use the library, internet and a telephone and still carry out effective case study research (Yin, 2003).

Nisbet and Watt in Cohen et al (2011) also report that case studies are prone to observer bias based on the predetermination of the cases based on both knowledge and inference. That is why Creswell (2014) recommends that the researcher reflectively

and explicitly identifies his or her biases, values and personal backgrounds. In the case of this study, the researcher is himself a teacher educator, a student at one of the sites and has worked at two of the remaining sites. He, therefore, has a reasonable amount of knowledge about the sites and the cases he is investigating. To reduce the perceived bias arising from this, the researcher sought permission to gain entry into the sites, he had to make an undertaking that the research he is conducting is ethical and that the participants in the research would remain anonymous. In addition, the researcher explicitly explained the purpose, significance and dissemination of the outcomes of the research. Those being researched were literate, highly informed and information-rich subjects who understood the reasons why they were participating in the study. They were required to sign a consent form (Appendix 3).

Since this research was investigating the phenomenon of preparation, induction and professional development of teacher educators, phenomena that all participants had experienced and had intimate knowledge about, the fears of disclosure of information and the accuracy of that information, as expressed by Glesne&Peshkin in Creswell (2014:188) does not arise. In addition the collection of data about the same phenomena through a self-administered questionnaire and interviews plus analysis of key documents increased the validity, accuracy and “authenticity” of the data. Stemming from this design, two data collection methods were employed. These were the interview and document analysis form. The next sections describe the interview which will be followed by a description of document analysis. These were the main methods of collecting data in the qualitative phase of this research.

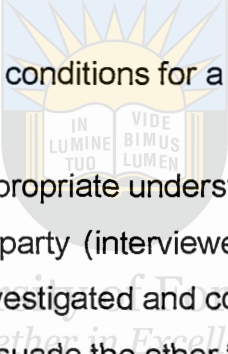
4.3.4.1.1 The interview

It should be stated from the onset that qualitative research interviews are value laden; they embody the nature of the relationship between interviewer and the interviewee. This relationship is not external to but is part of the research process with both the interviewer and the interviewee being “participants” (Whiteley, McCabe, Buoy, Howie, Klass, Latham, Bickley and Luckheenara in, 2003). It is against this background that the researcher chose the interview as one of the tools for collecting narrative data from a

purposefully selected sample of teacher educators at the four research sites. What follows is a brief overview of what constitutes a research interview.

Whitley, et al.(2003) described the interview as a face to face method of gathering information in such a way that spontaneous construction and reconstruction of realities can take place. This form of interaction is both verbal and non-verbal. Seale, Giampietro, Gubrium and Silverman (in Mafuwane, 2011), however, referred to it as a social encounter where speakers collaborate in producing retrospective and prospective accounts or versions of their past or future actions, experiences, feelings and thoughts (Seale et al. in Mafuwane, 2011:84). Given its comprehensiveness, this research was anchored on the definition by Whitley et al. (2003)

Whitley et al. present the following as conditions for a successful research interview:

- 
- The participants must have appropriate understanding of issues at hand.
 - They must accept that either party (interviewer or interviewee) could be wrong with regard to what is being investigated and could have differing perspectives.
 - Either party can be able to persuade the other to change his or her mind.
 - During the interview all participants are equal and should respect each other.
 - Bias from external influence should be minimized. This bias may result in differences in positions, gender, age, intolerance or rewards.

In order meet these conditions, the interview has to follow clearly laid out rules and procedures that are well understood by the participants. The interview should be context specific. In addition, the correct vocabulary that is well understood by both the interviewer and interviewee should be used. In this way the interview enables the researcher to gather and interpret data from a constructivist and interpretivists' standpoint.

Paton (in Whitley et al., 2003) identified three types of interviews. These are the qualitative research interview, the structured interview and the structured, open response interview. This researcher used the structured, open response interview. The interview has several limitations when looked at from a positivistic stand point. These include:

- The fact that the researcher is both a participant and a data collector and analyst introduces the element of bias.
- Participants may consciously withhold knowledge about what is being investigated consciously or unconsciously.
- There can also be bias resulting from forgetfulness or due to “selective memory” (Whitley et al., 2003).

While the first perceived bias is inevitable (because that is the essence of the interview anyway), the second can be addressed by ensuring that the research is framed in a clear and unambiguous way. In the same way, those being interviewed must be knowledgeable about the phenomenon or issue they are responding to. This calls for a very careful and considered choice of participants. The last limitation can be addressed by verifying and corroborating data collected through the interview with that collected from other sources.

In this research, these factors were consciously considered. The researcher first conducted a survey with teacher educators in the selected institutions. Information gained from the survey was then used to select teacher educators who were interviewed. In order to address the issue of clarity and language used during the interview, the researcher piloted the interview schedule using three experienced teacher educators who were not part of the final sample selected for the interview. Lastly, interview data was to be compared with data collected through the survey and analysis of documents. In the next section, a detailed description of the interview schedule is given.

The interview schedule

According to Fowler (2004) an interview schedule is the guide an interviewer uses when conducting a structured interview. The guide may have a set of questions that require the interviewer to ask them verbatim or have those that act as a prompt as to what issues the interviewer should address. In the former instance the questions should appear in the order in which they are to be asked while in the latter the order may be altered depending on the flow of the interviewing process. Paton in Tashakkori and Teddlie (2003) distinguish four types of interviews and therefore interview schedules.

The first is the informal conversational interview which is completely unstructured and the questions emerge from the natural flow of the conversation. The second type is the interview guide approach where the topic and sub-topics are pre-determined by the interviewer in form of an interview schedule (or protocol). The order, sequence and wording of the questions, however, may be changed by the interviewer depending on the flow of the interaction. The third type is the standardized open-ended interview with open-ended questions resulting in open ended qualitative data and results. The wording and sequence, however, remain unchanged during the entire interviewing process so that presentation among participants remains constant. The last type of interview is the quantitative interview where a carefully crafted interview schedule is used like a "script" from which an interviewer simply reads the question and writes down the answer. The questions are close-ended with all categories pre-determined. There is no probing or prompting. The interviewer, however, has to first establish rapport.

For this study the standardized interview guide with open-ended questions was used. The purpose of the interview was to validate, as well as gain insight into data collected during the quantitative phase. This was to allow for the understanding of the educators' journeys during their induction and professional development as teacher educators and therefore inform the proposal to develop a model for the preparation, induction and professional development of teacher educators.

Construction of the interview schedule

The interview schedule was developed following guidelines recommended by various authors (i.e. Babbie and Mouton, 2003; Cohen, Manion and Morrison, 2011; Creswell, 2003, 2014). It had an introduction consisting of the following components:

- The researcher acknowledged the respondent's acceptance to be interviewed. This was followed by the researcher introducing himself and explaining the purpose of the interview.
- There was also an indication of the fact that the respondent would remain anonymous and that whatever was discussed would not be linked to the respondent directly.
- There was also a further indication of the time the interview would take and that the researcher would record and take down notes during the interview.
- The researcher also requested the respondents to sign a consent form (Appendix 3) and stated that he/she could withdraw from the interview any time. The researcher also made an undertaking that he would pass on the written transcription of the interview to the respondent for corrections and approval before the information would go into the thesis.

The second part of the schedule solicited the respondent's background with regard to teacher education and the motivation to join teacher education. There were also questions about previous training and induction into teacher education.

The third part requested the respondent's opinion about professional development, and whether teacher educators can be considered a unique professional group. Finally there were questions that asked the respondent's general thoughts about teacher educator preparation, induction and professional development. In closing, the researcher asked if the respondent wanted any aspect of the interview to be handled with caution. The schedule concluded with a thank you note from the interviewer. The interview schedule is presented as Appendix 2.

Piloting of the interview schedule

As earlier indicated, a draft of the interview schedule was given to three experienced teacher educators at institutions B and D for review and comment. The teacher educators who were selected to review the schedule were deemed by the researcher to be knowledgeable about issues of induction, professional development and educational practices in teacher education in general since they had been in the field of teacher education for more than 10 years. All the three had doctoral degrees in their specialized fields of study and were therefore familiar with the research process.

The reviewers were asked to comment on:

- The structure and length of the schedule
- Clarity of instructions
- The language of the questions.

These issues were meant, in part, to address issues of relevance and clarity of questions, researcher bias, use of appropriate vocabulary, and cultural and professional issues. Comments given by the reviewers were incorporated in the final version of the schedule.

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Conducting of the interview

Using a structured interview schedule with open ended questions, the researcher was to interview a selected number of teacher educators (three per institution) with varying lengths of experience in teacher education (less than five years; six to nine years; and over ten years). These educators were selected from those who had participated in the quantitative phase of the research. They were also willing to share experiences and voluntarily agree to take part in the study. After being randomly selected from their clusters, the researcher solicited help from his supervisors and other gatekeepers (principals at colleges of education as well as the Dean of Education and heads of department in the higher education institution where the study was conducted) to approach them at their place of work. In addition to providing answers to the first

question, the interviews were to provide answers to the second research question: *How do the teacher educators (in Botswana and South Africa) adjust their teaching practice to cater for the needs of their students who are adults?*

The researcher conducted the interviews at the educators' place of work, taking down notes and audio-taping the entire interview process. The interviews were then transcribed by the researcher and, before analysis, a copy of the transcription was sent to individual participants for editing and authentication. During this entire process, the researcher was conscious of the issues of reflexivity in relation to the researcher's position as a student, colleague and/or supervisor of the interviewees, and that he was investigating his own practice.

4.3.4.1.2 Sampling for the qualitative phase

Several sample designs were available to the researcher. These included probability sampling, snowball sampling, quota sampling, convenience sampling and purposive sampling (Babbie and Mouton, 2001; Goom, 2008; Creswell, 2014). Purposive sampling was used for the case studies. A theoretical background about this method of sampling is now provided. This is followed by a description of the procedures followed to realize the sample that was used in the interview.

Purposive sampling

This is also known as theoretical sampling. It is based on the researcher's own knowledge of the population under study especially if the purpose is to have a pre-test before conducting the main study. The researcher selects subjects that he/she is sure have or do not have the characteristics that would inform the research. It is meant to investigate what is theoretically interesting irrespective of how frequent it occurs (Goom, 2008). In the case of this study, the choice of the research sites could be construed as having been chosen "purposefully" since they had only one common characteristic- they were all teacher education institutions. Their location, size and qualifications obtained by their graduates were not of great interest to the researcher.

Sampling procedures used to select cases (participants) to be interviewed

In the foregoing sections, purposive sampling was reviewed; a detailed description of how the participants for the interview were selected is now offered. Purposive sampling was used to select teacher educators to be interviewed at the four sites (a faculty of education and two colleges of education in Botswana and at a higher education institution in South Africa). Procedure for purposely selecting the twelve was as follows:

- Having analysed data from the questionnaire, from each site, three participants were selected purposefully from among those who completed the questionnaire.
- Initially questionnaires were numbered according to sites (A1 to A126 at site A, B1 to B56 at site B, C1 to C102 at site C and D1 to D32 at site D).
- Those from each site were then grouped according to responses to Question 6 (*Number of years of teaching in a faculty of education or college of education*).
- A set of three envelopes (labelled - less than 5 years, 6 to 9 years and over 10 years respectively) per site were used to place folded pieces of papers with numbered responses to question 6 in the questionnaire.
- The researcher then selected one piece from each envelope to determine who was to be interviewed.
- With permission from the gatekeepers, the researcher then approached the selected participant for the interview. Each participant completed an Ethics Research Confidentiality and Informed Consent Form (Appendix 3) before the commencement of the interview.

Research by Kasozi (2009) showed that there was a correlation between teaching experience in teacher education and andragogical orientation. He found out that teacher educators in Botswana's colleges of education with five to nine years' teaching education experience had a more andragogical orientation than those with less than five years or more than ten years. The selection of interviewees with varying experiences was in part, therefore, based on these findings.

4.3.4.2 Document analysis

This section provides a theoretical background of document analysis as a data collecting tool in qualitative research, after which there is a description of how this was carried out. According to Wharton (2006), document analysis is a detailed examination of documents produced across a wide range of social practices, taking a variety of forms from the written word to the visual image. These documents are usually produced in the past. The benefits of document analysis as a research design include:

- The provision of insight into the reasons why a document was produced.
- It helps to examine trends, patterns and consistency in documents.
- Analysis of documents may serve as a preliminary study for an interview, a survey, or observation. Interview questions, survey questions, or an observation checklist or the development of questionnaires and interview schedules.
- Document analysis can be used to evaluate other forms of inquiry.

Additionally, Creswell (2003, 2014) indicates that documents may enable the researcher to obtain the language and words of participants, is unobtrusive and can be accessed at a time convenient to the researcher. Official documents are usually well written and structured with a clear purpose. As evidence, documents save the researcher the time and effort that would have otherwise been taken up by transcription.

The main limitations of this research design are (1) available documents or materials may be incomplete or missing, (2) data is restricted to what already exists, and (3) it analyses events that have already happened and therefore it does not evaluate current opinions, needs, or situations.

For the purposes of this research, the following documents were analysed:

- A training policy for education professionals in Botswana
- Guidelines for teaching excellence awards for institution A
- Learning and teaching policy for institution A

- Teaching and learning policy for affiliated institutions of institution of the University of Botswana
- Faculty of Education Guide for institution D
- Draft induction policy for institution D

The purpose of analysing these documents was to enable the researcher to identify gaps, common trends and patterns that would assist in the development of a model for preparing, inducting and developing teacher educators in Botswana and South Africa. Information gained from the analysis augmented data gained through the questionnaire and interviews to answer the research questions posed in section 1.5.2 of this report. In order to enable systematic analysis to be done, a document analysis form was developed by the researcher.



4.3.4.2.1 Document analysis form

The document analysis form developed by the researcher, was used to summarize the contents in the main documents from which data for the study was collected. In the form, the researcher took note of the name, date of production, the author/s of the document as well as the purpose for which the document was produced. The form has space for summarizing what the document indicates with reference to preparation, induction and professional development of teacher educators as teachers of adults. Sample document analysis forms are provided as Appendix 6 (a) to 6 (e).

The data collected through the questionnaires, focus interviews and document analysis was then to be triangulated to answer the third research question: *What model can be developed to improve the preparation, induction and development of teacher educators as teachers of adult student teachers?* The next section tackles the important aspect of ethics in qualitative research.

4.4 Ethical issues

Research of this kind requires the researcher to indicate his or her position with regard to his role in the research. This brings in the element of ethics. Ethics can be broadly defined as justification of human action especially when this action affects others

(Schwandt, 2001:73). This means that as a researcher one has to consider the reasons for a given action and its impact on other people. Elliot in Schwandt (2001:74) suggested the following ways of going around ethical issues:

1. The researcher as a participant-observer and the researched should always remain as much as possible detached, objective and take the stance of an outside expert; and the researched are subjects, data sources and respondents.
2. The researcher as a participant observer and the researched as informants.
3. The researcher as a facilitator enabling the researched to activate their own capacities for self-observation, critique or advocacy.

In the case of this study, the researcher introduced himself to the respondents of the questionnaire and interviewees and explained the purpose of the research (Appendices 1 and 2). He also made sure that all those interviewed signed an informed consent form (Appendix 3). In addition the researcher sought and was granted ethical clearance by the institutions from where he collected data (Appendices 4 and 5). In addition the researcher required the researched to make an undertaking that participation is voluntary and that participants had the option to withdraw from the study anytime. The researcher also made an undertaking that he would return to the interviewees' transcripts of the interviews for them to comment on and edit before using them in the thesis. The researcher also made an undertaking that he would acknowledge the participants in general terms. He would also publicise the findings to the participants through the publication of the thesis or in academic papers arising from the study.

In a similar vein, the researcher was conscious of the need to be reflexive at the methodological and epistemic levels without necessarily being "hyper-reflexive" (Johnson & Duberley: 2003:184). In this way this researcher declares the following biographical details so that these can be "bracketed" out of the research process" (Johnson & Duberley, 2003: 184). That is, the researcher was:

- a student at one of the institutions at the time of conducting the research,

- is employed at one of the institutions at the time of conducting the research.

Despite these possible sources of bias in data collection, it is postulated that since participants in the research were all qualified teachers, conscious of the possible dangers of researching one's own practice, their responses should be treated as truthful in as far as this study is concerned. This is especially relevant in that the researcher took measures to be "methodologically reflexive" with regard to accessing the research sites by seeking consent from gatekeepers and participants as well as the returning of interview transcriptions to respondents for scrutiny, corrections and validation. The nature of this phase of the study, however, does dictate that the disclosure of the researcher "as an insider investigating issues within" in order to "inform decisions from without" is part of the actual object of the entire study.

4.5 Summary

This chapter has outlined the methodological stances that the researcher undertook to collect data in a systematic, coherent and ethical way. Data collected from the various methods outlined above was to guide the researcher to answer the following questions: (1) how are teacher educators prepared to perform their professional role as teachers of adults? (2) How do the selected colleges and faculties of education induct academic staff to transition from teachers to teacher educators? (3) To what extent are teacher educators' andragogic in their educational orientation? (4) What arguments would support an andragogically oriented preparation, induction and professional development of teacher educators?

Responses gained from the questions were to then guide the researcher to propose an andragogically based model for the preparation, induction and professional development of teacher educators in Botswana and South Africa. In the next three chapters, a report on the analysis of the data collected will be given. This will be followed by the analysis, discussion and conclusions drawn from the study.

Chapter 5 (1)

Data presentation and analysis: Quantitative phase

5.1.0 Introduction

In order to be able to clearly demonstrate the link between the quantitative and qualitative in a mixed methods research approach, data is presented and analysed separately. The aim of this chapter is to present and analyse data that was collected in the quantitative phase of the research; to help describe the phenomena and processes of teacher educator preparation, and their induction and professional development as teachers of adults in the selected institutions. The presentation and analysis follows the pattern of questions as they appeared in the questionnaire (Appendix1), in which Section A gathered data on the participants' biographic information. It contained nine items to respond to sub-question 1(a) - *Who are teacher educators in the four selected sites?* Section B was about teacher education preparation and induction; it comprised two items which were subdivided into sub-items that requested respondents to indicate whether they had received training in teacher education or not as well as the institution where they had received the training. There were also sub-items that required the respondent to indicate how long the training had taken and whether it included an aspect of handling adult learners. The second item requested respondents to indicate whether or not they had received induction when they joined a teacher education institution or faculty. The sub-items under this item requested information on the organizers of the induction, the type of induction, its length plus its effectiveness. This was to answer sub-questions 1(b) *what motivated the teacher educators to join teacher education?* and, 1(c) *how were they inducted and developed as teachers of adults?*

Section C captured information about teacher educator practices and their coping strategies in teaching; it contained five items, two of which were Likert type. This was in response to sub-question 1(d) *are the educational practices of the teacher educators*

congruent with adult learning principles?. The question required the participants to indicate the teaching methods they often use. Data analysis was carried out using the Statistical Package for Social Sciences (SPSS Version 20). Both descriptive and inferential statistics were employed. Specifically: frequencies, graphs and tables were used to visually display data for quick analysis of emerging patterns and for comparison of variables as well as to allow for simpler interpretation of the data.

The results of the quantitative analysis are presented according to the three sections of the questionnaire. In addition the discussions of the results are represented according to the research questions.

5.1.1 Profile of participants involved in the survey

Table 5.1.1: Profiles of the participants

Participating institution	Gender			Age in years				
	Male	Female	Total	25 - 30	31 - 40	41 – 49	50 - 59	60 or above
A	28	12	40	2	5	13	15	5
B	11	26	37	0	2	25	10	0
C	11	22	33	1	6	15	8	3
D	5	13	18	1	2	4	10	1
TOTAL	55 (43%)	73 (57%)	128	4(3.1%)	15(11.7%)	57(44.5%)	43(33.6%)	9(7%)

Note: Institution A is a faculty of education in Botswana, Institutions B and C are colleges of education in Botswana, while institution D is a faculty of education in South Africa.

Table 5.1.1 and Figure 5.1.1 give summary information about the background of the participants per institution. Table 5.1.1 indicates that four institutions of higher learning participated in this research. For ethical reasons these are referred to as A, B, C and D. There were 128(out of an anticipated total of 316) participants: 40 (out of 128)were from institution A; 37 (out of 54) from institution B; 33 (out of 102) from institution C and 18 (out of 32) from institution D. From the 128teacher educators who took part in the survey there were more females (73) than males (55). There were, however, more male

participants from institution A with 28 males (70%) and 12 females (30%) as indicated in Table 5.1.1.

The ages of the participants ranged from 25 to over 60 years with a mean age of 45 years. The number of participants who were in the age range of 41 to 49 (inclusive) were from the two colleges of education (Institutions B and C) accounting for 44.5% of the total number of respondents. However, the majority (78%) of the participants fell in the age range of 41 to 59.

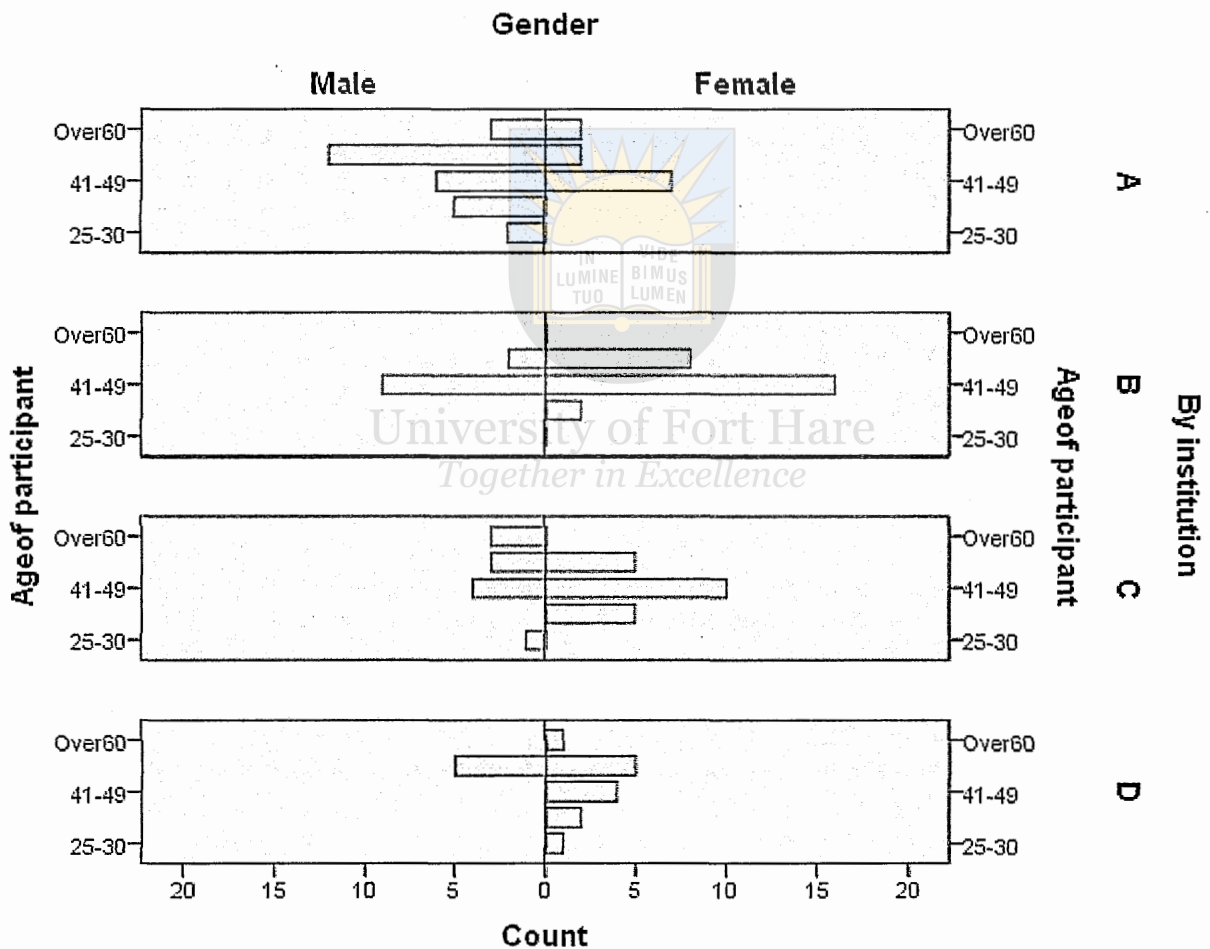


Figure 5.1.1: Profile of the participants

All the male participants from institution D were of the same age group (50 - 59). No female teacher educators in institutions B and C were 60 or above (Figure 5.1.1).

With regard to the participants' educational background, most teacher educators who participated (42.2%) specialized in the Humanities subjects followed by 30 (38.4%) who specialized in Foundations of Education and related subjects. Those who specialised in Mathematics and Science related subjects were 20 (25.6%). Ten (12.8%) indicated specialisation in more than one subject (a combination of Humanities and Foundations of Education) as indicated in Table 5.2. There was yet another group of eight (10.2%) participants who indicated that they specialized in other subjects. These included subjects like Technical Education as well as Business and Accounting.

Table 5.1.2 Educational background of the participants

Highest academic qualification and subject specialization			By institution				Total
			A	B	C	D	
PhD	Subject specialty	Humanities and Languages	8	0	2	2	12
		Math and Science related	4	0	1	1	7
		Education & related courses	5	2	1	1	8
		Other including technical	4	0	1	0	5
		Multiple subjects	1	0	0	3	4
	Total		22	2	5	7	36
Masters	Subject specialty	Humanities and languages	5	17	12	3	37
		Math and Science related	2	4	7	1	14
		Education & related courses	2	8	5	1	16
		Other including technical multiple subjects	0	0	6	0	6
	Total		9	30	30	9	78
Bachelors	Subject specialty	Humanities and languages	4	1	0	0	5
		Math and Science related	2	1	0	1	4
		Education & related courses	2	0	0	1	3
	Total		8	3	1	2	14
Diploma	Subject specialty	Multiple subjects	1				1
	Total		1				1

Total	Subject specialty	Humanities and languages	17	18	14	5	54
		Math and Science related	8	5	5	3	24
		Education & related courses	9	12	6	3	30
		Other including technical	4	0	6	0	10
		Multiple subjects	2	1	0	7	10
	Total	40	36	31	18	128	

Table 5.1.2 also depicts the participants' highest qualifications. Thirty five participants held a Doctoral degree qualification, 78 had a Masters' degree, 14 had a Bachelors' degree and one was a Diploma holder. Out of the 35 PhD holders 22 were from institution A and 7 from institution D. Most of those with Masters' degrees were from institutions B and C (with 30 each).

Data collected about the participants' teaching experience in schools indicated that 88.4% (111) had taught in primary or secondary schools for more than 10 years. Institution A had most of its teacher educators with most experience in schools. In particular, 82.5% (33) of its teacher educators taught for more than 10 years in schools. It was also interesting to note that the few inexperienced teacher educators (with a school teaching experience of less than 5 years) were PhD holders (5 from institution A and 1 from the institution D). In general teaching experience varied from less than 5 to 15 years or more. Background information further indicated that 79% (109) of the teacher educators joined the four institutions after teaching in primary (36) and secondary (73) schools as indicated in Table 5.1.3.

