

Interrogating student and lecturer perspectives of professional knowledge delivery in the initial teacher-educationprogrammes in South Africa within a context of quality

by

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ABSTRACT

Interrogating student and lecturer perspectives of professional knowledge delivery in the initial teacher-training programmes in South Africa within a context of quality

In South Africa, the quality of teachers working in our current education system has been put under a looking glass by the Department of Education (DoE) (2006) since the systemic results, indicating national literacy and numeracy levels in primary schools, were issued. These results place South African literacy and numeracy skills far below those of many countries in the rest of Africa. This has been viewed by the South African school sector as one of the symptoms of the breakdown in the culture of learning in the education system in our country. As a result, the South African school system has been characterised as a 'high-cost, high-participation, low-quality system' Taylor (2008). Taylor (2008) concludes from his research that the challenges which undermine effective teaching and learning in South African schools include the quality of teacher knowledge and teaching practices.

The relationship between teacher quality and teacher productivity is key to the development of a high-quality educational system. It is argued that teacher quality impacts greatly on student achievement, which, in turn, impacts on the development and transformation of that society. Rowe (2003) and Morrow's (2007) key findings in their research on educational success indicate that 'what matters most' is the quality teacher.

The historical and social change in South Africa has pioneered transformation with regard to curriculum change and has redefined the aims of teacher education in this country. Over the last few years we have been faced with a myriad of changes in policy frameworks that are supposed to guide change within the educational system, as well as within teacher education (Guskey, 2002:381-391). This study, therefore, aims to interrogate the missing links between teacher education institutions and pre-service teachers' experience, while incorporating school and learner needs. Since quality is the critical factor, there is an urgent need to reconceptualise how we can prepare a generation of teachers equipped to meet the demands of the 21st-century student. The key objective in this study, therefore, is the interrogation of the following components in the initial teacher-training programmes in South Africa:

- Professional development and knowledge of teachers.
- Delivery of that knowledge from a pedagogical perspective.
- Quality of current teacher-training programmes.

This research project is geared towards understanding the challenges that face final-year teacher-training students as they prepare themselves to enter the 'real world of teaching'. The study cross-examines the quality of learning and teaching in higher education institutions, the pedagogy applied and the degree of its success. In order to examine the initial teacher-training programmes there was a need to interrogate:

- students' perceptions of the quality of their training;
- lecturers' responses to the quality of training provided; and
- pre-service teachers' notions of the quality of the 'product' they experience in the field during practice teaching and in their experience with newly qualified teachers.

The search for an alternative pedagogy, which aims to promote the transformation and reconstruction of education in South Africa, has placed this research project within a conceptual framework of critical pedagogy, which holds the view that learning is self-generated and not just accessible. The theoretical underpinnings were derived from the works of Paulo Freire and Henry Giroux. This project is situated within an interpretivist paradigm and is qualitative in nature. A sample of four faculties of education, nationally, has been used in the project. Semi-structured interviews and focus-group interviews were used to collect data from all the fourth-year BEd students and their lecturers at each of the four universities, as well as from in-service teachers who host students during practice teaching sessions. The interview questions were concerned with the delivery of the teacher-training programmes and whether the needs of students were being met with regard to their training. Students commented on the development of the following areas: delivery of knowledge, acquisition of adequate teaching skills, and their readiness to enter the teaching field.

The findings of this research indicate that students, lecturers and in-service teachers believe that many components within the current teacher-training programme need to be transformed. This could be attributed to, amongst others, the inadequate pedagogical practices used in knowledge delivery, lack of actual classroom experience, and the ineffective organisation and supervision of teaching practice which results in students feeling ill-equipped to enter the teaching arena. These impact the quality of teachers who are exiting the current system. Suggestions to improve the organisation of teacher experience, the ongoing professional development of teacher educators, and mentorship ofteachers, as well as the development of recruitment and selection criteria for students wishing to enter teacher education are made.

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This work is dedicated to my family

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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

AFT: American Federation of Teachers

BEd: Bachelor of Education

CAPS: Curriculum and Assessment Policy Statement

C2005: Curriculum 2005

CPUT: Cape Peninsula University of Technology

DoE: Department for Education

DoE: Department of Education

FET: Further Education and Training

F/G: Focus Group

ICT: Information and Communication Technology

IPET: Initial Professional Education for Teachers

ITE: Initial Teacher Education

ITEP: Individual Teacher Educator Plan

NCATE: National Council for Accreditation of Teacher Education

NMMU: Nelson Mandela Metropolitan University

NRF: National Research Foundation

NSE: Norms and Standards for Educators

NQF: National Qualifications Framework

OECD: Organisation for Economic Co-operation and Development

PCK: Pedagogical Content Knowledge

QTE: Quality in Teacher Education

RNCS: Revised National Curriculum Statement

SAQMEQ: Southern and Eastern African Consortium for Monitoring Education Quality

TEI: Teacher Education Institution

TPACK: Technological Pedagogical and Content Knowledge

UKZN: University of KwaZulu-Natal

UNESCO: United Nations Educational, Scientific and Cultural Organization

Wits: University of Witwatersrand

CHAPTER 1. INTRODUCTION TO THE RESEARCH

1.1. INTRODUCTION

The relationship between teacher quality and teacher productivity is key to the development of a high-quality educational system. Within this relationship, initial teacher education serves as the catalyst in the redefinition of the professional development of teachers facing the present challenges of a globalised society. Harris and Sass (2007:3) contend that teacher quality has been the focus of research for decades, yet 'there is no consensus on what factors enhance, or even signal, teacher quality'. Since quality is the critical factor, there is an urgent need to re-conceptualise how we can prepare a generation of teachers equipped to meet the demands of the 21st-century student.

Gopinathan et al. (2008:9) believe that to improve quality we need to redefine the concept of professionalism and to change the 'form and function' of the existing teacher preparation programmes. We need to focus on the following five aspects: the development of teachers with specialised professional knowledge and skills, which they will be able to use appropriately in various teaching contexts; developing an orientation of enquiry, especially into pedagogical issues, and promoting the use of 'evidence-based knowledge to inform practice'; developing the ability to set realistic goals, facilitate and guide students in their learning, create empowering learning and teaching environments, and take responsibility for student outcomes, both academic and emotional; collaborating with all stakeholders to bring about reform where needed; and motivating teachers to be life-long learners, constantly enhancing their own expertise and strengthening themselves professionally (Gopinathan et al., 2008:9).

This study is, therefore, based on the perceptions of lecturers and students regarding their experiences within teacher-education programmes with the focus on the development of the professional knowledge of teachers, the delivery of that professional knowledge from a pedagogical perspective, as well as the quality of the programmes. Asthe research encompassed final-year students, and their lecturers as 'teachers of teachers', it was important to get a sense of how they were feeling in terms of various components of the training programmes by sharing their reflections, with the aim of interrogating and possibly improving the current programmes. In-service teachers were also asked to give their perspectives with regard to the preparedness of both student teachers and newly qualified

teachers they had worked with. They gave their views on aspects they felt students could manage well or possible areas that could be improved.

This chapter discusses the background, context and the aim of the study. The research questions and methodology are introduced, terms used are clarified, and the structure of the thesis is set out.

1.2. BACKGROUND TO THE STUDY

The school-society relationship, as well as individual learning and development, are the main aims of schooling, since it prepares young people to actively participate in the world. It is also linked to 'social, political and economic discourses' for the purposes of 'social cohesion, citizenship and the world of work' (Christie, 2008:64).

In order to prepare learners adequately to become active citizens in this complex world, we need to make sure that teachers understand their role and are fully aware of the challenges that are presented. Continuous change and renewal of teacher-education programmes are necessary to keep pace with the changing world. This study interrogates the missing links between the teacher education institutions and what pre-service teachers experience, and those of the school and learner needs. Christie (2008:66) makes reference to the increasing demands placed on schooling and, therefore, on teachers as well. This, she says, is exacerbated by the 'powerful changes' that are presently encountered in the changing world. According to her, the Organisation for Economic Co-operation and Development (OECD), which comprises 30 market economy countries, undertooka search to understand the concept of 'Schooling for the Future'. The following questions were raised as part of this debate:

- What will our future schools look like?
- What kinds of teaching and learning will take place in them?
- Who will be the teachers and will they be of high quality?
- Will schools be laying the foundations for life-long learning for all or only the lucky few?

(OECD: 2001)

According to the OECD (2001), these are the most critical questions which will set the tone for education for the 21stcentury. This sets high expectations for teacher-training

institutions, since they need to respond to the 'emerging paradigms of school education', making the issue of quality explicit in all teacher-training programmes (Menon et al., 2007:1). Chance (2008:87) indicates that the provision of highly skilled educators is, without a doubt, one of the most important factors influencing student achievement. He further contends that since student achievement depends on the effectiveness of teachers, there should be a greater focus on teacher educators since they are 'charged with training highly skilled teachers'.

It is argued that teacher quality impacts greatly on student achievement, which, therefore, impacts on the development and transformation of that society. Both Rowe (2003) and Morrow's (2007) key finding in their research on educational success indicates that 'what matters most' is the quality teacher. Rowe (2003) further contends that behaviour, academic achievement, experiences and background are insignificant when compared to the influence of quality teaching and learning on the achievement of cognitive, affective and behavioural outcomes of learners.

The main challenges that affect the access to and quality of education are, amongst others, according to Bourgonie and Tromp (2011:12), insufficient or inadequate training, low teacher morale, as well as high attrition rates. Despite many years of attempts at transformation, teacher-education programmes are still the object of great critique throughout the world and are accused of 'ignoring the voices and needs of teacher candidates' (Russell& McPherson, 2001:2). Darling-Hammond et al. (2005:391) believe that many of the problems are rooted in the programmes being 'too theoretical, having little connection to practice, offering fragmented and incoherent courses and lacking in a clear, shared conception of teaching among faculty'. Russell and McPherson (2001:2) refer to the 'illusion of adequate preparation to teach' which many newly qualified teachers experience, only to find that once they are in the classroom, their 'personal, daily experiences reveal the inevitable inadequacies of preservice preparation'. This study examines the first-hand experiences of final-year, pre-service teachers, creating an opportunity for their voices to be heard. It encapsulates the 'what' and the 'how' of the pedagogy of teaching and learning, creating a window through which all stakeholders can view the current teacher-education programmes, in order to transform them to suit the needs of their recipients.

1.3. RESEARCH CONTEXT

Morrow (2007:28) describes the schooling system in South Africa to be in a 'far from healthy condition'. In fact, he feels that the system 'is close to collapse'. The then Minister of

Education, NalediPandor, in October 2008, described the same system as being 'a national emergency', calling on all stakeholders to become part of a drive to find solutions to the problems experienced (DoE, 2009). In an attempt to build an active democracy, Christie (2008) feels that it is important to understand how the 'institutions of public life' might be maintained or transformed to develop a shared sense of identity and a common purpose.

Since social, political and economic discrimination, as well as the inequalities of a class, race, gender, institutional and spatial nature profoundly shaped South African education, various initiatives, since 1994, have been sought in an effort to transform education, starting with higher education (Kruss, 2007). The reformation, remodelling and transformation of teacher policy were at the heart of reshaping higher education globally. This meant shifting teacher education from the 'specialized college sector into the university sector' (Kruss, 2007:3). Thus, the landscape of teacher education and higher education has undergone much change since 1994.

Prior to 1994 the higher education sector, relevant to teacher education, comprised 21 public universities, 15 technikons and 120 colleges of education (Badat, 2010:12). According to Kruss (2007:3), the restructuring process included the following:

Table 1.1: Higher Education restructuring process

Time period	Institution	Restructuring process	Purpose
1990s Universities Colleges of education (closed down from 1980 – 1997)and universities		Internal	Change higher education imperatives
		Legislatively incorporated into universities	Improve efficiency and quality of colleges
2004	Higher education institutions	Process of mergers and partial incorporations initiated	

Badat (2010) explains further that since the restructuring of higher education in this country, the 'creation of a new, differentiated institutional landscape', which comprised 11 universities, six comprehensive universities, and six universities of technology, resulted. Kruss (2007) believes that since higher education institutions have now undergone this rapid wave of

restructuring within a short period of time, it has led to even further internal restructuring within certain institutions in order to deal with the mergers more effectively.

This process of restructuring, however, was intended to produce a new landscape in higher education thatwould 'lay the foundation for an equitable, sustainable and productive higher education system that will be of high quality and contribute effectively to the human resource, skill, knowledge and research needs of South Africa' (MoE, 2001:16). Gauging from the comments of Morrow (2007) and Pandor (DoE, 2009), these changes have not been able to successfully transform education in South Africa. McDaniel (2006:22) refers to transformation as not merely being change effected by participants or those in power, and Christie (2008:64) agrees, stressing the importance of changing conditions since it is not easy for education to 'cut across broad social patterns of inequality and marginalisation' in an attempt to build 'a sense of shared identity and develop a common purpose'.

While the problems experienced in the deterioration in education can, according to Morrow (2007:28), have their roots in politics, since it was a 'political struggle rather than an educational one', we should not assume that the remedies would be political too. He states that a large part of positive change will have to be professional.

The quality of teachers working in the current South African education system has been put under a looking glass by the Department of Education (DoE, 2006)since the issue of the systemic results, indicating national literacy and numeracy levels in primary schools. These results placed South African literacy and numeracy skills far below thoseof many countries in the rest of Africa. 'Even amongst the richest 20% of schools, South Africa is outperformed in numeracy by Mauritius and Kenya, and in all the other quintiles the South African mean scores are below those of the SAQMEQ (Southern and Eastern African Consortium for Monitoring Education Quality) all country means' (Taylor, 2008:4). This has been viewed by the South African school sector as one of the symptoms of the breakdown in the culture of learning in the education system in our country. As a result, the South African school system has been characterised as a 'high-cost, high-participation, low-quality system' (Taylor, 2008:4). He further concludes from his research that the challenges which undermine effective teaching and learning in South African schools include the quality of teacher knowledge and teaching practices.

In response to this,the 'Quality Learning and Teaching Campaign' was launched by the then Minister of Education, NalediPandor, in October 2008 (DoE, 2009). This campaign focused on drawing together all the stakeholders involved in education to take responsibility for the improvement of the quality in education. According to Pandor (DoE, 2009), the critical role

that all stakeholders, especially teachers and officials, play in the building of quality education, will present itself in the quality of interventions offered to ensure that effective learning and teaching take place.

The historical and social change in South Africa has pioneered transformation with regard to curriculum change, and has redefined the aims of teacher education in this country. Over the last few years we have been faced with a myriad of changes in policy frameworks that are supposed to guide change within the educational system, as well as within teacher education (Guskey, 2002:69). These include the National Qualifications Framework (NQF) and South African Schools Act (South Africa, 1996). The Department of Education further adopted a new national policy in 1998 called the *Norms and Standards for Educators*(NSE) (DoE, 2000). This document outlines the roles and the applied competences and qualifications for the development of teachers. Seven specific roles are enumerated, as well as the knowledge, skills and values defined within these roles.

In order to be a successful teacher in South Africa, one needs to fulfil the following roles: that of learning mediator; interpreter and designer of learning programmes; leader, administrator and manager; scholar, researcher and lifelong learner; and assessor. In addition, there is a community, citizenship and pastoral role, and a learning area/subject/discipline/phase specialist role.

These roles are further divided into three competences aimed at closing the divide between theory and practice.

- Practical competence is defined as the ability, in an authentic context, to consider a
 range of possibilities for action, make considered decisions about which possibility to
 follow, and to perform the chosen action.
- Foundational competence is where the learner demonstrates an understanding of the knowledge and thinking which underpin the action taken.
- Reflexive competence refers to the ability to integrate or connect performance and decision making with understanding, and with the ability to adapt to change and unforeseen circumstances and explain the reasons behind these actions.

(Bourgonje&Tromp, 2011:37-39)

The NSE is meant to provide guidelines or benchmarks within which all teacher-training programmes should be aligned, but research, according to Bourgonje andTromp (2011:38), has shown that this has not been adequately conceptualised or implemented by teacher

educators. For years, teaching styles have been characterised by 'transmission methods of teaching and rote-learning styles'.

These competences needed to be taught in integrated and applied ways, crossing conceptual boundaries, being rooted in context, and mixed in a way that is appropriate to the particular qualification, and varied and appropriate forms of assessment needed to be developed.

(Bourgonje&Tromp, 2011:39)

With no experience of actually implementing the new policy, it is suggested by Bourgonje and Tromp (2011:37-39), that the current teacher-education programmes have not been able to train teachers adequately to meet the needs as set out in the NSE.

1.4. AIM OF THE STUDY

It is the search for quality and good practice strategies that underpins the main concern raised in this research. The 'key agents in the success of any schooling system are the professional teachers who work in it and the quality, commitment and competence of teachers are necessary ingredients for its success' (Morrow, 2007:29). Therefore, the need to re-evaluate the quality and delivery of professional knowledge in the teacher-training programmes in South Africa becomes necessary. Two questions that still concern me are: Do we believe that the current policies have impacted on the quality of teacher competence and ability? Are we satisfied that South African teachers are trained adequately with regard to the acquisition of professional knowledge (content/pedagogical), good practice strategies, and values and skills in order to provide quality education which is core to developing and improving our society?

The key aim of this study is, therefore, the transformation of the following aspects in the initial teacher-training institutions in South Africa:

- Professional development and knowledge of teachers.
- Delivery of that knowledge from a pedagogical perspective.
- Quality of current teacher-training programmes.

1.5. RESEARCH QUESTIONS

The key focus question in the current investigation is as follows:

How does the training and professionalising of Initial Teacher Education (ITE) take place in four nationally selected institutions within a context of quality?

1.5.1. Sub-questions:

- 1. What are the perceptions of students and lecturers with regard to the quality in the acquisition of professional knowledge in ITE?
- 2. What are the perceptions of students and lecturers of the quality in the acquisition of teaching skills in ITE?
- 3. What are the perceptions of students and lecturers with regard to the quality of the readiness of students to enter the teaching profession?
- 4. What are the views of in-service teachers regarding the readiness of pre-service teachers to enter the teaching arena?

1.6. METHODOLOGY

The research is qualitative, using a phenomenological approach with semi-structured and focus group interviews as the key data collection instruments. These are appropriate instruments to explore the social processes that present within human interactions and are grounded in empirical data.

A sample of four faculties of education nationally was used in the project. Larger providers in each of the four major metropolitan areas were selected (University of KwaZulu-Natal,University of the Witwatersrand, Nelson Mandela Metropolitan University, and the Cape Peninsula University of Technology). The sample represents the different post-1994 configurations in the higher education scenario, the merger of universities/technikons, technikons/technikons and the shift of technikons towards the higher education sector. These factors were considered in the purposive sampling of universities.

- The University of the Witwatersrand is a previously white, liberal university that has merged with the Johannesburg College of Education (previously white).
- b. The University of KwaZulu-Natal is the result of the merger of Natal University (previously white) and the University of Durban-Westville (previously Indian).
- c. The Nelson Mandela Metropolitan University is the result of the merger of a previously white university (University of Port Elizabeth) and previously white technikon (Port ElizabethTechnikon).
- d. The Cape Peninsula University of Technology is the result of the merger of twotechnikons, Cape Technikon (previously white) and Peninsula Technikon (previously coloured).

Interviews were used to gather data from 10 - 20 students per faculty. The use of these instruments facilitated depth in the data and the probing of key issues added a richer texture to it. Since focus group interviews were conducted, it made it possible for the researcher to:

- · obtain general background information;
- generate research hypotheses which can further research and testing;
- stimulate new ideas; and
- diagnosepotential problems.

This form of data collection is especially useful as it provides in-depth information in a short space of time. The researcher can be assured of rich data as the questions can be redirected to ensure that they are answered fully (Johnson & Christensen, 2004:186). The interview questions were concerned with the delivery of the teacher-training programmes and whether the needs of students were met with regard to their training. Students commented on the development of the following areas: delivery of knowledge, acquisition of adequate teaching skills, and their readiness to enter the teaching field.

The interview respondents were sampled purposively. The focus group interviews took approximately one hour each. The project was underpinned by Maxwell's (1992) theory of understanding and validity in qualitative research, which focuses on: descriptive validity (referring to factual accuracy); interpretive validity (conveying the meaning portrayed by

participants accurately); and generalisibility (generalising from a set of research findings to other people, settings, times, etc.).

Communication validity and data triangulation were used in conjunction to ensure the validity of the results of this project, and also to ensure that the analyses of findings, good practice strategies or predictions based on the study of teacher education, were trustworthy. All the interviews were transcribed and an idiographic approach was followed. A particular example was analysed, working towards a more general categorisation. This process entailed looking for themes which emerged in the initial case, then connecting the themes and producing a coherently ordered table of themes. Thereafter other cases were analysed using overarching themes to label clusters.

Willig's (2001:18) set of basic ethical considerations for professional codes of practice was used which included: informed consent, no deception, right to withdraw, debriefing, and confidentiality.

1.7. CLARIFICATION OF TERMS

Professional knowledge:

Professional knowledge refers to the understanding and relationship between theory and practice. It is about developing teachers in a way that they do not only learn new skills, but are able to harness those skills to develop new insights into pedagogy, improve on their existing practice, and explore new understandings of what they teach and how they teach. It is regarded as 'knowledge-in-action' (Dickson, 2007:1) and comprises, therefore, not static or fixed points of information, but is dependent on its context of use, and as a result, is a continuous, life-long process of learning and adaptation.

Pedagogy:

Pedagogy, as used in this study, refers to the relationship between teaching and learning and how this relationship leads to growth, development and understanding of knowledge (Loughran, 2006). It is influenced by political, social and cultural values (Gray, 2009) and requires a reciprocal relationship between the 'teacher' and the 'student/learner'.

Quality in teacher education:

Educational quality is complex and multi-faceted. It is determined by how much and how well learners learn and how their education translates to benefit them personally, socially and developmentally. According to Gopinathan et al.(2008), central to quality in teacher

education is the provision of quality teaching provided by teachers to students, and this is characterised by the following: greater emphasis placed on teacher values, skills and knowledge that are fundamental to good teaching; expanded teachers' roles and responsibilities of teachers that are shared collaboratively with other professionals; different career expectations and aspirations resulting from changing teacher demographics and new job opportunities; and 'personalising' learning for individual students to accommodate greater diversity in learning contexts.

Technikons:

These were non-university higher education institutions in South Africa, focusing on vocational education.

Colleges for teacher education:

These were institutions that were developed based on racial and ethnic lines. These institutions provided teacher training to most Africans who were interested in becoming primary school teachers. At non-white colleges, students could train to qualify as teachers after completing a Standard 8 certificate (currently Grade 10). These colleges essentially operated as secondary schools, rather than tertiary institutions. After 1985, applicants had to have a matriculation certificate to qualify for entrance. At the white colleges, students were always required to have a matriculation certificate for entrance and these operated more like higher education institutions(Kruss, 2007).

1.8. STRUCTURE OF THE THESIS

This introductory chapter discusses the formulation of the research problem, clearly providing the background, the context and outlining the aims of the research. The main and supporting research questions are outlined. A brief description of the methodological orientations is provided. The clarification of terms particular to this study is presented and the chapter ends with an overview of the thesis.

The next six chapters have been arranged as follows:

Chapter 2:Theoreticalframework and literature review

This chapter is two-fold. Firstly, I discuss the conceptual underpinnings which frame this study. This study is placed within a critical paradigm, drawing on the work of Paulo Freire who is, arguably, the most celebrated critical educator. Freire's promotion of students' abilities to think critically about their educational situations and his notion of

engagedpedagogy, giving the responsibility of learning to both educators and learners, has influenced the course of this study. The works of Henry Giroux and Peter McLaren are also focused on, since their theory and practice of education is one that is set on transforming institutions of education and in so doing, transforming society.

The second aspect in this chapter reviews the literature relevant to this study. While looking at the quality of education delivered, one has to consider how teachers are trained to deliver this education. The literature focus has, therefore, been on the professional knowledge of teachers, the pedagogical practices applied, and how these determine the quality of education in South Africa.

Chapter 3: Methodology

In this chapter I outline the methodology, the design, and the implementation of the research process that has been employed. A qualitative approach is used and I provide a rationale for the research process chosen for this study.

Chapter 4: Findings and discussion: Acquisition of professional knowledge

In this chapter the findings and discussion related to the quality of professional knowledge acquisition and delivery are investigated. Modes of delivery used to teach students, meeting the needs of students, quality of lecturers, as well as student expectations of lecturers, are interrogated.

Chapter 5: Findings and discussion: Acquisition of adequate teaching skills

This chapter focuses on the findings and discussion surrounding the quality provided in the acquisition of teaching skills, on campus and during teaching practice. It also investigates the organisation of teaching practice and how this could possibly be improved.

Chapter 6: Findings and discussion: Readiness to enter the teaching profession

In this chapter I relate the views of both lecturers and students regarding students' readiness to enter the teaching profession. I also provide the opinions expressed by in-service educators and their viewsof the readiness of students to enter the teaching arena. The findings and discussion regarding this aspect are outlined in this chapter.

Chapter 7: Conclusions and recommendations

Certain conclusions are drawn regarding the training of teachers based on the analysis of the findings of this research. This chapter focuses on those conclusions and also provides

suggestions regard.	and	recommendation	ons foi	further	research	that	could	be	undertaken	in	this

CHAPTER 2.

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1. CONCEPTUAL FRAMEWORK

2.1.1. Introduction

This research project is geared towards understanding the challenges that face final-year teacher-training students as they prepare themselves to enter the real world of teaching. In order to examine the initial teacher-training programmes, there was a need to interrogate:

- students' perceptions of the quality of their training;
- lecturers' responses to the quality of training provided; and
- pre-serviceteachers' notions of the quality of the 'product' they experience in the field during practice teaching and in their experience with newly qualified teachers.

The study cross-examines the quality of learning and teaching in higher education institutions, the pedagogy applied, and the degree of its success. The search for an alternative pedagogy, which aims to promote the transformation and reconstruction of education in South Africa, has placed this research project within a conceptual framework of critical pedagogy which holds the view that learning is self-generated and not just accessible (Freire,1970). Actual knowledge can only come about through the engagement with and the 'problematising' of one's own reality, that is,understanding the problem and its significance in relation to experiences in one's own life and in the lives of those around us. The theoretical underpinnings in this study are therefore derived from the works of Paulo Freire (1970) and Henry Giroux (1988).

The journey, within the critical paradigm that this study has taken, is clearly outlined in the conceptual map that follows:

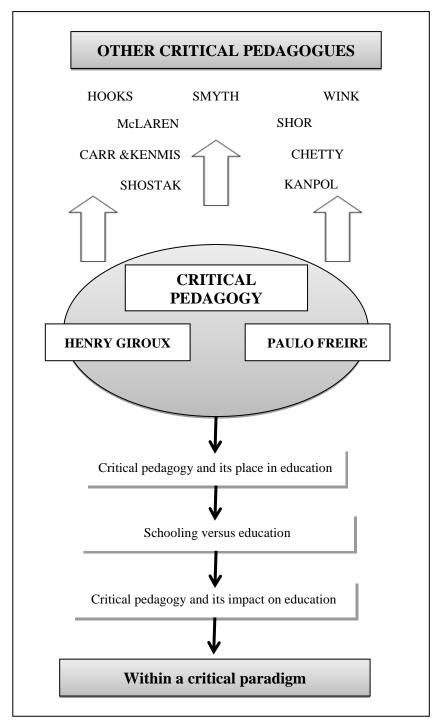


Figure 2.1: Framework of technological, pedagogical and content knowledge

2.1.2. The critical paradigm

Educational institutions do not exist in isolation or separate from the rest of society because, according to Giroux (1979:250), 'they embody collective attitudes that permeate every aspect of their organisation'. Giroux (1988:15) also concedes that in the curriculum design, in its implementation, as well as its evaluation, certain judgement patterns are presented regarding

the 'nature of knowledge, classroom social relationships and the distribution of power'. Without taking the above into consideration, we will be ignorant of the 'origins and consequences' of the belief systems that steer one's behaviour within these educational settings (Giroux, 1988:15). Wink (2005:26) describes critical pedagogy as a 'prism that reflects the complexities between teaching and learning. It is a prism which sheds light on the hidden subtleties that might have escaped our view previously'.

The traditional curriculum subscribes to a reasoning and logic that is void of history, is consensus driven and politically conservative (Giroux, 1988). This narrow model of reasoning does not embrace, nor does it own, the capacity to examine ideological presuppositions and, therefore, promotes a 'very passive' view of students (Giroux, 1988). Because it emphasises the logic of probability as the ultimate definition of truth and meaning, it does not promote critical reflection. The concepts of this model, in Giroux's (1988) view, are that the students appear as 'blank slates' to support the status quo.

Opposed to the view that students are 'passive learners', Freire(1985:68) refers to the concept of conscientisation, where people, as conscious beings, are not merely 'in' the world but rather 'with' the world and with others. Without this conscientisation, the human being would find himself/herself only 'in' the world as does the passive learner, thus limiting both their 'self knowledge and knowledge of the world'. It is this 'critical dimension of consciousness' that allows the human to transform his/her world. Freire uses the analogy of a bee which is without conscientisation and which, therefore, although able to produce honey, cannot transform it into any by-products because it lacks critical reflection. Humans, however, because they are beings of practice, are able to transform the world through humanisation.

... a bee puts to shame many an architect in the construction of her cells. But what distinguishes the worst architect from the bee of the bees is this, that the architect raises his structure in imagination before he erects it in reality.

(Freire, 1985:71)

McLaren (1989:167) justifies Freire (1993) and Giroux's(1988) interpretations by suggesting that within the critical educational paradigm, an institution should not be seen as only a 'site of indoctrination or socialization or a site of instruction' but that it aims to be seen also as 'a cultural terrain that promotes students' empowerment and self-transformation'. To effect this, it would be critical to envisage education as 'an arena of contestation that examines how and why knowledge is the way it is, why some forms of knowledge appear more powerful than others and how the students' daily experience reflects certain constructions of knowledge'

(Chetty, 2000:14). In order to achieve this goal it is vital, according to Chetty (2000), to create activities that encourage the construction of meaning, develop their understanding of the process whereby meanings are made, and promote critical thinking skills (Chetty, 2000:14).

In working towards developing the ability to construct meaning and understanding, and to promote critical thinking, constant dialogue and problem posing to develop critical consciousness, is necessary. Freire (1993:68) states that:

Whereas banking education anesthetises and inhibits creative power, problem-posing education involves a constant unveiling of reality. The former attempts to maintain the *submersion* of consciousness; the latter strives for the *emergence* of consciousness and *critical intervention* in reality.

Freire, according to Shor and Pari (1999:13), was not a libertarian but rather a critical educator because he believed that education 'as a group process was neither permissive nor agnostic'. Students and teachers were still expected to work within boundaries on the one hand, and on the other, 'the conceptual knowledge of the teacher was not denied but rather posed as a necessary element'. For these reasons it was vital that for teachers to become responsible and critical educators, they should be experts and very knowledgeable in their fields. The problem of Freire's (1973) mutuality lies within the teachers' capacity to use their expertise and authority to promote student agency rather than silence it. Freire (1973) felt that the liberatory teachers themselves were not equipped adequately and were poor practitioners of dialogue, since they were so used to the old habits of one-way communication.

Gore's (1993:40) critique of critical pedagogy is two-fold. On the one hand she contends that while Freire and Shor's contributions 'offer more concrete suggestions and examples taken from their own pedagogical practice, and which is intended to help other educators, Giroux and McLaren present an abstract, political vision which should be referred to as 'critical educational theory' rather than critical pedagogy (Gore, 1993:42). She states that they fail to give practical examples of practices which can be used in classrooms and thus:

Their pedagogy might be seen to restrict its audience to those readers who have the time, energy, or inclination to struggle with it... limiting its audience and its political potential(Gore, 1993:42).

2.1.3. Critical pedagogy and its place in education

Peter McLaren (1989:70) sees critical pedagogy as not only a site where indoctrination, socialisation or instruction takes place but as a site that is dialectical in nature and which, therefore, should promote reflection. Carr and Kemmis (1983) state that this dialectical nature involves: reflection, which plays between part and whole, knowledge and action, process and product, subject and object, being and becoming, rhetoric and reality or structure and function. Throughout this play, many contradictions may be revealed, and through these revelations 'new constructive thinking' is developed. The school, through critical pedagogy, should, therefore, become a site that 'promotes student empowerment and self transformation' (McLaren, 1989:70). This has been further defined by Shaw (2006:1) who holds the view that critical pedagogy should:

... embrace a raising of consciousness, a critique of society, as valuing students' voices, as honouring students' needs, values and individuality and as a hopeful, active pedagogy which enables students to become truly participatory members of a society who not only belong to that society but who can and do create and re-create that society, continually increasing freedom.

Wink (2005:165) agrees and feels that critical pedagogy will 'challenge our long-term assumptions'. Since critical pedagogy gives a 'voice to the voiceless and power to the powerless', it creates an opportunity to effect change (Wink, 2005:165). Wink (2005:165) further contends that 'critical pedagogy is all about change from coercive to collaborative, from transmission to transformative, from inert to catalytic and from passive to active'. Embracing critical pedagogy is important because, as Wink (2005:165) indicates, 'kids matter – that's why, our future matters – that's why'.

In view of this, Kanpol (1998:2) investigates practical ways of making critical pedagogy more doable for teachers in the classroom. A thorough understanding of the concepts of 'schooling and education' will provide 'hope for teachers to move on as social and critical change agents'. Within the concept of school and education, Kanpol (1998) focuses on concepts such as control versus democracy, authoritarianism versus authority, individualism versus individuality, de-skilling versus re-skilling, and traditional literacy versus critical literacy as a platform for the application of critical pedagogy in schools.

For the purposes of training teachers within a critical paradigm this study focused on the understanding of the over-arching concept of schooling versus education.

2.1.4. Schooling versus education

Since schools will soon become the pre-service teachers' reality, it is necessary for their initial training to adequately equip them to understand the various dimensions involved in the career they have chosen. Schostak (2005:1) and Kanpol (1998) refer to schooling as a social system in which management and control are the key indicators. They see schooling as merely a process of 'moulding and fashioning minds and behaviour' (Schostak, 2005:1)inthe interest of a particular group, and according to Kanpol (1998), gearing them particularly for the market economy. Schostak (2005:1) describes the process as a way of 'domesticating' people by trying to make them 'fit in' or match the demands made by particular societies. The motivation for students to learn, therefore, becomes entirely extrinsic. The greatest focus lies in the 'survival of the fittest mentality' and as stated by Kanpol (1998:6), presents itself in the attitude towards the importance of grades and the competitive nature among learners. For educators, this results in the use of 'sterile teaching methodologies' and a greater accountability model which denies the learner the reason for going into school in the first place, which according to Kanpol (1998), is to receive a broad education which includes nurturing, care, learning about community and being prepared to become good citizens. Schostak (2005:165) states that in schooling the 'locus of power is external to the child' because it lies with the adult or the teacher, since it is the adult that 'defines and controls'.

According to Giroux (1981:31-33), the approach to teacher education, as well as classroom pedagogy, has been too technocratic, and 'instead of learning to raise questions about the principles underlying different classroom methods, research techniques and theories of education, students are too preoccupied with learning the ...best way to teach a given body of knowledge'. Giroux (1981:33) also suggests that there is an assumption that all students can learn using the same resources, and the same instructional techniques and evaluation tools. He indicates that 'we need to rethink and reform the traditions and conditions that have prevented teachers from assuming their full potential as active, reflective scholars and practitioners'.