Table 5.1.3 Previous levels where participants taught before joining the four higher education institutions

Previous level taught before joining higher education	By institution				Total
	A	B	C	D	
Pre-primary & primary	6	21	6	3	36
Secondary	28	14	22	9	73
Technical/brigade/trade school	2	0	2	0	4
Adult basic education/non-formal	1	1	0	0	2

Primary and others	2	1	0	1	4
Secondary and others	1	0	2	1	4
Pre-school and others	0	0	1	3	4
Total	40	37	33	18	128

With regard to responses to question 6 that required respondents to indicate the number of years they had been teaching in a faculty or college of education, Table 5.1.4 and Figure 5.1.2 indicate that at Institution A,C and D, most respondents had spent more than 10 years (green), followed by those who had spent less than 5 years (blue) as opposed to those who had spent 6 to 9 years (red) at a college or faculty of education. There were however more respondents who had taught for less than five years at institution B than those who had spent less than 5 years or more than 10 years. The main purpose of this question was to assist the researcher to select participants to be interviewed rather than to infer any correlations to other questions in the study. The researcher's intention was to select three participant at each site,(one with less than 5 years, another with 6 to 9 years and the third with more than 10 years' experience at a faculty or college of education).

Table 5.1.4 Number of years that teacher educators have taught at a college or faculty of education

	Less than 5 years	6 to 9 years	More than 10 years
Institution A	12	5	23
Institution B	16	6	15
Institution C	2	5	11
Institution D	11	4	14

This information is represented graphically in Figure 5.1.2.

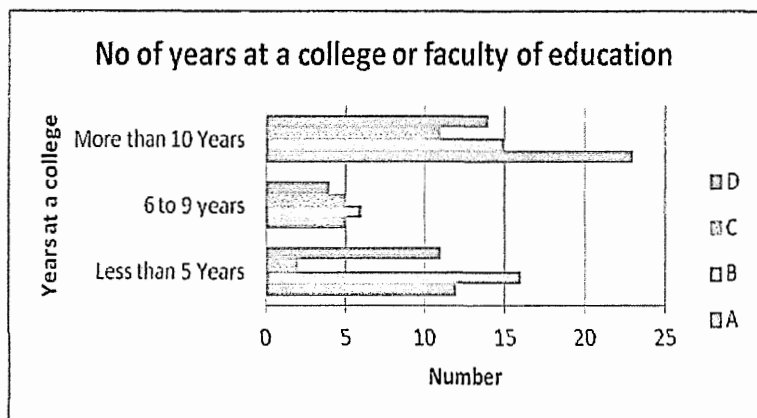


Figure 5.1.2: Teaching experience teacher educators at a college or faculty of education

5.1.2 Teacher educator preparation and induction

Section B of the questionnaire requested information on teacher educator preparation and induction. When the participants were asked if they had studied teacher education as a course or module before they started teaching student teachers, 43 (33%) answered *no* while 82 (64%) were of the affirmative that they did study a course or module on teacher education. The majority (93%) of those who studied teacher education as a course or module received their training at the university or college of education and the training lasted for more than nine months for most (88%) of them. Worthy of note, ten of those who had indicated that they received no training in teacher education, went on to indicate the length of training they received with five of them indicating that their training lasted for more than nine months (Table 5.1.5). Eleven of those who studied teacher education as a course or module indicated that their training was less than three months. This is illustrated in Table 5.1.5.

Table 5.1.5 Length of training on teacher education received

Length of training						
		Less than 3 months	4 to 8 months	More than 9 months	Missing ^a	Total
Studied teacher education as a course	NO	5	0	5	36	46
	YES	11	3	67	1	82
Total		16	3	72	47	128

Note.^a The "36" missing responses are missing by default because they were not supposed to respond to this item.

In response to whether the training prepared them to handle adult students 65% (54) affirmed that they were prepared. The 65% was in relation to those who had specified that they received training. When illustrated in another way less than half (54/128 =>42.2%) of the teacher educators were prepared to handle adult learners.

In addition, more than half (53.1%) of the participants responded that they did not receive any formal induction when they joined teacher education. A breakdown of participants' responses on the issues of induction when they joined their institutions, preparedness to teach adult learners and where they studied teacher education courses or modules is depicted in Table 5.1.6.

Table 5.1.6 Summary of the responses on whether participants did teacher education or induction

Institution	a (teacher education course)		b (prepared)		c (inducted)	
	No	Yes	No	Yes	No	Yes
A	11	27	16	19	18	19
B	14	23	15	9	24	13
C	12	21	6	17	16	15
D	6	11	3	9	10	8
TOTAL ^d	43 (33.6%)	82(64.06%)	36 (28%)	54 (42%)	68 (53.1%)	55 (43%)

Note a Did you study teacher education as a course/module?
b Did the training prepare you to handle adult students?
c Did you receive any formal induction when you joined teacher education?
d Totals per item may not add up to 100% because of missing responses due to design of the questionnaire.

When those who did not receive induction or whose induction did not include how to handle adult learners were asked how they coped with teaching adult students when they joined teacher education institutions, most of them indicated that they relied on their past experience as teachers, or a combination of strategies such as asking colleagues and trial and error as their coping strategies.

The 55 participants who specified that they received induction were further asked about the length, the form and the focus of the induction programme. Most of them (33) indicated that it was a once off workshop lasting less than a week (41). The workshops were mainly organized by the faculty of education or individual colleges (27), Centre for Academic Development¹ or the Teaching and Learning Centre² (18) and the Department of Training and Development³ (10). Teacher educators from institution A mainly selected the Centre for Academic Development (11) as the main organizer while those at institution D mainly selected the Faculty of Education. Equal numbers of

²The Teaching and Learning Centre is the entity in-charge of induction and professional development of all staff at institution D.

³The Department of Training and Development is responsible for the induction and professional development of staff at institutions B and C.

participants from institutions B and C highlighted colleges (18) as the main organizer. When quizzed about what areas the induction workshops focused on, most highlighted teaching and learning followed by administration and management. Among the competencies acquired, though several, ten indicated “teaching at a higher educational institution” as their acquired competency, five indicated managing adult learners as their acquired competency and another five specified that they acquired no competences from the induction programmes. Two reflected that they acquired research skills.

5.1.3 Presentation and analysis of responses in relation to the first research question

In this section a brief data analysis of the findings in relation to research question one (*How are teacher educators in Botswana and South Africa inducted and developed as teachers of adults*) is presented. Data was drawn responses to question items 10 and 11 (Section B of the questionnaire) that addressed issues of the induction and professional development of the participants. The two items are structured with four parts for item 10 and eight parts for Item 11.

When participants were asked if they had studied teacher education as a course or module before they started teaching student teachers, 43 (33%) answered *no* while 82 (64%) affirmed that they did study a course or module on teacher education (Table 5.1.6 - last column, bold numbers).

Table 5.1.7 Length of training on teacher education received

Item		Institution	Length of training				TOTALS
			Less than 3 months	4 to 8 months	More than 9 months	Missing ^a	
Did you study teacher education as a course?	NO	A 11	3	0	2	6	11
		B 14	1	0	0	13	14
		C 12	0	0	0	10	10
		D 1	0	0	2	4	6
						32	43
	YES	A 27	6	0	21	0	26
		B 23	1	2	20	0	23
		C 21	2	1	17	1	21
		D 11	2	0	9	0	11
			11	3	67	1	82
Total			15	3	71	34	125

Note. ^a The "34" missing responses are missing by default because they were not supposed to respond to this item. One participant who studied teacher education did not indicate the length of training and some who indicated that they received no training went on to indicate the length of training.

The majority (84% of the 82) of those who studied teacher education as a course or module received their training at the universities or colleges of education and the training lasted for more than 9 months for most (88%) of them. Worthy of note, eight of those who had indicated that they received no training in teacher education, went on to indicate the length of training they received with four of them indicating that their training lasted for more than 9 months (Table 5.1.7). Eleven of those who studied teacher education as a course or module indicated that their training was less than three months together with five from those who said they never received any course on teacher education In response to whether the training prepared them to handle adult students 46 (about 56%)⁴ affirmed that they were prepared. Said another way, with respect to all the 128 participants in the study, less than half (46/128 => 36%) of the teacher educators were

⁴Data was split by whether the respondent indicated that s/he studied teacher education as a course/module or not. Analysed data for this part of the item was based only on those who studied teacher education

prepared to handle adult learners. The responses were subjected to Pearson's Chi-square test in order to determine if there was a significant difference between those who felt that training prepared them to handle adult learners and those who felt it did not. According to Field (2011:688), Pearson's Chi-square test is "based on the simple idea of comparing the frequencies you observe in certain categories to the frequencies you might expect to get in those categories by chance".

In this case, the distribution of those who felt prepared (46) and those who felt not prepared was significantly different from the corresponding expected frequencies ($\chi^2 = 16.05$, $df = 1$, $p < .05$)⁵ with the prepared ones lower in number than the not prepared ones. This therefore denotes that within a 5% error, most of the respondents felt that they were not prepared to handle adult learners before joining teacher education. In addition, more than half (53.1%) of the participants responded that they did not receive any formal induction when they joined teacher education. A breakdown of participants' responses on the issue of induction when they joined their institutions, preparedness to teach adult learners and whether they studied teacher education as a course or module is depicted in Table 5.1.8.

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⁵Based on Pearson's chi-square (χ^2) goodness-of-fit test

Table 5.1.8 Responses on whether participants did teacher education, induction and how effective the induction was

Institution	a (teacher education course)		b (prepared)		c (inducted)	
	No	Yes	No	Yes	No	Yes
A	11	27	16	19	18	19
B	14	23	15	9	24	13
C	10	21	6	17	16	15
D	6	11	3	9	10	8
TOTALS^d	43 (33.6%)	82(64.06%)	36 (28%)	54 (42%)	68 (53.1%)	55 (43%)

- Note a Did you study teacher education as a course/module
 b Did the training prepare you to handle adult students
 c Did you receive any formal induction when you joined teacher education
 d Totals per item may not add up to 100% because of missing responses due to design of the questionnaire and some omitting subsections of the item

When the participants who indicated that they did not receive any formal induction when they joined teacher education were asked how they coped with teaching adult students, most of them selected a combination of more than two strategies such as asking colleagues, past experience and trial and error (34). The fact that almost all combination of the responses included previous experience maybe because most of the participants if not all (Table 5.1.9) were recruited from primary or secondary schools.

The 55 participants who specified that they received induction were further asked about the length, the form and focus of the induction programme. Most of them indicated that induction took the form of a once off workshop lasting less than a week (41). The workshops were mainly organized by the faculty of education or colleges (27); the Teaching and Learning Centre/Centre for Academic Development (CAD) (18) and the Department of Training and Development (10). Teacher educators from institution A mainly selected CAD (11) as the main organizer while institution D mainly selected Faculty of Education. Equal numbers of participants from institutions B and C

highlighted the colleges (18) as the main organizer. Though workshops focused on multiple disciplines, the highlighted ones were on teaching and learning followed by administration and management. Among the competencies acquired during the induction, several (10) indicated “teaching at a higher educational institution” as their acquired competency; five indicated managing adult learners as their acquired competency and another five specified that they acquired no competences from the induction programmes. Two reflected that they acquired research skills.

Table 5.1.9 Responses on coping strategies employed by those who were not prepared or inducted to handle adult learners

Item and options		By institution				Total
		A	B	C	D	
If you received no formal induction, how do you cope with teaching adult learners?	Relied on previous experience as a teacher	2	4	0	0	6
	Asked colleagues and friends for help	0	0	1	1	2
	Trial and error	1	0	0	0	1
	Other	0	1	0	0	1
	Previous experience and colleagues	0	2	2	2	6
	Previous experience and trial and error	0	0	1	0	1
	Previous experience and research	4	1	1	0	6
	More than two strategies	8	11	9	6	34
	Missing	2	4	1	0	7
Total	17	23	15	9	64	

Questions 11(g) required participants to rate the effectiveness of the induction they received; the results are represented in Table 5.1.10.

Table 5.1.10 Participants ratings of the effectiveness of induction they received

Likert Scale used: 1 = Ineffective, 2 = Somehow effective, 3= Effective, 4 = Very effective

	(4)	(3)	Effective	(2)	(1)	Ineffective	χ^2 - value
Preparation for teaching at a higher education institution	9	15	24	19	9	28	1.46
Managing adult learners	6	16	22	16	13	29	0.510
Assessing in higher education	9	15	24	20	8	28	0.184
Research skills	8	11	19	17	14	31	2.174

When Pearson's Chi-square (χ^2) test of goodness of fit was used to fit the observed frequencies onto the frequencies that one might expect to get in those categories if the distribution of responses was uniform. None of χ^2 - values were significant. This indicates that there wasn't much disparity between the observed frequencies and the expected ones (that is, the responses were almost equally distributed among the categories). The frequencies of the ratings were further grouped into *Ineffective* (by combining *Somehow effective* with *Ineffective*) and *Effective* (by combining *Effective* and *Very effective*). Though the totals for the negatives (*Ineffective*) were higher than the totals for the positives (*Effective*), they were not statistically different from the expected frequencies. This denotes that based on the responses provided, it is not possible to conclude whether the induction was effective or ineffective against the four competencies (Preparation for teaching at a higher education institution, managing adult learners, assessing in higher education and research skills).

5.1.4 Presentation and analysis of results with regard to the second research question

This section presents and analyses of the findings in relation to the second research question: *How do the teacher educators (in Botswana and South Africa) adjust their teaching practice to cater for the needs of their students who are adults?*). These were obtained from answers to questions 12, 13, 14 and 15 in the questionnaire.

5.1.4.1 Professional development (PD) activities specifically aimed at handling adult learners

In response to the question of whether participants have ever been involved in professional development activities, seventy five participants (59.5%) indicated that they have never been involved in professional development activities that were aimed at the equipping them with skills of handling adult learners while 51 indicated that they did. There was a statistical difference at the 5% conventional level that the responses in each category did not fit or were not a representative of the corresponding expected frequencies (*chi-square* = 4.57, *df* =1). In other words, the observed distribution of responses did not fit the theoretical distribution which would have resulted had everything else been equal. Based on this analysis it may be inferred that the majority of respondents had not been involved in professional development activities that were targeted at assisting them handle adult learners.

The popularity of the professional development activities which were attended by the 51 participants are as outlined in Table 5.1.11 together with the coping mechanisms of the 75 who never attended PD activities.

Table 5.1.11 Representations of the duration of the PD activities and coping strategies employed by those who never PD activities

PARTICIPANTS WHO ATTENDED PD ACTIVITIES (Total 51)		PARTICIPANTS WHO NEVER ATTENDED PD ACTIVITIES (Total 75)	
<i>Duration of the activity</i>	<i>Number of respondents</i>	<i>Coping mechanisms</i>	<i>Number of respondents</i>
A once off workshop	17 (13.5%)	Relied on previous experience as teacher	20
A series of workshops	15 (11.9%)	Ask colleagues and friends for help	4
A short course of 3 to 8 months	3 (2.4%)	Trial and error	2
A course of 9 months or	5 (4%)	Research in the library and	5

more		internet and other strategies	
A professional discussion group	3 (2.4%)	Others	1
A mentoring programme	3 (2.4%)	More than two strategies (mainly including previous experience)	37
Other	1		

As indicated in Table 5.1.11, for those who had an opportunity to get involved in PD activities, most of the PD activities were in the form of workshops (32 or 81.6%) with a few attending a course or joining a mentoring programme (13.6%). When it comes to coping mechanisms on to how to handle adult learners, a large proportion (57 out of 75) relied on previous experience as teachers at the pre-primary, primary or secondary school level.

5.1.4.2 Teacher educators' responses regarding teaching adult learners and research

Question 15 required respondents to indicate whether they strongly agree, agree, are not sure, disagree or strongly disagree with the statements about adult learning, modelling and the conflict between the research and teaching functions. Table 5.12 summarizes their responses.

Table 5.1.12 Ratings of statements by the participants about their responses regarding teaching adult learners, scholarship in teaching and research

<i>Likert Scale used: 5 Strongly agree, 4 = Agree, 3 = Not sure, 2 = Disagree, 1 = Strongly disagree</i>									
	5	4	Agree	3	2	1	Disagree	\bar{x}	χ^2 - value
Teaching children and adolescents is different from teaching adult students	78	38	116 (90%)	3	3	3	6 (5%)	4.47	35.37**
Teaching skills acquired by teaching during training at colleges/university prepared them	7	45	52	21	41	12	53	2.94	1.14 (p = .286)

to teach adult learners			(40%)				(41%)		
Teacher educators need to model how student teachers are going to teach in schools	62	43	105 (82%)	16	2	2	4 (3%)	4.28	39.09**
Scholarship in the research function of teacher educators is often in conflict with their scholarship in the teaching function	18	28	46 (36%)	56	19	3	22 (17%)	3.31	6.71*

Note: ** Significant at $p < .01$, * Significant at $p < .05$

On a scale of 1 to 5 (strongly disagree to strongly agree), the participants average ratings (\bar{x}) were more than the neutral option of 3 (not sure) except for the second item ($\bar{x} = 2.94$). This means that most respondents were in agreement with the given statements except for the second item where the numbers of those who agreed or disagreed were almost equal with slightly more participants disagreeing. This seemingly even distribution is also reiterated by the low value of Chi-square ($\chi^2 = 1.14, p = .286$) indicating a non-significant result. Ninety per cent (90%) of the participants agreed that teaching adolescents or children is different from teaching adults. The average rating for this item was very high ($\bar{x} = 4.47$) close to 5 which indicates strong agreement. The results for Items 1 and 3 were highly significant. These responses are an indication that respondents most respondents were aware that teaching adults is different from teaching children. In the same way, the majority of respondents were in agreement that teacher educators need to model how student teachers are going to teach in school. This was true at 1% or 5% margin of error. However, there seemed to be no consensus when it came to the statement that "Teaching skills acquired by teachers during training at a college or university prepared them to teach adult learners".

Responses to the statement that: "Scholarship in the research function of teacher educators is often in conflict with their scholarship in the teaching function" yielded a 5% margin of error (χ^2 - value of 6.71), with a relatively large number of respondents (37%) in agreement as opposed to a relatively few (17%) who disagreed.

5.1.4.3 Popularity of teaching methods

Question 16 required participants in the study to rate on a scale of 4 (very often), 3 (often), 2 (rarely) and 1 (never) the teaching methods they use. This was to find out

whether they often use adult (learner centred) methods. Table 5.1.13 presents the results. This was to deductively find answers to research sub-question 1(d) "Are the educational practices of the teacher educators congruent with adult learning principles?"

Table 5.1.13: Popularity of teaching methods

Likert –Scale used with a rating of Very often =>4, Often => 3, Rarely => 2 and Never => 1

Item	Very often (4)	Often (3)	Often	Rarely (2)	Never (1)	Never	\bar{x}	χ^2 - value	Missing
(i) Lecture	62 (50%)	44 (35%)	85%	19 (15%)	0 (0%)	15%	3.35	39.5**	0
(ii) Group discussion	50 (40%)	64(51.2%)	91.2 %	8 (6.4%)	1 (.8%)	7.2%	3.32	62.32**	2
(iii) Tutorial	18(14.4%)	57(45.6%)	60%	33(26.4 %)	12(9.6%)	36.3%	2.67	22.9**	5
(iv) Debate	11(8.8%)	36(28.8%)	37.6 %	48(38.4 %)	21(16.8%)	55.2%	2.32	23.02**	9 (7.2%)
(v) Buzz groups	5 (4%)	22(17.6%)	21.6 %	36(28.8 %)	35(28%)	56.8%	1.97	23.13**	27(21.6%)
(vi) Fish bowl	6 (4.8%)	20(16%)	20.8 %	23(18.4 %)	48(38.4%)	56.8%	1.84	42.98**	28(22.4*)
(vii) Brain storming	36(28.8%)	53(42.4%)	71.2 %	21(16.8 %)	7 (5.6%)	22.4%	3.0	37.5**	8
(viii) Panel	6 (4.8%)	33(26.4%)	31.2 %	44(35.2 %)	24(19.2%)	54.4%	2.20	18.4**	18 (14.4
(ix) Case studies	19(15.2%)	50 (40%)	55.2 %	28(22.4 %)	9 (7.2%)	29.6%	2.75	27.5**	19 (15.2%)
(x) Listening and	22(17.6%)	58(46.4%)	64%	21(16.8	11(8.8%)	25.6%	2.81	26.5**	13

observing)		%)					(10.4%)
(xi) Project	25(20%)	56(44.8%)	64.8	25(20.0	9 (7.2%)	27.2%	2.84	21.5**	10 (8%)
(xii) Visits/tours/ field trips	7 (5.6%)	32(25.6%)	31.2	46(36.8	25 (20%)	56.8%	2.19	18.6**	15 (12%)
(xiii) Workshop	16(12.8%)	18(14.4%)	27.2	37(29.6	40(32%)	61.6%	2.09	21.6**	14 (11.2%)
(xiv) Assignments	81(64.8%)	33(26.4%)	91.2	5(4%)	1 (.8%)	4.8%	3.62	80.3**	5 (4%)
(xv) Learning contract	16(12.8%)	35(28%)	40.8	21(16.8	38(30.4%)	47.2%	2.26	10.3*	15(12%)
(xvi) Self-directed learning	30(24%)	55(44%)	68%	23(18.4	7 (5.6%)	24%	2.94	27.8**	10 (8%)
(xvii) Experiential learning	21(16.8%)	47(37.6%)	64.4	32(25.6	14(11.2%)	36.8%	2.66	16.1**	11 (8.4%)

As a measure of internal consistency, the seventeen items were subjected to Cronbach's *alpha* coefficient test. The test measures how closely related a set of items are as a group. It is considered to be a measure of scale reliability. A higher value of Cronbach's *alpha* indicates a greater consistency and therefore acceptable levels of reliability (Creswell & Plano Clark, 2011)

In this case, the reliability index of the internal consistency of the items yielded Cronbach's *alpha* coefficient of 0.803 (*i.e.* $\alpha = 0.803$)⁶. The items were therefore homogeneous and coherent. That is, the values in the column "Cronbach's *alpha* if item deleted" ranged from 0.789 to .809 and none of the items would substantially increase or decrease the reliability if they were deleted.

⁶According to Ntoumanis (2005), alphas should be between .70 and .90. Low alphas (less than .70) indicate poor internal consistency which reflects poorly related items and very high alphas (higher than .90) indicates that the items are almost identical which might bring an element of redundancy.

The mean values (\bar{x}) ranged from a minimum of 1.84 (*fish bowl*) to a maximum of 3.62 (*assignment*) on a scale of 1(never) to 4 (very often). The information is given in Table 5.12. The most popular teaching methods were *assignments, lectures, group discussions and brainstorming*. These methods were selected by over 70% of the participants each, with assignments and lectures being selected by over 80% of the participants. Specifically, every participant indicated that they use the lecture method though a few (15%) said rarely. Zero participants selected 'never' for the lecture method. Figure 5.1.2 shows a visual representation of the participants' responses to the 17 items using Boxplots¹. The boxes for the four popular methods stand out in the figure. The least popular methods were *buzz groups* and *fish bowl*. Each of these two methods was selected by about 20% of the participants and they were also the most omitted methods (last column of Table 5.1.13). It is possible that some of the participants did not know about these methods and this resulted in high missing responses. Figure 5.2 shows fish bowl as the least popular of all the 17 listed methods. The median (indicated by a thick line at the bottom end of the box) of the respondents is almost at the base of the box for this item.

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The participants also differed significantly in the frequency at which they employ various teaching methods. The high χ^2 - values (Table 5.1.12) show that there were statistically significant differences of the observed number of preferences (never to very often) for each teaching method (item). All χ^2 - values were significant at $p < .01$, except for (xv), learning contract, which was significant at the conventional level 5%. These results are presented in the form of boxplots indicating participants' responses per item and by institution in Figure 5.1.2. The responses to items were irrespective of institution with the outliers indicating the institution where the particular participant is a teacher educator.