Kanpol (1998:3) agrees with Giroux and asserts that education presumes that the motivation to learn, for both learners and educators, is intrinsic. Kanpol (1998)contends that although grades remain an important element within schools, the main focus should be placed on the acquisition of 'knowledge for knowledge's sake'. The reason for teaching and learning, therefore, should involve the following: the educator's passion for the subject matter; the ability

to develop within the learner the capacity to think critically; the ability to develop the aptitude to be creative about content; to create a classroom atmosphere in which one builds community as part of teaching and learning; a powerful desire to teach and learn; and a thorough understanding of schooling mechanisms which will either promote or deny the learner an education.

Scott and Freeman-Moir (2000:24) concur and indicate that the current trends in teacher training in the United States of America have also focused on a more uniform and homogenous system where the dominant interest is the elevation of student achievement for the purpose of improving the global economy, rather than nurturing the social, political and moral domains. In their opinion, this has resulted in the adoption of an 'uncritical stance towards conventional social and political understandings', and this has made it easier 'to suspend critical enquiry into the realities that surround the preparation of professionals'.

2.1.5. Critical pedagogy and its impact on quality education

Critical pedagogy and its impact on the quality of education are dependent on the reconceptualisation of teachers' work. Teachers need to be encouraged constantlyto 'critically question their understandings of society, schooling and pedagogy' (Smyth, 2011:16). Giroux and McLaren (1986) agree that the dominant view of teachers is to primarily 'implement rather than conceptualise pedagogical practice'. Smyth (2011) concurs and believes that the re-conceptualisation of 'teachers' work' should be transformed from the view that they are mere 'species of implementation' to one where they are regarded as pedagogues who seek to empower learners and who constantly question the theories of teaching and learning. Crandall's (2000:35) view is that rather than have teachers be active participants in knowledge construction, teacher education still focuses on a traditional view that leaves teacher trainees as passive recipients of transmitted knowledge.

It is important that in their training we find a way to get teachers to 'reclaim knowledge about teaching and learning so that it acknowledges and questions its socially construed nature' (Smyth, 2011:19). Teachers, therefore, need to learn to constantly ask the following questions:

- Why do we insist on external rewards and punishments to make kids learn?
- Why do we define the 'good' kids as the 'quiet' kids?
- Why is it that we insist on equating 'workbook work' with 'reading'?

- Why do we regard 'on-task time' as synonymous with learning?
- Why is it that we have come to regard 'getting through the material' as the prime goal of our teaching?

(Smyth, 2011:19)

Smyth (2011) also believes that in order to break these habitual pedagogical practices that have been so entrenched and shaped by our past social, cultural and political experiences, we need, as teachers and as teacher educators, to question ourselves further:

- Where do our ideas of teaching and learning come from historically?
- How did we come to appropriate these ideas?
- What social and cultural conditions cause us to continue to endorse the ideas we hold to be true about teaching and learning?
- Whose interests do our ideas really serve?
- What power relations between us and our students are expressed in our teaching practices?
- Do our practices accommodate the dominant ideology?
- How do we encourage resistance by those who are oppressed?
- In view of this, are there grounds for radically changing the way we teach?

When we approach our teaching and critique it from this perspective, we shall be able to transform old habits and reconceptualise our practice. What is critical at this stage, and especially in South Africa, is what Smyth (2011) refers to as 'centralism in education', where the curriculum is predetermined at all levels. (In South Africa we have moved from the National Curriculum Statement (NCS), where all content and assessment were not predetermined, to the NCS with Curriculum and Assessment Policy Statements (CAPS), where content is pre-determined and where it becomes very prescriptive with regard to practice, since CAPS prescribes content and time for each grade and every learning area.)

This results in a process of deskilling teachers, robbing them of their creativity and initiative; they then become the passive recipients, or as Zeichner (1983:4) states, 'executors of the laws and principles of effective teaching'. Giroux (1988) finds this to be a process which further promotes disempowerment. This prescriptive mode in which teachers are expected to work defies the very core of what it means to be reflective or critical practitioners.

2.2. LITERATURE REVIEW

2.2.1. Introduction

The features of teacher preparation that will be expounded in this chapter include: professional knowledge delivery, pedagogy, teaching experience, mentorship, subject matter knowledge, theory linked to practice, managing diversity, and the use of technology, among others.

'If we want schools to produce more powerful learning on the part of students, we have to offer more powerful learning opportunities to teachers' (Feiman-Nemser, 2001:1014). Darling-Hammond (2006) stresses that in contemporary society there is a great need for powerful teaching, that is, higher-quality teaching, since standards for learning and demands on teachers are higher now than ever before, and greater knowledge and skill are required in the workplace for mere survival and success. This is reiterated by the Partnership for 21st Century Skills (2003:10) that states:

The world within which we live is increasingly sophisticated, multi-faceted and nuanced. People need high level learning skills to act, respond, learn and adjust to ever-changing circumstances. As the world grows increasingly complex, success and prosperity will be linked to people's ability to think, act, adapt and communicate creatively.

Ball and Forzani (2009:497) suggest that there is already widespread agreement that the most important stakeholder to impact student learning, within this ever changing context, is the teacher. The development of the teacher as a professional, therefore, becomes the 'core of teacher preparation' (Ball & Forzani, 2009:497).

While teaching and what teachers need to know in order to teach successfully is practically invisible to the layman and is thought to require very little formal training (Darling-Hammond, 2006:1), Spalding et al. (2011:3) indicate that 'it is not magic'. This is also argued by Ball and Forzani (2009:498), who contend that classroom teaching is not 'natural' as many may think, but that it is defined as 'specialized work that is distinct from informal, commonplace showing, telling or helping. It involves identifying ways in which a learner is thinking about a topic or problem at hand, to structure the next steps in the learner's development and to oversee and assess the learner's progress'.

The professional teacher needs to be trained to meet needs as presented within the 21st-century learning context. However, according to Zhao (2010:422), education should also be

future-orientated, with teacher education embracing the forces that shape future societies. Since dramatic change has occurred as a result of globalisation, new challenges face teacher education. Darling-Hammond (2006), however, argues that teacher education preparation remains very traditional.

Darling-Hammond (2006) adds that the weakness of teacher-preparation programmes is concentrated in the 'collections of unrelated courses'. Feiman-Nemser (2001) and Zeichner (2006) concur, and state that preparation programmes, across the world, have for many years been criticised for reasons including such fragmentation within the programme. Other weaknesses they identify include: weak pedagogy;a lack of articulation between courses and field experiences, and no organised themes, shared standards or clear goals.

In order to counter these weaknesses, Darling-Hammond (2006:4-7) defines four critical components which need to be included in teacher-preparation programmes in order to effect the change required. She states that there needs to be a tight coherence and integration among courses and between coursework and clinical work in schools; extensive and intensely supervised clinical work integrated with coursework using pedagogies that link theory to practice is required; closer, proactive relationships with schools that serve diverse learners effectively is necessary; while developing and modelling good teaching is essential.

Similarly, Feiman-Nemser (2001:1014) focuses on three themes in teacher training: preparation, induction and development. Her discussion around these themes is summarised in the table overleaf:

Table 2.1: Central tasks of learning to teach

CENTRAL TASKS OF LEARNING TO TEACH						
PRE-SERVICE		INDUCTION		CONTINUING PROFESSIONAL DEVELOPMENT		
1.	Examine beliefs critically in relation to vision of good teaching	1.	Learn the context – students, curriculum, school community	1.	Extend and deepen subject matter knowledge for teaching	
2.	Develop subject matter knowledge for teaching	2.	Design responsive instructional programmes	2.	Extend and refine repertoire in curriculum, instruction and assessment	
3.	Develop an understanding of learners, learning and issues of diversity	3.	Create a classroom learning community	3.	Strengthen skills and dispositions to study and improve teaching	
4.	Develop the tools and dispositions to study teaching	4.	Develop a professional identity			

This study focuses on the aforementioned first stage, which is teacher preparation.

2.2.2. Professional knowledge

Initial teacher training is the preparation for professional practice, which consists of preservice learning with particular reference to underlying theories and professional learning, thus the acquisition of professional knowledge (Ur, 2007:3). He directly contrasts the term 'professional' with terms like lay, amateur, technician and academic and, therefore, interprets 'professional knowledge' to be distinguished by particular skills, knowledge, language, conventions and ethical principles; superior performance as a practitioner, superior knowledge, consistent self-development, commitment to the achievement of teaching objectives – the advancement, or bringing about of learning on the part of the students; understanding of the principles of their practice andengagement in real-time action and a desire to bring about real change (Ur, 1997:3).

Ur (1997:3), however, concedes that these may not necessarily be the 'main, authoritative bases for professional knowledge'. The emphasis of Menon et al. (2007) on the development of the teacher's professional knowledge base is that it develops over time through the successes acquired in the classroom that result in new experiential insights.

Dickson (2007:1) believes that 'professional knowledge' is assumed by many teacher educators as obvious, yet many researchers hold competing ideologies in their interpretations of 'professional knowledge' as indicated in this discussion. The concept of 'professional knowledge', as held by Dickson (2007:7), is illustrated as dynamic as well as knowledge-in-action, and is often expressed as 'know about, know how to, and demonstrate'.

Morrow (2007:78) sums up professional knowledge as follows:

Professional knowledge is practical knowledge harnessed to an ethical ideal. It is a qualitatively distinct kind of knowledge, different from academic and technical knowledge, although it draws on both.

The aforementioned theories of professional knowledge and practice are in part encompassed in Morrow's (2007:80) estimation that professional judgement be held in high esteem, since it involves a 'situational appreciation (a professionally appropriate perception of what is salient in particular situations): judgement in context (professional judgements that take informed account of the details of particular situations); and knowledge-in-practice (as opposed to knowledge-of-practice)'. For this purpose it is important that the professional knowledge of students be developed within professional teacher education, since it will enhance the pre-service teacher's ability to make professional judgements reliably and rationally.

The above definitions, which include 'particular skills, superior performance as a practitioner, achievement of teaching objectives, bringing about learning, understanding the principles of their practice' (Ur, 1997), also 'know about, know how to and demonstrate' (Dickson,2007:1), as well as 'practical knowledge and knowledge-in-practice' (Morrow,2007), are all dependent on various contexts. Professional knowledge is defined by McCluskey (2007:2) as 'a product of a particular social context and as a dynamic process of constant evolution and enrichment by means of reflection on practice, thus the teacher is more than just a transmitter of knowledge'. Professional knowledge is, therefore, seen as dynamic, but also ever changing, as is evident in the above paragraph on 'professional knowledge delivery'.

2.2.3. Understanding pedagogy in teacher education

In countries like Australia, America, the United Kingdom, Canada and New Zealand, the term 'pedagogy' is regarded as 'a synonym for teaching ... pedagogy is seen as a catch-all term for such things as teaching procedures, teaching practice, instruction...' (Loughran, 2006:2). Loughran further explains that pedagogy is not just about teaching or the transmission of

information, but rather about the 'relationship between teaching and learning and how together, they lead to growth in knowledge and understanding through meaningful practice'. Gray (2009:5) agrees, but also feels that while pedagogy is about the 'central relationship between the teacher and the learner', the importance of other stakeholders, who include teacher educators, parents, researchers, policymakers and educational authorities, should be acknowledged. He adds that pedagogy is influenced by 'political, social and cultural values and principles and is underpinned by a strong theoretical and practical base' (Gray, 2009:5). Pedagogy should, therefore, be flexible and teaching practices should be inclusive and include flexibility in delivery, curriculum and assessment. The two main foci in pedagogy in teacher education, according to Loughran (2006), are learning about teaching and teaching about teaching.

2.2.3.1. Learning about teaching

The student, who is learning about teaching, should always be learning that which is being taught, as well as the manner in which it is being taught. For many students of teaching this is a difficult and complex process to undertake, considering that for most of their lives they have only had to focus on what was being taught, even at university level.

Student teachers' expectations of their pre-service programs are strongly influenced by their prior experiences as learners, together with popular stereotypes about teachers' work. Student teachers commonly enter their teacher education with a view of teaching as simple and transmissive. They believe that teaching involves the uncomplicated act of telling students what to learn.

(Berry, 2004:1301-1302)

Students of teaching need to develop a learning agenda that focuses on the learning of 'specific content, learning about learning and learning about teaching' (Loughran,2006:4). Careful attention, in the process of acquiring these skills while learning the content, should be given to: questioning; examining and learning about the way in which it is actually being taught; asking questions about the nature of the teaching; the influence of the practice on subsequent learning (or lack thereof);the manner in which the teaching has been constructed and is being portrayed; andhow the teaching-learning environment has been created and so on(Loughran, 2006:4).

2.2.3.2. Teaching about teaching

The teacher of teaching needs to focus on both the content to be taught, as well as the manner in which it should be taught. Too often, the focus is solely on the content.

Student teachers need to understand the thoughts and actions that have shaped the practice, and need to be able to see and hear the pedagogical reasoning that underpins the teaching that they are experiencing' (Loughran, 2006:9). Therefore, the need for teacher educators to always be conscious of what they are teaching and how the teaching is conducted is vital. There needs to be continuous looking into the 'teaching being experienced so that a serious examination of teaching is always a central element of practice' (Loughran, 2006:9).

2.2.4. Professional knowledge delivery from a pedagogical perspective

Teaching is a process that is 'complex and multi-dimensional', requiring 'deep knowledge and understanding in a wide range of areas and the ability to synthesise, integrate and apply this knowledge in different situations and under varying conditions'. Teaching is, therefore, not just about mere implementation but involves constant opportunities to engage in thinking, problem-solving and decision-making (Crandall, 2000:37).

Although Crandall (2000:37) has a specific focus on language teaching, it is still felt that across the curriculum very prescriptive teaching methods are applied like 'recipes' to ensure effective teaching. There needs to be 'a shift away from the traditional top-down approach' which is product-based and where teachers are taught certain strategies and are expected to 'match' the right one, to a more interactive approach which is process-based and which depends on greater reflection on experience. This reflection on experience provides prospective teachers with opportunities to 'develop more informed practice, making tacit beliefs and practical knowledge explicit, articulating what teachers know and leading to new ways of knowing and teaching' (Crandall, 2000:40). Teacher enquiry and reflection are, therefore, key to developing teaching theory in teacher education.

Shor and Pari (1999:141) explain the traditional approach is more focused on teachers' transfer of accepted information that is to be remembered and then reproduced later. Freire(1993:76) calls it the 'notion of banking education' and explains:

The banking notion of consciousness is that the educator's role is to regulate the way the world 'enters into' students. His task is to organise a process which already occurs spontaneously, to 'fill' the students by making deposits of information which he considers to constitute true knowledge-deposits which are detached from reality, disconnected from the totality that engenders them and could give them significance.

Barr and Tagg's (1995:13) work on the shift in instructional practices, although 'old', is still particularly relevant to this study. They express the top-down, traditional, dominant way of teaching as the 'Instruction Paradigm' and state that the teaching in teacher-training programmes consists mainly of the delivery of '50-minute lectures'. This 'fairly passive lecture-discussion format, where faculty talk and most students listen, is contrary to almost every principle of optimal settings for student learning and results in ineffective teaching'. A shift from the 'Instruction Paradigm' to the 'Learning Paradigm' will 'create environments and experiences that bring students to discover and construct knowledge for themselves and make students members of communities of learners that make discoveries and solve problems' (Barr &Tagg, 1995:4). Ineffective teaching results from learning practices which negatively impact student learning. Special reference is made by Edwards (2000:4-5), who highlights 'teacher-talk-dominated' classroom experiences as 'the sea of blah':

The teacher stands at the front of the room and blahs all over the place – blah, blah, blah... The sea of blah fills the room and the students bob up and down like corks in a sea. Every now and then they go under and take a gulp of air...

Edwards (2000) goes on to explain how frustrating this is for listeners. He claims that teacher-talk is still the most commonly used mode of instruction in schools and universities, even though we are aware that it is not the best mode to use.

'Children are organically predisposed to be critical thinkers... Sadly, children's passion for thinking often ends when they encounter a world that seeks to educate them...they stop enjoying the process of thinking...' (Hooks, 2010:8). For too long, according to Hooks (2010), the acquisition of knowledge has been a process that is 'private, individualistic and competitive', thus learning is only important until the process of receiving knowledge, memorising it, regurgitating it and then meeting the demands of the course is achieved and then it becomes redundant. For authentic learning to occur there needs to be a participatory relationship between teacher, learner and material, resulting in engaged pedagogy. With this engagement, teachers become facilitators in a classroom that functions co-operatively, where 'education is seen as a means of self-development and self-actualization'.

While Morrow (2007) acknowledges that huge strides have been made in teacher training, he still believes that education depends on what teachers do and think. In South Africa there is the problem of a large number of teachers who have not yet made the 'paradigm shift', thus the 'quality of schooling for almost 80 percent of its population might actually have deteriorated over the past decade'. He argues that 'learner-centred education is a half-truth'. According to Morrow (2007:104), there are formal and material elements to teaching, yet

there is a tendency to define teaching 'as a favoured set of teaching methods that presuppose particular facilities, conditions and resources' which are the material elements. Not recognising the distinction between these elements has been a great shortcoming in teachertraining institutions in South Africa. The formal element, which is non-context-bound, however, does not enjoy the same rigour as the material element. The most important question to ask regarding the formal element is: How do I organise learning in this context or in these conditions?

For the teacher, getting learners to move through the curriculum, to access their full potential while dealing with the challenges that the diverse nature of the class and the contexts brings, means that they are doing their 'job'. Being able to successfully work through these challenges forces them, according to Menon (2007), to assimilate and accommodate more effective strategies. With success in the classroom and the development of new experiential insights, the professional knowledge base of the teacher is further extended. When their experiences are more negative in terms of not being able to manage the challenges they are faced with, they tend to question their pedagogic ability and, therefore, their effectiveness as teachers. This makes the training interventions they experience a key factor in determining their initial success in their practice (Menon, 2007).

Crandall (2000:35) concedes that how teachers were taught, shapes their views of teaching and is often replicated in their own practice. Similarly, the way teacher educators were taught will be replicated in teacher-education programmes. Very often these include the views that pre-service teachers are 'passive recipients of transmitted knowledge'. This Freire (1970) refers to as the 'pedagogy of the oppressed', as opposed to the 'freedom to learn' (Rogers, 1969).

In Table 2.2 overleaf, is an indication of the shift from the old, traditional instructional paradigm to a learning paradigm referred to by Menon (2007) as a learning design that encompasses four quality indicators: 'design of learning, reflective practice, learner-centredness, and dialogue in instruction'; these are the 'critical factors influencing the quality of a professional education programme'.

Table 2.2: Instruction versus learning paradigm

Instruction vs Learning Paradigms						
Instruction paradigm	Learning paradigm					
Mission						
Transfer knowledge	Empower learners to discover and construct knowledge					
Provide efficient delivery of instruction	Facilitate/cause effective learning					
Education as quantitative knowledge acquisition	Education as qualitative transformation					
Values						
One-size-fits-all	Respect for individual needs/strengths					
Competition	Co-operation					
Reactive	Proactive					
Institution/discipline-centred: isolationist	Responsive to stakeholders/'clients''strategic alliances'					
Learning theory						
Body of knowledge exists for transfer/storage	Knowledge is individually constructed and dynamic					
Culture of unquestioned acceptance of received wisdom	Culture of enquiry and evidence-based learning					
Teacher responsibility	Learner responsibility					
Extrinsic motivation	Intrinsic motivation					
Learning is linear and sequentially 'chunkable'	Learning is non-linear and 'hyperlinked'					
Teaching/learning assumptions						
Instructor-led/dependent/micro-managed	Learner-led					
Didactic, monologic	Active/interactive, dialogic					
Curriculum driven	Geared to learner's experience/needs; contextual					
Coverage dominated	Mastery, distributed cognition					

Instruction vs Learning Paradigms					
Instruction paradigm	Learning paradigm				
Classroom bound; synchronous	Anywhere, anytime learning				
Single loop learning	Continuous learning				
Certification is key	Competency is yardstick				
Measurement in terms of time on task	Learner-paced; achievement-based measurement				
Individualistic and competitive learning	Cooperative, collaborative learning				
Teacher as expert	Teacher as guide/facilitator				
Education is the responsibility of teachers	Whole organisation involvement in optimising learning environment				
Performance indicators					
Inputs/outputs; efficiency	Learning quality/outcomes;effectiveness				
Enrolment	Quality of education				
Curriculum development/expansion	Development of teaching/learning environment				
Quality of entering students	Quality of graduates				

Adapted from Barr and Tagg (1995:17-19)

As opposed to the instruction paradigm, where knowledge is just transferred or delivered to students, the learning paradigm's purpose is not to deliver knowledge, 'but to create environments and experiences that bring students to discover and construct knowledge for themselves, to make students members of communities of learners that make discoveries and solve problems' (Barr &Tagg, 1995:4). Formerly, according to Barr and Tagg (1995:1), institutions existed to 'provide knowledge', but with the shift to the new paradigm, 'institutions exist to produce knowledge'.

2.2.5. Importance of subject matter

The assumption that the more teachers know about their subject matter, the greater the achievement of learners, according to Ellis (2009), is not an entirely new one. For too long

the greatest emphasis has been on teaching content to students, and while subject matter is important, Furlong et al. (2000:11) indicate that it is not the only component that impactsteaching and learning and states that:

... the primary task for initial teacher education ... is therefore to develop professionals who are themselves experts in their own subject area: ... the chief weakness of current approaches to initial teacher training (according to 'neo-conservative voices') is that they are dominated by preparing students [for] what to teach rather than how to teach.

Berliner (2000:358) suggests that there are many such criticisms directed at teacher-training programmes. Those which are particularly linked to the importance of subject matter include: all you need is subject matter knowledge, the rest is a waste of time; any reasonably smart person can teach; all you have to do is follow the text books; and loading up teacher-education programmes with methods courses actually takes away from time teachers could be getting more profound understanding of subject matter in various content areas (Berliner, 2000:358).

Berliner (2000:358) further contends that there is much empirical evidence refuting the 'fact' that in order to be a good teacher all you need is subject matter. He refers to a study conducted by Wilson (1989), where four high school history teachers' achievements and teaching ability were examined in detail:

- Teacher A: experienced and well-educated history teacher (high in both pedagogical experience and subject knowledge).
- Teacher B: new teacher of history fresh from teacher-education programme (low in pedagogical experience and high in subject knowledge).
- Teacher C: PhD in history superior subject knowledge with no experience of high school teaching (high in subject knowledge and low in pedagogical experience).
- Teacher D: experienced teacher of English who accepted the job to teach history rather than being unemployed (low in both subject knowledge and pedagogical experience).

The results of this study show that Teacher A was the strongest teacher and Teacher D the weakest. Between Teacher B (low pedagogical experience and high subject knowledge) and Teacher C (high subject knowledge and low in pedagogical experience), the latter with high pedagogical experience outperformed the former who had high subject knowledge. Subject matter knowledge in this case has proved inadequate in creating an accomplished teacher.

In the United States, *The No Child Left Behind Actof 2001*, highlighted teacher quality and defined a 'highly qualified teacher' to be one that focuses on content knowledge. This was the motivation for the United States Department of Education to promote improvement in teacher qualifications by emphasising certification and high levels of content knowledge as the defining factors for highly qualified teachers in teacher preparation and professional development (Boe et al., 2007:158).

This decision to place greater focus on content knowledge was based on reports of teacher quality presented by Goldhaber and Brewer, as well as Walsh, during the period 1999 – 2001 (Boe et al., 2007). Consequently, further research conducted by Boe et al. (2007:168) concluded that teachers who were exposed to 'extensive preparation in pedagogy and practice teaching earned a much higher level of full certification than did those with little or no preparation'. There is also consistent evidence that the students were better prepared to teach, since their pedagogical skills, which were used to select curriculum materials, effectively plan lessons, apply various instructional methods and access students effectively, were better developed.

Ingersoll and Curran (2004), however, define highly accomplished and well-prepared teachers as those who have been instructed well in their subject area. In their research they discovered that in underachieving schools, more than 77percent of students were taught by teachers not qualified in their subject areas, and the students' poor results were attributed to this. Similarly, Taylor's (2008) study also bears evidence that very low teacher subject knowledge was only one of three components undermining effective teaching and learning in South African schools.

According to Lampert (2010:22), teaching is relational and involves both intellectual and social collaboration. While the relationship between teachers and students needs to remain productive in order to facilitate learning, there is also the need for teachers to work well in relation to subject matter for students to learn effectively. Working with the subject matter in order for teachers to 'understand it, plan lessons around it, represent it, demonstrate it and explain it' is vital according to Lampert (2010:22). She also indicates that many problems occur in trying to maintain a good relationship between students and subject matter, and these can be solved in particular moments of interaction in the classroom.

Morrow (2007:64) agrees, adding that it is our inherited conception that 'basic education is essentially a matter of socializing the young into the dominant belief and value system of their society'. He states that this is achieved through the curriculum via literacy,

numeracy, and later, through more specialised subjects. Content or subject matter, therefore, provides ways of enabling access into the 'modern world by developing the capacity for people to think for themselves'. It is the subject matter and teaching methods, together, which promote learning in which important concepts such as feelings, thoughts, attitudes and practices are shaped while still leaving room for revision and modification of learning.

2.2.6. Linking theory to practice

A surge of attempts to find alternative ways of preparing pre-service teachers emerged strongly in the late 20th century. These attempts placed great emphasis on the practice versus theory debate:

Traditional approaches to teacher education are increasingly critiqued for their limited relationship to student teachers' needs and for the meagre impact on practice. Many pleas are heard for a radical new and effective pedagogy of teacher education in which theory and practice are linked effectively.

(Korthagen et al., 2006:1020)

Crandall (2000) agrees that generally, teacher-education programmes do not adequately prepare teachers for the 'realities of the classroom'. These programmes should place greater focus on developing 'concrete, relevant linkages between theory and practice'. She feels that this 'decontextualised theory fails to consider the multi-dimensionality and unpredictability of the classroom environment'. Arends and Phurutse(2009) also hold the view that teacher-education programmes' content focuses largely on the theoretical and fails to include practicalities.

A novice teacher indicates that while he was taught how to write a lesson plan, and the origin of public schools in the United States, this certainly failed him when it came to maintaining discipline in a classroom. The novice teacher contends:

... there is a widespread public perception that teacher education is an archaic enterprise, out of touch with teachers' real world needs, stubbornly and self-servingly refusing to teach the simple, finite set of skills they need to survive... graduates claim they learned all they needed to know in the 'trenches not in the towers'

(Arends&Phurutse, 2009)

Another novice teacher, in studies done by Lampert (2010), claims that teacher-education programmes deliver 'too much theory and not enough practice'. Bruner (1990) also makes reference to universities being sites where the focus is on scientific knowledge, which is often 'abstract, decontextualised and impersonal', rather a more specific focus on how to link

theory to practice in more 'concrete, contextualised and personal ways'. Crandall (2000:41) indicates that although 'practical experiences such as observations, internships, apprenticeships, student teaching, or other teaching practice' have always formed part of the training of language teachers, 'these experiences are often too few, too late and not sufficiently focussed on the realities of the classroom'.

Echoing this, Darling-Hammond et al. (2005:401) suggest that the 'key element for successful learning is the opportunity to apply what is being learned and refine it', and note that 'cognitive psychologists have found that "deliberate practice", i.e, purposefully and critically rehearsing certain kinds of performances, is particularly important to the development of expertise' (Darling-Hammond et al. 2005:401). Teacher experience during teacher-training programmes has been reinforced by much research, but this, on its own, is not enough. Opportunities need to be created by teacher educators to continuously connect practice to theoretical knowledge acquired and to make this an integral part of teacher-training programmes. Lampert (2010) states that we need to understand this concept to be 'thinking as theory and practice as action'.

Korthagen et al. (2006:1024) suggest that two assumptions that have dominated beliefs for the past 30 years could well be the reason for this. The two assumptions are:

- Those learning to teach can readily translate what they are told into practice.
- Supervision of those learning to teach should focus on the subject being taught rather than on the overall process of professional learning.

Research conducted by Korthagen et al.(2006) in teacher education in Australia, Canada and the Netherlands, heard the voices of all stakeholders, particularly those of students and teacher educators, which resulted in a focus on three specific issues:

- 1) Complaints from students, school administrators, parents and politicians about the need to make teacher education more relevant in order to prepare students for the reality of the classroom.
- 2) Many newly qualified teachers experienced the phenomenon 'reality shock' when entering the profession for the first time because they were not adequately prepared.
- 3) New conceptions of learning and teaching have been developed, including views that knowledge is 'strongly interwoven with experience and emotion', therefore the need to change from the very traditional structure still implemented.

(Korthagen et al., 2006:1024)

Korthagen et al. (2006) believe that the emphasis now needs to shift from theory to practice. Instead of the focus being mainly on learning the 'tricks of the trade', there needs to be a 'deepening of the theory' to connect it to practice, so that teachers, through theory guiding, find it easier to handle everyday problems in class.

Grossman et al. (2009:274) argue that to close the gap between theory and practice, a pedagogy of enactment' would need to be added to the existing repertoire of pedagogies of reflection and investigation. Kennedy (1999) has termed this the 'problem of enactment', where she states that not only should new teachers 'think like a teacher', but they should also 'act like a teacher'. However, Wisniewsky's (1982:3-4) interpretation of enactment is explained as being where 'the master (teacher educator) works with apprentice (student) just as physicians work with medical interns during their rounds'. In order to solve the problem:

... the program in a true professional school would be clinically-based and the theory-practice gap would be systematically attacked. ...Ideally, courses as we know them would be obsolete in a true professional school. In their place, competencies blending theory and practice requisite to teaching would be practiced daily on and off campus by professors and their students. ... A professor of education would make regular rounds, visiting selected schools and projects each week. The analogy here is to a physician making rounds in hospitals and demonstrating skills to interns.

(Wisniewsky, 1982: 3-4).

This 'highly abstract approach to teaching theoretical concepts', needs to be translated into simple practical language to enable teachers to appreciate its value. The capacity to transfer knowledge and skills is a professional function. Not fully understanding or appreciating the nexus between theory and practice results in an over-reliance on 'learning by doing' and this, according to the Thailand Education Reform Project (2002) is what undermines professionalism.

According to Darling-Hammond (2006:308), it is possible to connect theory to practice through examining one's own practice and the practice of others through analysis of teaching and learning, and case methods. She indicates that these 'seek to make the process of student teaching more purposefully analytic', and at the same time 'make coursework more practice-based'.

2.2.7. Teacher educator qualities

Chance (2008:87) clearly states that the provision of highly skilled educators is without a doubt one of the most important factors influencing student achievement. He further contends that since student achievement depends on the effectiveness of teachers, there should be a greater focus on teacher educators, since they are 'charged with training highly skilled teachers'.

While Chance (2008) feels that there are four particular criteria which teacher educators need to bear in mind in order to uplift the quality or effectiveness of teachers, that is, being clear about their professional mission; bridging the gap between theory and practice; thorough preparation; and modelling accomplished teachers, Devlin and Samarawickrema (2010), however, argue that it is much more complex than this and that effective teaching cannot be constant. It needs to be reviewed and renewed constantly so that the changing education landscape with all of its transformations and changing contexts can be absorbed and redefined in terms of effectivity. Therefore, the four criteria, as suggested by Chance (2008), are further investigated.

2.2.7.1. Professional mission

For teacher educators to understand what their 'mission' is, and to fully comprehend what a 'highly effective' teacher is, it is necessary to unpack the term 'effective'. Shulman (1986) refers to an effective teacher as an accomplished one, and contends that understanding the concept of pedagogical content knowledge (PCK), also referred to by Airasian and Russell (2008:103) as practical knowledge, is of utmost importance to achieve effectiveness. He defines PCK as:

The most regular taught topics in one's subject area, the most useful forms of representations of those ideas, the most powerful analogies, illustrations, examples. Explanations and demonstrations ... ways of representing and formulating the subject that make it comprehensible to others. Pedagogical content knowledge also includes an understanding of what makes the learning of specific topics easy or difficult; the conceptions and preconceptions that students of different ages and backgrounds bring with them to the learning of those most frequently taught topics and lessons.

(Shulman, 1986:10)

These skills need to be constantly modelled by teacher educators in their quest to train teachers. Morrison (2006:13) defines effective teachers as follows:

Effective teachers accept responsibility for teaching, allocate most of their time to instruction, organise their classrooms for effective instruction, move through the

curriculum quickly but with an understanding of individual student needs, actively instruct, maintain a pleasant learning environment that is student centred and provide opportunities for practice and feedback on performance.

(Morrison, 2006:13)

2.2.7.2. Appropriate background for teacher educators

Teacher educators need to have a 'rich, varied school background' with classroom teaching experience as a prime criterion. Knowledge about theoretical frameworks of education 'is not sufficient' since teacher educators need to become 'a resource to their students' (Aleccia, 2011:88). Very often, without the appropriate background, teaching is equated with 'simply doing rather than seeing teaching as being carefully structured, thoughtfully created and deliberately informed in order to engage students in learning for understanding as opposed to learning by rote' (Loughran, 2006:15).

2.2.7.3. Bridging the theory – practice gap

The process of preparing teachers should include much more than just presenting these theoretical frameworks. Teacher educators need to be conscious of the age-old theory – practice divide and work towards bridging that gap. Aleccia (2011) suggests that for teacher educators to do this, there is a need for them to remain constantly aware of the culture of classrooms. This can be achieved by engaging teacher educators in observation and evaluation of pre-service students during teaching experience sessions. These supervision duties will 'update faculty knowledge' and also 'add to their credibility among elementary and secondary teachers and administrators' (Aleccia, 2011:89).

2.2.7.4. Modelling effective teaching

'Good modelling is an essential component of good teaching' (Aleccia, 2011:89), since preservice teachers' or students' own experience of learning will have a powerful effect on how they view effective teaching and learning and will invariably influence their own teaching practice. Crandall (2000:35) states that:

... thesepreconceptions are remarkably resistant to change unless awareness of that prior learning is developed in the teacher education program and opportunities for practical experiences and conscious reflection upon those experiences are provided throughout the program.

In the same way,teacher educators are influenced by the way they were taught and very often the methods they were exposed to are replicated in their own practice. Loughran (2006:39) argues that 'the notion of modelling carries with it the connotation that it is a demonstration of exemplary practice', but he indicates that we need to bear in mind that in all teaching 'something is always being modelled', whatever it might be, 'good or bad, intentional or unintentional'. Loughran (2002:36) shares this anecdote about a student:

The tutorial room was quiet. Only the professor's voice broke the silence. I had to say something. I disagreed with what he was saying. I spoke up. That's what I thought we were supposed to do. To be actively engaged in the learning, to question our understanding. We are expected to do that with our students in school. 'I don't think that policy has to be about change,' I said, and gave some examples to support my point of view. With that others also contributed. 'This is what the definition is! Reputed researchers agree!' was his forceful response. Faced with that what else could I say? He was the expert... we had just been talking about including people in discussions, accepting others' points of view, inclusion, understanding. I don't think that classrooms should be lecture theatres. Teaching is not a one-way process.

Crandall (2000) states that conscious reflection now becomes necessary for teacher educators and that 'self-observation and reflection on practice can help teachers move from a philosophy of teaching developed during their sixteen or so years as a learner, to a philosophy of teaching consistent with their emerging understandings of learning and teaching'.