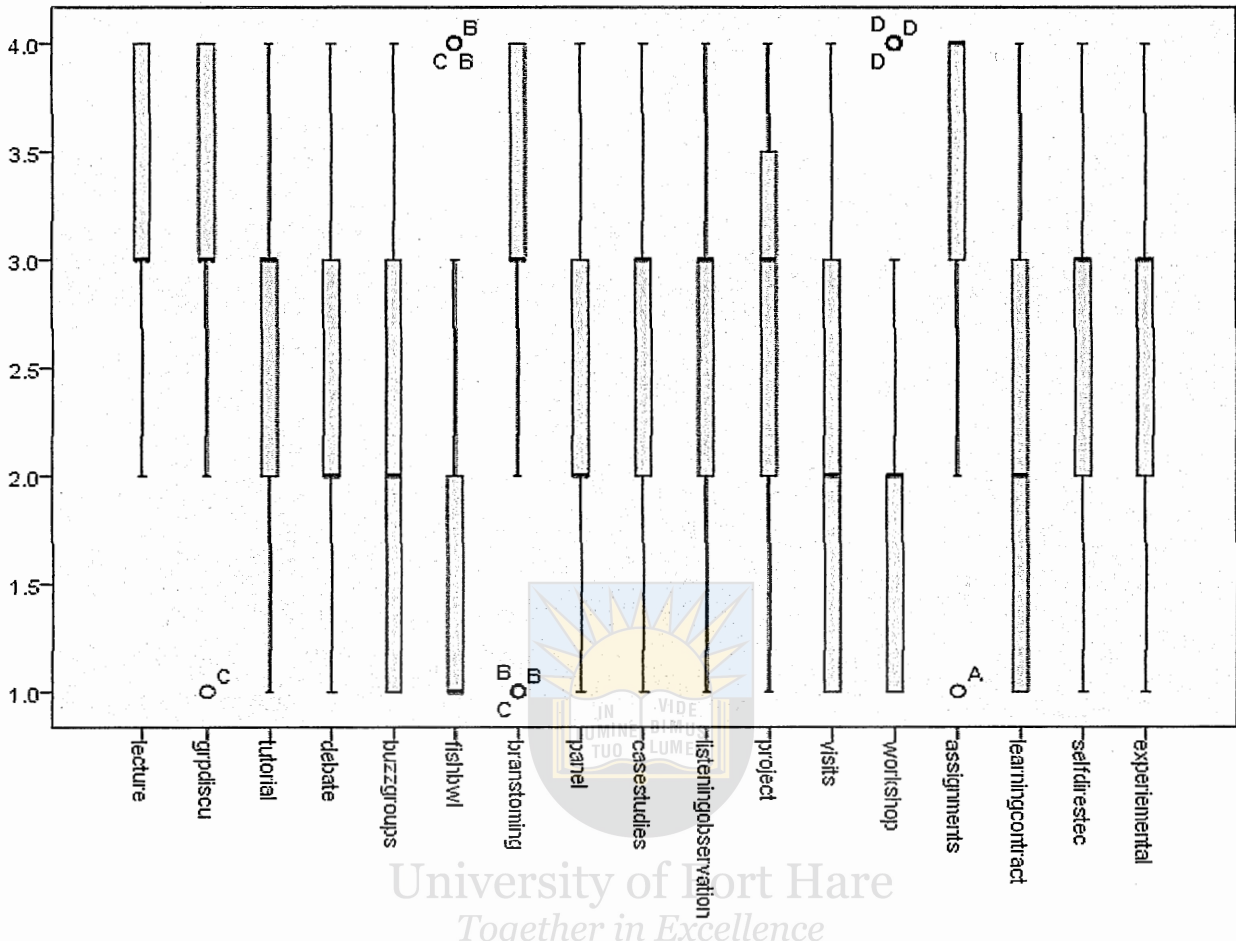


Figure 5.1.3: Boxplots depicting participants' responses per item and outliers indicated by institution

¹At the centre/end of the plot is a thick line (it indicates the median), the box contains 50% of the observations. The whiskers extend to the most and least extreme scores and each (where they both appear) represent 25% of the observations

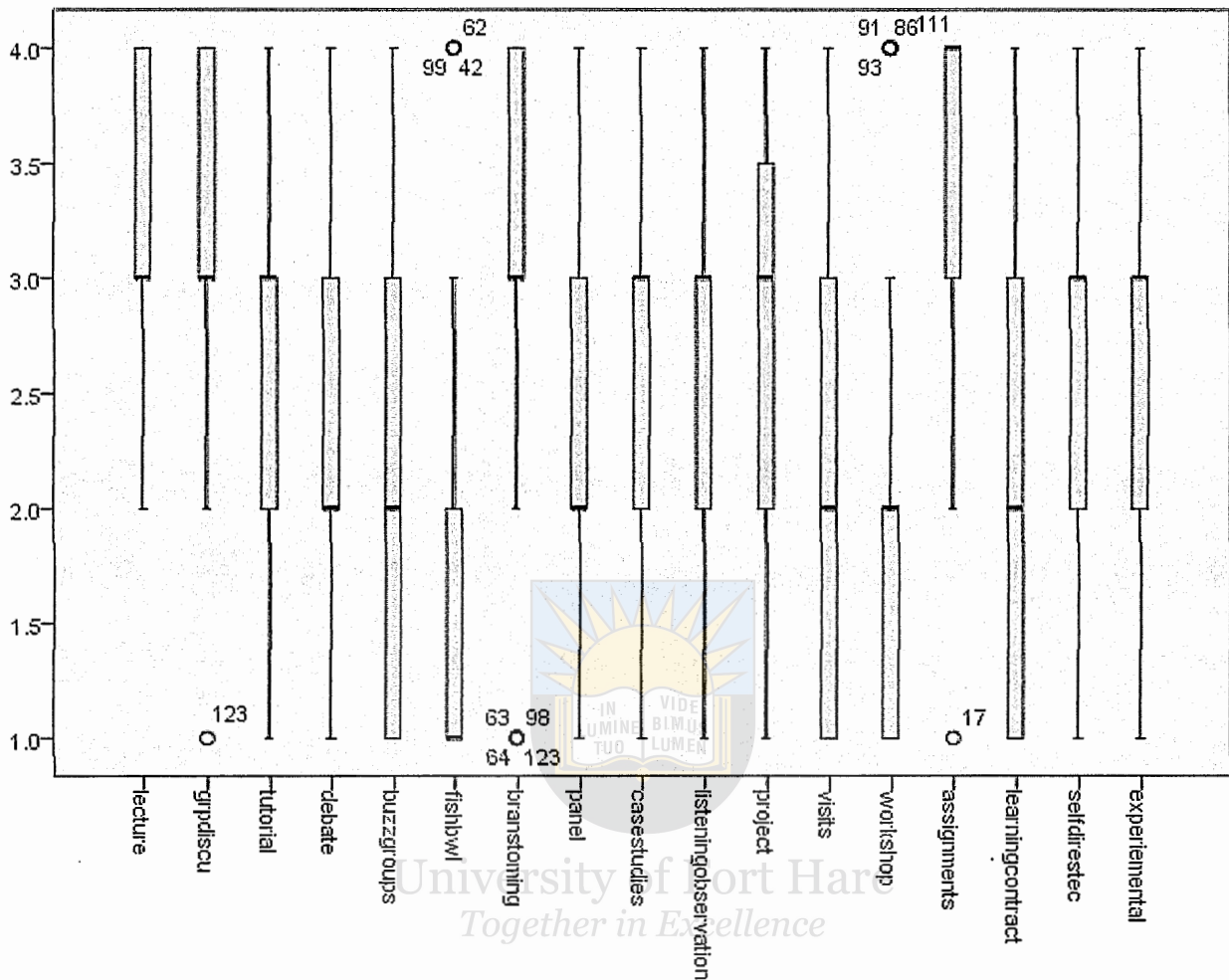


Figure 5.1.4 Boxplots depicting participants' responses per item with outliers indicated by case numbers

Participants' responses were also analysed by institution. Table 5.1.14 and Figure 5.1.5 represent the information.

Table 5.1.14: Popularity of teaching methods by institution

Case Processing Summary

	By institution	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Lecture	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%

	D	18	100.0%	0	0.0%	18	100.0%
Group discussion	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Tutorial	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Debate	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Buzz groups	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Fish bowl	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Brainstorming	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Panel	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Case studies	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Listening & observation	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%

	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Project	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Visits and tours	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Workshop	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Assignments	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Learning contract	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Self-directed learning	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%
Experiential learning	A	23	59.0%	16	41.0%	39	100.0%
	B	20	54.1%	17	45.9%	37	100.0%
	C	18	58.1%	13	41.9%	31	100.0%
	D	18	100.0%	0	0.0%	18	100.0%

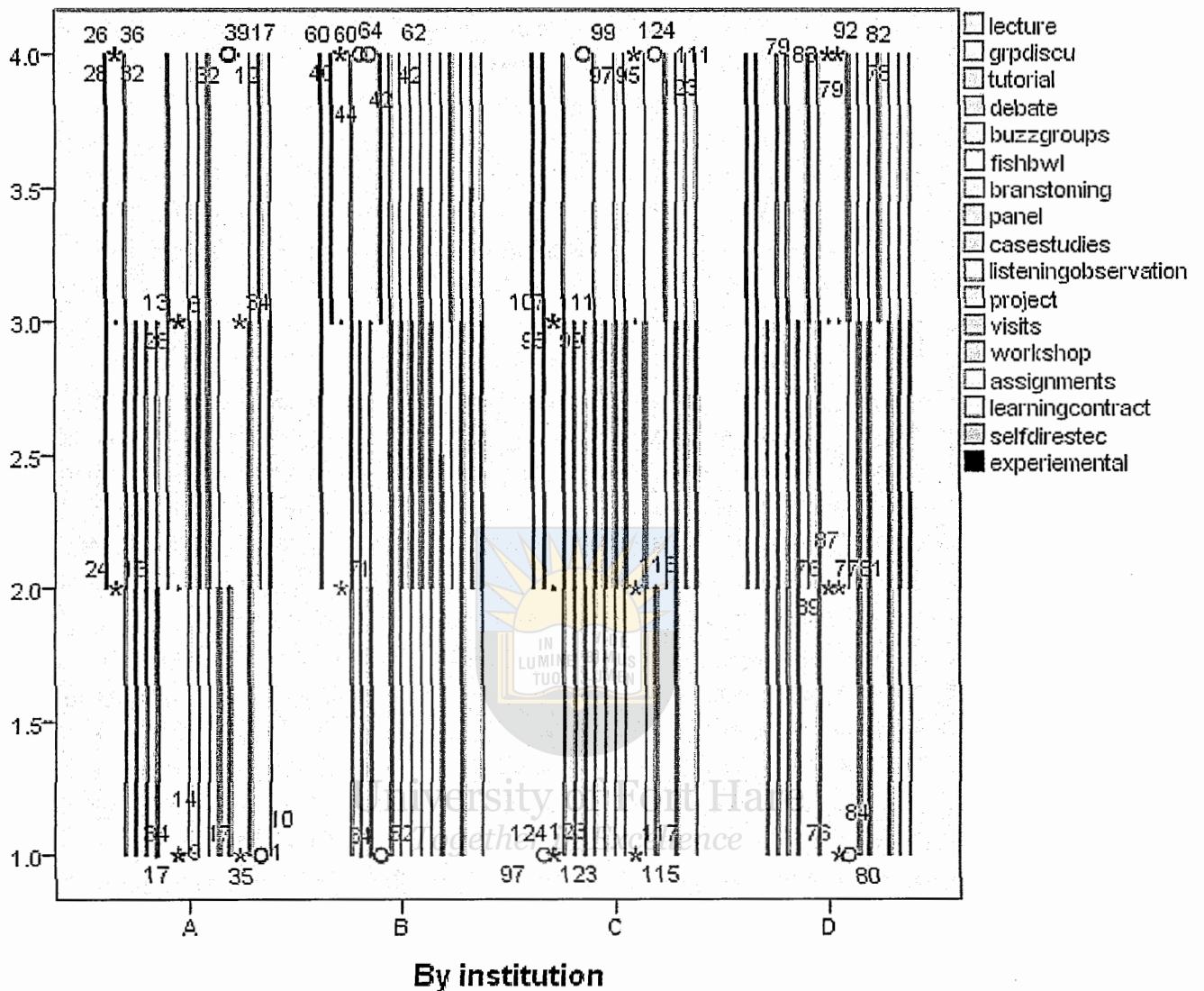


Figure 5.1.5 shows Box plots for the 17 items grouped by institution

Even when analysed by institution, the pattern of responses was almost uniform across institutions.

5.1.4 Summary

In this chapter, data collected in the quantitative phase of the research was documented and analysed. Key feature of the induction and professional development process of teacher educators as teachers of adults were highlighted. Teacher educator preferences with regard to the most popular teaching methods they use were also

presented and analysed. This was to find out if the preferred teaching methods are akin to andragogy or not as noted in chapter 2. From the findings, it can be noted that teacher educators enter teacher education from a variety of settings but mainly from primary and secondary schools. Most possess a postgraduate qualification of at least a Masters' degree in their areas of specialisation. A typical teacher educator in the four institutions is between the ages of 40 and 50 years of age. The majority of them are not prepared to teach adults and most of them were neither inducted nor professionally developed in this area.

The next chapter discusses the qualitative findings that detail the professional development journey of twelve teacher educators that were interviewed from the four institutions under study.



University of Fort Hare
Together in Excellence

Chapter 5 (2)

Data presentation and analysis: Qualitative phase

5.2.0 Introduction

Having presented and analysed numerical data collected during the quantitative phase of the study, this chapter presents and analyses data collected in the qualitative phase. This was done by interviewing twelve purposefully selected teacher educators. A detailed description of the procedures that were followed in identifying interview respondents, accessing, recording and transcribing interview data is provided. The main purpose of the interview was to consolidate and corroborate data that was collected during the quantitative phase as well as to record the “voices” of teacher educators as they narrate their experiences on the journey of professional growth as teacher educators. It is after this discussion that a brief report will be presented about the documents that were analysed.

5.2.1 Identification of interview respondents

A purposive sample was drawn from teacher educators who had responded to the questionnaire. Initially three teacher educators with varying teacher education experience were to be identified from each of the four institutions. The main criterion was that one of them should have been a teacher educator (taught at a teacher education institution) for less than three years, another one between four and nine years while the third one for more than ten years. The justification for these selection criteria was related to what the researcher had found in literature that:

- Teachers (*educators*) with five to nine years’ teaching experience in teacher education tend to be more innovative than those with less than five or more than ten years’ experience (Kasozi, 2009:117-118).
- Those with less than three years’ experience were likely to give a more vivid and fresh account of their preparation and induction (Van Velzen et al., 2010).

- Those with more than ten years' experience were likely to provide more "insight" into induction and professional development and provide an indication as to whether their attitude and aptitude had been altered by "experience" (Murray, 2005).

In this the researcher hoped to record the typical professional development journey of a teacher educator as a teacher of adults. This would provide a record of "participants' meaning" of teacher educators' preparation, induction and professional development. In this research, therefore, a total of 12 teacher educators (also referred to as cases) were interviewed. According to Creswell (2013), this is considered to be an adequate number for case studies. Biographic data of those who participated in the study is summarized in Table 5.2.1.

Table 5.2.1 Biographic data of teacher educators who were interviewed

Pseudo name	Institution	Gender	Age range	Highest qualification	No. of years in schools	No. of years at college/faculty	Position	Subject specialisation
Agang	A	F	Over 60	MA	>5	+10	Lecturer	English
Andrew	A	M	50 -59	PhD	+10	+10	D/Director	CSS
Bame	B	F	41 -49	BEd		> 5	Lecturer	Maths
Boitumelo	B	F	41-49	MEd	>5	+10	HOD	FoE
Bobedi	B	F	41 -49	PhD		+10	HOD	SEN
Chaba	C	F	50-59	PhD	>5	+10	HOD	Maths
Charles	C	M	Over 60	MSc	+10	+10	Senior Lecturer	Agric
Daniel	D		41 -49	MEd	+ 10	6	Lecturer	ECE
Darius	D	F	41 -49	PhD	> 5	+10	Senior Lecturer	Languages
David	D	M	41 -49	PhD	+ 10	> 5	Lecturer	FoE
Donald	D	F	30-39	MEd	+10	> 5	Lecturer	FoE
Davis	D	F	41 -49	MEd	+10	>5	Lecturer	Languages

Abbreviations: Agric – Agriculture. CSS – Communication and Study Skills. ECE – Early Childhood education. FoE – Foundations of Education. HOD – Head of Department. Maths –Mathematics. SEN- Special Needs Education

5.2.2 The researcher's role

It is a requirement that when conducting this kind of study, the role of the researcher be made explicit (Creswell, 2014). The researcher, therefore, self-reports (reflexively) on the following strategic, ethical and personal issues (Johnson & Duberley, 2000):

(i) Strategic issues:

The actual research problem as postulated by the researcher arises from the researcher's own experiences as a teacher educator. He "accidentally" got into teacher education and eventually realized that his struggles to be an effective and innovative professional teacher educator would have been less painful had he been prepared and inducted. The researcher had to use "trial and error" and "self-directed learning" with little or no facilitation. In addition, the researcher's professional development as a teacher educator was self-initiated and this particular study is a follow-up on an earlier one where he had compared the educational orientation of teacher educators in the colleges of education in Botswana.

(ii) Ethical issues:

The researcher wishes to state that he is to some extent researching his own practice. Some of the sites he used in the study are intimately connected to him as an employee and supervisor or as a student. Some of the participants were, therefore, his colleagues or supervisees. The benefit of this, however, is that all participants are professionals who are aware and conscious of the nature of this type of research and were voluntarily willing to take part in the study.

(iii) Personal issues:

Due to costs and other resource implications the researcher was compelled to select sites where he could easily access data, participants and other resources. His attempt to increase the number of research sites in South Africa was unsuccessful specifically because of the time it would take to get ethical clearance from the institutions he wished to include in the study. As a study across two countries the researcher acknowledges that the findings of this study may not be generalizable to all teacher educators or teacher education institutions in Botswana and South Africa. In spite of this, the use of a single site in South Africa can be regarded as providing valuable data contributing to the conclusions and recommendations of the study. It could be argued that the induction

practices in most universities in South Africa follow a more or less similar pattern like the one practiced at institution D (Mofokeng, 2002; Parker & Deacon, 2004; Wadesonga & Machingambi, 2011).

5.2.3 The interview process

This phase of the study was a form case study through conducting twelve face-to-face/ one-on-one interviews with teacher educators at four teacher education sites (three in Botswana and one in South Africa). The following were the steps in the process:

After purposefully identifying potential participants in the interviews, the researcher initially sought permission from the relevant deans of education and principals of colleges of education to conduct the interviews. All consented to the researcher's request after ascertaining that the researcher had obtained permission from Ministry of Education and Skills Development in Botswana, and Ethical clearance from the University of Fort Hare in the case of the site in South Africa. He then contacted potential interviewees (via e-mail, telephone and/or in person) and made an appointment to meet at an agreed venue and time for the interview. At the time of the interview the interviewee was asked to read and sign a consent form (Appendix 3). The researcher then provided the interviewee with the interview schedule and requested him or her to read through the schedule before the commencement of the interview. This was to familiarize the respondent with the questions to be asked. The researcher also sought permission from the interviewee to make a digital audio recording and take notes during the interview.

With regard to the actual sites of the interviews; most were conducted in the interviewee's office except in a case where the interview was held in a boardroom and, in another, in the researcher's office. These settings were considered "natural" since they were places where the respondents "worked" (Creswell, 2014: 185).

Digital recordings were made by means of an OLYMPUS VN5500 Digital Voice Recorder. The recorder enables one to record digitally audio files that can be uploaded

onto a computer hard-drive, compact disk or USB (universal serial bus) mass storage device and played back on computerising digital media player software. In this way the researcher was able to record, play-back and retrieves audio data during the process of transcription. All interviews as much as possible followed the interview schedule (Appendix 2).

5.2.4 Interview data analysis

The following steps were taken during the analysis of interview data:

- a. Verbatim transcription was done with the help of research assistants who listened to the audio recordings and transcribed every word that was said by the interviewer and respondent. Sample transcriptions for three respondents are provided as Appendix 9a, 9b and 9c.
- b. The researcher then reviewed the transcripts while listening to the recordings and while cross checking with the notes taken during the interview.
- c. The researcher then identified preliminary themes that were entered into a table (Table 5.2.2).
- d. In addition to the preliminary themes (Theme 1 to 9) two more themes emerged from the interviews (Theme 10 and 11)

Table 5.2.2 Preliminary and emerging themes from the interviews

Theme 1	Motivation to venture into teacher education
Theme 2	Training before joining teacher education
Theme 3	First time memorable experiences as teachers of adult students
Theme 4	Induction
Theme 5	Teaching student teachers versus teaching primary or secondary school students
Theme 6	Professional development
Theme 7	Teacher education as a unique profession

Theme 8	Research versus the teaching functions
Theme 9	Scholarship
Theme 10	Professionalism
Theme 11	Mentoring

What follows is a discussion of themes that were predetermined and those that emerged from the interviews. Those that were predetermined by the researcher include: motivation to go into teacher education, training before joining teacher education, first time memorable experiences as teachers of adult students, teaching student teachers versus teaching primary or secondary school students, induction, teacher education as a unique profession, professional development and research versus the teaching functions. Those that emerged from the interview were scholarship in teaching, professionalism and mentoring. These will now be discussed in some detail.

Theme 1: Motivation to venture into teacher education

With regard to their motivation to join teacher education, the interviewees gave a variety of reasons why they had joined teacher education with a good number claiming that it was a result of the passion to be able to make a contribution at a higher level. Ms Agang simply said:

It was exciting, should I call it a calling

Dr Darius at institution D joined teacher education...

..in order to influence change. If I could train teachers in such a way that they could teach learners effectively because I believe if I had been taught mathematics effectively at school, I would have been a mathematician by now. Because I believe some of my teachers did not have the methodologies that I got to understand and explore when I was furthering my studies after completing my teachers 'diploma'.

Another motivator was the fact that joining teacher education would allow the person to go for further studies as indicated by Ms Bame who simply said:

To do Masters, that was the motivation.

Dr Andrew at institution A indicated that he was...

...wanting to teach at a higher level and for further studies.

Others like Dr Chaba at institution C said that it was an administrative decision taken by her employers because she says:

...I was simply transferred from senior school X to college Y. I wasn't even interviewed or asked or whether I wanted or not, it was a transfer. I think they were short of teachers and they just took the nearest and i happened to be one.

This external influence to join teacher education was further echoed by Ms Daniel at institution D who felt that:

I think it's one of those things that can be associated with being a good teacher.

and that is why she was encouraged by her lecturers to join teacher education.

Several respondents, however, were more down to earth when they described their motivation to join teacher education. A case in point is Ms Daniel at institution D who felt that:

... There's more freedom. And I also think I like the umm, the mental stimulation that the university has.

From these testimonies it can be said that teacher educators who were interviewed joined teacher education for a variety of reasons, including improved status, passion to improve teaching and learning (a form of altruism) , to grow professionally and face new challenges, or simply because they were transferred into teacher education.

Theme 2: Training before joining teacher education

All teacher educators that were interviewed indicated that they had not received any formal training in teacher education or how to handle adult students. This revelation contrasts sharply with the quantitative results where 65% of teacher educators claiming that they had received training in teacher education at college or university level. Could

this be a result of misconception about “training of teachers” and “training of teacher educators”? This issue will be explored further during the discussion of results.

Four of those interviewed, however, indicated that they had attended an odd workshop on general training methods. With hindsight most respondents, however, felt that such training could have been useful.

Dr Darius at institution D puts it succinctly that:

It would have been very useful because the distance education students I was working had multiple personalities. They were mothers, they were students and some were business women. So it would have helped if I had been trained or taken to a workshop about how to deal with adult learner who have got multiple personalities, because I was from a primary school where I taught children who depended on me. And now I have these people who would come to class with their “issues” and at the same time I was expecting them to submit assignments and participate in class so they would come to class not necessarily ready for participation. So if I had been trained I think it would have made some difference and the impact would have been much faster.

In a similar way Dr David from the same institution put it clearly that:

I would propose that the induction be composed of behaviour issues, how to deal with them. Yes, when I was doing my primary teachers’ diploma, I did a course called child psychology that was focusing on the child psychology from 0-21. There was less emphasis from the age 21 up to 65. So, if the induction of newly appointed teacher trainers would focus on age 18-65 that will be helpful, because here we are dealing with adults, some of them are teachers. I remember (me) saying in one lecture, I can’t teach teachers so I must ‘carry them’ you want to carry teachers because you are teachers, how can I teach teachers.

The other aspect of prior training that interviewees indicated could have been helpful related to pedagogical content knowledge (knowledge about teaching teachers) as Dr Chaba at institution C commented:

I believe it would have been helpful. What happened was when I joined the colleges they gave me content, to teach content, so teaching content

was just okay , I just continued as if, as i would have taught to anyone without regarding whether they were teachers or students, ordinary students. That one was not a problem then as the years progressed i was to teach professional studies - how to teach, that one became a challenge. Though I have been taught how to teach, teaching someone how to teach was something else. When I started that course I went through it so fast that within a week i was almost done with the syllabus that is when I realized something was wrong. Because i was just telling them, telling them how to teach, that this is what you do. The way I was taught, when i was doing my PGDE (Post Graduate Diploma in Education) I was taught how to teach so I was teaching them how teach that way; using my skills and my notes.

Prior training in research was also an area that some respondents felt could have helped them to cope if they had received prior training in the area before joining teacher education, as Ms Boitumelo from institution B remarked:

Research - it would have been helpful because I would've been more informed in working with older people.

Theme 3: First time memorable experiences as teachers of adult students

In summary the main incidents that seem to have been engrained in most respondents' mind involve issues of *adjusting to handling older students*, including the teacher having to *give up part his/her power* as he/she teaches adults. This is what prompted Mr Charles at institution C to remark:

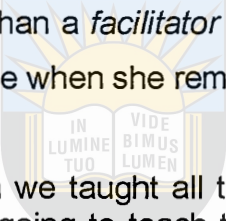
The other aspect is that in a secondary school its' like you're the boss in the classroom. Whereas, here you might have to interact more with students, for example they might come with a problem or something confusing, and I have to discuss it with them or maybe even agree with them that something needs correcting. And this is something I wouldn't do in a secondary school. But we are learning all the time.

The same sentiments were expressed by Dr Bobedi from institution B when she said:

The challenges like I said, the controlling of the adult students; you have to negotiate for you to be effective, you should have that understanding which you don't practice much when you are still at secondary school ,

and though I would say the adult students at times they are difficult to handle, but there will be those who are mature, those are the ones who will give you courage even after the class when they see that maybe somehow you were not so happy about the class, they will come to you to say, maybe this time and that time we did not understand. They will come to you to assist you with regards to that. Some giving you advice some suggestions saying let us do it this way.

Another aspect relates to the *lack of confidence as a result of fear* that as a teacher educator one has to know more than the student teacher. Ms Bame, for example, did not know a lot about Setswana and its teaching, while Dr David and Dr Bobedi wanted to impress by being fully prepared for their classes. These may be indicators of pedagogical tendencies since the underlying belief here seems to be that of *the teacher as the provider of knowledge* rather than a *facilitator of learning*. On the other hand Ms Boitumelo took an andragogical stance when she remarked:



At primary school when we taught all those subjects it was up to you to find out how you were going to teach them. There were no laboratories, there was nothing. The environment was your laboratory, and then sometimes an extension of the laboratory would be your house if you wanted to demonstrate something like that. And then when you came to college you'd find that everything was there. We had laboratories, and we had all those things to teach. You'd find that there were students who knew more than you did. So it was different, you could identify students you'd consider knowledgeable. At times when you were in trouble you could approach them and ask "how do I explain this?... how can I do this?... can you help me with this?..." this is how I managed to move on. I would tell my students, "I don't know it all". It was even better because I was teaching in-service students and they would tell you that certain methods of teaching had changed. It was enriching for both the student and the teacher. For instance I would explain a concept and ask the students to give me examples.

Theme 4: Induction

When it comes to induction, the majority of respondents indicated that they were not inducted. The few who were inducted said that this was general and did not include handling of adult learners. In this regard, Ms Davis remarked:

It was very general; we were told that this is how the university works and what to do and so on and so forth. But we were also told to draw up a guide, but now in February, we had already done our guides, and then now in June they are telling us how to do it (chuckles). So, it should have perhaps been in the beginning before we'd even started.

Many respondents felt that induction could have assisted them overcome problems related to gaps in pedagogical content knowledge (PCK), the attitude of adult learners, and issues of respect and power in the classroom. A case in point was the response of Ms Davis who said:

Umm, one of the courses I was teaching, most of the students were more mature students and here there are straight out of school students. And I see quite a big difference in the level of maturity, umm, their more self-regulated the older they are the younger ones are less self-regulating I think because they've come from a school environment and yah, it takes longer to entrench your own way of doing things. Umm, yeah I think also definitely cell phones, the cell phone issue.

In the same vein, Ms Daniel stated that:

Well I think when you first start in teacher education, you have to remember that these are adults that you are dealing with and not your 10 or 11 year old that you find in a normal classroom. So you become very conscious of that. But I think at the same time, there are things that adult's do that really annoy you and you can't tell them to stop. Like arriving late for lectures or putting away their cell phones you know. And then because they're so many in this lecture, you lose track of a couple of people then later on you see them texting and you know. It's quite difficult because you can't use the same strategies that you use with children you know, like "you go and stand in the naughty corner now" (chuckles) you know. Umm yeah, there are differences but there are similarities as well.

Theme 5: Teaching student teachers versus teaching primary or secondary school students

Although there were a few respondents who felt that there was no difference between teaching school pupils and student teachers, most respondents indicated that it differs

with some highlighting the fact that the student teachers are more mature and therefore are focused. This was the view of Ms Davis who remarked that:

Yes, let me give you an example with the more mature adult students, because they are more dedicated to their course, they will make sure that (they are) always there. But with young students, they've had a party, they've had a long weekend, they don't have to come to a lecture on Monday. That's the difference.

The issue of the teacher educator no longer being the authority figure in class was also highlighted by Ms Donald who said:

Yahh! (it is) totally different. It differs in so many ways; remember secondary students are still children, if I can put it in that way. While student teachers, most of them have their own backgrounds, and experienced in different ways. Some are parents, age wise, some of them are of my age, you know, so they are different. Because unlike secondary students, you can be in charge somehow, even with student teachers you have control somehow but, you need to consider their needs. Some of them come with their own problems, for example some of them have never been in a class (attend lecture) and when you try to follow it up, they personalize that and say that you are being harsh, but you are just asking and not being harsh. Sometimes they give reasons such as my husband or my child was sick, you know what I am saying, of which you can't (get) those responses from secondary school students. And with the secondary school students, there is the opinion of reaching out to their parents and saying that this child is not performing well and ask for assistance. So if someone has not been in class for some time you can (follow) it up, but with adults, you have to go directly to that particular person and maybe it becomes a negative response to that particular person.

There were other subtle differences to do with the teacher's image and identity. As Dr Bobedi pointed out in her discussion:

At secondary school, though you will prepare, when you get into higher institutions, the anxiety comes in, there are those who are able to read on their own and beyond and will be able to challenge you when you get to class. That is even before you know your students. These are some of the things that will come into your mind.

The other thing is the dress, you know, the dress, they be will say this one, she goes to PEP (Stores) like I do, she goes to Edgars (Stores) like I do.

She is also dressing the same way like us. You want to be seen to be dressing appropriately to earn respect and may be buy clothes from different shops that they do not go to.

Theme 6: Professional development

While most respondents indicated that they were involved in professional development activities, the focus of these activities was about acquiring content knowledge, keeping pace with the primary and secondary school curriculum or attaining a higher degree in their field of specialization. Only a few, like Dr Bobedi and Dr Darius, had workshops related to adult learning and mentoring. Most respondents, however, acknowledged the need to get involved in professional development activities, but cited the lack of time, resources and incentives as impediments to their lack of participation.

With regard to support offered to teacher educators to grow professionally, Ms Boitumelo was of the opinion that this was not taken seriously at institutions B and C. She expressed the following sentiments:

I don't think it's taken seriously because if it was, we would be sending the people for PhD for one. The fifteen years that I've been here, a lot of people would have gone for PhD and they would be doing the last ones. And then generally *hela* even in the colleges, what courses can we do? Once you have done your Masters, you can't just sit and say "no I'll go for a workshop ya interactive methodology," how many people go? What happens, are we refreshed? Nobody has refreshing courses that keep us alive, there's nothing motivating after a while. Like when I teach assessment; I don't need to take a book anymore because it's all in my head. I struggle a lot when I have to teach (educational) administration because it's a new course that I'm teaching. I'm enjoying it but it engages me and that is what I am learning, I am learning on the job. So that is the only way I can do it for now. We need a lot more courses that will revitalize us.

Dr Bobedi, on the other hand, was of the view that the reason why teacher educators at institution B were not motivated to engage in self-initiated professional development activities was because:

(In) my opinion; firstly I would say, the government has, well, a way of not encouraging people to continue with professional development. In Botswana, once you have done your first degree, it's enough generally.

You continue with your Masters, with your PhD you are not even recognized, that on its own; is really discouraging. It is discouraging because I think that is one of the reasons why a lot of lecturers are not engaged in professional development. You will still be the same person. No one is going to recognize that you have a PhD! You will still be the same person. Knowing that you are there is really very important. We are in this field (of Special Needs Education), you will be shocked to learn that Inclusive Education Policy has been launched on a certain day, that doesn't come well, Just asking one to run short courses, or being called to go to present, those things, is enough, not necessarily in monetary terms.

Respondents advanced a number of areas that should be prioritized when planning professional development activities. These included how to handle adult learners, professional studies (teaching methodology), practical and skills-oriented teaching, how to teach using technology, research, plus teaching and learning at tertiary level (what Dr Andrew and Dr Darius call "scholarship in teaching"). In addition to these, Dr David also took note of counselling, when he intimated that:

Umm, as I have mentioned before, I think all of them (counselling, assessment, and research) play an important role. Yah, because really if you don't have all those, there is no way you can be competent, you cannot be a competent teacher without knowing all these aspects and have something to fall back on. Because the type of students you have might have enough exposure and may even be far ahead of you in certain aspects. So if you relax and say I will only focus on one aspect, then there can be a very serious problem.

Theme 7: Teacher education as a unique profession

In response to the question of whether teacher educators are a unique profession, most teacher educators did indicate that they believed that they are unique when compared to primary or secondary school teachers or other lecturers in higher education. Ms Agang, for example, referred to the fact that teacher educators are expected to add a "human touch" to what they do and "be models" to their charges as she noted:

And there is a difference, and the big difference is we have got children and we have got adults that are only looking for a pass to get to the next level, but those guys are going to deliberately demonstrate what they are to a certain group of youngsters and it is different, when you send them out, you want to make sure that they are ready and will survive.

She further intimated:

Up to a certain level, yes (teacher educators are unique). Most things that teacher educators do umm academic umm workers, lecturer's researchers don't do, because there is that human touch that comes to play because you are teaching them how to teach your child, somebody's child and umm your concern about what they are going to project out is very important.

On the other hand, Dr Andrew was clear about the difference:

There is a difference since teacher educators teach about teaching.

He further explained that teacher educators, unlike other lecturers in higher education, have above all other attributes:

High levels of research skills. Should have subject content knowledge as a well as pedagogical content knowledge and should demonstrate above average teaching competencies.

Meanwhile, in the opinion of Ms Bame, teacher educators are unique because they empower their students with a vision that these are the ones going to improve the quality of education. She argued that:

Yes, we are not only teaching these students to pass, we are teaching them so that they can go and teach. That is the difference. I have to keep the wheel moving, and I have to power it, if I teach these students research skills, they will keep renewing what I have taught them.

Similar sentiments were expressed by Dr David who commented about the strategic nature of teacher education when it comes to improving the general quality of education. He said:

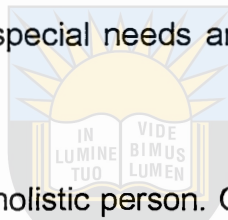
It is unique in that it is important in that when you are teaching or training teachers, teacher educators; it is strategic because even the quality of teaching and learning that will take place in the future is largely dependent upon the quality of lecturers or teacher educators. So if the quality of teachers, the quality of teaching and learning that will happen in the future is largely dependent upon me, if I am not serious about my work then that will mean I'm not serious about learner outcomes in the future. So, that is why I'm saying it is unique and it's important, it is strategic.

Dr Bobedi, however, was not quite clear about the difference when it comes to differentiating school teachers and teacher educators as can be gleaned from her response:

I think we can, as long as one, we do not call anyone to be a teacher. As long as a teacher is someone who has been trained in that area. Not just like calling anyone who has done form 5 to come and teach or anyone who is still doing first degree.

We can stand out in terms on how we approach other people, when you do teacher training, you get to learn how to approach different people, as a teacher you get to learn how to approach or work with people of different calibres and all the like. That is the uniqueness.

However, given her background is special needs and inclusive education, Dr Bobedi was of the view that:



A teacher should be a holistic person. Given any situation, a teacher may have to have some solutions. Given a certain individual, a teacher should assist this individual. That is why I always say “give me any student, I will be able to teach any student”. I was taught how a person is, these are the characteristics, you are likely to observe this and this is what you have to do. Just that, makes you unique.

These statements seem to show that Dr Bobedi was more articulate about her being a teacher rather than a teacher educator.

Overall, however, the issue of teacher education being unique is echoed in the opinion that Dr Andrew expressed which was to delink teacher education from general university education to avoid competing interests. In his opinion:

It is high time we have a fully-fledged university specifically dealing with teacher education. It is a question of resources basically that can be channelled into education specifically without competing with other interests.

Theme 8: Research versus the teaching functions

Opinions on whether the research and teaching functions of teacher educators were in conflict were split almost evenly with some believing that there was a conflict between the two functions and those who did not see a conflict. For example, Ms Agang felt that there is some form of conflict between teacher educators' teaching and research functions. She argued that:

Research is important, but not at the expense of your charges, because I do research for my teaching and that's very important and research for publication is important but not at any cost, because people tend to say you have to produce two or three papers/articles a year when do I find the time to do a good one.

A similar view was expressed by Dr Darius who believes that research is glorified and rewarded at higher education institutions. She put it succinctly that:

Yeah, because with research there are benefits and there are no benefits to being a good teacher so its teacher excellence versus research. By being a researcher you are rewarded heavily and every paper you produce you are rewarded, but being a teacher I think we are just acknowledged because there is the VC's (Vice Chancellor's) Teaching Excellence Award. And that's why people abandon teaching and they go for research because most of the time good teachers are not necessarily good researchers and vice versa and how do you bring the two together so that you can get good researchers and good teachers. How do you get this good teacher to do research while he/she is also teaching and find ways of researching his or her own teaching? So I think that's where we are.

Dr Andrew and Ms Boitumelo, however, found no conflict in the teaching and research functions because, as Ms Boitumelo put it:

I don't think there is conflict between them because the two of them have to work hand in hand. There is no way you can do one without the other so there's always been a link between that.

Dr Andrew augmented this argument by reminding the researcher that research should inform practice. He noted:

I think that is then, that is where now you will appreciate the importance of research and how it should be linked to practice. What I'm getting from what you said at the beginning, people kind of separate research from practice and they want to focus on practice and maybe not do research or maybe do research and forget about practice and as far as I am concerned the two should be linked somehow. I think we research in order to extend our knowledge in order to develop practice, otherwise why are we researching? That cycle, theory informs practice.

Dr Bobedi, however, was of the opinion that research findings should be shared and there should be greater emphasis on action research. She said:

I would prefer people who have information, they have done the research, the action research, and they should come out to share with their colleagues. The people who have the experiences in class should do the action research to come and present to the colleagues see how they can handle those situations.

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Dr David, on the other hand, pointed to the conflicting demands for teacher educators' time. As a newly appointed teacher educator at institution D, he had this to say:

Mhmm! I can't say yes or no because there are many things. For example, now I'm from school experience. I haven't touched research at all. If I have touched I think about just two hours since I have been appointed. I have to mark papers, I have to set papers and prepare thoroughly (for my lectures).

The seven themes presented in the preceding section were those that had been anticipated. However, there were others that emerged from the interview. These were in relation to scholarship, professionalism, formal and informal mentoring, linking teacher education to schools and delinking training of teachers from general university education. These will now be presented in the next section and their correlation to the ones identified will be highlighted.

Theme 9: Scholarship

One of the themes that emerged from the interviews was that of scholarship. Dr Andrew at institution A and Dr Darius at institution D had strong opinions about the need to have teacher educators becoming scholars. They linked this to teacher educator preparation, induction and professional development. Dr Darius, for example, passionately talked about the need to turn good teachers into scholars by taking them through a well-structured induction and professional development programme. She opined thus:

Well, all I can say is that; we are missing out if we don't induct people who are coming into teacher education because we are missing out on turning the good teachers into scholars and also turning the good teachers from schools into good lecturers. Because at least for me, some people come with methodologies that we need for our students that are doing the foundation phase, they also come with content knowledge. But now they need to combine the two so that they can have pedagogical content as needed in a higher education institution on how to teach an adult.

In the same way Dr Andrew expressed the need to link theory and practice and for teacher educators to continually conduct research that informs practice. When responding to the perceived dichotomy of research versus teaching, he said:

What I'm getting from what you said at the beginning, people kind of separate research from practice and they want to focus on practice and maybe not do research or maybe do research and forget about practice and as far as I am concerned the two should be linked somehow. I think we research in order to extend our knowledge in order to develop practice, otherwise why are we researching? That circle, theory informs practice. We do not want to research and pile our information in the library, for what? At the same time we do not want to practice blindly without infusing new thinking and so on.

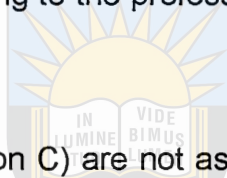
Theme 10: Professionalism

The other theme emerging from the interviews was that of professionalism. In this, issues related to the professional nature of teacher education were highlighted. As an example, Dr David expressed a concern about the declining professionalism among teachers in schools. He suggested that teacher educators also need to emphasize this in the teacher education curriculum. He argued:

... Focus on professionalism. Professionalism because professionalism is gradually eroding among educators out there because if the course itself could focus on professionalism; that will assist teacher educators to be better, quality educators and be prepared to deliver. I think mine is just simply saying focusing on what you are expected to do as a teacher educator, full stop. That is professionalism. If from time to time you take time off the learners doing other things, and that to me is unprofessional. I'm not saying they should be submissive to everything. But I'm saying, that commitment to their work must be emphasized.

I think that there should be a special module, even if it's a half year course especially at the level of 4th year, before they go out into school so that they will know when they get there that would be unprofessional in the eyes of the profession to be seen to be doing other things other than the actual teaching.

Mr Charles had other concerns relating to the professionalism of teacher educators. He had observed that:



...a lot of lecturers (at institution C) are not as practical orientated as they could be. I am talking about practical subjects where lecturers often teach students the way they were taught in secondary school, by chalk and talk. So I think for teacher educators, they need to be more informed about being more practical orientated and skills orientated. And even in the assessment of students, tests and exams, I feel that the standard we are testing is not much above Cambridge (O level) level, at least in certain subjects. And err, we need to be moving forward from a knowledge level to higher levels of assessments. So; myself, when I assess students by tests, I always have plenty of those types of questions, not just say "state two fertilizers", but maybe put the student in a situation where they are a farmer for example.

Theme 11: Mentoring

The last theme that emerged from the interviews concerns mentoring. Participants highlighted the need for formal and informal mentoring as they responded to different questions in the interview. As an example, Ms Davis suggested a more subtle way to *induction to accommodate teacher educators who join teacher education at different times*. She suggested:

Well, I think it doesn't have to be a formal one (induction) like I came earlier or later into a university and I've learnt from Ms Daniel for

example, about this, you know I've done this now, what must I do... you know. So, maybe informal mentoring from the beginning could be helpful.

On the other hand, Ms Daniel proposed a strong mentoring programme with new teacher educators choosing who is to be their mentor. It is interesting that she uses the term "accompany" to describe the relationship between the mentor and mentee. She pointed out:

It would be very helpful maybe when you arrive at a new university, maybe someone just says, this is the person that will accompany you anytime of the day, this person will answer all your questions. But yeah, even the group we've formed has taken time.

I think another thing is, in a university, yes you've got a research, learning and community function, but on the other hand, it talks to management and also have the space for collegial relationships. You know sometimes you'll be only going to your office and only be going to your lectures. And you don't have a space and the time to actually get to know each other, and get to know the person and that they do know this knowledge and they won't mind me going to ask them. And its dependent on the culture and flow of an organization as well, if people are free to do that, then yah, it makes a difference.

You know what I think the problem here at institution D is the lack of senior staff members, because there's a lot of junior's yah. At my previous place, I knew exactly which senior professor, which senior person I respected and I would just go knock on their door and ask for advice. I don't feel like I have that with anybody here.

The views expressed by Ms Davis and Daniel (at institution D) were similar to those of Ms Agang at institution A, who was of the opinion that:

In colleges of education, I think it is very important that each discipline as lecturers finds a way of inducting their newly appointed lecturers, whether where they have come from schools or they have done something or not. I think sharing and find out whether they have undergone, or been inducted before and their training, especially the new ones and people thinking that it has to come from above is wrong because it is a composite thing. It is a team thing and this is how I think we used to manage in institution C everybody came with what they had and shared. I have a mentor here actually, but umm, I have to find time to talk to him and share. It's interesting.

Ms Donald was of the opinion that the mentoring and professional development programme should have a strong element of guidance and counselling as this extract from the interview indicates:

You know what I am very passionate about, and I normally say this when I am talking to my student teachers is, number one; they should be conscious about the way they portray themselves, the dress code is also important and the approach. And I always advise them that when they enter the classroom, they should bear in mind that all learners are equal and all of them are innocent. Even though they might be exceptional learners, they need not take that on with a negative attitude, they need to know how to handle that learner, because that learner need not be rejected. Most of the time I always tell them that, where ever you are, you should be in charge of your class, you should be disciplined towards your work, you should get to know your learners and do a lot of reading so as to plan well ahead of time. By doing all these things will make work easier, you get what I am saying.

And then again, with learners, I always, for example, yesterday there was a student who came to me just for some advice, and said during the last lesson, you said something that I loved, and I now have 1, 2, 3, 4 questions. Also, to deal with a learner who did not turn up for a test? And also how to deal with a learner who is making noise during a test?, you understand, so you need to be a very principled somebody. At first, you need to talk to your learners first, you need to know what they expect from you and they need to know what it is you expect from them and you take it from there. If that learner continues doing that, remember you are there to protect all learners and you cannot let that particular one disrupt the whole class. You have to deal with that learner immediately, you have to, you can't wait because within say 45 minutes with other learners who are willing to learn. But you deal with that particular somebody in a professional way and you don't have to make them feel bad, yah, you need to call them to order professionally. And then later on, that's when you can try and call that particular somebody and try and identify what might be the cause of the problem. Maybe you won't know that you are the problem and not the learner, so you have to try and look at various problems. Sometimes it might be the approach that you use, sometimes *maybe you are joking and unaware that the joke goes directly to somebody*, so yah, there are so many things that you have to look at.

Another form of mentoring as modelling and apprenticeship was expressed by some respondents. Dr Chaba, for example, she seemed to advocate for an apprenticeship

model of teacher educator professional development with a more experienced member of staff demonstrating and guiding the novice. She says:

I believe in teacher assistants, that our students should somehow work together with their lecturers when preparing for other classes. I am having a problem with this micro-teaching being a one-time thing, without continuity in what is going on. If we are to have something like school experience, where students will go into schools and be teacher aids or whatever to the other teachers. That mentoring is important if we cannot do it at college ourselves. That is happening elsewhere. A teacher aid is important, having this student teacher working together not as a substitute; (but rather) handling the class together, before they are left alone in the classroom. With us, it will be working with the HOD (Head of Department) for some time and see what is going on. I believe that would, help.

Related to modelling, an analysis of Mr Charles' interview centres on linking the teacher education curriculum to what is going on in the schools. In this he advocated that the teacher educator should model for student teachers what they are going to do in schools. His argument is as follows:

Umm, I think we need to be more aware of the changes in the secondary school system. Syllabuses are changing, and sometimes we don't always change our own syllabus to cater for that. And also, in some of the exam papers you find that the style of questions is also changing, becoming more pupil-orientated, needing more thinking by the pupil. Rather than just saying state five parasites affecting livestock for example, you need to go beyond that. And again as I said, we need to raise our assessment procedures and our content to be in line with that in schools.

5.2.5 Analysis of key documents related to the study

The following documents were analysed in an attempt to respond to the research question:

How do the teacher educators (in Botswana and South Africa) adjust their teaching practice to cater for needs of their students who are adults?

The criteria used in selecting these documents was that the selected document should provide information on induction and professional development as well as provide an

indication of the educational practices carried out by teacher educators. It is against this background that the following documents were analysed:

- A training policy for education professionals in Botswana
- Guidelines for teaching excellence awards for Institution A
- Learning and teaching policy for institution A
- Teaching and Learning Policy for Affiliated Institutions the University of Botswana
- Faculty of Education Guide for Institution D
- Draft Induction Policy for Institution D

The reason for the review was to examine the policies that undergird induction and professional development practices in the institutions under study. A document analysis form developed by the researcher (Appendix 6) was used to summarize the key contents in the documents that were related to the study. The researcher took note of the name, date of production, and the author/s of the document as well as the purpose for which the document was produced. The form has space for summarizing what the document is all about with reference to preparation, induction and professional development of teacher educators as teachers of adults. Information gained from the documents was to inform the researcher as he drafted the proposed model.

Analysis of documents from Institution A

An analysis of these documents indicates that institution A has no clear academic staff induction policy and that the issue of professional development of academic staff is devolved to departments and faculties. The Academic Quality Management Policy for institution A (Appendix 6A), while requiring the institution to recruit quality academic staff with requisite qualifications, does not specify how they are inducted. The policy specifies that their professional development is the sole responsibility of the departments and faculties.

The report of Centre for Academic Development (CAD) External Review Assessment Evaluation of the first cycle (2004- 2010) for institution A, highlighted the strengths and shortcomings of the practices related to induction and professional development of academic staff at institution A. While the report did not make specific reference to academic staff induction, the external reviewers noted that the most common teaching methods employed by academic staff included lecturing, small group work, power point presentations, peer tutoring, Web-CT, portfolios and the use of on-line resources. The report, however, was critical of the fact that there was no conscious use of pedagogical (andragogical?) principles and strategies in some departments. The external reviewers also noted that in many departments, research methods were taught in an “abstract” and mechanical manner”. The personal tutor system was also criticized as being ineffective and the “research mentoring system” among junior and senior academics was very weak.

Related to induction and professional development, the external reviewers recommended that institution A should develop a human resource development policy that would, among others, highlight “career ladder training and progression”. In addition, faculties and departments should facilitate the use of student centred approaches, deep learning and student collaborative strategies.

Analysis of documents related to Institution B and C

Two important documents that relate to induction and professional development of teacher educators for the two colleges of education were also examined. These were: The Teaching and Learning Policy (TLP) of affiliated institutions by the University of Botswana (2009), and the Training Policy for Education Professionals in Botswana by Bennell (1995).

The purpose of the TLP is to harmonize teaching and learning processes in institutions affiliated to the University of Botswana. While the policy does not directly make reference to teacher educator preparation, induction and professional development, its guiding philosophy is the use of learner - centeredness in teaching and learning in these

institutions using diverse teaching and learning approaches like self-directed learning, active learning and independent learning. Given that these approaches have an andragogical orientation, it is expected that teacher educators should know and use these approaches in their educational practice. However, evidence elsewhere points to the contrary (c.f. Kasozi, 2009; Pansiri et al., 2011).

The second document that was analysed was the Training Policy for Education Professionals in Botswana by Bennell (1995). The purpose of the policy document was to guide the Ministry of Education in Botswana on the training of education professionals in Botswana. These include teacher educators (lecturers) at institutions B and C. While the policy is meant to address training issue of all teaching professionals, there is only a cursory mention of teacher educators requiring training in teacher induction processes and to be periodically attached to schools. The policy, however, is silent on guidelines for the actual preparation, induction and professional development of teacher educators.

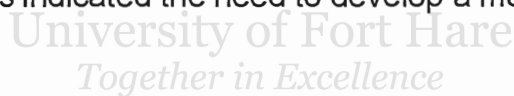
Analysis of documents from Institution D

The researcher also examined the draft Induction Policy for Institution D. It was noted that the policy describes staff induction as being conducted in three phases (i.e. institutional, departmental and by the Teaching and Learning Centre). In particular, the induction of academic staff is the responsibility of the Teaching and Learning Centre (TLC).

Newly recruited academics are taken through a series of activities that last up to one year. Members of the academic community who do not possess a teaching qualification are required to register for a Post Graduate Diploma in Higher Education and Training (PGDHET) administered by the TLC as part of the requirements for promotion and progression. Assessment of this Diploma is structured in such a way that it results in the graduate having produced a portfolio. Registration for the PGDHET for academic staff with a teaching qualification is voluntary.

A scrutiny of the PGDHET curriculum (as outlined in institution D's Faculty of Education Handbook) indicates that it has many aspects that would assist to address gaps identified in the literature and by respondents in the research as problematic for teacher educators. These include the methods of delivery which are mostly learner centred (use of self-study, portfolio development, and evidence based assessment, reflective exercises, action research and work based learning). These methods are in line with andragogical principles. The main drawback to the course is that it is not compulsory for teacher educators (or those with a teaching qualification) most of whom did not find the programme relevant. It is not the purpose of this study to critique the PGDHET offered by institution D, but the underlying philosophy of the programme is akin to what this research is attempting to advocate.

In summary, the analysis of documents enabled the researcher to identify gaps, common trends and patterns that were to inform the development of a model for preparing, inducting and developing teacher educators in Botswana and South Africa. The outcome of this analysis indicated the need to develop a model in this regard.



5.2.6 Summary

In this chapter, data collected during the qualitative phase of the research was documented and analysed. Key features of the induction and professional development process of teacher educators as teachers of adults were highlighted. Key themes from the survey were documented and reported on. From the findings it can be noted that teacher educators enter teacher education from a variety of settings but mainly from primary and secondary schools. The majority of them are not prepared to teach adults and most of them are neither inducted nor professionally developed in this area.

The next chapter discusses the integration of results obtained from the quantitative and qualitative phases of the study.

CHAPTER 5 (3)

Integration and analysis of results from the quantitative and qualitative phases of the research

5.3.0 Introduction

In chapters 5(1) and 5 (2) results from the qualitative and qualitative phases of the study were presented and analysed. Attention is now drawn to the integration, analysis and interpretation of results using mixed methods techniques. This procedure involves looking across the quantitative and qualitative results and making assessments of how the information addresses the (mixed) research question (Tiddlie & Tashakkori, 2009:212). This is in order to present the entire results as a coherent whole. Mixed methods data integration also reduces the gaps between inferences drawn the two phases of the study. It also enables the researcher to compare and contrast the findings from the quantitative and qualitative phases (Tiddlie & Tashakkori, 2009:287). Based on the integration of the two sets of results, reasonably valid inferences can be drawn. According to Tiddlie & Tashakkori (2009), inferences are “conclusions and interpretations that are made on the basis of data collected during the study.” These inferences can be process inferences where meaning is created using a series of steps or can be made as conclusions made on the basis of obtained results.

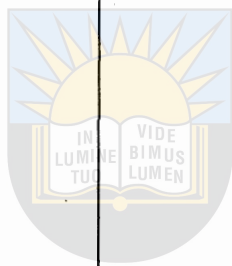
According to Creswell and Plano Clark (2011) it is recommended that in a mixed methods research report, the researcher should pay particular attention to the integration and analysis of data drawn from the quantitative and qualitative phases of the study. This is in order to increase the validity and reliability of the results as well as draw valid inferences across the phases of the study. Integration of data also enables the researcher to unearth inconsistencies that may exist within data collected in different phases (Driscoll, Yeboa, Salib & Rupert, 2007). In this study, the mixed methods integration was with regard to answering the research questions asset out in chapter 1. To reiterate, these questions were:

1. How are teacher educators in Botswana and South Africa prepared, inducted and developed as teachers of adults? This question was further broken down into the following sub-questions:
 - (a) Who are teacher educators in the four selected sites?
 - (b) What motivated the teacher educators to join teacher education?
 - (c) How were they inducted and developed as teachers of adults?
 - (d) Are the educational practices of the teacher educators congruent with adult learning principles?
2. How do the teacher educators (in Botswana and South Africa) adjust their teaching practice to cater for the needs of their students who are adults?
3. What model can be recommended to improve the preparation, induction and professional development of teacher educators in Botswana and South Africa as teachers of adult student teachers?

This chapter therefore provides for the integration and analysis of the results from the quantitative and qualitative phases of the study. This analysis and interpretation takes the form of a tabular display (Table 5.3.1) and a discussion according to the research questions.