2.2.8. Teacher experience

With the theory – practice gap, there is a need to 'link the theoretical insights about the professional development of teachers with the practice in teacher education'. This integration of the two perspectives, as relayed by Korthagen et al. (2006:1022), should lead to the development of 'a pedagogy of teacher education that is both empirically based and practically orientated'. While the theoretically based knowledge is generally traditional in nature and university based, the experience-based knowledge is more school based and more focused in and on classroom realities (Darling-Hammond, 2006; Korthagen et al., 2006).

This brings us to the age-old debate or discussion surrounding the importance of practical experience or school residency, which is regarded as one of the key components in the enhancement of quality in initial teacher-training programmes.

According to Darling-Hammond (2006), 'wrenching change' is needed in the traditional teacher-education programmes with regard to teaching experience. Too many of the programmes offer 'front loaded coursework in isolation from practice, and then adding a short dollop of student teaching to the end of the programme – often in classrooms that do not model the best practice'. Similarly, Loughran (2006) concedes that experience remains central to learning but argues that 'experience can also be mistaken as learning'. Although Dewey (1938:25) agreed that experience should be seen as the 'shaping force' in teacher education, he also created awareness that 'the belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative. Experience and education cannot be directly equated to each other'.

Allsoppet al. (2006) concurwith Dewey (1938) and state that learning for the pre-service teacher is enhanced through teaching experience sessions and refer to these as 'site-based experience'. Darling-Hammond (2006) echoes this and contends that the most successful and powerful programmes are the ones that include extensive school teaching experience throughout the programme.

Allsoppet al. (2006) believe that teaching experience gives pre-service teachers opportunities to apply what they learn at university within the context of a classroom and that it is instrumental in developing their notions of the day-to-day life in schools. However, Darling-Hammond (2006) argues that it is not just the availability of the classroom that is important; she agrees with Dewey (1938) that there is a need to 'pay attention to the relationship between experience and education'. She therefore strongly advocates that pre-service teachers need to be paired up with 'best practice' teachers who can guide them throughout the programme to apply concepts that are concurrently being dealt with at universities, thus linking theory to practice. Darling-Hammond (2006) further contends that research suggests that 'immersing teachers in the materials of practice and working on particular concepts using these materials, ... analysing samples of work, videotapes of teachers and students in action and cases of teaching and learning with reflection and case analysis of the experience', will provide students with the tools for professional learning.

The school experience, according to Korthagen et al. (2006), is constructed as the real-world site for applying university education to school teaching practice. Both Kiggundu (2007) and NgidiandSibaya (2003) agree that it forms an integral part of teacher training and that it serves as the 'pre-service teachers' initiation into the real-life world of the school'. Kiggundu and Nayimuli (2009) echo this statement: this teaching experience is the 'work integrated

learning' where students work within the 'relevant industry' in which they are provided with opportunities to apply theory to practice.

The research of Korthagenet al. (2006), which compares teacher-education programmes on three continents, indicates that while organisational structure also plays a huge role in teacher-education programmes, the focal point is still the issue of learning from practice. The familiar features in the organisational structure on these three continents are:curriculum methods subjects, educational foundational subjects, and school experience (practicum).

'Teacher educators in all three programs share the assertion that one does not learn through experience, but through reflection on experience and through interaction with others' (Korthagen et al., 2006:1025). Darling-Hammond (2006) and Korthagen et al. (2006) believe that dumping students into schools for practical experience will have absolutely no meaning unless it is guided by theory. Segal (2002) and Korthagen et al. (2006) agrees and states that

To fully illuminate the dynamics of a teaching situation, student teachers need opportunities to understand what is involved in planning the teaching, doing the teaching and reflecting on the teaching. Then they need to link all of these to the relationshipbetween the teaching and the concurrent learning. One way of creating such opportunities is by helping the student to experience teaching practice being both constructed and deconstructed – and for them to be central to the process...

(Korthagen et al., 2006:1025)

It has also been found that novices who have had experience prior to their encountering coursework seem better prepared and more able to 'make sense of ideas, theories and concepts that are addressed in their academic work' (Darling-Hammond, 2006). The National Council for Accreditation of Teacher Education (NCATE, 2008:32) found that:

Fieldexperiences allow candidates to apply and reflect on their content, professional and pedagogical knowledge, skills and professional dispositions in a variety of settings with students and adults. Designed and sequenced well, field experiences and clinical practice help candidates develop the competence necessary to begin or continue careers as teachers or other school professionals. Student teaching or internship is the culminating experience for teacher candidates.

Further research by NCATE (2010:2) indicates that 'teaching is, like medicine, a profession of practice – prospective teachers must be prepared to become expert practitioners who know how to use the knowledge of their profession to advance student learning... in order to achieve this we must place practice at the center of teacher preparation'. However,

Kiggunduand Nayimuli (2009) argue that despite teaching experience being an enriching and learning experience, it can also prove to be quite challenging. This is especially evident in disadvantaged schools in South Africa, where there is a lack of resources and facilities, varied ranges of teacher qualifications and expertise, a lack of discipline, and the challenges of geographical distance. They contend that in such cases the teaching experience can prove to be debilitating, not only affecting student performance negatively, but also how the profession is perceived.

Teacher education students need to experience that telling is not teaching, and listening is not learning. The focus needs to be on teaching students and not only teaching the curriculum. It is, therefore, imperative that university faculties work closely with schools in order to purposefully integrate content and experiences with the practicum setting as well as across relevant courses.

2.2.9. The role of mentors in teaching experience

The role of school-based mentors usually determines the success of the teaching practice experience.

When mentors are well selected, well trained, and given the time to work intensively with new teachers, they not only help average teachers become good, but good teachers become great. And because new teachers are most often assigned to the poorest schools and most challenging classrooms, instructional mentoring programs provide a powerful lever for closing the teacher-quality gap and ensuring that all students, regardless of their backgrounds, have a real opportunity to succeed.

(Barlin, 2010:1)

Mentors play an important role in the development of pre-service teachers' skills to teach and manage classrooms since they directly influence students during their teaching practice sessions. It is during this time that pre-service teachers observe their mentors at work, and this impacts on how they learn about teaching skills and strategies, maintaining discipline, general classroom management and administrative duties, and this, subsequently determines their own teaching style (Quick &Siebörger, 2005).

In a study conducted in South Africa by Kiggundu and Nayimuli (2009), it was found that the perception of the influence of mentors on pre-service teachers was subjective, and therefore 'varied from student to student'. For many, the mentors were excellent role models, modelling good teaching and guiding students and supporting them throughout the process. Kiggundu's (2007) study of student teachers' experience during teaching practice in the Vaal

Triangle also highlighted both positive and negative responses. One student responded by saying:

I am indebted to my mentor. She has dedicated her time to ensure that I do the right thing and gain good experience in the process. She has inspired me and has helped me translate the theory I learnt into practice...

(Kiggundu, 2007:31)

Other positive remarks were that mentors respected students and made practice-teaching experience enjoyable, with some having a profound effect on students who had no intention of pursuing a teaching career, thus changing mindsets and motivating students to consider 'venturing into the real teaching world' (Kiggundu, 2007:31).

However, many students were dissatisfied with their mentors because they felt that, in their experience, they were not respected as developing teachers but seen rather as 'relief teachers' who had to do all the menial jobs that teachers did not want to do. They explained that they were made to feel insignificantas mentors carried on with their daily tasks, not affording them opportunities to teach or experience working with classes. These experiences proved very discouraging and students were negatively influenced and left with feelings of inadequacy. In Kiggundu's (2007) study, there is evidence of this too. Negative comments from students included:

They just order us around. They treat us like errand boys...

and

The teachers take advantage of us and they keep us in the computer centre to type their work. Some teachers give us personal assignments. Most teachers in the school are lazy and they drink a lot...

(Kiggundu, 2007:31)

A report by NCATE (2010:20) indicates that currently in the United States, student teachers sent into schools are assigned to teachers, but managing them just becomes extra work for those teachers. There is an expectation that the teachers will train, support and guide the students, yet there is very little or no remuneration or training for these teachers; this then could result in negative experiences similar to those to whichKiggundu (2007) alludes.

Kiggundu's (2007) study recommends that greater communication between universities and schools needs to take place. Mentors or 'best practice' teachers need to be supported, guided and 'constantly empowered' to effectively lead and assist students during their teaching practice sessions. Aleccia(2011) agrees that mentor teachers should 'serve as a resource for student teachers... and provide them with the appropriate guidance but also give potential teacher educators a cohesive framework for understanding the professional development cycle of classroom teachers'.

Darling-Hammond et al. (2005:411) contend that the kind of support offered to students will help them to 'make sense of their experience and learn from it'. They concur that teachers supported by expert practitioners actually learn more. Kiggundu (2007) also recommends that profiles be drawn up for each school and then selection be done to find schools that meet certain criteria. These schools would be used to provide teaching practice experience for pre-service teachers.

2.3. DURATION OF PRACTICE TEACHING

Crandall (2000) and Darling Hammond (1996) feel that teaching as a profession needs to be viewed in the same way as the legal and medical professions, with 'respect for the role of teachers in developing theory and directing their own professional development through collaborative observation, teacher research and inquiry, and sustained in-service programmes', rather than the short practical sessions currently offered in the training programmes.

Kiggundu (2007) also suggests that there should be an even spread of teaching experience sessions throughout the year. Students should be sent out at the beginning of the year to observe the processes followed to kick-start the year. In addition, they should have four-week sessions in both the second and third terms to expose them to the 'management styles and various institutional cultures' experienced throughout the year. Quick and Siebörger(2005:4) agree that there should be two or three sessions per year.

Darling-Hammond et al. (2005:411) indicate that the current 10 - 12 week of teaching practice is not adequate and suggest that more supervised experience with graduated responsibility can have a positive effect on candidates' practice and self-confidence. Also that the number of opportunities students get to teach and the nature of the diverse classrooms they teach in result in teachers being much stronger in their first few years of

teaching, because 'they have a stronger frame with which to interpret important concepts in teaching and learning' (Darling-Hammond et al., 2005:411).

Darling-Hammond et al. (2005) also believe that while we strive for learning to be interactive instruction, a form of experiential learning where learners learn by doing, it is necessary for students to have enough time to experience the processes involved. Scheyvens et al. (2008:51) echo this, and state that active learning should include a wide variety of learning theories and should encourage critical thinking and reflection; however, in order for teacher trainees to successfully apply this process of learning, it is necessary to extend their teaching experience period to enhance the quality of their training.

While there is a call for longer teacher experience periods, at the same time optimal use needs to be made of the current time set out and, therefore, the teacher experience time-table at universities should take into consideration the demands made on students in terms of university work as well as on schools, for example, assessment and examination periods, etc. Students should not be sent out when either of the institutions is under pressure, since it will negatively influence the nature of their experience.

2.3.1. On-campus acquisition of teaching skills

While the study has shown to what extent student teachers are influenced 'by the teaching context of their teaching practice', Cheng et al.(2010:101) propose that we should not 'underestimate the influences from the campus-based component of the teaching education program'.

Microteaching, a component focusing on the acquisition of teaching skills, reared its head in the 1960s and was very often and is still used today among teacher education peers in laboratory settings or in their own classrooms (Darling-Hammond et al., 2005:420). These researchers go on to explain that microteaching 'often included modeling of practices to be learned, opportunities to plan and teach a brief lesson using these practices, videotaping and feedback, and sometimes additional practice'. According to Darling-Hammond et al. (2005:420), a number of studies indicated that there was a definite improvement in students' ability to 'demonstrate the desired behaviors or practice in the microteaching sessions'.

Darling-Hammond et al. (2005) and Cheng et al. (2010) agree that the modelling of good teaching by teacher educators greatly influences students' conceptions of teaching. In a study conducted by Cheng et al. (2010:101), student teachers referred to 'distinguished

lecturers' who had greatly influenced them through modelling good teaching. One student, in the study, describes the impact of a particular lecturer's modelling of good teaching on her development as a teacher in the following way: It inspired me to learn through discussion; I learnt how to communicate with students of different age groups; it led me to highly value the role of discussion and interactivity between teachers and students in teaching; I adopted the lecturers' pedagogies as a role model for my own teaching; and I recognised the importance of self-learning (Cheng et al., 2010:100).

The evidence in the study by Chang et al. (2010), focusing on the importance of discussion and feedback, is also reinforced by Lampert (2010:27), who explains that often teachers get together to 'replay and rehearse as they talk together, telling one another about classroom incidents, giving one another feedback, and using those incidences as a basis to prepare for future teaching by repeating what they have learnt from others'. Kazemi and Hubbard (2008) refer to these rehearsals, which influence learning to teach, as the 'pedagogy of enactment'. Teacher educators need to provide opportunities for students to learn from these rehearsals and, therefore, should also provide opportunities for them to 'simulate the sorts of situations teachers confront in the midst of instructional practice and thus engage teachers in the ways of knowing involved with classroom teaching'.

2.3.2. The use of technology in teacher-training programmes

In times of change, it is the learners who will inherit the earth while the learned will find themselves beautifully equipped for a world that no longer exists.

Anonymous

This world is ever changing, and within the next few decades the changes that will occur will surely exceed our wildest expectations. Bork(2003) speaks about the dilemmas of teacher training, alluding to the fact that in order to best prepare students for the realities of the teaching world to come, we need to move with the changes experienced in education and, therefore, technology needs to be infused with professional development. Carlson (2002) concurs and states that the key determining factor in the improvement of student performance in developing and industrialised countries is the use of technology applications in teacher training.

In a study conducted by Nuangchalerm et al. (2011:119),it was found that 'pre-service teachers felt that they needed more technology preparation' to prepare them for the 'future classroom'. It was concluded that there was a need to adequately train teachers in the use of

technology through online professional experiences. With adequate training and improved confidence, teachers would be more open to exposing their own learners to this 21st-century education.

According to Polly et al. (2009:863), many teacher-education programmes have, in the past decade, attempted to integrate technology skills through introductory courses in educational technology. However, too often the skills are used more for administrative functions rather than to enhance learning and teaching. It is, therefore, intimated that the most important factor in the acquisition of these skills is that they are functionally integrated into the methods courses and field experiences. No longer should pre-service teachers be informed of new technology, but have very little idea of how to use it successfully or integrate it with their daily work in the classroom. Carlson (2002:7) agrees that 'educational technology is not, and never will be, transformative on its own – it requires teachers who can integrate technology into the curriculum and use it to improve student learning. In other words, computers cannot replace teachers – teachers are the key to whether technology is used appropriately and effectively'.

Koehler and Mishra (2008) developed a framework for integrating technology into the classroom. Their concern is that teachers need to be knowledgeable about the relationships between:

- technology and content how technology can be used to support the learning of specific content;
- technology and pedagogy how specific pedagogies best support the use of technology; and
- content and pedagogy how specific pedagogies facilitate learning of specific content.

This is illustrated in the diagram below:

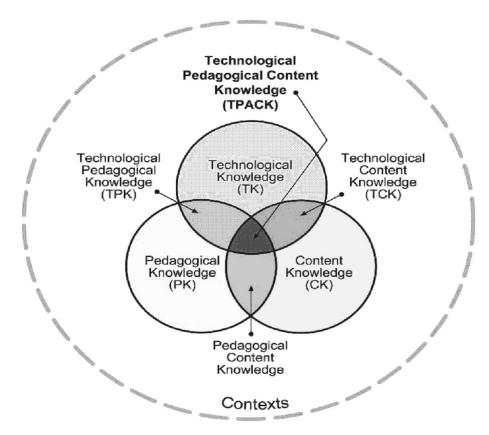


Figure 2.2:Framework of technological, pedagogical and content knowledge (Koehler & Mishra, 2008:3)

TPACK (Framework of technological, pedagogical and content knowledge) is the framework within which the teachers' knowledge and skills with regard to technology integration is described. The intersection in the diagram relates the importance of teachers'possessing knowledge about technology, pedagogy and content in order to integrate and enhance learning and teaching successfully (Koehler & Mishra, 2008).

The use of technology can promote critical pedagogy through instruction that is more 'student-centred, inter-disciplinary, more closely related to real-life events and adaptive to individual learning styles' (Carlson, 2002:8). This will encourage a shift which changes the 'teacher's role from being the sole source of knowledge and instruction to being a facilitator of students' learning that is acquired from many sources' (Carlson, 2002:8). Carlson (2002) further indicates that this is often referred to as 'a shift from being the sage on the stage to the guide on the side'.

2.3.3. Student selection processes

In the *McKinsey Report* of 2006 (Kárpáti, 2009), it was recommended that three criteria were vital if quality were to be maintained in education systems. This study focuses on one of these criteria, namely, ensuring that more talented people become teachers.

Many teacher-training programmes attract school leavers with below-average skills. Since the number of applicants is always low, they are freely admitted and this results in the quality of training being compromised, since the entrants have poor levels of knowledge and skill (Kárpáti, 2009). This is also evident in a study conducted by Kiggundu (2007), which focused on the impact of teaching practice on student teachers. When students were requested to substantiate why they wanted to become teachers, the majority indicated that they chose the profession through default. Many students had no desire to become teachers, but saw it as a 'stopgap while they waited for better career opportunities in other fields'. Many also chose the profession because they were offered funding, and most of the candidates indicated that they had no intention of entering the profession once they had qualified. However, in a study conducted by Skilbeck and Connell (2004), it was found that in many cases the reasons for students entering teaching were altruistic, where their desire was purely to contribute positively to society. Skilbeck and Connell (2004) interviewed many teachers who had changed their career path to teaching because their former occupations had not offered job satisfaction and because they wanted to contribute something to society. For many of these teachers, teaching had always been a consideration, or of interest to them for a long time. This, according to Skilbeck and Connell (2004), should be borne in mind during recruitment campaigns.

According to Kárpáti (2009:215), countries with rigid selection proceduresfor admitting students into teaching programmes have greater success, and thus enhance quality in their education systems. Students are selected according to specific criteria that include certain skills and aptitudes needed specifically for the teaching profession. In Finland and Singapore, students have to meet certain basic requirements to be accepted into the programme. In both these countries selection criteriafocus on 'the applicants' academic performance, communication skills and professional motivation' (Kárpáti, 2009:215). Success is evident in the fact that of the one hundred percent of applicants that start the course, all complete it successfully and enter the teaching profession. A great incentive could perhaps be that from the moment they start their studies they are employed and paid a salary by the education ministry.