Table 5.3.1 Integration and analysis of results from the quantitative and qualitative phases of the research

Research Question	Quantitative results	Qualitative results	Integration and analysis
How are teacher educators in Botswana and South Africa prepared as teachers of adults?	Of the 82 respondents who claimed that they had attended a teacher education course, 54 claimed that the course had prepared them to handle adult learners. Ref: Tables 5.1.5, 5.1.6, 5.1.7 and 5.1.8.	All teacher educators that were interviewed indicated that they had not received any formal training in teacher education or how to handle adult students.	In the quantitative phase, there seemed to be no consensus when it came to the statement that "Teaching skills acquired by teachers during training at a college or university prepared you to teach adult learners". Again, in the qualitative phase, the revelation that all



			<p>teacher educators interviewed had not received formal training in teacher education contrasts sharply with the quantitative results where 65% of teacher educators indicated that they had received training in teacher education at college or university level. This may be an indication of the respondents' uncertainty on their roles as teacher educators as opposed to being teachers.</p> <p>This may be a result of misconception that "training of teachers" is equivalent to "training of teacher educators".</p>
How are teacher educators in Botswana and South Africa inducted as teachers of adults?	Out of the 55 who indicated that they had been inducted, only 5 were inducted on how to handle adult learners.	The majority of interviewees indicated that they were not inducted. The few who were inducted said that this was general and did not include handling of adult learners.	Qualitative analysis confirmed what was reported in the quantitative phase; that there is little induction done to assist teacher educators deal with issues of adult learners. Many of the interviewees felt that induction could have assisted them overcome problems related to gaps in pedagogical content knowledge (CPK), the attitude of adult learners, and issues of respect and power in the classroom.
How are teacher educators in Botswana and South Africa	53 (40.5%) indicated they were involved in PD while 75 (59.5%)	Most interviewees indicated that they were involved in professional	The observation that more than half of teacher educators had

<p>developed as teachers of adults?</p>	<p>indicated that they have never been involved in professional development activities that were aimed at the equipping them with skills of handling adult learners. This result was significant at 5% level.</p>	<p>development activities, which mainly focused on acquiring content knowledge, keeping pace with the primary and secondary school curriculum or attaining a higher degree in their field of specialization. Only 3 of the 12 interviewed had attended workshops on adult learning and mentoring.</p>	<p>not attended any professional development activities related to adult learning is an indication of a gap in this area. This is coupled with the absence of previous exposure to andragogy and the subsequent over reliance on pedagogically oriented teaching methods. Yet this was a priority area identified by a number of interviewees.</p>
<p>Are the educational practices of the teacher educators congruent with adult learning principles?"</p>	<p>Analysis of responses summarised in Table 5.1.13, indicate that the most popular teaching methods used by teacher educators have a pedagogical rather than an andragogical orientation.</p>	<p>Responses to this question were only collected through the questionnaire.</p>	<p>Overall most teacher educators used pedagogically oriented teaching methods. This pattern was consistent across all the four institutions</p>
<p>How do the teacher educators (in Botswana and South Africa) adjust their teaching practice to cater for the needs of their students who are adults?</p>	<p>From the 75 who had not attended PD activities 20 indicated that they relied on previous experience only; five relied on research only, four asked for help from friends and colleagues only, while two used trial and error only. 37 used a combination of the two or all the three strategies (but including relying on previous experience).</p>	<p>Two new themes that emerged from the interviews could shed light on this research question. One is scholarship in teaching and research and the other is, mentoring.</p> <p>Three interviewees (Dr Andrew, Dr Darius and Dr Bobedi) were of the opinion that scholarship in teaching, research and mentoring would assist novice teacher educators adjust their teaching practices (including catering for adult learners).</p>	<p>There seems to be a gap between teacher educators' beliefs and their practices. They accept that teaching adults is different from teaching children and yet many rely only on previous experiences as former teachers of children.</p>

<p>What recommendations can be advanced to improve the preparation, induction and development of teacher educators as teachers of adult student teachers?</p>	<p>Responses to this questions were collected through document analysis only.</p>	<p>One recommendation from external reviewers for institution A was that faculties and departments should facilitate the use of student centred approaches, deep learning and student collaborative strategies.</p> <p>In the same way, the Teaching and Learning policy for institution B and C advocates for teacher educators to be learner - centered in teaching and learning in these institutions by using diverse teaching and learning approaches like self-directed learning, active learning and independent learning.</p> <p>The PGDHET offered by institution D indicates that the modes of delivery and assessment are learner centred (i.e the use of self-study, portfolio development, and evidence based assessment, reflective exercises, action research and work based learning)</p>	<p>The post graduate diploma in higher education and training which is offered to new academic staff at institution D is premised on theoretical underpinnings of andragogy. The only unfortunate thing is that it is not compulsory for those who have had teaching qualifications before joining the university. Herein lies the dilemma. As advanced elsewhere in this study, teacher educators at institution D are recruited as former teachers of primary and secondary school children. There seems to be a general assumption that since they are teachers, they can effectively teach anybody (including adult student teachers).</p>
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5.3.1 Integrated summary and analysis of results to the first research question

The first research question was: *How are teacher educators in Botswana and South Africa prepared, inducted and developed as teachers of adults?* In the quantitative phase, responses to this question were drawn from answers to question 10 and 11 which sought information on how teacher educators in Botswana and South Africa are prepared, inducted and developed as teachers of adults. Question 10 had three sub-questions and respondents had to choose between a sub-question on having received training prior to joining teacher education or no training at all. Those who received training went on to answer sub-questions 10a (*Where did you receive the training?*) 10b (*How long did the training take?*) and 10c (*Did the training prepare you to handle adult learners?*). Responses to question 10 indicated that 82 claimed to have been prepared and 43 of the respondents were not prepared. Three provided no response to the question. In response to question 10a, 71 out of 82 of those who were prepared had attended a course lasting more than 9 months. In response to question 10b, 46 of those who claimed to have attended a course in teacher education indicated that the course had prepared them to handle adult learners.

However, these quantitative results contrast sharply with the responses given by those interviewed. In the qualitative phase, all those who were interviewed indicated that they had not received any formal training in teacher education let alone in how to handle adult students. The researcher postulates that the high number of respondents (82 out of 128) who claimed to have been trained in teacher education could be a result of misconception by many of them that “training of teachers” is synonymous with “training of teacher educators”. This is a widely held misconception among educationists and educational commentators throughout the world as cited in literature (c.f. Cochran-Smith, 2005; Boyd *et al.*, 2005, 2007; Murray & Male, 2005; Murray, 2008).

With regard to induction, the quantitative results indicated that only five out of a total of 55 respondents who were inducted had been inducted on how to handle adult learners (c.f. Table 5.1.8). However, the qualitative interviews revealed that none of those

interviewed had received induction specific to handling adult learners. In this regard, the qualitative analysis confirmed what was reported in the quantitative phase: that there is little induction done to assist teacher educators to deal with issues of adult learners in the new context of teacher education in the four institutions under study. Most interviewees were of the opinion that induction could have assisted them overcome problems related to gaps in pedagogical content knowledge (PCK), the attitude of adult learners, and issues of respect and power in the classroom. These results confirm what is cited in the literature where novice teacher educators are simply thrown into “the deep end” of teacher education to “swim or sink” on their own (c.f. Lunenberg, 2002; Mofokeng, 2002; Beijaard, 2011)

On the question of professional development, the quantitative results indicated that 73 (59.5%) respondents had never been involved in professional development activities that were aimed at equipping them with skills of handling adult learners. This result was significant at 5% level. These results are collaborated by the responses from some of the respondents who were interviewed. They indicated that the professional development activities, in which they were involved, focused mainly on acquiring content knowledge, keeping pace with the primary and secondary school curriculum or attaining a higher degree in their field of specialization. Only three (out of twelve) had attended a workshop or two on adult learning and mentoring. The observation that more than half of teacher educators had not attended any professional development activities related to adult learning is an indication of a gap in this area. This is coupled with the lack of previous exposure to andragogy as teachers in primary and secondary schools. This may be the reason for teacher educators’ over reliance on pedagogically oriented teaching methods (c.f. Table 5.1.13). Yet, this was a priority area identified by a number of interviewees. In his research on INSET activities in universities in South Africa, Mofokeng (2002) recommended that since university lecturers are adult learners, andragogy should inform their professional development and in-service education and training (INSET) activities. This researcher wholly agrees with this recommendation.

In addition, quantitative data analysis of responses summarised in Table 5.1.13, indicate that the most popular teaching methods have a pedagogical rather than an

andragogical orientation. These findings confirm what van Aswegen (2004) and Kasozi (2009) had observed in some South African and Botswana teacher education institutions that teacher educators mostly use teaching methods that are akin to pedagogy rather than andragogy.

5.3.2 Integrated summary and analysis of results to the second research question

The second research question was: *How do the teacher educators (in Botswana and South Africa) adjust their teaching practice to cater for the needs of their students who are adults?* From the quantitative results (Question 15), 90% of respondents agreed that teaching adults is different from teaching children (Table 5.1.12), with the majority indicating that they had not been developed to handle adult learners. Further critical analysis points to a possible tension between the teacher educator beliefs and their practices. This is in relation to their acceptance that teaching adults is different from teaching children and yet they rely mainly on previous experiences as former teachers of children to teach adult student teachers. Only a few acknowledged that they did empower themselves through research. This is further confirmed by the large number of respondents that answered in the affirmative when asked whether teacher educators need to model how student teachers are going to teach in schools (c.f. Table 5.1.12 and 5.1.13). Their over reliance on pedagogically inclined teaching methods could be a demonstration of this.

To adjust their teaching in order to cater for their students who are adults, 57 out of 128 respondents relied on previous experience; four asked friends and colleagues, while five depended on research and two used trial and error. Most of them however used a combination of two, three or all the four strategies (one of them being experience from schools). Although in the interview there was no question that directly addressed teacher educator practices, the researcher drew inferences from the question on scholarship in teaching and research. Three interviewees (Dr Andrew, Dr Darius and Dr Bobedi) were of the opinion that these strategies (scholarship in teaching and research) could assist novice teacher educators adjust their teaching practices. When compared

to responses to a similar question in the questionnaire, there seemed to be an indication that most teachers were not sure whether research and teaching are interrelated. Many seemed to indicate that the two teacher educator functions are mutually exclusive. The responses from interviews that indicated congruence in research and teaching scholarship were mostly given by seasoned PhD holders. The researcher could infer that their professional development as scholars had assisted them alter their views on teaching and research functions of teacher educators. It could be argued that this would be the case if all novice teacher educators were professionally developed to embrace this view (c.f. Smith, 2003; Martinez, 2008; van Velzen, 2010; Mayer et al., 2011). Similar results were obtained by Jean Murray in England where some novice teacher educators viewed research as “practical enquiry, routinely undertaken by reflective practitioners; others saw it as engaging in and publishing their own research; yet some saw research as a highly ‘theoretical’ activity, practiced and owned by ‘academics’ and essentially separate from their practice as teacher educators” (Murray, 2010:199).

5.3.3 Integrated summary and analysis of results to the third research question

The third research question was: *What model can be recommended to improve the preparation, induction and development of teacher educators in Botswana and South Africa as teachers of adult student teachers?* This question was not asked directly in the qualitative and quantitative phases. This could be regarded as the mixed methods question whose answers are deduced from the findings obtained from the quantitative and qualitative phases of the study (Tiddlie & Tashakkori, 2009; Creswell & Plano Clark, 2011). Answers for this question were deduced from the quantitative results, interviews as well as the analysis of key policy documents and reports that guide the induction and professional development of academic staff in the four institutions under study. The results from the questionnaire showed that only a few teacher educators were inducted or professionally developed as teachers of adults. Those interviewed made similar observations. In addition, an analysis of documents pointed to a gap in this area. For example when analysing a report on teaching and learning processes at institution A, the researcher noted a recommendation that was made by the external reviewers for

faculties and departments to facilitate the use of student centred approaches, deep learning and student collaborative strategies. Similar findings surfaced when the researcher analysed the Teaching and Learning Policy for institutions B and C. The policy advocates for academic staff to adopt learner - centeredness in teaching and learning by using diverse teaching and learning approaches like self-directed learning, active learning and independent learning. These approaches have an andragogical rather than a pedagogical orientation.

The researcher found similar nuances when analysing the curriculum for the PGDHET offered by institution D. There is an indication that the modes of delivery for the program were learner centred (i.e. the use of self-study, portfolio development, and evidence based assessment, reflective exercises, action research and work based learning). The results from the questionnaire, interviews and analysis of the documents cited above have pointed to having andragogy at the centre of teacher educator preparation, induction and professional development.

5.3.4 Summary

Having provided an integrated analysis of quantitative and qualitative data, attention now turns to the general discussion of the results of the study. This chapter has integrated findings drawn from the quantitative and qualitative phases of the study. This is a necessary step in increasing the validity and reliability of the findings through drawing inferences from both quantitative and qualitative data and answer the mixed methods question. The inferences drawn from the quantitative phase were either confirmed or disconfirmed by data drawn from interviews and analysis of key documents. In the next chapter data collected through the questionnaires, focus interviews and document analysis is further discussed in detail and then triangulated to provide a detailed answer to the third research question: *What recommendations can be made to improve the preparation, induction and development of teacher educators as teachers of adult student teachers?*

Chapter 6

Discussion of the findings, conclusions and recommendations

6.0 Introduction

This chapter builds on the findings from the quantitative and qualitative phases of the study. It starts with an introduction that reiterates the purpose of the research and the research questions that accompany it. What follows is a detailed discussion of how quantitative and qualitative data was integrated followed by discussion of the themes that guided the analysis. Conclusions and recommendations arising from the research are then presented.

The main purpose of this study was to assess the practices of teacher educator preparation, induction and professional development in selected teacher education institutions in Botswana and South Africa. This was, in part, to gain insight into the possible reasons why the use of learner centred approaches in teacher education has not taken root in such institutions (van Aswegen, 2005; Kasozi, 2009). It was postulated that in order to inculcate learner centeredness, teacher educators have to experience and practice it in their teaching and learning endeavours. It was suggested that this experience and practice could be gained during their preparation, induction and professional development especially if these important milestones are anchored on the principles of andragogy. In order to conduct the investigation, two research questions were formulated. The first was to find out how the teacher educators are prepared, inducted and developed. The second question related to how teacher educators adjust their teaching practices in order to cater for student teachers who are adult learners. Based on the answers to these questions, recommendations to improve the preparation, induction and professional development of teacher educators would be made. The study followed a mixed methods approach within the pragmatic research paradigm. In the following sections, mixed data integration is further elucidated, followed

by analysis and discussion of the outcomes of the research that address each of the questions. In the final chapter, recommendations are made on how to support teacher educators on their professional journey as *learner centred teachers of teachers*.

6.1 Who are teacher educators

Before we can talk about teacher educator induction, it is important to appreciate who teacher educators are. Tables 5.1.1, 5.1.2 and 5.1.3 provide a typical profile of a teacher educator as a middle aged man or woman between the ages of 40 and 60 years. Such a teacher educator will have a postgraduate qualification (Masters or PhD). The teacher educator will have probably taught for a period of not less than 10 years in a primary or secondary school (Table 5.1.3). In addition some of the teacher educators who join the faculties of education (for example at institution A and D) will have been teacher educators elsewhere. This was true for Ms Agang, Dr Andrew, Ms Donald and Dr Darius who had teaching experiences at colleges of education before joining the university.

This profile is similar to that of teacher educators reported in the literature in the United Kingdom, the Netherlands, Israel, Canada and Australia (Russell and Korthagen, 1995; Koster et al., 2005; Murray & Male, 2005; Boyd et al., 2007; Khan and Halai, 2008; Ritter, 2007; Shagrir, 2010; Loughran, 2011). A similar profile was reported for Malawi, Ghana, Lesotho and, Trinidad and Tobago (Lewin & Stuart, 2003). This profile confirms the fact that teacher education is a “second” career that most teacher educators enter into after a chosen career of teaching in schools. As a result of this universal phenomenon, the challenges that confront teacher educators as they join teacher education could be construed to also be universal. However, this is not necessarily true since different teacher education systems have devised different ways of overcoming them (c.f. Section 3.2 of this thesis).

6.2 Motivation for joining teacher education

There are a variety of reasons why teacher educators join the “teacher education profession”. For some it is the desire to teach at a higher educational level (like Ms

Boitumelo, Dr Andrew and Mr Charles); others viewed it as an opportunity for professional growth (Dr Bobedi, Dr David), while some had altruistic motivators such as helping improve the quality of education by training effective and committed teachers (Dr Bobedi, Dr Darius, Dr David and Mr Charles). This was succinctly put by Dr Darius who indicated that after completing her senior teacher's diploma she decided to further her studies and:

...during the study period one of the things that I realized was that had I been taught some of the stuff effectively, I would have taken a different path career wise. So I decided to take it upon myself and said I want to influence change. If I could train teachers in such a way that they could teach learners effectively because I believe if I had been taught mathematics effectively at school, I would have been a mathematician by now. Because I believe some of my teachers did not have the methodologies that I got to understand and explore when I was furthering my studies after completing my teachers 'diploma'.

In some instances teacher educators simply wanted to acquire senior degrees (Ms Bame). In one instance, one teacher educator was simply transferred from a secondary school to a college of education because there were vacancies in that particular college of education (Dr Chaba).

In other cases teacher educators felt that working conditions in teacher education institutions were better and that the environment was more stimulating. There was also the belief by some that being good teachers qualified them to teach other teachers. This was the argument pointed out by Ms Daniel at institution D when she said:

I think it's one of those things that can be associated with being a good teacher. You know there are very little things that can be associated with being a good teacher unless you're going into management. And in my case, I was asked to go and teach other teachers, so it was also kind of an accident I suppose. I've had lecturers who have said "you need to stay in teacher education", so as to share what you know with so many more people.

Similar sentiments were expressed by Ms Boitumelo at institution B. These findings echo those of teacher educators in the rest of Africa, Europe, Australia and Canada (Kosteret *al.*, 2005; Murray, 2005; Boyd, Harris and Murray, 2007; Martinez, 2008; Ben-Peretz et al., 2010; Van Velzen et al., 2010). The notion that "good teachers make good teacher educators" as echoed by Ms Daniels and Ms Boitumelo is reported in the

literature as a major impediment dwarfing the regard for teacher educators as professionals. As early as the 90s Loughran and Russell (1997) noted this dilemma and started a crusade to build up data that would qualify teacher educators as a unique professional group. This is why Maguire in Khan (2011) noted that novice teacher educators were perceived by their students as being out of date and detached from the realities of the classrooms while their colleagues in higher education regarded them as poorly educated and less capable of doing research (Khan, 2011:327).

6.3 Teacher educator preparation

Results from the questionnaire indicated that 64% of respondents claimed that they had studied teacher education at a college or university. This result is misleading as an examination of curricula of the colleges of education and education faculties indicated that there were no specific modules on teacher education *per se*. This was further confirmed by the interviewees from the same institutions who indicated that they were not prepared to train student teachers, but rather trained in teaching primary school or secondary school students. It is postulated that the cause of this confusion between “studying teacher education” and “studying to teach” were taken by the respondents as being synonymous. That is probably why most respondents who answered the question in affirmative claimed that they had studied teacher education for more than 9 months. To support this assertion, all the teacher educators who were interviewed indicated that they had received no training in teacher education, let alone training in the handling of adult learners prior to joining teacher education institutions.

Although many researchers identified this problem of teaching in schools being considered synonymous with teaching of teachers a long time back (for example Korthagen et al., 2005; Swennen et al., 2009), no remedial action seems to have been taken by most teacher education institutions in Botswana and South Africa to remedy the misconception. This misconception further reinforces the earlier assertion that most teacher educators are not aware of the difference between teaching teachers and teaching children.

One key difference that sets teaching in schools from teaching at a faculty or college of education is that the students at a college or faculty are adults. While the majority of those who completed the questionnaire were of the opinion that teaching adults is different from teaching children, the methodologies they often used were contrary to this belief. It could be argued that most teacher educators lacked exposure to adult learning methodologies and these were not part of their repertoire of teaching methods (c.f. section 5.1.3.3).

6.4 Teacher educator induction

Results indicate that in most cases there was no systematic induction geared towards preparing teacher educators for their new roles as teachers of adults. Where induction was conducted (for example at institution D) it was general, voluntary and not specific for teacher educators. When the few who had attended induction were asked to indicate which competencies were acquired during induction, most reported competencies related to teaching and learning; and administration and management. Five of these who attended induction claimed to have gained no competence at all. Most teacher educators, who were interviewed, however, indicated that induction was informal involving guidance on where to find what and in a few cases on assessment and supervising teaching practice.

The absence of formal induction may imply that teacher educators continue to teach the way they were taught to teach students at secondary or primary school level. This would mean that addressing the needs of their adult student teachers is peripheral to the task of “transmitting knowledge” as the pedagogical model dictates. The absence of formal induction also means that new teacher educators take time to adjust to their new environment and teaching and learning settings. Similar findings were reported for teacher educators in Malawi, Ghana, Lesotho, Trinidad and Tobago, and Pakistan (Lewin & Stuart, 2003; Khan, 2011) and in most European countries. The exception was in Israel where the MOFET institute organizes induction and professional development courses for new teacher educators (van Velzen, et al., 2010).

This research revealed the following with regard to induction:

- Generally, teacher educators did not receive formal induction specific to them. Where induction was done, it was of a general nature for all academics.
- Despite the fact that all participants interviewed were former teachers, they faced challenges of teaching in a higher education institution in aspects like motivating students, assessment, delivering lectures and, in one case, teaching practice supervision.
- All those who were interviewed indicated the need for a systematic professional development programme with some wishing to have mentors and others receiving training in the form of PhD courses and workshops on research and handling adult students. In several instances informal induction was mentioned as a more acceptable introduction into teacher education than attending courses. Those who advocated for this option pointed to the difficulty of having a generic program that caters for NTEs from varied backgrounds and settings.
- Most teacher educators indicated that they relied heavily on their experience as primary and secondary school teachers to cope with the challenges they faced in teacher education.
- One experienced teacher educator emphasized the need to share information with others in a collaborative manner especially when conducting research.
- Most teacher educators in the study were of the view that teaching and research are often in conflict in terms of time requirements, resources and rewards, although some were of the opinion that the two aspects are inseparable.

6.5 Coping strategies of teacher educators in handling adult learners

Since the majority of teacher educators who participated in the study had not been prepared to handle adult learners, most of them relied on past experience as teachers in primary or secondary schools. Others however, asked colleagues or used trial and error. In a few cases, the respondents indicated that they did research in the library and

on the internet to cope. The value of having teacher educators acquire advanced research skills in order to cope in novel and sometimes seemingly ambiguous situations was poignantly illustrated by Dr Bobedi (a PhD holder in Special Needs Education) from institution B when she said that she coped with new situations by relying on her experience as a researcher. These findings confirm what Murray and Male (2009), Swennen et al. (2009) and Loughran et al. (2001) found regarding the coping strategies adopted by beginning teacher educators in Europe.

6.6 Professional Development in relation to handling adult students

According to the responses from the questionnaire, most teacher educators (almost 60%) had not been involved in professional development activities specifically geared at preparing them for the task of teaching adult students. This was confirmed in the interviews where only 2 out of 12 respondents had attended a two-day workshop to that end. One interviewee also indicated that while she had never been to a workshop where the focus was on training adults, she however got to learn and do research on training of adults when she taught a module on mentoring for the Advanced Certificate in Education (School Leadership) course.


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An analysis of policy and guiding documents confirmed the findings discussed above. A case in point is the Post Graduate Diploma in Higher Education and Training (PGDHET) offered by institution D (Appendix 9e) which did not specifically address issues of teaching and learning in higher education in relation to adults although the instructional methodologies as well as assessment strategies are akin to andragogy. A similar situation was noted when analysing a guiding policy document for training of education professionals in Botswana in general; and teacher educators and others for institution B and C in particular (Bennell, 1993). In that policy, a lot of attention is focused on teacher training and development in schools with a single recommendation (out of sixty four) made to set up a comprehensive staff development programme for colleges of education.

Paradoxically, two key documents (The Teaching and Learning Policies of institution A, B, and C – see Appendix 9c and 9d) are very elaborate in requiring teacher educators to use learner centred approaches in their practices. This paradox echoes what Swennen et al. (2006) observed that quite often teacher educators are guided by policies advocating learner centeredness and yet their practices do not mirror these policies. The issue of teacher educators not being systematically and deliberately exposed to andragogy (and, therefore, learner-centeredness) during induction and professional development activities leads to the question of why this is not so; given the clear requirement in policy documents for teacher educators to model learner centeredness? In chapter 7, an intervention to address this paradox will be suggested.

6.7 Teacher educator practices

Teacher educator practices were captured by the question that requested them to indicate the most popular teaching methods they used. From the results, it was evident that most relied on the lecture, assignments, group discussion and brain storming. Significantly, all participants had used the lecture at some point in their teaching of student teachers, but the least used methods or omitted methods were fish-bowl and buzz group. The use of teacher centred methods like the lecture may be an indication that most teacher educators' view of learning subscribes to the deficit rather than the constructivist model. The two least used or omitted methods (fish bowl and buzz groups) are highly learner centred and one would expect that teacher educators would use them in some instances during their teaching practices. The fish bowl method, for example, is a social learning method that helps a student learn how to answer open ended questions, appreciate other people's ideas and bring forth ideas of his/her own. The indication that most teacher educators had not used (let alone ever heard of) the *teaching method, points to the deep-rooted belief of teaching as transfer of knowledge* among most teacher educators who participated in the study. In the same way, the buzz group, which is a refinement of group discussion, is another learner centred teaching method that allows students to work co-operatively in small groups to generate new ideas in the process of suggesting solutions to a given problem. The fact that only a few

teacher educators (20% who participated in the study) have used this method in their teaching practice seems to indicate that this method is not considered as effective when compared (for example) with the lecture.

These findings confirm what is in the literature that the absence of academic induction for teacher educators results in their falling back on their tried and tested methods of teaching (Lewin & Stuart, 2003; Kasozi, 2009; Khan, 2011; Wasendango & Machingambi, 2011).

It can be argued that most teacher educators who completed the questionnaire viewed teacher education as transmitting knowledge and skills, which the trainees would then apply uniformly (Lewin & Stuart, 2003). This leads to a situation where teacher educators rely heavily on the official curriculum as opposed to being innovative and flexible in their practices. As Lewin & Stuart (2003) observed, most teacher educators often treated student teachers like high school pupils rather than tertiary level students. This practice was also observed by the external review team that reviewed programmes at Institution A who noted the mechanical nature of how lecturers taught the research methods course. Furthermore, the review team noted that some departments did not consciously use pedagogical (teaching and learning) principles and strategies in their teaching practices.

To sum up this discussion, it can be concluded that teacher educator preparation, induction and professional development in the four institutions has not received the serious attention it deserves. The absence of a comprehensive preparation, induction and professional development model to follow may hamper efforts to address this gap in the institutions. It is with this in mind that attention turns to a proposal to develop a model that should deliberately expose teacher educators to andragogy and thus, probably, lead them to adopt learner centeredness in their practices.