Meri (2007:5) also believes that to enhance quality within the teaching profession, students who intend to enrol should meet requirements such as: educability, that is, students should be able to process and analyse information, be critical thinkers, find relevant information, express their own views and be active participants in the study community. These are only a few of the factors taken into consideration at a university in Helsinki (Meri, 2007:5).

NCATE (2010:18) also suggests that student selection processes are vital and that specific criteria need to be set as requirements for admission to the teacher-education programme. This will improve the 'candidate pool and increase outreach to diverse students'. Although institutions in the USA have set standards through cut-off scores in scholastic aptitude tests as well as American college tests and even some grade-point averages, other institutions have included additional attributes for each of their candidates 'by seeking information on such qualities as leadership, persistence, commitment and facility with oral and written communications, as factors which are judged in selecting applicants' (NCATE, 2010:18). Meri (2007) also found that student selection processes ensure that students who have undergone the entry tests and interviews and are found to be suitable, are the students who are successful in the education field.

2.3.4. Dealing with diversity

Cornbleth (2008:40) describes student diversity as follows:

Schools and classes with students who are different from one another with respect to race/ethnicity, socioeconomic status, home language, religion or academic ability/motivation.

In societies we very often serve certain groups or individuals 'at the expense of others', and Cornbleth (2008:40) believes that it is the teacher's responsibility to 'face the differences and divides and attempt to deal with them in equitable and constructive ways'. Loughran, (2006:87) reiterates this by acknowledging that 'building relationships begins with a genuine concern to listen, to be aware of the changing nature of the teaching and learning context, and to be interested in and responsive to the needs of all students'. This is echoed by Long (2012), who refers to the recognition and valuing of students from diverse social groups as 'high inclusivity' where 'the classroom is free from negative forms of prejudice and discrimination, and thus, all individuals, regardless of their social grouping, feel encouraged to participate fully in lessons'.

Particularly since democratisation, South African schools, according to Hemson (2006), have become more and more diverse in terms of their student complement. Gopinathan et al. (2008:54) indicate that in countries like China and South Korea, where populations are more homogenous, there is much less concern regarding this issue, but in others, there has been an attempt to 'offer a more diversified curriculum'. Integrating diversity into teacher training in South Africa foregrounded the following questions:

- What understanding of diversity underlies pre-service and in-service teacher education?
- What specific interventions are in place as a result of this understanding?
- What educational processes are used in coursework, to encourage change in attitudes and action?
- In what ways is teaching practice organised and assessed to promote good practice with regard to diversity?
- To what extent does the understanding of diversity inform practices regarding the different forms of exclusion on campus and in schools?
- What research is being undertaken to assess the impact on practice and to assess obstacles to good practice in schools?

(Moletsane et al., 2004:76)

While attempts have been made to integrate diversity into the curriculum, a study conducted by Hemson (2006:5) to 'characterise diversity frames within institutions', distinguished between the following: those that do not accommodate diversity, those that accommodate it without recognising it, and those that recognise and act on it. However, in South Africa, Hemson (2006:2) refers to the *Norms and Standards for Educators* (DoE, 2000), which specifies the requirements for all teachers with regard to the integration of diversity within the curriculum. Of the seven roles in the *Norms and Standards for Educators*, the roles of community, citizenship and pastoral care require that 'the educator will uphold the constitution and promote democratic values and practices in schools and society' (DoE, 2000:14). In the role of learning mediator, it is expected of every educator to communicate effectively, showing recognition of and respect for the differences of others' (DoE, 2000:12). Hemson (2006:2) further explains that all the roles require a 'critical and inclusive handling of diversity' in order to 'understand the impact of class, race, gender and other identity-forming forces on learning (DoE, 2000:19).

The general results drawn from Hemson's (2006) study indicate that staff and student demography has changed little sinceapartheid years; most staff are not familiar with current

debates about diversity; students have not been exposed to school environments different from those of the schools they attended; some of the work is simply not effective and the frameworks in use are not helping; national policy is referred to by all institutions but history and internal factors seem to be more decisive; only one case illustrated a high level of internal coherence and this case demonstrated the most critical approach; there is little focus on how students will enact the learning related to diversity; there is little material available that addresses diversity; none of the institutions have modules that give specific attention to theories of diversity and inclusion; and the language of diversity creates its own problems.

Given the fact that student populations have become more diverse worldwide, there is the need to consider changing approaches in teacher-preparation programmes to embrace issues like equity, inclusion and social justice through relevant pedagogy, resulting in a more diversified curriculum (Ghambir et al., 2008). Gopinathan et al. (2008), Cornbleth (2008) and Grossman et al. (2008) indicate that there is a lack of research on the issue of dealing with diversity in teacher training. Grossman et al. (2008) thereforeargue that more attention needs to be focused on the development of pedagogical relationships between teachers and students and how these impact student learning, as these relationships are relevant and useful 'in preparing teachers to effectively work with students differentiated by race, ethnicity, socio-economic status and language' (Gopinathan et al., 2008:54).

2.3.5. Teachers as researchers

Korthagen et al. (2006) state that teacher-education programmes need to place greater focus on the teacher as learner, where they become responsible for their own learning through analysing and making meaning from their experiences.

The importance of developing good research skills is aptly described by Rinaldi (2003:2) as follows:

... it shakes up our frame of references because it forces us to look at the world with new eyes. It opens us up to what is different and unexpected. We tend to accept the status quo, that which we know... only searching and researching can guarantee us that which is new, that which is moving forward... it defines research as an attitude and an approach in everyday living, in schools and in life... the young child is the first great researcher ... born searching for the meaning of life, the meaning of the self in relation to others and to the world...

This, according to Korthagen et al. (2006:1030), is particularly important since students should research their own practices. Actively researching their own practice can become a 'catalyst for students to see things differently, reframe a situation and thereby gaining new insights into how they might come to better understand that situation and act within it'.

Boyer (1990) has accorded research, which he refers to as having a four-pronged function, a high position in academe. He discusses research as an important component in the development and growth of teachers, since it will impact on their own practice and on the learners they teach. The four-pronged function includes: research for discovery: where knowledge is advanced through authentic research; research for integration: ideas are connected and synthesised across all disciplines; research as application: knowledge accrued is used to address significant issues in society; and research for dissemination: successful dissemination of acquired knowledge between the teacher and the learner.

(Boyer, 1990:17-24)

Learning will be more meaningful if students are allowed to collect their own data and analyse it from the perspective of their own experience, rather than it'sbeing passed on to them by teacher educators. 'Learning by researching their own practice is, therefore, a crucial component in learning about teaching and teaching about teaching, and another means of counterbalancing the tendency in traditional teacher education to create the gap between research-based knowledge and practice' (Korthagen et al., 2006:1030).

2.4. CONCLUSION

Lewin and Stuart (2003:693) believe that if any reform to teacher training, within the context of quality, is to 'bear fruit and not remain at the level of rhetoric, then a more evidence-based policy is needed'. Two of the aspects that will assist with this reform, according to Lewin and Stuart (2003), are identifying *who* becomes a teacher: exploring the motivations, images and experiences they bring with them; and analysing the *processes:* what is needed to assist teachers to learn to apply knowledge, skills and attitudes to become more effective teachers.

Juran (cited in Arcaro,1995:5) believed that the basic quality mission of any school should be 'to develop programs and services that meet the needs of the user, i.e. students and society'. To improve this quality we must ensure that each individual has been provided with the necessary building blocks in order for him or her to effectively do the job.

In addition to this, there is also the *McKinsey Report* of 2006 (Kárpáti, 2009), that concluded that three concepts were vital if quality were to be maintained in education systems: ensuring that more talented people become teachers; developing these teachers into better instructors; and ensuring that instructors deliver consistently and to every child in the system. Quality has been defined as fundamentally relational. Winder and Judd (1996) indicate that researchers concur that quality is dependent on the time, context and people involved. UNESCO (2005:37) also acknowledges that conceptions of quality vary widely, and thus the different notions of quality will be determined by the different educational traditions and contexts with which they intergrate.

In the USA the *No Child Left Behind Act of 2001* has been the greatest motivation behind improving the quality of teachers, with the aim of having highly qualified teachers in every classroom. Teacher training and its relation to teacher productivity, therefore, becomes an important research focus with the spotlight specifically on teacher education in universities (Harris & Sass, 2007).

According to Darling-Hammond (2006:300), the need is, therefore, to focus on the 'what' and the 'how' of teacher training. These include:

- Well-defined standards of professional practice and performance to guide and evaluate knowledge and clinical experience.
- Extended clinical experiences well over 30 weeks of supervised practicum and student teaching opportunities in the program – carefully chosen to support and closely interwoven with course work.
- Extensive use of case methods, teacher research, performance assessments and evaluation that apply learning to real problems of practice.
- Explicit strategies to help students confront their own beliefs and assumptions about learning and learning about the experiences of others different to them.
- Strong relationships, common knowledge and shared beliefs among school and university-based faculty jointly engaged in transforming teaching, schooling and teacher education.

The above factors, they believe, will help to produce newly qualified teachers 'that are able, from their first days in the classroom, to practice like many seasoned veterans, productively

organizing classrooms that teach challenging content to very diverse learners with levels of skill many teachers are yet to attain' (Darling-Hammond, 2006:300).

This chapter discussed the literature review and provided the theoretical framework.

Chapter 3 discusses the research design and the methodology employed in this study.

CHAPTER 3. METHODOLOGY

3.1. INTRODUCTION

This study aims to interrogate professional knowledge delivery in the teacher-training programmes offered at a selection of South African universities. The methodology is conceptualised in the following diagram.

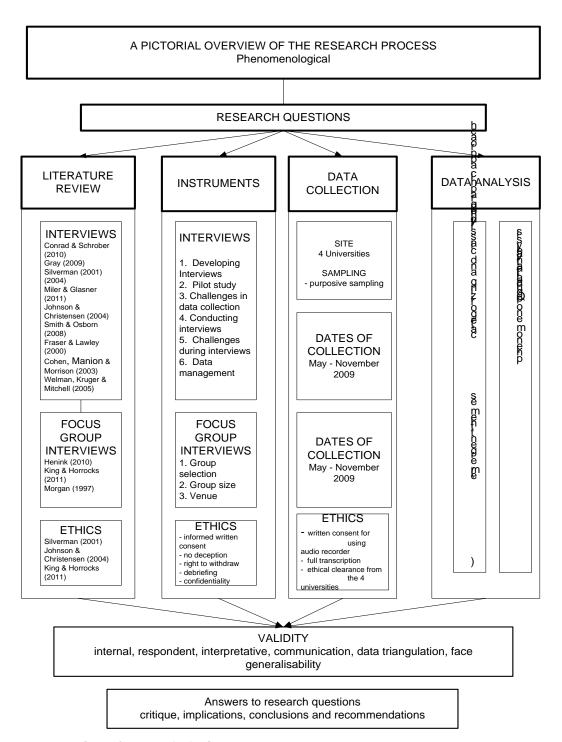


Figure 3.1: Overview of research design

3.2. RESEARCH DESIGN

In the search to understand the nature of, and experience of teacher educators and student teachers within the context of their training, a qualitative approach is best suited. This paradigm afforded me the opportunity to elicit an in-depth and detailed description of their experiences and the quality of their training at their respective institutions.

Since this qualitative research project attempts to view the initial teacher-training programmes through the lens of the teacher-education students, teacher educators and that of the in-service teachers, a phenomenological approach has been adopted. Phenomenology allows the researcher to understand how people experience a phenomenon from their own perspective (Johnson & Christensen, 2004:46).

The study focuses on how the participants experienced the following for the duration of the programme:

- The acquisition of professional knowledge.
- The acquisition of teaching skills.
- The readiness of the students to enter the teaching profession.

The use of the phenomenological approach allowed the participants to express how they felt about the phenomenon, that is, their experience enabled them to provide good descriptions of their training but most importantly, enabled them to describe their lived experience since they were in their fourth and final year of the teacher-education programme. Teacher educators were allowed to express how they experienced teaching these final-year students and inservice teachers could comment on how they experienced the students within their schools during practice-teaching sessions and as newly qualified teachers.

The goal of phenomenology, according to O'Leary (2005:162), is 'rather than ask what causes X or what is X, phenomenology explores the lived experience of X'. This results in the researcher and the participants developing a narrative that will prove to be both, descriptive and interpretive as well as rich and in-depth. This 'thick, rich detailed description will get beneath the surface of the experience' and will provide valuable insight into the phenomenon (Falk &Blumenreich, 2005:10).

Falk and Blumenreich (2005) and O'Leary (2005) agree that once the essence of the lived experience can be captured, it could lead to a rethinking of students' experiences in their training. This will bring about 'the discovery of new meanings' and will be 'an advantage in working towards situation improvement' (Falk &Blumenreich, 2005:11). This interpretive paradigm uses insider perspectives, probing for understanding and insights in its quest to seek the truth of particular interpretations and analysis (Falk &Blumenreich, 2005:11).

3.3. RESEARCH SITES

Four nationally approved faculties of education were used as the research sites. Thesewere also sampled purposively in order to ensure the heterogeneity of the institutions. Two of the sampled sites are the largest providers of initial teacher education in the country. The four institutions provide Initial Professional Education for Teachers (IPET) programmes.

All four of the sampled institutions have experienced some form of merger or incorporation as part of the post-1994 transformation process in higher education in South Africa. The reformation, remodelling and transformation of teacher policy were at the heart of shaping teacher education. This meant shifting teacher education from the 'specialized college sector into the university sector' (Kruss, 2007:3). By 2004, the incorporation of 120 colleges of education and technikons into universities had been completed. This process of restructuring intended to produce a new landscape in higher education that would 'lay the foundation for an equitable, sustainable and productive higher education system that would be of high quality and contribute effectively to the human resource, skill, knowledge and research needs of South Africa' (MoE, 2001:16).

3.4. SAMPLING

In the phenomenological approach, to explore the perceptions of individuals regarding their particular situations and their daily experiences and how they are making sense of this personal and social world, it is more feasible to conduct the research using smaller samples. Smith and Osborne (2008:56) refer to this as 'sacrificing breadth for depth'.

The sample used was fairly homogenous, and therefore purposive sampling was applied in order to find a 'more closely defined group for whom the research question would be significant' (Smith & Osborne, 2008:56). The researcher, therefore, considered participants who, according to their judgement, could provide the best information to achieve the objectives in the study (Kumar, 1999:162). The information required was obtained through investigating the following:

- How students and lecturers felt about the acquisition of professional knowledge throughout their training.
- How they viewed their training in terms of the quality in the acquisition of teaching skills.

 Whether lecturers, students and in-service teachers thought students were ready to enter the teaching profession.

In order to obtain this information, 26 lecturers, 3 in-service teachers and 9 focus groups (F/G) comprising 61 students from the four universities participated in the study. This sample was purposively chosen for the following reasons:

- The lecturers' 'life world' revolved around the daily teaching and training of students in their quest to become teachers.
- The students' were final-year BEd candidates whose 'life world' was the daily exposure to teaching and learning with the aim to develop and groom them to become good teachers, ready to enter the teaching arena. They had experienced more than three years of this training and it was felt that, based on their experiences, they were equipped to share their perceptions of their training.
- In-service teachers were based at schools that hosted and mentored pre-service students during practice teaching sessions, and had employed students who had recently qualified.

This non-random, purposive sampling technique allowed the researcher to solicit persons with specific characteristics to participate in the study in order to achieve its objectives (Johnson & Christensen, 2004:214). This sample, according to Welman et al. (2005:69), can be regarded as representative of the population, since the researcher relied on their 'experiences, ingenuity and previous research to deliberately obtain units of analysis'.

For the purposes of this study, the final-year BEd students and lecturers at each of the four universities were invited to a meeting where they were informed of the Quality in Education project and invited to form part of the sample. They were handed a student information sheet and had to indicate whether they were interested in participating in the project (seeAppendix 1). Their participation was, therefore, voluntary. Welman et al. (2005:69) indicate that there could be some difficulty in evaluating how representative the sample is because the researchers may use different means of obtaining the sample. However, they concur with Kumar (1999:162) that this sampling method is the most important and most useful type to use when describing a phenomenon or constructing a historical reality.

3.5. DATA COLLECTION INSTRUMENTS

3.5.1. Interviews

Interviews were used to collect data for this study because it required information regarding participants' experiences, perspectives and motivations. 'The method of collecting data that is generally assumed to provide the highest quality information, is the interview' (Conrad &Schrober, 2010:173). It is also Gray's (2009:370) view that if the nature of the research is exploratory, as in this study, then the most logical research technique to use would be interviews. He contends that in a phenomenological approach, people are concerned with particular meanings relating to a phenomenon. In this study the use of the interview allowed the participants to reflect on their experiences without committing themselves in writing, for fear of confidentiality being breached. Richness in responses results from dialogue between the interviewer and the participant, where it 'allows for nuances to be captured and for questions to be clarified and adapted or improved' (Gray, 2009:372).

Semi-structured interviews (see Appendix 2) were used to elicit responses from teacher-educators regarding their perceptions about their training, and from in-service teachers (see Appendix 3) regarding the readiness of students to enter the profession, since this technique is vital in a phenomenological approach. Because semi-structured interviews are not standardised, they can provide very rich data where additional questions and the probing of views and opinions allow for possible diversions which were not anticipated, but which could help to reach the research objectives (Gray, 2009:373). Silverman (2001), however, questions the authenticity of accounts obtained through interviews. According to him, radical social constructionists suggest that knowledge derived from interviews is nothing more than a 'narrative version of the social world'. It is, therefore, not representative of some truth of this world, but is rather 'context specific, to fit the demands of the interactive context of the interview'.