6.8 Conclusions

The previous section discussed the findings from the study. It described the profile of a typical teacher educator; outlined the motivation behind participants wanting to join teacher education, and went on to discuss how induction was perceived and experienced by the participants. An indication of the kind of coping strategies that participants employed as they transitioned from being school teachers to becoming teacher educators was provided. Issues relating to teacher educator professional development were also discussed. In addition, the teaching methods employed by participants in their teaching practice were analysed. These discussions culminated in a proposal to have a model for the preparation, induction and professional development of teacher educators. The proposed model will then be graphically illustrated and described in detail in the next chapter. In the next section, the main conclusions and recommendations arising from the research are presented. The limitations that the researcher experienced before, during and at the conclusion of the study are also outlined.

6.8.1 Conclusions drawn from the research

This research set out to investigate the preparation, induction and professional development of teacher educators in four teacher education institutions in Botswana and South Africa. This was, in part, to find an explanation as to why the espoused policy on learner centeredness has not taken root in teacher education and generally in the education systems of the two countries. It was postulated that the absence of a comprehensive model to guide the preparation, induction and professional development of teacher educators may be a major contributor to this scenario. The following research questions and sub-questions were posed:

- (1) How are teacher educators in Botswana and South Africa inducted and developed as teachers of adults?
- (2) How do the teacher educators (in Botswana and South Africa) adjust their teaching practice to cater for the needs of their students who are adults?

(3) What **recommendations can be made** to improve the preparation, induction and development of teacher educators as teachers of adult student teachers?

In order to adequately respond to these questions, a questionnaire and an interview schedule were developed. These two data collection instruments were complemented by analysing specific documents that guide and “talk about” induction and professional development of teacher educators in the four institutions under study. The following are the conclusions drawn from the study. They are captioned under (a) the biography of participants (b) teacher educator preparation, induction and professional development (c) teacher educator practices and coping strategies, and (d) teacher education as a unique profession. The conclusions under these heading are now provided below.

6.8.2 The biography of participants

Most participants in the study were aged between 41 and 59 years of age. This indicates that teacher education in general is a profession for the middle aged and elderly. This has implication on how these teacher educators perceive themselves and are perceived by others. Research elsewhere has shown that those professionals that change their careers late (after 35 years of age) are less likely to easily adopt change or experiment with new ideas. Their practices are deeply rooted in their experiences. They are less disposed to conducting research that asks why and how questions but rather seek answers to immediate here and now problems.

Related to this is the finding that almost all participants had taught in primary or secondary schools on average for a period of 5 to 10 years before joining teacher education. This could mean that they are good teachers who have the know-how on handling children and adolescents. It is this know-how that forms the basis upon which improvement of their teaching practice is anchored. However, the same experiences can inhibit change of the world view of these teacher educators, especially if they are not *nudged* to be reflective and reflexive. In this regard it can be concluded that the rich experiences that participants brought with them to teacher education is not only a source for learning but can also be a barrier to their learning. Institutions, therefore,

have to create environments that can advance learning from and through experience. This could be enhanced through research and other collaborative professional development activities.

The fact that almost all participants had a post graduate degree (Masters, PhD or Honours) indicates that they have a propensity to carry out and learn from research. It is these research skills that should assist them make improvements in the curriculum, and generate new ideas for making teaching and learning more effective.

6.8.3 Teacher educator preparation, induction and professional development

Some of the teacher educators who completed the questionnaire indicated they had received training in teacher education before joining a college or faculty of education. However, further investigation through follow up interviews and examining the curriculum of the institutions where these participants claimed to have received training indicated that this was a misconception. It can be concluded that most respondents were not prepared prior to joining teacher education. For the few who may have been prepared, their training did not include aspects of handling adult learners. The fact that there were many participants who mistook preparation for teaching teachers as being synonymous with preparation for teaching in general reveals the deeply held belief among these participants that a good teacher is equal to a good teacher educator. Given this situation, it is not surprising that the participants still use teaching methods that are primarily pedagogic in nature.

In terms of induction, it can be concluded that all the institutions investigated have a lot of planning to do if induction into teacher education is to be effective. Two institutions (A and D) have laid down policies on institutional induction but these fall short of recognizing the peculiarity of the induction needs of beginning teacher educators, especially the element of transitioning from being teacher of children and adolescents to becoming a teacher educator. One possible way is to have systematic faculty or departmental induction programmes in these institutions.

It can also be concluded that induction of teacher educators joining institution B and C is almost non-existent. What participants reported was sometimes a one-off workshop on staff welfare issues and a bit on general professional development. Most of the participants reported that they used trial and error to navigate the problems they experienced when they joined teacher education. There was, however, a noticeable reliance on informal induction as indicated by some participants.

When it came to professional development, there was an indication that most participants were involved in professional development activities with some upgrading their academic qualifications to higher levels. Participants, however, indicated this upgrading was usually in their content area and not in the area of teaching and learning in higher education. Paradoxically, while institution D runs a diploma to upgrade the teaching skills of academic staff joining the institution, none of the participants considered it a useful avenue to learning how to deal with adult students. In the same way, the policy document guiding professional development of teacher educators in institution B and C, while being elaborate about professional development of teachers in schools, was not as detailed when it came to teacher trainers (educators). Instead, it recommended that teacher educators should regularly go back to work and teach in schools.

6.8.4 Teacher educator practices and coping strategies

When participants were asked the teaching methods they most often used; the responses indicated that they use the lecture, assignments, group discussions and brainstorming. The least used methods were fish bowl and buzz groups. From the literature, fish bowl and buzz groups are highly learner centred methods and their absence from the group of methods commonly used by teacher educators could be an *indication that the participants' worldview of learning is still highly pedagogical*. It can also be concluded that the majority of participants relied on their experience as school teachers to navigate their way around problems they faced as they joined teacher education.

6.8.5 Teacher education as a unique profession

During the interviews, participants were asked whether they considered teacher education to be a unique profession. The results were inconclusive with some indicating a yes and others saying no or not sure. Those who said yes referred to the fact that teacher educators handle adult students, are expected to do research and have to prepare more thoroughly before getting to class. The element of teacher educators being role models to student teachers was also indicated as a difference. However, the lack of differentiation between teacher and teacher educators was also noted among some of the participants who were interviewed. Some drifted between talking about the role of the teacher and that of the teacher educators. It can be concluded that role clarity was not yet appreciated among some participants. There is, therefore, a need to stimulate teacher educators to have an in-depth examination of their roles and identities.

The other conclusion drawn from this study is that while research by teacher educators is encouraged, there is little support offered to make this a reality. While the majority of participants appreciated the value of research and publication as a developmental tool, they decried the lack of institutional support in creating an environment where this could be done. Only a few participants viewed research as part and parcel of their everyday work. Most saw research as an extra burden on their already heavy workloads.

In summary the preparation, induction and professional development of teacher educators as teachers of adults is not systematic, structured or institutionalized. In some institutions attempts are made through informal mentoring, workshops and, in one case, developing a professional teaching portfolio. Where this is done, it is voluntary and most participants did not consider it valuable.

In answering the second research questions, participants indicated that they rely heavily on their experience as teachers in schools to cope with handling adults in a teacher education setting. Some indicated that they used trial and error while other sought help from friends and colleagues, with some doing research or a combination of two, three or

all the four. Very few, however, had received formal guidance on how to handle and work with adult learners. Given this scenario there is a need to have an intervention that bridges this identified gap.

6.9 Limitations

In pursuing a study of this nature, it would be folly to argue that there were no impediments to the smooth running of the research. One limitation was the nature of the institutions used as research sites. Two of them are university faculties while the others are colleges of education. As a result of this, there were differences in relation to the programmes on offer. Institution A and D offered teacher education programmes ranging from certificates, diplomas, bachelors, honours, masters and PhDs while institution B and C were only offering diploma programmes. While this could be construed as comparing the incomparable, the results indicated that the entry points, biographies, induction and professional development of teacher educators in all these institutions had a lot in common.

When conducting research of this nature, it would have been expected to have an equal number of research sites in Botswana and South Africa. This, however, was not possible because of a variety of reasons, one of them being the difficulty of obtaining ethical clearance from each institution. It should be noted that there was an attempt to have a second university faculty research site in South Africa. This attempt was however not successful due to logistical and ethical problems.

At the onset, the researcher had considered using research assistants to distribute questionnaires and conduct interviews, but due to a limited budget and time constraints as well as ethical reasons, the researcher opted to distribute, collect questionnaires, and conduct interviews on his own. This had cost and other resources (including time) implications.

The last limitation relates to unavailability of novice teacher educators in some institutions. The researcher was unable to interview teacher educators who had less than five years' experience at institutions A and C. This was despite the fact that two

had initially accepted to be interviewed and several attempts were made to make appointments with them. He was, however, able to get four at institution D, thus balancing the number of twelve interviewees he had planned for. In the opinion of the researcher, this did not have adverse effects on the outcomes of the research since there was no intention to compare teacher educator experiences across institutions.

6.10 Recommendations

Based on the findings of this study, the following recommendations are advanced:

1. Teacher education institutions should institute induction and professional development programmes for new teacher educators that embrace andragogy as their underlying philosophy.
2. In Botswana, the practice of redeploying teachers from schools to colleges of education should be done away with. Instead, there should be a systematic and concerted effort to recruit teachers who have shown interest and volunteer to join teacher education institutions.
3. In order to attract and retain younger people into teacher education, deliberate efforts should be taken to recruit bachelors and Honours degree holders into teacher education. These would then be assisted and developed to obtain their senior degrees including the proposed PGCTE. The requirement to have taught at a school (for a period of not less than 3 years) before joining teacher education should, however, remain in force.
4. The teacher education curriculum should of necessity include a module on andragogy so that future teachers are exposed to alternative ways of teaching and learning for all ages.
5. More research should be conducted to further ascertain the induction and professional development needs of teacher educators in Botswana and South Africa. This research should include more teacher education institutions in the two countries.

6. The proposed andragogical model should be piloted and evaluated. Based on the findings of the pilot study, it could be recommended that it be adopted as the model for teacher educator preparation, induction and professional development.
7. The proposed Postgraduate Certificate in Teacher Education (PGCTE) should be a requirement for the progression/promotion of novice teacher educators.
8. Modules based on the curriculum developed for the PGCTE should form a basis for the continuous professional development of the current teacher educators.

Having drawn conclusions and made appropriate recommendations from the research, the next chapter highlights and summarises possible the contributions to academia the study has made.



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Chapter 7

Contribution to academia

7.0 Introduction

In the broad expanse of literature that was reviewed for this study, no significant research was found that discussed the preparation, induction and development of teacher educators from an andragogical viewpoint. Most scholars discuss the concept of andragogy in relation to adult basic and continuing education, with much of the research focusing on the application of the andragogical assumptions to adults as an entire population rather than specific adult professional groups such as teacher educators.

The research set out to investigate the process of teacher educator preparation, induction and professional development in selected teacher education institutions in Botswana and South Africa. This was, in part, to gain insight into the possible reasons why the use of learner centred approaches in teacher education have not taken root in such institutions (Kasozi, 2009; van Aswegen, 2005). It was postulated that in order to inculcate learner centeredness, teacher educators have to experience and practice it in their teaching and learning endeavours. It was suggested that this experience and practice could be gained during their preparation, induction and professional development. These important milestones in the teacher educators' professional development journeys should therefore be anchored on the principles of andragogy.

In order to conduct the investigation, two research questions were formulated. The first was to find out how the teacher educators are prepared, inducted and developed. The second question related to how teacher educators adjust their teaching practices in order to cater for student teachers who are adult learners. Based on the answers to these questions, a model to improve the preparation, induction and professional development of teacher educators was proposed. Details of the model will be discussed in section 7.2.

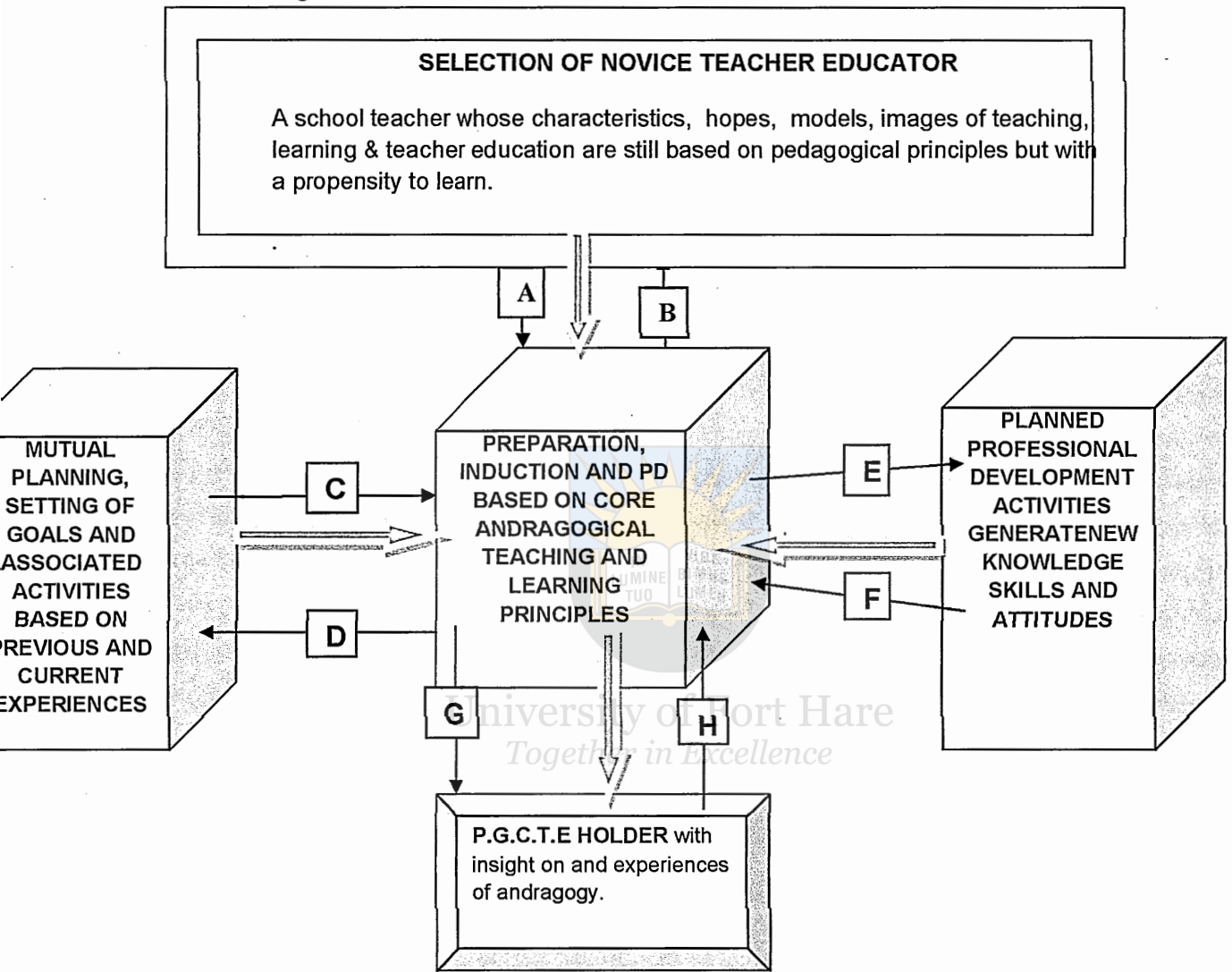
7.1 Contribution to academia

In the opinion of this researcher, this study has made two major contributions towards research literature in the area of teacher education. The first is that it has added knowledge on who teacher educators in Botswana and South Africa are; and it has explained why and how they joined teacher education, their induction as well as their professional development journey. The second one is a proposal to place andragogy as a guiding and overarching philosophy at the centre of the preparation, induction and professional development of teacher educators. It is postulated that such a move could assist in addressing issues the ever present problem of using predominantly pedagogically oriented teaching methods by teacher educators in their teaching practice. At the same time andragogical approaches would enable teacher educators to reflect on and interrogate their beliefs on effective teaching and learning. Finally, the study should make a contribution towards answering the global call for quality teacher preparation for teacher effectiveness. What follows is a description of the proposed model.

7.2 A model for the preparation, induction and professional development of teacher educators

This research has indicated that most if not all teacher educators who participated in the study have been teachers in other sectors of education. This seems to be a universal phenomenon. As a result of this, they bring with them experiences that they gained in the process of teaching children and adolescents. It is also evident that student teachers possess those adult characteristics that were articulated by Knowles (1989) and indicated in section 2.2 of this study. Furthermore, the use of learner centred approaches by teacher educators has failed to take root in teacher education as evidenced by this research and other studies conducted elsewhere. These were the postulations embedded in the problem statement and research questions that guided this study. Based on the responses of the participants in this study, plus the literature consulted as well as the experience of the researcher, the following model for the

preparation, induction and professional development of teacher educators is proposed as indicated in Figure 7.1.



LEGEND

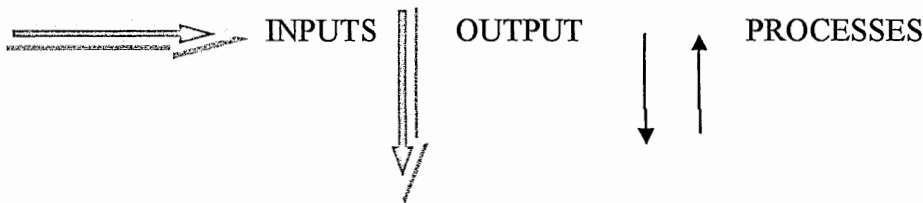


Figure 7.1 The proposed andragogically based model for the preparation, induction and professional development of teacher educators in Botswana and South Africa

7.2.1 Description of the proposed model

The proposed model is premised on the six principles of adult learning as postulated by Knowles et al. (2005). To reiterate, these are: (a) self-direction, (b) the role of learner experience, (c) readiness to learn, (d) problem-centred learning (e)intrinsic as opposed to extrinsic motivation and (f) the need to know why something must be learned prior to learning it and its justification for being learned (for a detailed description see section 2.2.2). Coupled with these are the guiding principles that underpin transformative learning as espoused by Mezirow (1978, 2000) and Boyd and Mayer (1988). In this regard reference is made to section 2.3.4. What follows is a description of the various components of the model denoted by the labelled arrows. The empirical data collected through the questionnaire and interviews as well as secondary data from literature was be used to support the inclusion of the various components in the model.

A: **Selection of novice teacher educators based on andragogical principles of selection for training (i.e. self-motivation, the need to know, collaboration).**

In the recruitment of teacher educators, there should be a systematic way of identifying and motivating candidates so that they make informed choices on whether or not to join teacher education. At issue is the fact that a potential candidate should make a personal decision to join teacher education. Ideally, such a candidate's motivation should be intrinsic rather than extrinsic and superficial. Intrinsic motivators help the novice to commit to the task of improving teaching and learning through experimentation, trial and error, engaging in collaborative activities or research. These key identifiers could be ascertained by the recruiting agency through the careful scrutiny of the candidate's curriculum vitae, professional portfolio and/ or through interview. The case of just transferring teachers from a school to a teacher education institution does not support the three principles of self-direction, (intrinsic) motivation and the need to know (refer to section 2.2.2). With reference to collaboration, the candidate who wishes to join teacher education should display a propensity to work as part of a team in collaborative

activities like research, supervision of student teachers or conducting and participating in other professional development activities (see section 3.2.2).

B: Experiences, inputs, motivation that the novice teacher educator brings into the learning encounter.

The empirical data as well as extant literature indicates that most teacher educators have been good teachers in schools. It is this experience that makes them unique when compared to other educators in the higher education sector. The challenge is on how to build on this rich experience, research and scholarship capacity. The model suggests that this can be done through encouraging NTEs to reflect on their practices as they build up more experiences in teacher education through for example, writing statements of relevance (SOR) defined as a written statement (usually of about 1,000 words) which shows that a participant has understood the main ideas of a particular workshop or learning activity, and was able to reflect on the relationship between the theories introduced during a workshop/learning and their own teaching practice (Pickering, 2008).

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C: Experiences that are brought into the learning encounter are a basis for mutual planning, setting agreed objectives and learning activities.

Mutual planning and setting of goals enables the NTE to commit and be confident in tackling challenges that may be faced in the process of becoming an effective teacher educator (refer to section 2.2.2.2, 2.2.2.4 and 2.4.5)

D: Andragogical induction and PD alters/influences the beliefs (worldviews), knowledge, skills & attitudes that the novice teacher educators come with.

Through reflection and exposure to other forms of learning, the NTE may be able to consider altering his or her view about learning, thus promoting a shift from only viewing learning using the pedagogical lens but also considering the value of using andragogical approaches in his/her teaching practice. This is what appears to have happened to Charles at institution C who still clings to his pedagogical approaches to handling

students but has realized that there are times when these approaches do not work (refer to section 5.2 and Appendix 8a).

E: New knowledge, procedures, generated from research, reflection and insight.

As a result of active involvement of NTE in various professional development activities, like teaching and conducting research, attending workshops, seminars, symposia, planning activities, curriculum development and supervising student teachers, he/she is able to acquire new knowledge and integrate it into the existing frames of reference through reflexive action. This is supported by comments from Dr Bobedi and Dr Darius at institutions B and D respectively (refer to Appendix 8b and 8c) when they talked about scholarship in teaching and research.

F: Knowledge, skills, and attitudes from the facilitator/mentor.

The facilitator/mentor should be a senior member of staff who has a proven track record of scholarship in research and teaching. The relationship between the facilitator and mentee (NTE) should be based on mutuality, respect and *botho* with the acceptance that the mentor is merely accompanying the NTE on the journey to becoming a seasoned teacher educator (a scholar, academic, and teacher). This is what Ms Daniel felt was missing at institution D when she said:

You know what I think the problem here at institution D is the lack of senior staff members, because there's a lot of junior's yah. At my previous place, I knew exactly which senior professor, which senior person I respected and I would just go knock on their door and ask for advice. I don't feel like I have that with anybody here.

G: Transformation of the novice teacher educator into a qualified, informed, reflexive facilitator.

This is the desired end to preparation, induction and professional development of the NTE. It should be noted, however, that teacher educators are on a never-ending journey

of improvement and that these initial stages are merely land marks on this lifelong learning journey. The suggestion that teacher educators should be certified with some form of credentialing is to support the assertion that teacher educators should be set apart from other academics and therefore receive recognition for their unique roles.

H: Follow up studies, informing future preparation, induction and professional development of teacher educators.

The process of preparation, induction and professional development of teacher educators should trigger further research in this area and stimulate debate in a community of educators who, as earlier argued, are often lonely in their quest for preparing effective teachers of the future. Forming local, national and regional teacher educator associations or similar professional groupings would help advance the case of teacher education being a unique profession.

The proposed model conforms to the andragogical learning model stages proposed by Knowles et al. (2005) which places the learner at the centre of the learning cycle consisting of preparation, planning, diagnosing of learning needs, carrying out the planned learning activities, evaluation and planning follow up activities.

The integration of the transformative learning principles into the model could enable novice teacher educators to interrogate their unique roles as teacher educators when compared to those of teachers in schools. The model affords NTEs an opportunity for self-examination after moving from a primary or secondary education setting to a teacher education setting. In this way deep-held assumptions about teaching and learning are critically assessed. In doing this the feeling of isolation will be minimized since the NTE will have facilitators/mentors and other NTEs as well as experienced teacher educators to consult and dialogue with. In this way the NTE should explore new ways and actions as a result of realizing that the previous ones are no longer sufficient to cater for the new roles of the NTE. In all this the NTE will become more confident and competent in his/her new role of teacher educator. In this way transformative learning may be assumed to have taken place since the NTE could have changed his/her

assumptions, perspectives, and behaviour in relation to teaching and learning by student teachers. He/she would have moved beyond acquisition of knowledge to focus more specifically on connecting theory to practice (Harris, Lowery-Moore & Farrow, 2008).

7.3 Final Conclusion

This study has highlighted the fact that teacher educator preparation, induction and professional development in the four institutions is still a challenge. This situation is not unique to these institutions but is widespread in both developed and developing countries as evidenced by what is in the literature. However, attempts are being made by some institutions to address the situation through the introduction of compulsory and promotion-linked induction of academic staff. These attempts, however, are at institutional level and general level. They do not address the specific dilemmas experienced by teacher educators' transitioning from being teachers of children to becoming teachers of teachers. The proposed model is an attempt to cover this identified gap.



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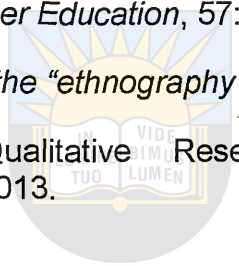
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APPENDIX 1

Questionnaire for teacher educators

Introduction

I am a PhD student of the University of Fort Hare undertaking research on teacher educator preparation, induction and professional development. The information you give is confidential and will only be used for purposes of educational discourse and your identity or that of others will in no way be revealed. You will require approximately 15 to 20 minutes to complete this questionnaire.

The person who handed you the questionnaire will personally collect it at a time that you have mutually agreed on.

If you need any further clarifications, please contact: *JA Kasozi* FCE Office no: 7.

Telephone: (+267) 71887184

E mail: 201103487@ufh.ac.zajamokasozi@gmail.com, jkasozi@gov.bw



Thank you very much for your time.

University of Fort Hare
Together in Excellence

Joseph Amooti Kasozi

INSTRUCTIONS

PLEASE PLACE A TICK (✓) IN THE BOX NEXT TO THE APPROPRIATE RESPONSE.

Section A: Biographic data

1. **Gender** Male 1 Female 2

2. **What is your age range?**

- a. 25 -30 1
- b. 31 – 40 2
- c. 41 -49 3
- d. 50 - 59 4
- e. Over 60 5



3. **Subject group (specialization or area of concentration)**

- Humanities 1
- Mathematics/Science 2
- Technical 3
- Languages 4
- Economic Sciences 5
- Education Foundations 6
- Special Needs Education 7
- Guidance and Counselling 8
- Creative and performing arts 9
- Agriculture 10
- Other (Please specify)..... 11

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4. **Number of years as a teacher (primary, secondary, or other**

- Less than 5 years 1
- 6 to 9 years 2
- 10 to 14 years 3
- 15 or more years 4

5. Indicate the sector/s in which you were a teacher (You may tick more than one)

- Pre primary 1
Primary 2
Secondary 3
Technical/brigade/trade school 4
Adult basic education/non formal 5

6. Number of years of teaching in a faculty education or college of education

- Less than 5 years 1
6 to 9 years 2
10 or more years 3

7. Indicate the sector/s where you are training teachers (You may tick more than one)

- College of Education 1
University 2
Other (please specify)..... 3

8. Highest Academic qualification

- a. PhD 1
b. Masters 2
c. Bachelors 3
d. Diploma 4

9. Highest Professional Teaching qualification

- a. PhD in Education 1
b. Master of Education 2
c. Bachelor of Education 3
d. Diploma in Education 4
e. Certificate in Education 5
f. None 6

SECTION B TEACHER EDUCATOR PREPARATION AND INDUCTION

10. Did you study teacher education as a course/module before starting to teach student teachers? NO 1 YES 2 go to 10a

a. Where did you receive the training?

- i. At a university 1
- ii. At a college of education 2
- iii. At a technical college 3
- iv. Other (Please specify.....) 4

b. How long did the training take?

- i. Less than a month 1
- ii. 2-3 months 2
- iii. 4 - 8 months 3
- iv. More than 9 months 4

c. Did the training prepare you to handle adult students?

- i. Yes 2
- ii. No 1

11. Did you receive any formal induction when you joined teacher education? NO 1 Go to Qu. 11a. YES 2 Go to Qu.11b.

a. If your answer to question 11 was NO how did you cope with starting to teach student teachers? (You may tick more than one)

- i. Relied on my previous experiences as a teacher 1
- ii. Asked colleagues and friends for help. 2
- iii. Trial and error 3
- iv. Research in the library and internet 4
- v. Others (Please explain)..... 5

b. If yes, how long did it take?

- i. One day 1
- ii. Less than a week 2
- iii. More than a week 3
- iv. 1 to 3 months 4

v. Any other (please specify)..... 5

c. Which entity/entities organized the induction program? (Cross as appropriate)

- i. Teaching & Learning Centre/Centre for Academic Development 1
- ii. Human resources department 2
- iii. Department of Training and Development 3
- iv. The college/faculty of education 4

d. What form did it take?

- i. A once off workshop 1
- ii. A series of workshops 2
- iii. A mentorship programme 3
- iv. Short course 4
- v. Other (Please explain)..... 5

e. What was the focus of the programme? (You may cross more than one)

- i. Administrative structure of the institution 1
- ii. Labour relations 2
- iii. Teaching and learning 3
- iv. Research 4
- v. Student counselling 5
- vi. Strategic planning 6
- vii. All the above 7

f. What skills/competencies did you acquire during induction?

- i. None 1
- ii. Teaching at a higher education institution 2
- iii. Managing adult learners 3
- iv. Assessment in higher education 4
- v. Research skills 5
- vi. Other (Please specify)..... 6

g. How do you rate the effectiveness of the induction with regard to:

	Very effective(4)	Effective (3)	Somehow effective (2)	Ineffective (1)
i. Preparation for teaching at a higher education institution				
ii. Managing adult learners				
iii. Assessing in higher education				
iv. Research skills				

SECTION C: TEACHER EDUCATOR PRACTICES AND COPING STRATEGIES

12. Have you ever been involved in professional development (PD) activities that are specifically aimed at assisting you to handle adult learners?

1 **NO.** Go to Qu.14

2 **YES.** Go to Qu. 13

13. If your answer to Question 12 is **YES**, please indicate what form did the PD activity take?

- a. A once off workshop 1
- b. A series of workshop 2
- c. A short course of 3 to 8 months 3
- d. A course of 9 months or more 4
- e. A professional discussion group 5
- f. A mentoring program 6
- g. Other (Please specify)..... 7

14. If your answer to Qu. 12 was a **NO**, how do you cope with teaching adults students?

- i. Rely on my previous experiences as a teacher 1
- ii. Ask colleagues and friends for help. 2
- iii. Trial and error 3
- iv. Research in the library and internet 4
- v. Others (Please explain)..... 5

15. Please indicate whether you strongly agree, agree, are not sure, disagree or strongly disagree with the following statements by ticking the appropriate response.

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Teaching children and adolescents is different from teaching adult students					
Teaching skills acquired by teachers during training at college/university prepare them to teach adult learners					
Teacher educators need to model how student teachers are going to teach in schools					
Scholarship in the research function of teacher educators is often in conflict with their scholarship in the teaching function					

16. Which of the following teaching methods do you use: very often, often, rarely or never use?

	Very often	Often	Rarely	Never
i. Lecture				
ii. Group discussion				
iii. Tutorial				
iv. Debate				
v. Buzz groups				
vi. Fish bowl				
vii. Brain storming				
viii. Panel				
ix. Case studies				
x. Listening and observing				
xi. Project				
xii. Visits/tours/field trips				
xiii. Workshop				
xiv. Assignments				
xv. Learning contract				
xvi. Self-directed learning				
xvii. Experiential learning				

Thank you very much for your time and assistance.

APPENDIX 2

INTERVIEW SCHEDULE

0.0 Introduction

Sir/Madam, I wish to thank you for accepting to be interviewed. I am a PhD student of the University of Fort Hare undertaking research on teacher educator preparation, induction and professional development. This research is towards the writing of a thesis leading to the award of a PhD degree in Education. The discussions and the information we will share will be used only for purposes of educational discourse and your identity or that of others we may make reference to will in no way be revealed. The interview will take approximately 15 to 20 minutes. I will be taking notes as well as tape recording our conversation. All efforts will be made to share with you the outcomes of this study. I will also pass on the transcription of this interview for correction and to get your consent on what should go into the thesis.



Thank you very much for your time.

University of Fort Hare
Together in Excellence

Joseph Amooti Kasozi

1.0

2.0 Interview questions

2.1 Background information:

- a. When did you start training teachers?
- b. What motivated you to venture into teacher education?

2.2 Prior Training

- a. Had you received any previous training in training teachers?
- b. Do you think prior training was/could have been helpful?
- c. What aspects of training were/could have been most useful? (Teaching and learning? Research? Handling adult students? Assessment? *Interviewer will cue towards these aspects*)

2.2 Teacher educator induction

- a. Can you describe an incident that stands as most significant in your early years of beginning to teach teachers?

- b. Why does this particular incident stand out in all your experiences?
- c. Did you undergo any induction when you first started handling student teachers?
- d. If YES did the induction help prepare you to handle adult learners?
- e. If NO did you experience any issues in relation to handling adult student teachers?
- f. Do you consider that teaching student teachers differs with teaching primary or secondary school students? Please briefly explain.

2.3 Teacher educator professional development

- a. Have you ever undertaken staff development activities that relate to personal and professional growth after joining a college or faculty of education? Please explain.
- b. What is your opinion (in general) about professional development of lecturers in colleges/faculties of education?
- c. What should professional development of lecturers focus on?

2.4 Teacher educators as a unique profession

- a. Can you share your thoughts about lecturers in faculties/colleges of education (teacher educators) as a unique professional group?
- b. If they are a unique professional group, what are the attributes that make them unique from say teachers in schools or lecturers in other faculties/colleges?
- c. What are your thoughts about the research **versus** the teaching and learning functions in relation to **reward, recognition** and the **professional growth** of lecturers in faculties/colleges of education?

GENERAL COMMENTS

- 3.0 Do you have any thoughts about the preparation, induction and professional development of teacher educators in faculties/colleges of education you wish to share?
- 4.0 All efforts will be made not write any of this in a way that links to you or your identity. However, please indicate any **aspect** of this interview that I should be **particularly cautious** about.

Once again, thank you very much for your time.

Appendix 3



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Ethics Research Confidentiality and Informed Consent Form

Please note:

This form is to be completed by the researcher(s) as well as by the interviewee before the commencement of the research. Copies of the signed form must be filed and kept on record

(To be adapted for individual circumstances/needs)

Our University of Fort Hare / Department is asking people from your community / sample / group to answer some questions, which we hope will benefit your community and possibly other communities in the future.

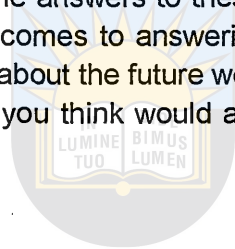
The University of Fort Hare / Department/ organization is conducting research regarding We are interested in finding out more about We are carrying out this research to help (*adapt for individual projects*)

Please understand that you are not being forced to take part in this study and the choice whether to participate or not is yours alone. However, we would really appreciate it if you do share your thoughts with us. If you choose not to take part in answering these questions, you will not be affected in any way. If you agree to participate, you may stop me at any time and tell me

that you don't want to go on with the interview. If you do this there will also be no penalties and you will NOT be prejudiced in ANY way. Confidentiality will be observed professionally.

I will not be recording your name anywhere on the questionnaire and no one will be able to link you to the answers you give. Only the researchers will have access to the unlinked information. The information will remain confidential and there will be no "come-backs" from the answers you give.

The interview will last around (60 - 90) minutes. I will be asking you a questions and ask that you are as open and honest as possible in answering these questions. Some questions may be of a personal and/or sensitive nature. I will be asking some questions that you may not have thought about before, and which also involve thinking about the past or the future. We know that you cannot be absolutely certain about the answers to these questions but we ask that you try to think about these questions. When it comes to answering questions there are no right and wrong answers. When we ask questions about the future we are not interested in what you think the best thing would be to do, but what you think would actually happen. (*adapt for individual circumstances*)



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If possible, our organization would like to come back to this area once we have completed our study to inform you and your community of what the results are and discuss our findings and proposals around the research and what this means for people in this area.

INFORMED CONSENT

I hereby agree to participate in research regarding I understand that I am participating freely and without being forced in any way to do so. I also understand that I can stop this interview at any point should I not want to continue and that this decision will not in any way affect me negatively.

I understand that this is a research project whose purpose is not necessarily to benefit me personally.

I have received the telephone number of a person to contact should I need to speak about any issues which may arise in this interview.

I understand that this consent form will not be linked to the questionnaire, and that my answers will remain confidential.

I understand that if at all possible, feedback will be given to my community on the results of the completed research.



.....

Signature of participant

Date:.....

I hereby agree to the tape recording of my participation in the study

University of Fort Hare
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.....

Signature of participant

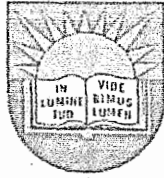
Date:.....

APPENDIX 4

Ethical clearance by the Fort Hare University



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ETHICAL CLEARANCE CERTIFICATE

Certificate Reference Number: DUK01 ISKAS01

Project title: Towards the development of an andragogically based model for preparing and supporting teacher educators in Botswana and South Africa.

Nature of Project: PhD

Principal Researcher: Joseph Amooti Kasozi

Supervisor: Dr N Duku

Co-supervisor:

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

The Principal Research must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
 - Any unethical principal or practices are revealed or suspected
 - Relevant information has been withheld or misrepresented
 - Regulatory changes of whatsoever nature so require
 - The conditions contained in the Certificate have not been adhered to

- Request access to any information or data at any time during the course or after completion of the project.

The Ethics Committee wished you well in your research.

Yours sincerely



A handwritten signature in black ink, appearing to read 'Gideon de Wet', is written over a faint, light blue circular watermark that matches the University of Fort Hare logo.

University of Fort Hare
Together in Excellence

Professor Gideon de Wet
Dean of Research

04 February 2013

APPENDIX 5

Research Permit

Ministry Of Education and Skills Development- Botswana



University of Fort Hare
Together in Excellence

TELEPHONE: 355449
TELEX: 24471WTO ED
FAX: 312167



REPUBLIC OF BOTSWANA

MINISTRY OF EDUCATION
AND SKILLS DEVELOPMENT
P.O. BOX 242
GABORONE

28th August 2012

REFERENCE : E1/20/3 XXII (27)
Joseph Amooi Karozi

Dear Madam/Sir

RE: REQUEST FOR A PERMIT TO CONDUCT A RESEARCH STUDY

We would like to acknowledge receipt of your application for research permit to conduct a study. This serves to grant you permission to conduct your study in the sampled areas in Botswana to address the following research objectives/question/topic:

How Are Teacher Educators In Botswana And South Africa Prepared: Towards The Development Of An Andragogically Based Training Model/mentoring Program.

It is of paramount importance to seek Assent and Consent from The Department of Training and Development, Ministry of Education as well as the

of Education as well as the _____
Botswana that you are going to collect data from. We hope that you will conduct your study as stated in your proposal and that you will adhere to research ethics. Failure to comply with the above stated, will result in immediate termination of the research permit. The validity of the permit is from 25th August 2012 to 27th August 2013.

You are requested to submit a copy of your final report of the study to the Ministry of Education and Skills Development, in the Department of Educational Planning and Research Services, Botswana.

Thank you.

E Ranganai
For / Permanent Secretary



University of Fort Hare
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APPENDIX 6 (a)

Document analysis form: Institution A

Document name:	Academic Quality Management policy for institution A
Date produced	2010
Authors	Institution A's Centre for Academic Development
Purpose of the document	To support the institutions efforts to achieve its Vision and Mission through development and implementation of academic programmes that meet national, regional and international standards

Main features of the document that relate to adult learning principles:

- The document has no specific section that requires the institution or its schools, faculties or departments to induct new academic staff on issues of teaching and learning.
- There is however mention of the institution recruiting quality staff.
- In section 5.3, there is a general reference to the staff to have requisite qualifications, engage in scholarly work and other professional development activities. The policy however devolves the responsibility for PD to faculties and departments.
- Conversely, section 5.8 has clear assessment criteria for research.

Appendix 6 (b)

Document analysis form

Document name:	CAD External Review Assessment Report Evaluation of the first cycle(2004- 2010) for institution A
Date produced	April 2011
Authors	Institution A's Centre for Academic Development
Purpose of the document	To present a summary of the External Review findings, and an assessment of the review process itself, including recommendations needed to enhance effectiveness of the quality management process towards completeness and institutional strategic performance and impact.
Main features of the document that relate to induction and professional development:	
<p>The report evaluated findings of the External Review exercise that took place in 2011. As part of this review, the researcher took note of the following as they relate to the induction and professional development of academic staff at institution A.</p> <ul style="list-style-type: none">• The external reviewers were required to review and comment on the processes that were in place to enhance the quality of academic staff (section 2.2 page 6). The external review team found out that :<ul style="list-style-type: none">• The most common methods employed by academic staff included lecturing, small group work, power point presentation, peer tutoring, Web-CT, portfolios and use of on-line resources.(Page 17)• The external reviewers did not make any mention of induction of new academic staff. There was however criticism of the use of Performance Management System (PMS) as a tool for staff appraisal and professional development. (Page 16)• The reviewers were critical of the following when it came to staffdevelopment.	

- There was no conscious use of pedagogical (andragogical?) principles and strategies. (Page 17)
- Teaching research methods in an “abstract” and mechanical way.
- An ineffective personal tutor system (Page 18).
- A weak “research mentoring system” among junior and senior academics.
- Few local outlets for publishing.

The external reviewers recommended:

- The development of a human development policy; that would among others, highlight “career ladder training and progression” (Page 27).
- Faculties and departments to facilitate for student centred approaches, deep learning and student collaborative strategies (Page 27).



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Appendix 6 (c)

Document analysis form: Institution D

Document name:	Draft Induction Policy for Institution D
Date produced	November 2013
Authors	Institution D's Teaching and Learning Centre
Purpose of the document	To describe the processes and procedure of inducting new staff at institution D
Main features of the document that relate to induction and professional development:	
<p>The policy describes induction as being conducted in three phases (i.e. institutional, departmental and by the Teaching and Learning Centre). Induction of academic staff however is the responsibility of the Teaching and Learning Centre (TLC).</p>	
<p>Academics are taken through a series of activities that last up to one year. Members of the academic community who do not possess a teaching qualification are required to register for a Post Graduate Diploma in Higher Education and Training administered by the TLC. Assessment of this Diploma is structured in such a way that it results in the graduate having produced a portfolio.</p>	

Appendix 6 (d)

Document analysis form: Institution B and C

Document name:	Teaching and Learning Policy. Affiliated Institutions
Date produced	August 2009
Authors	University of Botswana
Purpose of the document	To harmonize teaching and learning processes
Main features of the document that relate to induction and professional development:	
<p>The policy subscribes to the philosophy of learner-centeredness as a guide to teaching and learning in affiliated institutions (including institutions B and C). This should be achieved through the use of diverse teaching and learning strategies including, but not limited to, self-direction, active learning, independent learning, and creative use of resources, integrated learning and use of technology. In addition, the policy recognizes that learners come to colleges with a wide variety of experiences and therefore there a need for a consideration and recognition of prior learning (RPL). All these are andragogic aspects.</p> <p>The policy however gives no clear indication as to the preparation, induction and professional development of the teacher educators.</p>	

Appendix 6 (e)

Document analysis form: Institution B and C

Document name:	A Training Policy for Education Professionals in Botswana
Date produced	July 1995
Authors	Bennell, P. (Ministry of Education – Botswana)
Purpose of the document	To examine policies and practices that affect directly and indirectly the professional development of professionals in the Ministry of Education in Botswana (including those in institutions B and C).
Main features of the document that relate to induction and professional development: The policy recommended that an <i>experienced adult education professional</i> should be appointed with precisely defined responsibilities of upgrading Primary Teachers' Certificate holders to "O" level. There is also a recommendation that teacher educators should undergo specialist training in " <i>induction processes</i> " for teachers. The policy also recommended that teacher educators should periodically get attached to schools. The policy, however, falls short of addressing issues directly related to the preparation, induction and professional development of teacher educators.	

APPENDIX 7

Profile of Institutions under Study

Profile of Institution A

Pseudo name:	A
Date of establishment	1 st July 1982
Profile of the institution	<p>Training educators at undergraduate and graduate levels for all levels of education. The faculty had 128 teacher educators in May 2013.</p> <p>The faculty is made up of nine departments namely: Adult Education; Educational Foundations; Educational Technology; Family and Consumer Science; Language and Social Science Education; Mathematics and Science Education; Nursing Education; Physical Education, Health and Recreation; Primary Education.</p>

Profile of Institution B



 University of Fort Hare
Together in Excellence

Pseudo name:	B
Date of establishment	1968
Profile of the institution	<p>A college of education training teachers for primary schools at diploma level. The college had 56 teacher educators in May 2013.</p> <p>It is made up of 16 teaching departments, namely: Agriculture; Art Craft and Design; Communication and Study Skills; English; Guidance and Counselling; Home Economics; Mathematics; Music; Physical Education; Religious Education, Science; Setswana; Social Studies; Special Needs Education; Teaching Practice.</p>

Profile of Institution C

Pseudo name:	c
Date of establishment	1990
Profile of the institution	<p>A college of education training teachers for junior secondary schools at diploma level. The college had 102 teacher educators in May 2013.</p> <p>It is made up of 16 teaching departments, namely: Agriculture; Business Studies; Communication and Study Skills; English; Foundations of Education; Guidance and Counselling; Home Economics; Mathematics; Library Studies; Moral Education; Physical Education; Religious Education, Science; Setswana; Social Studies; Special Needs Education; Teaching Practice.</p>

Profile of Institution D

University of Fort Hare

Pseudo name:	D <i>Together in Excellence</i>
Date of establishment	1916
Profile of the institution	<p>A faculty of education in a university in the East Cape province of South Africa. The faculty had 32 teacher educators in May 2013.</p> <p>It is made up of two schools located at two different campuses; one for initial and general education, and the other for further education and training.</p> <p>The faculty offers education courses ranging from certificate, diploma, undergraduate to the post graduate levels.</p>

APPENDIX 8 (a)

MR. CHARLES' INTERVIEW TRANSCRIPTION

Interview Settings: Institution C. Office No. AB 09

Length of Interview: 30 minutes, 38 seconds

Researcher: Mr JA Kasozi

Participant: Mr Charles

START OF INTERVIEW

R: Good morning.

P: Good morning.



R: Thank you for being part of my research. This interview will take roughly 20 to 30 minutes. I will be using a digital voice recorder and will simultaneously be writing down notes throughout the interviewing process. All efforts will be made to assure that no personal opinions that you provide during this interview are used. And absolute confidentiality will be maintained and nothing in particular will be related to you. I will however ask a few questions, some that you have answered in the questionnaire, so as to get more clarity on the matter.

BACKGROUND INFORMATION:

R: When did you start training teachers?

P: Umm, when I was transferred from secondary school to College C in 1995 that was the first time I was introduced to teacher training.

R: And err, why did you join a college of education?

P: Umm, there a number of reasons. Number one; up to that time I had been teaching in secondary schools for about 15years, so I thought by

that time that it was time to move upwards and teach people at a higher level. It was a good career move, I think or felt at the time. And secondly, noticing how teaching goes on in secondary schools, a very much chalk and talk method, and umm, I thought maybe I could contribute something to student teachers, to be more innovative in their teaching.

R: Alright, do you think that your previous training was also a motivator?, because you mentioned in your questionnaire that most teaching in secondary schools is chalk and talk, and a few minutes ago you mentioned that your experience in Post Graduate Certificate to Education (PGCE) you had experience in vocational work.

P: Yes umm, I attended a College of Education that is actually affiliated with the College of London in the UK. It is one of four colleges that is designed primarily to train people for teaching in further colleges of education in the UK. So it's a higher level than secondary schools, and at that time I felt that that would be a challenge. And at that time during training, one was exposed to different types of students. Some were day release doing subjects that were not on their timetables, for example, A level. Other were more mature, or quite old actually, for example some were doing external degree programs from the University of London, I was also teaching them. So I was more exposed to, maybe, people of a higher level.

R: And so would you say you felt that with teaching in secondary school, you were losing out a bit?

P: Yeah I felt that maybe things would be a bit to theory orientated and that, umm, maybe a chance to use one's skills more.

R: Alright, while the PGCE assisted with teaching older students, what about training of teachers? Because, in my opinion, teacher training education is about preparing adults to go and teach children. Do you think that if you had had some kind of training or preparation or exposure to account for that link, it could have been helpful?

P: Yes, I think so because just to be teaching people who are older is different from training them to be adult teachers. And umm, when I first came to D, it was quite a shock actually going from secondary level to tertiary level. I am not talking about content but in terms of dealing with students that you have is a different matter.

R: Umm, particular incidents or examples that stand out for you in your early days at College D?

P: Umm, I remember one incident in first year when some students in a year 3 (Agriculture) minor class irritated me and I shouted at them for a long time and I think people could hear me through the corridor. And I mentioned it to the head of department at the time, and he told me that I had to adjust. Because after so many years of dealing with secondary school students, where you could do almost anything you wanted with them, even corporal punishment and so on, it was somewhat of a shock really. And I was not used to being restricted in ways I could, umm, let's say "punish" students. Umm, it was a shock to the system. But even today I still sometimes shout at them, just like I am in a secondary school.

R: Well that not unique at all, because when I think when you are teaching adults, the power games are different. There is an element of give and take and an element of respect from either side. And errr, I believe there is an element of accepting that certain things will take more time. So, I think your reaction was natural and many people go through such situations during adult learning and teaching.

P: The other aspect is that in a secondary school its' like you're the boss in the classroom. Whereas, here you might have to interact more with students, for example they might come with a problem or something confusing, and I have to discuss it with them or maybe even agree with them that something needs correcting. And this is something I wouldn't do in a secondary school. But we are learning all the time.

R: That is actually another element, comes to play. So probably direct exposure to certain aspects or principles could have been helpful. Especially in the handling of adult students is what I have picked up?

P: Yes, yes very much so.

R: Alright, what about assessment? In secondary school versus colleges or education?

P: Umm, the way I look at assessment (pause), I think in some ways there is too much assessment in the secondary school system, especially in junior schools with monthly tests, exams and so on. I do prefer the assessment structure in College C and it is more flexible and often up to the lecturer to decide what he wants to do and how he wants to assess course. Myself, most of my courses are assessed practically. So for example, land and survey, they get to go out and assess a piece of land and draw up maps, and use these to create vegetable production or crop production and so on. I don't often give written assignments; I give things that are hands on, except for Professional Studies (PS). I only give

assessments for presentations, but again that is a skill, so I go for the assessment of skills.

R: Ok, so you are skills orientated. What about research, both yours and your students?

P: Research I regard as important, although in College D, I feel they don't regard it as important. Umm, lack of access to funds, it is not regarded as important, but for me, for professional growth, I do a lot of research projects on my own, I do them with students. Every time a student goes to the garden there is some sort of research that they have to do, not just growing food. Umm, my own research, for example in my garden I do my own research, maybe of fertiliser use or whatever, and then errr, even going as far as the Sahara and doing research on crop production. So I always have something going on in terms of research and I regard it as very important, but I am dismayed at the lack of it in College D.

R: Umm, you indicated in your  questionnaire that you were not inducted.

P: Yes, when I arrived at college D I think we were given one day of knowing how the place functions, yahh, maybe one or two days. It was just telling you how to borrow books and how the timetable is arranged, but nothing really about teaching and the actual job no.

R: So really it was a once off, administrative thing?

P: Yeah.

R: Ok, when you answered the question about the difference between teaching secondary school students and student teachers, your emphasis was on the way they are handled, rather than the way information is put across.

P: Yeah, so I don't have a problem with delivering the content, but umm, I used different methods than those in secondary schools that are more practical and student oriented. It's a way of dealing with them, like for example, in a secondary school I could tolerate people making noise in a class, but at this level, if someone is rude to me in class I can't tolerate it. It is one weakness I have and I cannot tolerate it. I could tolerate it at secondary school but not at this level.

R: What about professional development? Err you did mention in your questionnaire that you have undergone one practical aspect of professional development during a short course at Botswana College of Agriculture (BCA).

P: Yes, err that was about one week, err restricted but it was valuable. Since then, we have not had no real workshops as such, well maybe the occasional afternoon course on maybe IT, that's about all.

R: Alright, would you say that it changed your outlook to teaching and learning at that level?

P: Yeah to a certain extent, it made me a bit more flexible to teaching methods.

R: Umm, what is your opinion about developing teacher educators generally? People working in Colleges of education or people training teachers in general?

P: Umm, I have mixed feelings about the program at COLLEGE D, (pause) as I said; a lot of lecturers are not as practical orientated as they could be. I am talking about practical subjects where lecturers often teach students the way they were taught in secondary school, by chalk and talk. So I think for teacher educators, they need to be more informed about being more practical orientated and skills orientated. And even in the assessment of students, tests and exams, I feel that the standard we are testing is not much above Cambridge level, at least in certain subjects. And err, we need to be moving forward from a knowledge level to higher levels of assessments. So; myself, when I assess students by tests, I always have plenty of those types of questions, not just say "state two fertilisers", but maybe put the student in a situation where they are a farmer for example.

R: So in essence you are saying that professional development should include aspects of teaching and learning and assessment.

P: Yes, and the other thing I noticed in the College is that there is no consistency in the departments in terms of levels of teaching. For example, mathematics content is way above the English level, whereas other subjects you are dealing with the same level, different facts, but the same level. And also as I said, inconsistency in questions for tests and exams from subjects. There is no standardisation, and even some subjects have true or false questions in the exam papers which to me is an anathema, a no go area.

R: Umm, do you think teacher educators are unique from other teachers? Do you think there is something unique about being a teacher/trainer of teachers? And if there is, what is it?

P: Umm (pause), I don't think there is much of a difference because the methods used by a teacher educator are often the same as those used by a secondary school teacher, the only difference is of course they have a masters (degree), but that doesn't mean they are different. Those are two different things, teaching with a masters (degree), teaching at a different level.

R: So there is not much of a difference between them?

P: I wouldn't say so, no.

R: Ok, so you wouldn't pin point out that you as a person working at a college of education is different from somebody working at a secondary school?

P: There is a thin line, one could say that being called a lecturer has more prestige, but to me the difference is not great. It's all down to your ability on the job. Because when I teach soil science, I just go up a bit to Cambridge level maybe, but I wouldn't say there is a massive difference. I would say there would be if I was teaching group B for example.

R: What about that course that you picked up, PS?

P: (laughs) Yeah well, we are PS experts now. That's what sets me apart from a secondary school teacher in particular because we don't teach content, umm that one is challenging.

R: You noted in your questionnaire your reluctance and many colleagues were reluctant and sort of downgraded the aspect of PS. Do you still believe that anybody can teach it once you have gained the skill?