Miller and Glasner (2011:132), however, argue that 'information about social worlds is achievable through in-depth interviews. Although it is not possible for research to provide a 'mirror reflection' of the social world, it can provide 'access to the meanings people attribute to their experiences and social worlds'. Johnson and Christensen (2004:183) agree that with qualitative interviewing, one is able to enter the social world of the participants and gain access to their experiences, understanding and perspectives of the phenomenon.

3.5.2. Focus-group interviews

Focus-group interviews (see Appendix 4) were used to collect data from the final- year BEd students regarding their perceptions of their training. The use of focus-group interviews allowed participants to 'identify, define and contextualize issues' that were important to them in their training. Participants were able to 'describe, discuss, debate, disagree and defend their views' on how they experienced the training programme (Hennink, 2010:208) as indicated in the extract below.

Table 3.1: Interview extraction

Interviewer: We are having a discussion with the students pertaining to quality in teacher education and we are going to follow a certain sequence as we are discussing as per schedule. Maybe initially if I could ask the students what mode of lecture delivery do lecturers use mostly?

Resp 1. It's mostly chalk and talk. Typically standing in front of the classroom with a book, reading and showing some transparencies with slides and that will be the end of the lecture. Sometimes they do a bit of discussion with the class and that is usually the norm.

Resp 2. And also they like to project the data from the computer on the white screen. It's not summarised. It's exactly taken from the textbook and presented as it is.

Interviewer: How do you find this helping you as teacher educators, the form of lecture delivery that you have most of the time? Is it helping you?

Resp 3. I think it's quite opposite what we have to do in class. They teach us not to teach like chalk and talk but they give us examples how not to do it.

Interviewer: Any more comments on that one?

Resp 2: Oh I agree with that. They tell us to use different strategies in class but they don't implement it themselves. It's very difficult to see how it is properly done to be able to implement it yourself. We don't get examples how we can do it.

3.5.2.1. Group selection

Homogenous groups were selected, since greater interaction was required and because they would more than likely be more compatible. The decision to use homogenous groups was based on their characteristics and experiences, for example they studied the same course at the same institution and were in most cases taught by the same lecturers at their respective institutions.

King and Horrocks (2011:66) do, however, feel that the more homogenous the group is, the greater the restriction with regard to discussion around issues and the positions from which they are viewed. While this is a concern, the consideration of using heterogenous groups would be less likely since it would negatively impact the discussions because of incompatibility. Group discussions would most likely be stifled and the research aim would not be met.

3.5.2.2. Group size

Group size, according to King and Horrocks (2011:67), is an important consideration since they feel that the larger groups may be hard to manage and in smaller groups it may be more difficult to actively engage discussion. Morgan (1997) advises that groups should be composed of between six and ten participants. He feels that if groups are fewer than six it may be more difficult to sustain discussion and groups larger than ten could pose the problem of group control. In this study the groups ranged from two to ten as indicated inTable 3.2 below. Initially, the intention was to recruit ten students for each focus group; however, the following table indicates the number of students that participated.

Table 3.2: Focus groups

Date (2009)	Respondents per focus group (F/G)	Venue	Duration
May 19	2 students	Lecture hall	40:37minutes
May 19	4 students	Classroom	48:42minutes
May 19	7 students	Lecture hall	42:27minutes
September 2	10 students	Classroom	1hr 7minutes
September 3	9 students	Classroom	1hr 4minutes
September 13	7 students	Science laboratory	37:46minutes
October 14	10 students	Lecture hall	1hr 13minutes
October 14	7 students	Classroom	44:54minutes
November 23	5 students	Classroom	1hr 10minutes

King and Horrocks (2011:67) indicate that researchers should always over-recruit because in many cases people who often agree to participate may, for various reasons, not attend. The groups of two and four in the above table were as a direct result of 'no shows' as indicated by King and Horrocks (2011).

3.5.2.3 Venue

King and Horrocks (2011:67) highlight the importance of the choice of venue, as it will 'create an ambience' which will directly impact on how participants behave. Therefore, the participants in this study were interviewed on their 'home turf', that is, they met at the institution they were studying at. They chose the venue at the university that was easily accessible, familiar and comfortable. These 'naturalistic environments' left all the participants feeling relaxed and secure throughout the interviews (King &Horrocks, 2011:67).

3.6. DATA COLLECTION

Data was collected using semi-structured interviews as the main instrument. There were interviews with lecturers and focus group interviews with students.

3.6.1. Developing interview schedules

In preparation for the interviews, I followed the process of Wellman et al. (2005:167) which comprises four stages:

- Analysing the research problem.
- Understanding what information needed to be obtained from participants.
- Identifying those who would best be able to provide the information.
- Formulating the questions.

Thereafter a pilot study was conducted.

There were three broad themes focused on in the development of the interview schedule, that is, acquisition of knowledge, acquisition of teaching skills and, readiness to enter the teaching profession. Each of these had to be evaluated within a context of quality. Within

each of the above themes, sub-questions were developed, since the over-arching themes were so broad. These sub-questions would solicit as much information as possible. In addition to these, probes were also prepared to encourage participants and to sustain the discussions. Table 3.3 shows how the sub-questions were developed from the over-arching themes.

Table 3.3: Interview matrices

Focus	Lecturer Student		In-service teachers			
Acquisition of knowledge	Which modes of lecture delivery are used?	Which modes of lecture delivery are used?	How would you define quality teaching? What do you think of the quality of			
	Do they serve the students' purposes?	Do they serve the students' purposes?	teacher training in South Africa?			
	What in your opinion are the qualities of a good lecturer of student teachers?	How would you like your lecturers to deliver lessons?				
	How do you think you measure up to those qualities?	How do you feel about the quality of lectures that you receive?	Which teacher characteristics do you think will impact positively on learners?			
	How do you feel about lecturer support within the department?	What is your expectation from lecturers as far as lecturing is concerned?	on realiters?			
		Which do you consider to be the qualities of a good lecturer?	To what extent do newly qualified teachers possess these characteristics?			
Acquisition of teaching skills	What provisions do you have on the programme for student teachers to practise teaching skills?	What arrangements are in place to facilitate teaching skills development during the course?	Is the downward trend in learner results indicative of the quality of teachers being trained?			
	What is the duration of practice teaching?					
	Do you think it is adequately serving its purpose?	Are these arrangements meeting your needs as student teachers?				
	How could lecturers improve the quality of the training of teachers?	How do you think your teaching skills development could best be met?	How do you ensure quality teaching among staff members?			
		What could the institutions put in place in order to improve your training?	Which areas should institutions strengthen in order to improve the quality of graduates			

Focus	Lecturer	Student	In-service teachers			
Readiness to enter the teaching profession	What are the knowledge expectations for exiting student teachers and how do they usually fare?	Which knowledge areas are you expected to exhibit by the end of the course?	How do graduates from higher education institutions perform? How well prepared do you think they are?			
		To what extent do you think the knowledge gained enhances classroom practice?	Which areas do you think need reinforcement or improvement.			
		How do you feel about your overall preparedness to go and teach?				

3.6.2. Pilot study

The pilot study was administered to a group of students who were part of the intended study but not part of the sample used. It was conducted for the following purposes:

- To detect possible flaws in the measurement procedures.
- To identify unclear or ambiguous questions.
- To identify non-verbal behaviour (Wellman et al., 2005:148).

The pilot study provided the opportunity to determine the time to be set aside to conduct the interviews, which lasted approximately one hour each. It also allowed for correction or improvement upon certain aspects, for example, minimising double-barrelled questions, refining the more loaded questions and developing appropriate questions to be used as probes. These ensured that information collected could be regarded as accurate and of good quality. Table 3.4 describes how two of the six sections of interview questions were developed from the original questionnaires used in the larger research project. When piloting the interview questions, various probing questions were selected to be developed, to gain further clarity on the concepts underpinning this research project, with the aim of answering the research questions

				INTERVIEW QUESTIONS
	EXTRACT FOR ORIGINAL QUESTIONNAIRE		Lecture delivery	What mode of lecture delivery do you use mostly and how do you think it is serving
a b	Lecturer's self assessment Assessment of teaching methods			both your purposes and students' purposes?
c d	Students' feedback Quality of management			
е	Lecturer's academic qualification			What internal mechanisms are in place to support your teaching and learning by
f G	Course planning and preparation Course presentation and teaching strategies			students?
h	Students' assessment			How do you assess teaching and learning
j J	Lecturer's competence Technical support			of student teachers and how do you use the
k	Administrative support			information?
I	Physicalenvironment (lecture halls, labs, outerspace etc.)			
b c d e f	Most students are able to apply knowledge of how learners learn to create appropriate learning opportunities Most students are able to strengthen learners' prior knowledge with new ideas Most students are able to apply theories of learning in teaching their learners Most students are able to apply theories of learning in assessing learners	→	Teaching skills	What provisions do you have on the programme for student teachers to practise teaching skills? What is the duration of practice teaching and do you think it is adequately serving the purpose? How do feel about student supervision?
	Most students are able use certain motivation theories			
h	Most students are able to use some behaviour			

3.6.3. Challenges in data collection process

The dates for the interviews (see Appendix 5) for the collection of data were pre-arranged with the participants. The four universities involved in the study were the venues for the interviews and students were asked to choose an appropriate space within that venue that would be comfortable, private and quiet (King &Horrocks, 2011:42). This was to ensure that the interviews could be conducted without any interruptions or disturbances which could negatively impact on the data collected. These arrangements took place in May and June 2009.

In the attempts to arrange interview dates and times many challenges were encountered: in two of the institutions students had just returned from teaching practice and apparently had been working on several assignments which were due shortly after the practice-teaching session. This made it difficult to arrange times for interviews, since students were more interested in getting their work done. Students were also preparing for mid-year examinations to be written the following week and were not sure of when they could meet for the interviews. As lecturers were very busy collating yearmarks and preparing for the examination session, they were hesitant to commit themselves completely. The timetables were also rather fluid to allow students to settle in after their practice-teaching session, which made it difficult to get students and lecturers together to finalise dates and times.

The above factors greatly impacted the smooth process anticipated with regard to scheduling interview dates and times. In many cases, owing to these factors beyond our control, interviews had to be rescheduled. However, with the co-operation and intervention of heads of departments, as well as some of the participants themselves, the interviewers were able to leave with interview timetables from all the sites. In an initial meeting with participants, they were given a global view of the nature and the purpose of the research, and a general overview of what the expectations of them were.

3.6.4. Conducting interviews

Interviews were conducted over a period of six months – from May to October 2009. King andHorrocks (2011:44) and Smith and Osborn (2008:64) state that it is a virtually essential requirement, in qualitative research, to have a full record of the interviews. For this purpose, a digital recorder was used for all interviews. The researcher felt that if one only relied on note-taking the gist would not be captured and many of the nuances present in the interviews would be lost. In this research notes were taken during audio-recorded interviews, but they

served as reminders to follow up on important aspects that the participants may have raised and also to record any non-verbal behavioursthat could contribute to a more accurate transcription. The digital recording also allowed the researcher to focus on establishing a relationship of trust with all participants. The following tips, provided by Welman et al. (2005:168) and Smith and Osborn (2008: 64), were used to enhance my interview technique:

- The interviewer was early for each interview and attempted to make each participant feel as comfortable as possible.
- Simple, understandable language was used.
- One question at a time was asked to obtain as much information as possible.

Participants were not rushed in any way – providing sufficient time for their responses. Interruptions were kept to a minimum. This proved to work well as the responses were quite rich and detailed.

- The interviewer made sure not to ask leading questions to prevent participants from telling the researcher what they thought she wanted to hear.
- As far as possible the effects that the interview questions had on the participants were monitored, looking particularly at non-verbal behaviours.
- The time for each interview was well managed.

While every attempt was made to keep interruptions to a minimum during interviews, it was necessary at times to use probes in order to gather data that was detailed and rich enough. The three kinds of probes, indicated by King and Horrocks (2011:53), were used to obtain relevant data:

• Elaboration probes: where participants were encouraged to keep the conversation going in order for the researcher to gather greater detail of the topic discussed:

Interviewer: Do lecturers find time to demonstrate appropriate teaching skills for you?

Resp 1: But this is the thing, once again, because they come from the old curriculum and now they

are trying to, theoretically they have learnt about OBE and how it works; they don't work in the classroom and they never have. So they know about all different ways you can teach but once again how do you implement them in a class. Most of them worked before 1994. We finished apartheid 1994 you know so all of them are still doing the old system way of

South African teaching. It does not work like that anymore.

Interviewer: How does the programme keep track of the current curriculum, the new NCS?

Resp 1: I think that you can see it from a few lecturers that we have that are trying to get their

doctorates. You can see those ones are trying to keep up with what is currently going on but once again they understand it in theory but don't know it in practice. That's where the biggest problem is at this university. We have got some brilliant lecturers; they know what

they are talking about but in theory.

 Clarification probes served to clarify either words or phrases used by the participant, as well as provide explanations of certain substantial sections that the interviewer requested in order to make sure that the information was clearly understood:

Interviewer: What components of your programme focus on the development of teaching skills?

Resp 1: I think one of our modules PEDU. I think we have one module that deals with that and now

in our fourth year we are redoing a module that we should have done in our first year which should have been covered. Now we are redoing it and rewriting a very similar exam that we wrote in our first year and that's a big problem. I think they should include more modules based on teaching skills. I think that [there] is so much theory and I think they should integrate it with other modules because we have PEDU which focuses on that. It doesn't integrate with mathematics or languages it just explains the theory and skill on its own and it doesn't show how it's integrated with different modules.

Interviewer: So what does the acronym stand for now?

Resp 2: PEDU? Pedagogical education.

 Completion probes were used to encourage participants to complete a story or explanation that was discussed:

Interviewer: Are you happy with the organisation of practice teaching?

Resp 1: No. Practice teaching, no. I am glad that we are the last group to do practice teaching

because we had the opportunity to go out and practise.

Interviewer: Has it been phased out now?

Resp 2: Yes. The fourth years are the last group of students to actually do that. How it's going to

work from there, the third years who are here have not yet gone out for practice teaching. We started teaching practice in our second year and we had two schools to practise from each year. What is going to happen with the third years is next year they will have to go to one school and in one grade for the whole year which means that they will have experience with one grade within one setting where we had the experience of going to many different schools in many different schools seeing many different teaching styles with different teachers experiencing different types of people as well. They will not have that same

advantage as well.

3.6.5. Challenges presented during interviews

This process of data collection was, most certainly, not without its challenges. Although lecturers and students were willing to participate, there were in some cases pressures of work that impacted negatively on the smooth running of the process. For example:

- Some lecturers did not manage to meet their appointments. Re-negotiations with the next available lecturers to agree to the interview process were done.
- One focus group did not meet their appointment either, because their lecturer had completed the lecture very early and a new appointment had to be scheduled.

To prevent this problem from reoccurring, the researcher had to physically wait outside lecture halls to remind students of their interview appointments. Participants needed some form of incentive as motivation for them to meet their commitment to the interview. Frazer and Lawley's (2000:74) techniques for stimulating response rates were implemented.

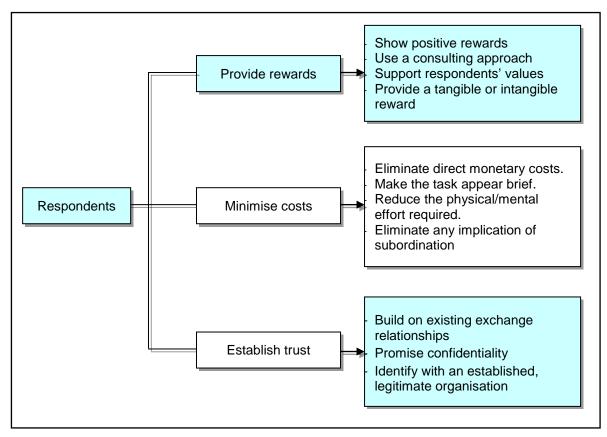


Figure 3.2: Techniques used to stimulate survey response rates

Adapted from Frazer and Lawley (2000:75)

These proved fruitful, the level of engagement during interviews was heightened, and the atmosphere was more relaxed. The researcher acknowledged the pressure participants were experiencing and was especially mindful of developing good relationships with each participant. Generally the co-operation from all participants was good.

3.6.6. Data management

A long and complex process with transcribing each interview ensued. Full transcriptions, which included all spoken words, interview questions, false starts, significant pauses, laughing, and all other features that were worth recording, were carried out (Smith & Osborn, 2008:65). For example:

Interviewer: er any further comment on that, just say are you happy or unhappy?

Resp 1: (laughing) oh I can say I'm happy because you are not being evaluated by the same person for each and every prac but it's different people but it's better if it's foundation phase because we get more insight.

Resp 2: uhm I'll say yes the ... the how they evaluate us uhm it's been running well but then we got other complaints like not, not me complaining, but students complaining about evaluations done by teachers. Sometimes, cause we've got strategies that we have to use from, there's ... they expecting us to do this and teachers are not trained for using those ...

Transcribing the interviews allowed for the full engagement with the data, since the process of transcription forced repetitive listening, and was followed by a recording of the data. This also allowed the researcher to be reminded of certain nuances and non-verbal behaviour that could enrich the data even further. What needs to be borne in mind is that a recording is not 'merely a data collection exercise' but it is a 'social encounter' and therefore one needs to be aware that it 'filters out important contextual factors, neglecting the visual and non-verbal aspects' of the interview (Cohen et al., 2007:281). Cohen et al. (2007) further explain that this is important because often the 'non-verbal communication gives more information than the verbal communication'.

All transcriptions were dated and saved in computer files, making them available and easily accessible. Hard copies of all transcriptions were printed and made easy reading for the purposes of analysis.

3.7. DATA ANALYSIS

The purpose of using a phenomenological approach was to 'explore in detail how the participants were making sense of their personal and social world' in the context of the research questions (Smith & Osborne, 2008:53).