P: Umm, I think you have to have more motivation because people were not trained in PS when they were at university, they were trained in other

aspects, but umm, it's still very important. That's the business of training teachers, you need to know how to teach in the classroom.

R: So then you would say it is more about motivation and interest than actual structured training?

P: I think so, yes.

R: Umm, would you suggest then that err, if one was to improve that unique aspect of teacher training, maybe a bit of mentoring, or a short course...

P: Yes a short course would be very important. One could be teaching livestock production or dairy, but you've learnt that at BCA, so it's just a question of applying the knowledge to the level of the diploma. It's not a big deal actually, in fact you'll be teaching at a lower level.

R: So you would say one would benefit from a short course which is integrated with work and skills?

P: Yeah, I think something like an introductory course is very important, because many people fear teaching PS, it's like the unknown. And I've noticed, especially in the case of lecturers in COLLEGE D, who don't have teaching certificates, they are most fearful of PS because they have no background.

R: Alright, you have been at college D for 15 years now, and you've already said that research being neglected. But sometimes at higher levels like the university, there is a lot of emphasis on research and people are promoted mainly because of their research output as opposed to their actual teaching function. What is your opinion on this?

P: Umm, college D is a tertiary institution so I think there should an element of research. And err, it should not be the only criteria to look at to promote someone, but I think it should be there, it should carry some weight, because it shows the dedication of someone to a subject. Because as things stand, you could become senior lecturer or HOD, but have no research practice at all. And I think that needs to be amended somehow. Even if it's just giving a paper or a seminar, at least something

to show that you have an interest in the subject, and that maybe you are somewhat special from someone else.

INTERVIEW CONCLUSION

R: Alright, as we reach the conclusion of the interview, do you have any other thoughts about preparing, induction and the development of teachers, apart from what we have touched on in the interview?

P: Umm, I think we need to be more aware of the changes in the secondary school system. Syllabuses are changing, and sometimes we don't always change our own syllabus to cater for that. And also, in some of the exam papers you find that the style of questions is also changing, becoming more pupil orientated, needing more thinking by the pupil. Rather than just saying state five parasites affecting livestock for example, you need to go beyond that. And again as I said, we need to raise our assessment procedures and our content to be in line with that.

Umm, another issue is, there are still lecturers in college D who have no teaching certificate themselves, and I really think that should be a pre-requisite for anybody coming to a College of education, to have a teaching certificate of some kind. As well as teaching in PS, and issues of handling adult students.

R: Alright

P: And one last thing, given my time at College D, apart from that one week at BCA (for a short course on advanced teaching methods), I've had no professional development at all, and I think that's lacking. That's one week in 15 years (laughs). Maybe even exposure to international conferences, seminars would be beneficial, because we are not living in a cocoon; we have to be exposed to the exterior. And also the lack of internet resources at the College is another problem. And even when we do have internet, there are many complaints about it not being reliable.

R: Alright. Please be reminded that all efforts will be taken to avoid linking you personally to this interview and what has been discussed. Is there any aspect of this interview that you feel I should be cautious about presenting in the transcription of this interview?

P: I think its ok.

R: Alright, thank you for your time, and the information you have given will be substantial in my research and have value input as well. So once again thank you.

P: Thank you so much.

END OF INTERVIEW



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APPENDIX 8 (b)

DR BOBEDI'S INTERVIEW

Location: Institution C Office no: 7

Background information:

R: When did you start training teachers?

P: May 2002

R: What were you doing before starting to teach at a teachers' college?

P: I taught mathematics at a junior secondary school, I taught for 10 years.

R: What motivated you to venture into teacher education?

P: Firstly, when I was still at junior school, I was a math teacher, when I realized there were students who were struggling so much with mathematics some of them could not recognize numbers, some could not write their names then it challenged me to do something. Then I learnt about the area of Special Education.

For my first degree, that is why I studied Special Education so that I can learn how to assist them, how to help them. When I came back from studies, I was again posted back as a Mathematics teacher. This therefore means I did not have the chance to practice what I acquired during my first degree training. I had wanted really to....I had wanted to impart the skills, practically doing that. But unfortunately I was posted back to the class as a mathematics teacher. So I did not implement that which I had wanted to by then.

R: So you really wanted to practice aspects of Special Needs Education? But when you came back from your first degree, you went back to teaching mathematics and did very little with regard to special needs?

P: Just normal teaching, No specialization

R: You decided to join a college of education?

P: I learnt that at a college of education they were offering Special Education and then I decided to join the colleges of education so that I can go now and be a special education teacher not a mathematics teacher.

R: Beyond that, can you describe your early days as a Special Education lecturer at a college of education?

P: When I got there, I didn't have the know-how of handling the adult learners. It was a challenge on its own, because I was still using my experiences as just a teacher for the junior students whom I think they did not cause any problems in terms of responding to my assignments, to my expectations in terms of behaviour. When you are trained to be a teacher you will be told this is how you are going to handle a learner and when you get there, you will be using that. But, when you go to an adult learner, there will be a problem. They do not expect you to be telling them what to do. You have to negotiate with them, and it becomes a challenge especially in the initial days and at times you will be so frustrated, thinking that now here is the situation, how I handle it. And because you have not been trained, you will be improvising, bringing forth that experience you got from the secondary (school), try and use it. Sometimes it will work, sometimes it will not work. Personally, as a lecturer by then, you will be frustrated. You will be asking yourself some questions like; did I make the right move?

Prior Training

R: Had you received any previous training in training teachers?

P: No

R: Do you think prior training was/could have been helpful?

P: You don't need a short course per se, you need an intense induction having seen the behaviour of adult learners, having experiences with how

they would want to be taught. It's not like you will teach at secondary school. I remember one student, he asked me, when did you stop teaching at secondary? And I think when I was reflecting he asked because maybe I was handling the course like I was doing at secondary school. So when I reflected, I thought yaa....

R: So the student was wondering whether your methodologies..., was actually emphasizing that your approaches had not changed much from how he had experienced teaching and learning at secondary school, therefore ...?

P: That is what he suggested.

R: What about issues of research? Did you have opportunities after joining colleges of doing some research especially research related to your work? But also supervising student research?

P: That opportunity I did not have. One, I think it is because of the arrangement that is in the colleges. The secondary colleges, the Special Education is not considered as a subject in which students can do a research on, it is only limited.

You only have the opportunity to supervise research if some departments are coming to you to give you students, just to assist them. If the student has a question which is somehow related to Special Education, then they will require your support. That small portion. To check whether the content is correct, you are not really doing the research, you are only checking the content.

R: What about assessment? Most often we are challenged as teacher educators, we still want the pen and paper kind of assessment? The very objective type of assessment? Yet maybe there could be other forms of assessment, was that a challenge also?

P: It was a challenge; fortunately they had an assessment in the form of presentations where they would not write much. They would present and have a summary in a written form which again you are going to mark. It

was long essays. They were so challenging for one to mark especially when you were a mathematics teacher, who will be looking for the appropriate methods and the correct answer. This time you had to switch from that, mark long essays. It was a challenge, awarding marks, at times you will have awarded marks and really you will not be in a position to say why you had awarded the marks. It will have helped if you were taken on board in terms of assessment, how you mark some form of papers they produce and all the like.

Teacher educator induction

R: Can you describe an incident that stands out as most significant in your early years of beginning to train teachers?

P: The challenges like I said, the controlling of the adult students, you have to negotiate for you to be effective, you should have that understanding which you don't practice much when you are still at secondary school, and though I would say the adult students at times they are difficult to handle, but there will be those who are mature, those are the ones who will give you courage even after the class when they see that maybe somehow you were not so happy about the class, they will come to you to say, maybe this time and that time we did not they will come to you will assist you with regards to that. Some giving you advice some suggestions saying let us do it this way.

That is in the class now, but the challenge is even before you get to class. You will be anxious, the anxiety before you get to class, you know you are a teacher and you will be comparing the ages, you will be asking yourself what is going to happen when I get to class, do I start with questioning, how do I arrange my methods, just before you get to class. You will feel you are not ready for class.

R: Sometimes you get a feeling that you are forced to think on your feet,

P: Yes, yes

R: Because what you planned might not be what you find in class?

P: At secondary school, though you will prepare, when you get into higher institutions, the anxiety comes in, there are those who are able to read on their own and beyond and will be able to challenge you when you get to class. That is even before you know your students. These are some of the things that will come into your mind.

The other thing is the dress, you know, the dress, they be will say this one, she goes to PEP (Stores) like I do, she goes to Edgars (Stores) like I do. She is also dressing the same way like us. You want to be seen to bedressing appropriately to earn respect and may be buy clothes from different shops that they do not go to.

R: I like that, I like that element, because you have to be cautious of how the others are. I am sure it is more serious here than there, or am I wrong? College C versus College B?

P: It is more serious here, because they go to the same shops that we go to. Those in College C there, they will have to travel down here to buy, they will not be buying all the clothes that you can buy because of the distance. These ones we go to the shops to buy and this person will go there immediately.

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R: Interesting! Very interesting.

P: The other area which caused some challenges is because when you are at secondary you are not so many, the number of staff, especially that I was in a junior secondary, when you get to a higher institution like College C for instance, you will find that there are more staff, the buildings, everything has sort of increased.

R: You are confirming literature. Because in literature also when people move from schools to universities and colleges, they are overwhelmed by space, they are overwhelmed by the freedom. There is that feeling of being free. That there is no bell to answer to, that maybe you have six periods per week you wonder what to do with the time and the like. You are right about space and numbers having an effect on you.

Did you undergo any induction when you first started handling student teachers?

P: The induction was there but not much on how to handle adult learners, it just introduced you to the processes, how do you get to the Principal, channels of communication, we were taken to the Farm to see the physical aspects - not much on to how to handle adult learners. (As for) the class; It was up to you to find your way. It was for a week, people from TT&D (Department of Teacher Training and Development) came to talk on progression, nothing on how to handle adult learners.

Teacher Educator Professional development

R: Have you been involved in activities that relate to personal and professional growth after joining a college or faculty of education? Please explain.

P: Of course I did go for my further studies, that was the professional growth that I can talk about, in my area of specialization. I went for a third degree by distance mode and that was my initiative.

R: A third degree out of your own initiative? Has this been helpful?

P: They have been helpful, if at all there was research that is being carried out in the colleges of education. This would have been helpful. You will be coming from studies, you will still be have ideas that you still want to find out if they really are happening in schools or what, but because one the research culture is not yet c, people are reluctant to do research. You will always be looking forward to say who can be your mentor in this area of research. When you are completing your masters, you still have gaps with regards to research, that if there were mentors in colleges of education who will be absorbing the newly enrolled and qualified. Then that would help. That would help.

R: Are you are suggesting that an in depth mentoring programme it should have a strong element of research?

P: Yes.

R: What is your opinion (in general) about professional development of lecturers in colleges/faculties of education?

P: My opinion; firstly I would say, the government has, well, a way of not encouraging people to continue with professional development. In Botswana, once you have done your first degree, it's enough generally. You continue with your Masters, with your PhD you are not even recognized, that on its own; is really discouraging. It is discouraging because.... I think that is one of the reasons why a lot of lecturers are not engaged in professional development. You will still be the same person. No one is going to recognize that you have a PhD! You will still be the same person. Knowing that you are there is really very important. We are in this field (of Special Needs Education), you will be shocked to learn that Inclusive Education Policy has been launched on a certain day, that doesn't come well, Just asking one to run short courses, or being called to go to present, those things, is enough' not necessarily in monetary terms.

R: So really there is still a lot that can be done?

P: There is a lot that can be done.

R: Which other area could be focused on when one is planning professional development programme for teacher educators? Apart from research? Where do you see the gaps?

P: The gaps in terms of the methodologies that we use. I think it will be helpful if now and then lecturers are taken on board on the new developments in terms of the methodology aspect on how to handle adult learners. They have to keep on learning and not use the traditional methods, my observation, even after 5 years you still use the traditional methods, where the lecturer is a fountain of knowledge, you lecture and lecture and set assignment. You see what I mean. Short courses; how to handle adult learners using new developments and methodologies.

Teacher educators as a unique profession

R: Can you share your thoughts about lecturers in faculties/colleges of education (teacher educators) being a unique professional group?

P: I think we can, as long as one, we do not call anyone to be a teacher. As long as a teacher is someone who has been trained in that area. Not just like calling anyone who has done form 5 to come and teach or anyone who is still doing first degree.

We can stand out in terms on how we approach other people, when you do teacher training, you get to learn how to approach different people, as a teacher you get to learn how to approach or work with people of different calibres and all the like. That is the unique.

A teacher should be a holistic person. Given what situation, a teacher say be having some sought of solutions. Given a certain individual, a teacher should assist this individual. That is why I always say give me any student, I will be able to teach any student. I was taught how a person is, these are the characteristics, you are likely to observe this and this is what you have to do. Just that, makes you unique

R:What are your thoughts about “research versus the teaching and learning functions” in relation to reward, recognition and professional growth of lecturers in faculties/colleges of education?

P: I would prefer people who have information, they have done the research, the action research, and they should come out to share with their colleagues. The people who have the experiences in class should do the action research to come and present to the colleagues see how they can handle those situations.

R: The idea is sharing and sharing and sharing.

P: Sharing and sharing. As long as you learn something new you have to share with others are on board and will know how to handle that.

Interview Conclusion

R: Do you have any thoughts about the preparation, induction and professional development of lecturers in faculties/colleges of education you wish to share?

All efforts will be made not write any of the interview responses in a way that links them to you or your identity. However, please indicate any aspect of this interview that I should **be particularly cautious** about.

P: I think I said everything that is right. I do not think I said anything which will cause any damage whatsoever.

R: Once again, thank you very much for your time.

END OF INTERVIEW



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Appendix 8c

Interview Transcription (Dr Darius)

Location: Institution D

Length of Interview: 30 minutes 19 seconds

Researcher (R): Mr JA Kasozi

Participant (P): Dr Darius

START OF INTERVIEW

Researcher: Good afternoon.

Participant: Good afternoon.



R: Thank you for agreeing to be part of this research. This interview will take about 30minutes and I will be taking notes and recording as the interview progresses. Please note that all information given during this interview is anonymous in nature and not link back to you personally.

P: Alright.

BACKGROUND INFORMATION:

R: When did you get into teacher education?

P: Umm, in the year 2000.

R: Alright, where was this exactly?

P: I worked for the University of Fort Hare distance education project and we worked with practicing teachers who were upgrading their studies. They were doing Bachelor of Education degrees, because most of them had national diplomas so they were doing Bachelor of Education degrees through distance education and that's where I started.

R: Why did you go into teacher education? What motivated you?

P: Umm, after completing my senior teacher's diploma I decided to further my studies. And during the study period one of the things that I realised was that had I been taught some of the stuff effectively, I would have taken a different path career wise. So I decided to take it upon myself and said I want to influence change. If I could train teachers in such a way that they could teach learners effectively because I believe if I had been taught mathematics effectively at school, I would have been a mathematician by now. Because I believe some of my teachers did not have the methodologies that I got to understand and explore when I was furthering my studies after completing my teachers' diploma.

R: So after completing your teachers' diploma you did some teaching in schools?

P: Yes I did.

R: Any particular subject areas?

P: I taught in a primary school, so we had to teach all the subjects for grade 3. So during that time I furthered my studies.

TEACHING METHODS:

R: Alright, you mentioned effective teaching and I'll ask a few questions concerning this. I know I have a similar history. In mathematics, I found that I depended a lot on the quality of the teacher with regards to understanding the subject. And maybe the little I know now is a result of one or two teachers, as opposed to the entire "O" level "A" level spectrum.

Umm, so really you wanted to influence change?

P: Yes I wanted to influence change because I was concerned about the quality of teaching while I was at school because had I been taught mathematics effectively I would have been a mathematician. This is due to me realising while I was at school my teachers were more concerned about me knowing the procedures to problem solving and not helping us to know and understand the concepts behind the procedures. So it was an issue of conceptual development versus procedural discourse.

PREVIOUS TRAINING:

R: Alright, before you joined the Forte Hare distance education project had you received any form of training or assistance in terms of training teachers?

P: No, (laughs) I received on the job training.

R: Alright, could you please explain more on that?

P: Well I didn't go for the workshop before actually working for the teachers in the distance education project, but what was done was that after being employed we would be sent to workshops. So initially go get employed and then you start attending workshops.

R: Alright, what kind of workshops were they regular workshops or Monthly workshops perhaps?

P: We would have workshops during school vacations, two day workshops and the workshops for this particular project were workshops that helped us to mediate the materials, and not necessarily helping you with how to deal with adult learners. That I did through trial and error (laughs).

R: Umm so it was really about how to mediate the materials because materials were content based and not the aspect of teaching and learning per say.

P: Yes

R: Umm, with hindsight do you think if you had received training in teacher training it would have been useful

P: it would have been very useful because the distance education students I was working with had multiple personality. They were mothers, they were students and some are business woman. So it would have helped if I had been trained or taken to a workshop about how to deal with adult learner who have got multiple personalities, because I was from a primary school where I taught children who depended on me. And now I have these people who would come to class with their "issues" and at the same time I was expecting them to submit assignments and participate in class so they would come to class not necessarily ready for participation. So if I had been trained I think it would have made some difference and the impact would have been much faster.

R: Alright, what about research in relation to teaching adults? If you had received some elements of that ?

P: Yeah, I think if I had exposed to research concerning training adults I think that would have also helped me.

ASSESSMENT:

R: What about issues of assessment? You mentioned that you used to handle standard three's and now you are handling diploma to degree students.

P: I think with me, the project that I worked for had that all planned out so as we are trained for mediating the materials, we are also trained for issues of assessment in terms of how do you assess adult learners. We were even introduced to three forms of assessment; self-assessment, peer assessment and your assessment as the tutor. So that really helped me because I was from a school where I was the only assessor, now I had to give to give the student's space to assess themselves and also assess their colleagues. Although we had some issues around that because they (the students) were not really honest about the way they assessed each other, but I was not really exposed to or taken into a context where you'd find that there is tension between your assessment and the teacher's assessment. How do you deal with that that was my problem when the adult learners assessed themselves and they believed that the way they assessed themselves was the correct way as opposed to the way you assess them.

R: What percentage of this accounted for the final grade?

P: It was my assessment (laughs) so that was the issue.

R: (Laughs) because normally you find that self and peer assessment is there but they hardly have any effect on final assessment simply because of that argument of objectivity and validity.

P: Yes that they are very subjective. But despite this mine the assessment I would convince them. I wouldn't just say because you have given yourself "good" that you are now very good because we had those level descriptors. I had to tell them why for example I did agree with their assessment and it took some convincing.

R: So in a way it was negotiated?

P: It was negotiated because otherwise there would be tension in the lecture (laughs).

INDUCTION:

R: Alright. You mentioned that you are self-taught and that you learnt a lot by actually doing. What about induction as we know it?

P: There was no induction and I think for us it was assumed because when I started working for DUP I had worked at a teachers training college and I think that's where the challenges were. I had actually forgotten about that, that I had worked at a teachers college before joining a primary school so that why most of the time I would find myself worried in front of the student. Because I didn't know how to mediate content because the students have passed matric so if you are teaching them languages, they have heard learnt everything that is to be done about languages. What does it mean to teach language in a primary school and in a teachers college, how do you prepare someone to go and teach at a primary school. And also I did not have the methodologies for teaching them. The only methodologies that I had were for teaching children and these were pre-service kids.

R: Very challenging?

P: Yes very challenging because in a way they would try to control your lesson and what happens in class despite your own planning.

R: Alright, so the element of age was a challenge?

P: Yes because about 50% of them had worked before coming to the teacher college.

EXPERIENCES AND INCIDENTS

R: Umm, do you have any particular incidences in the earlier years at the college that stand out in terms of teaching in general but also the lack of preparation?

P: What I realised with adult learners is that when you teach them, and maybe they have a textbook they do the same thing that is done in high schools. They will go through the textbook and ask you things that you have not really touched on during your lesson just to see if you understand and if you are comfortable with the content. So I didn't know when to stop and watch because I did not have the methodologies because teaching in a primary school the kids would just depend on you, but now I was a figure of authority in a context where people would challenge some of the things that you said. So I realised that I had to be prepared.

R: And you did not have the opportunity to say “I am not sure about this”

P: No not at all

R: So you had to keep your reputation going because it would reflect upon you as a teacher?

P: Yes and one thing as I mentioned was the content. Having students who have passed matric and now looking at the content and wondering what is it about this content that is supposed to be new and that I am supposed to teach these kids. For example what is language, what is English in a teachers college versus teaching language in a secondary school?

R: Alright, from the discussion you seem to be of the opinion that teaching children is different from teaching young adults?

P: Yes

PROFESSIONAL DEVELOPMENT



R: And you gave the example of power and of umm, content and mediation. In addition to this you mentioned negotiation for assessment. Alright, what about professional development? Now from the year 2000 to of late, have you been involved in professional development activities?

P: Definitely, a lot of them because I needed to understand and also be comfortable in my lectures. And also to take you back to the reasons why I ventured into teacher education, I needed to offer my students the best so that when they go out, especially pre-service students, they would be effective teachers.

R: Alright, so would you say that the urge to be an effective teacher educator has pushed you to the level you are at?

P: Yes

R: Ok, umm of course you have had numerous workshops

P: Yes, I actually still attend workshops even at the department of education (DOE). When they train teachers I do go so that I can keep abreast with what is happening in the real classrooms, so that when I go

into the lecture hall, I will be able to come up with real examples of what is going on in real classroom situations.

R: Are any of these workshops you mentioned specific for handling adult students?

P: Not at all. Most of the workshops are on the content of the curriculum and content mediation of the wide subjects. I have never been to a workshop where the focus was in training adults. The only time I got to learn and do research when it comes to training adults was when I taught a module for a school leadership and it was mentoring.

R: Alright, so you did a bit of that in the advanced education for school leadership

P: Yes, so I had to deal with research that's based on how one goes about how to handle adults because when I got there the principal was to mentor students at school. So, I felt that they had to know to work with adults, how adults learn. So that helped me to also understand issues about how adults learn.

R: Alright, when I previously visited the teachers learning centre I spoke to a lady who, in my opinion mentioned that there is a very wonderful program for training teachers to teach at higher education levels or university level and the way it is structured sounds very interesting. And so I was wondering if perhaps there is a reason you have not joined that?

P: I registered for that course in 2010 but I did not find it interesting. This is because while I was there they were still dealing with assessment, so they were trying to get people to understand the forms of assessment and I was like ok, I am already a teacher and an educator so I already know all those things. So it wasn't, or rather I didn't find it challenging, maybe for people outside other parts but not the faculty of education.

UNIQUE PROFESSION

R: Umm, do you think that teacher trainers are part of a unique profession and require unique competencies and skills from other people who are in higher education?

P: I think we do because with us, as people who are preparing teachers, when it comes to the knowledge that we need, we have to look at content knowledge. When they leave having acquired the pedagogical knowledge that they are supposed to have and now we have to expose them to the

content knowledge and how to combine the two and decide what to do and teach in class, how to sequence and pace your lessons.

R: Alright, umm does that mean you would say there is a gap at Fort Hare University, especially with regard to that element?

P: I think for me there is a gap because as teacher educators we are trained from different contexts. Some people come from secondary or senior secondary schools and join the faculty of education. And some people come here being known for being good teachers and when they get into the university level they tell you about the scholarly of teaching and being a good teacher does mean you have to do research. Because they may say you have to teach but whatever you do make sure you do research and that it is informed through research. So they tell you to talk about the scholarship of teaching so now you have to be a scholar, so from being a teacher to a scholar and you have to understand what it means to be a scholar versus being a teacher. And what happens is that nobody inducts you or tells you what it means to be a scholar and how research can inform your teaching.

R: Well from my experience in several departments, the two are held in different compartments, to a level where colleagues in higher education, from schools especially find it difficult to do both. To a level where people abandon teaching to do research. This leads me to my next question. Do you think these institutions elevate research over teaching?

P: Yeah, because with research there are benefits and there are no benefits to being a good teacher so it's teacher excellence versus research. By being a researcher you are awarded heavily and every paper you produce you are awarded, but being a teacher I think we are just acknowledged because there is the VC's teacher's award. And that's why people abandon teaching and they go for research because most of the time good teachers are not necessarily good researchers and vice versa and how do you bring the two together so that you can get good researchers and good teachers. How do you get this good teacher to do research while he/she is also teaching and find ways of researching his or her own teaching? So I think that's where we are.

R: Ok, so how do you cope? Because I know that you have written some papers and you are involved in teaching and the times I have seen you teach you seem to have passion for your students and also completing your first degree and your honours degree.

P: Umm, with research you have to find time and I think I have come to a stage where I have realised that I cannot only be a teacher at university level, I have to be a scholar. And what I decided to do was say, well there was a professor who would say what you need to do get a PhD and then prove you are a scholar. So that is what I am trying to do and I think I am trying and learnt the tricks and rules of the game, but with research you need to find time. And it's worse in our situation because you are overloaded, from Monday to Monday.

INTERVIEW CONCLUSION

R: Alright, as we conclude this interview do you have any general questions about the preparation, induction and professional development of lecturers in faculties of colleges that you would like to share?

P: Well all I can say is that; we are missing out if we don't induct people who are coming into teacher education because we are missing out on turning the good teachers into scholars and also turning the good teachers from schools into good lecturers. Because at least for me, some people come with methodologies that we need for our students that are doing the foundation phase, they also come with content knowledge. But now they need to combine the two so that they can have pedagogical content as needed in a higher education institution on how to teach an adult.

R: Alright. All effort will be taken to not associate you with what we have discussed. Do you have any areas you wish I take caution about when transcribing this interview?

P: Well perhaps, previously where I had forgotten to mention my experience as a lecturer in a teacher training college.

R: Alright.

R: Thank you very much for your time.

END OF INTERVIEW

APPENDIX 9

Introductory letter from the research promoter



University of Fort Hare
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FACULTY OF EDUCATION

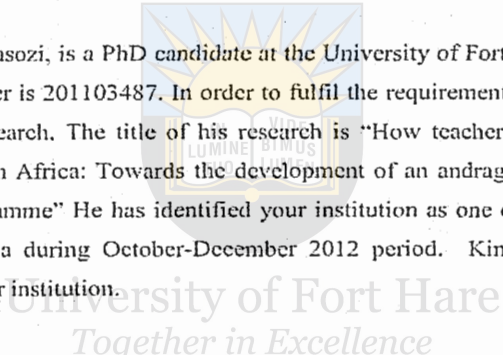
Alice (main) Campus:
Private Bag X1314, King William's Town Rd, Alice, 5700, RSA
Tel: +27 (0) 40 602-2412 • Fax: +27 (0) 40 602-2448



01 August 2012

To whom it may concern

This is to confirm that Mr JA Kasozi, is a PhD candidate at the University of Fort Hare, Faculty of Education. His student number is 201103487. In order to fulfil the requirements of his study, he needs to undertake field research. The title of his research is "How teacher educators are prepared in Botswana and South Africa: Towards the development of an andragogically based training model/mentoring programme" He has identified your institution as one of the research sites, and is due to collect data during October-December 2012 period. Kindly grant him permission to collect data in your institution.



Feel free to contact me for any more information at the following contact numbers:
043-704 7222/7221.

Sincerely

Dr. N. Duku

Research Promoter

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