Research questions:

- 1. What are the perceptions of students and lecturers with regard to the quality in the acquisition of professional knowledge in ITE?
- 2. What are the perceptions of students and lecturers of the quality in the acquisition of teaching skills in ITE?

- 3. What are the perceptions of students and lecturers with regard to the quality of the readiness of students to enter the teaching profession?
- 4. What are the views of in-service teachers regarding the readiness of pre-service teachers to enter the teaching arena?

The 'real world' for the participants, who were the lecturers and final-year BEd students, comprised the university campuses where they were training and being trained to become educators. Phenomenological analysis allowed the researcher to get close to this personal world and get an 'insider's perspective' of their lived experience within their training provided at the respective institutions (King&Horrocks, 2011:205).

The phenomenological approach is a two-phase process where:

- participants are trying to make sense of their world through interpreting their actual lived experience for the interviews; and
- the researcher is trying to make sense of the participants trying to make sense of their world through analysing the participants own interpretation.

(King &Horrocks,2011:205)

An idiographic approach was followed, starting with the analysis of a particular example and working towards a more general categorisation. This process entailed looking for themes which emerged in the initial case; connecting the themes; producing a coherently ordered table of themes; analysing other cases; and using over-arching themes to label clusters.

One interview was chosen and a reading was done in order to become more familiar with the content. No attempt was made to analyse it with the first reading, since King and Horrocks (2011:152) feel that analysing any part of the interview without understanding the full context could result in misinterpretation of perceptions or experiences. The second and subsequent readings were aimed at understanding the 'participants' views, experiences and perceptions' as they discussed various aspects of their training (King &Horrocks, 2011:152). With every new reading added insights became evident. Particular texts of interest were highlighted and marked and commentaries were written alongside them. Special note was taken of similarities, differences, echoes, amplifications and contradictions present in the interview. This process was followed throughout the first transcript. Once this was completed, the

process was restarted but now an attempt was made to identify emerging themes (Smith & Osborn, 2008; King&Horrocks, 2011). For example:

Interviewee response	Identifying emerging themes
R. What provisions do you have on the programme for students to	
practise teaching skills?	
I. Sometimes they have to do presentations, I know a lot of lecturers do this,	
they do presentations, that is in all courses so that I can see how well or	On-campus training
how badly they use transparencies. Sometimes they have to make a	Demonstration lessons
poster. Occasionally one person is appointed as a teacher.	
R. Each and every semester they go for teaching experience. What is	
the duration of the teaching experience and do you think it's	
adequately serving its purpose?	
I. They go for three weeks each semester, as close as possible to three	Duration of teaching practice
weeks. The requirements for first-, second-, third- and fourth-year	
students are different. The fourth-year students in their last school	
experience are having to teach a full timetable, whereas first years start	
slowly. I don't know if it meets the needs because a little lesson that I	Teaching practice supervision
see doesn't tell me much about a student's ability. I think it would be	
appropriate and harder for the students to be required to do a lot more	
teaching and for lecturers to be allowed to pop in not by appointment	
but by just popping in so that the student is always busy.	
R. How do you feel about students' supervision or being a tutor during	
school experience?	
I. It's very frustrating because the majority of students do take what we tell	Mentor teacher training
them seriously. They try to put it into practice and they come to a school	
where the teacher says you have to do this, this and this. It just turns to	
be something that one reads from the text book. It must be dreadful for	
the students. Yes I do enjoy being a tutor because it helps me see	Evaluation
something that I could do in terms of methodology. So you were saying	
earlier how do I assess?That is a good way of assessing. If I see most	
of the students struggling on the board I better do something about it.	

The next phase involved a 'more analytical or theoretical ordering of themes' (Smith & Osborn, 2008:72). Strong connections were now emerging from the themes and some of these could be clustered together. During this phase the transcripts were repeatedly checked, also the actual words of the participant to make sure that the interpretations were correct. Actual phrases or explanations given by the participant were used to support the themes that emerged.

The third stage involved the analysis of the remaining transcripts. The themes developed from the first transcript were used as the starting point for this analysis. In the readings of the other transcripts, repeated patterns that emerged were identified, as well as the differences and the similarities. However, care was taken not to overlook other important responses

which could further expand the existing themes. After all the transcripts had been analysed and re-clustered, the over-arching themes were chosen.

1. Acquisition of knowledge

Modes of lecture delivery used:

Top-down approach

Interactive approach

Meeting the needs of student teachers through the modes used:

Expectations of lecturers

Quality of the lectures received/provided

2. Acquisition of adequate teaching skills

Satisfying their needs in the development of teaching skills (on campus)

Organisation of teaching practice

Improvement needed in teacher-training programme

3. Readiness to enter the teaching field

Readiness in terms of acquisition of knowledge of the current curriculum

Readiness in terms of linking theory to practice

Readiness in terms of acquisition of knowledge during teaching practice

Readiness in terms of the acquisition of ICT

Student selection and its impact on readiness

Teachers as researchers

4. In-service educators' perceptions of the quality of initial teacher-training programmes

Perceptions of the quality of the training at current teacher-training institutions and recommendations for its improvement

Managing change in education

Lecturer experience

Training in the use of resources

Increasing the duration of teaching experience

Developing a mentorship programme

Curriculum development

Student selection processes

Because the data was rich and detailed, the findings of each over-arching theme were written up and discussed in separate chapters.

3.8. VALIDITY

Henning et al. (2004:147) refer to validity as finding the 'truth value' of the research findings and whether this 'theory of truth' corresponds with reality. In order to find this value, the researcher needed to establish, through implementation of particular methods, whether what was investigated was intended to be investigated, and what was intended to be measured, was actually measured.

In order to establish internal validity, the researcher depended on corroboration to ensure that there was a match between the findings and the participants' reality. To effect this, respondent validation was applied, that is, member checks (Maxwell, 2005:111). All the participants were given the opportunity to peruse the transcripts and provide feedback with regard to the accuracy of the interpretations and conclusions drawn from them. Maxwell (2005) indicates that through the use of respondent validation, one eliminates the possibility of misinterpreting what respondents have said, and in this way one also minimises any biases one may have brought to the study or any misunderstandings that may have slipped through.

In an attempt to maintain interpretive validity, the transcripts needed to be read and re-read in conjunction with listening to the recordings to make sure that it was really understood how the participants were feeling, and what their thought processes around the study were (Johnson & Christensen, 2004:251). To assist with interpretive validity, actual participant verbatim accounts and quotations from the data were used.

To obtain communication validity the findings and analysis of this research were presented multiple times at academic conferences (Second Annual Staff Research Colloquium, Wellington, Saturday, 29 October 2011; Western Cape Regional Student Research Conference, 2 – 3 October 2009; and CPUT Faculty of Education and Social Sciences Doctoral Student Presentation, Friday 25 August 2012) in order to 'open them to possible falsification' (Henning et al., 2004:149). An academic review was done at another institution in a neighbouring province. After being reviewed, the results and analysis were used in a final report for the project, which discussed quality in teacher education nationally. Data triangulation was also used to validate the results obtained in this research. Multiple data sources using a single method were used, that is, students, lecturers and in-service

educators were interviewed using very similar questions. Collecting this data at different times, in different places and from different people, which yielded very similar results, also validated the study.

While Maxwell (2005:119) feels that external generalisability is not crucial in qualitative research, he does contend that 'face generalizability' is often used but states that there is no reason why the results should not apply to a more general population. In respect to this study, I argue that the results can be generalised across teacher-training institutions in South Africa, since all teacher trainees are prepared to implement the same curriculum.

3.9. ETHICS

Silverman (2011:416), in his research, has found research ethics in social research to be a topic that has attracted much attention in the past few years. King and Horrocks (2011:49) indicate that because of the presence of the human factor in qualitative research, there is greater responsibility placed on researchers in terms of their moral obligations and this renders the process more complex. Silverman (2011) argues that for some this moral responsibility is something one can sign off at the start of the research and then continue with the process. King and Horrocks (2011) and Silverman (2011) concur that ethical issues exist and continue to emerge throughout the process. It is, therefore, important that we be constantly mindful of the ethical implications for all those involved in the process.

Willig's (2001:18) set of basic ethical considerations which outlines professional codes of practice. For the purpose of this study, I aligned my ethical considerations with those considerations:

1. *Informed consent:* The researcher should ensure that participants are fully informed about the research procedure and give their consent to participate in the research before data collection takes place.

The first step in this process was to gain ethical clearance from the Faculty of Education and Social Sciences Research Ethics Committee at the Cape Peninsula University of Technology. Ethics clearance was granted, as I was an assistant researcher working on the project, Quality in Teacher Education, an NRF-funded project headed by CPUT's Faculty of Education and Social Sciences' Research Department, in collaboration with the Faculties of Education at Wits, UKZN, and NMMU (see Appendix 6). As an active research assistant

within the project, my interview questions became part of the interview schedule used in the project. The findings and analysis of this study also formed part of the final report of the project.

All the institutions involved in the project were covered with the same clearance. While permission for institutional access was granted, approval from individuals still needed to be obtained. A brief description of all the features of the study was given to all lecturers, students and in-service teachers who were approached to participate and this influenced whether they agreed to give consent to participate or not (Johnson & Christensen, 2004:102). An information sheet was provided, and all prospective participants were informed of the necessity for the use of a digital recorder. Participants were then asked to provide written consent (see Appendix 7).

No deception: Deception of participants should be avoided altogether. The only
justification for deception is when there is no other way to answer the research
question and the potential benefit of the research by far exceeds any risk to the
participants.

Considering the principle of informed consent, participants were fully aware of the nature of the research and were able to evaluate the procedures. There was no need for any form of deception, justified or not, on the part of the researcher, since there was no 'need to withhold information' and there was no fear that the information provided would 'alter the outcome and invalidate the study' (Johnson & Christensen, 2004:109).

3. *Right to withdraw:* The researcher should ensure that participants feel free to withdraw from participation in the study without fear of being penalised.

All participants were informed that they were free to withdraw from the study at any time and for whatever reason. There were no penalties and their right to withdraw would be respected.

4. *Debriefing:* The researcher should ensure that, after data collection, participants are informed about the full aims of the research. Ideally they should also have access to any publications arising from the study they took part in.

All participants were informed that once the data analysis was complete they would be fully informed of the aims and that they would also be informed should any publications arise from the data (King &Horrocks, 2011).

4. *Confidentiality:* The researcher should maintain complete confidentiality regarding any information about the participants acquired during the research process.

All participants were assured that their identity would be protected and that any personal information obtained during the interviews would be kept confidential.

3.10. CHAPTER SUMMARY

The methodology focused on the current trends experienced in initial teacher education in South African universities, giving a 'voice' to the incumbents and allowing them to critically analyse their training experiences. For this purpose the discussion specifies the rationale for the research design and the data collection methods which were used in order to answer the research title which is: 'Interrogating lecturer and student perspectives of professional knowledge delivery in the initial teacher-training programmes in South Africa within a context of quality'. Collection, access and challenges experienced in the process of data collection are explained. The applied strategies, and the justification for the choice in sampling, are clearly defined. Phenomenological analysis was used to obtain a true perspective of the 'insiders' world', their experiences and their interpretations, and an idiographic approach was applied to allow for natural themes to emerge from the data. Validity and ethics were dealt with as well.

The findings and analysis now follow in Chapters 4, 5 and 6. Chapter 4 investigates and discusses the perceptions of students and lecturers with regard to the quality in the acquisition of professional knowledge in initial teacher education (ITE). Chapter 5focuses on the findings and discusses the perceptions of students and lecturers with regard to the quality in the acquisition of teaching skills in ITE. Chapter 6 investigates and discusses the

in-service profession	regarding	the	readiness	of	pre-service	teachers	to	enter	the

CHAPTER 4.

FINDINGS AND DISCUSSION

4.1. INTRODUCTION

This research project aimed to answer the major question: How does the training and professionalisation of initial teacher education take place in four nationally selected higher education institutions. This question focused on three features relating to the training and professionalisation of teacher trainees.

The first feature interrogated the quality of professional knowledge acquisition and its delivery. Therefore, it questioned the modes of delivery used to teach students and whether the modes used were satisfying students' needs. Furthermore, it investigated the perceptions of both lecturers and students regarding the quality of lectures provided, as well as student expectations of lecturers.

The second feature focused on the quality provided in the acquisition of teaching skills, both on campus as well as in the organisation of teaching practice. Both lecturer and student perceptions regarding ways to improve the current teaching-practice programme were investigated.

The final feature solicited a general view from in-service teachers regarding the quality and readiness of pre-service teachers to enter the teaching profession. It investigated the quality of the training provided by teacher education institutions and makes recommendations to improve the programme.

This chapter presents the results and discussion relating to the first feature, which interrogated the quality of professional knowledge delivery and acquisition. The student-teacher relationship greatly impacts the teaching and learning process and this chapter, therefore, investigated how knowledge was acquired, what was expected of lecturers, the quality of the lectures according to the students, and whether student needs were satisfied.

Within each of the above three categories, findings from the interviews with all the respondents were inductively analysed, presented and argued, with a discussion after each category. To conclude this chapter, a final summary of all the findings regarding the

acquisition and delivery of professional knowledge in teacher-training institutions will be presented.

4.2. ACQUISITION OF KNOWLEDGE

Pre-service teachers spend most of their time in lecture halls with the aim of equipping themselves with the necessary knowledge needed to become the educators of future societies. What occurs in these lecture halls, therefore, greatly impacts this aspect of teacher training which does have an influence on the quality of the educators produced. Student teachers and lecturers were asked to give their perceptions/responses regardingthe following:

- 4.2.1 Modes of lecture delivery used and how these meet student needs
- 4.2.1.1 Top-down approach
- 4.2.1.2 Interactive approach
- 4.2.2 Expectations of lecturers
- 4.2.3 Quality of the lectures received/provided

Each of the following five concepts will be discussed, using evidence from the interviews with lecturers and students from the four teacher education institutions (TEI 1, TEI 2, TEI 3 and TEI 4), in more detail.

4.2.1. Modes of lecture delivery

From the analysis of the interviews, it was found that the modes of delivery used were generally influenced by the lecturers' personal styles as well as the learning areas covered. These are divided into two categories: top-down approach and interactive approach.

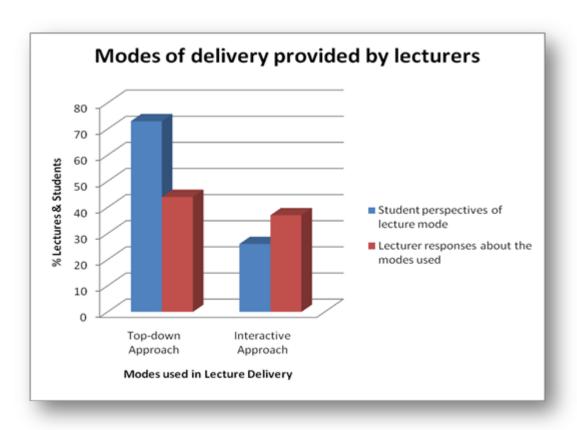


Figure 4.1: Modes of lecture delivery

4.2.1.1. Top-down approach

This approach, according to the students, consisted mainly of lecturers being the dominant figures in the transmission of knowledge. Of the 23 students who responded to this question, 73percent felt that the lectures were delivered mainly in the top-down approach (see Figure 4.1). Although the use of transparencies, overhead projectors, slide presentations and chalk-and-talk methods were present, they merely presented information which could have or had already been read from the texts received.

Freire (1993:73) refers to this top-down approach as prescribing to the notion of 'banking education', where the roles of students and their teachers are reflected in the following way:

- The teacher teaches and the students are taught.
- The teacher knows everything and the students know nothing.
- The teacher thinks and the students are thought about.
- The teacher talks and the students listen meekly.
- The teacher disciplines and the students are disciplined.

- The teacher chooses and enforces his choice, and the students comply.
- The teacher acts and the students have the illusion of acting through the action of the teacher.
- The teacher chooses the programme content, and the students (who were not consulted) adapt to it.
- The teacher confuses the authority of knowledge with his or her own professional authority, which he or she sets in opposition to the freedom of the students.
- The teacher is the subject of the learning process, while the pupils are mere objects.
- This teacher is the depositor and the students only receive.

Most of the students indicated that this was the scenario they experienced daily. There is a marked discrepancy here with regard to student perception and lecturer perception of the method used. It is noted that only 23percent of the lecturers indicated that they used mainly the lecture approach (see Figure 4.1). One of the lecturers indicated that:

... a lecture by definition is a one-way process. It is really a one-way communication between a lecturer who lectures and the assumption being that you know a little bit more in the subject area than your students.

(Lecturer C:TEI 1)

Students participating in the focus group interviews (F/G),felt that information was not summarised and not enough discussion was used to assist with the interpretation of texts. As a result of this, lectures were quite 'boring and monotonous', because notes were given and students sat there while the notes were being read through (F/G 5: TEI 1). They felt that they could have done that on their own. Another student (F/G6: TEI 1) indicated that she certainly did not enjoy the lectures because she felt as if she had 'learnt nothing'. A third respondent (F/G 8: TEI 2) shared a similar sentiment and mentioned that she had learnt a great deal more through doing her own research. This was as a direct result of lecturer attitudes:

... a lot of lecturers at this university I have had over the four years have the same approach. It's very one sided. What you say is ok, but this is what I have here and because of my experience over the years this is how it should be. It's more of what they say and yet they want to promote life-long learners and critical thinkers.

Lecturer M (TEI 2) felt that although there was the 'will to do student-centred work, the circumstances, however, did not always allow for it'. What made it difficult, according to this lecturer, was that students did not prepare adequately for lectures. They did not do the

appropriate readings and this limited two-way discussion. Students (F/G7: TEI 3), however, complained that:

... what they give us to read is a huge pack and they say read it for the next day. It's impossible because we have other subjects too...

Students (F/G7: TEI 2) felt that lecturers were not managing their time well and as a result they were loaded with readings that they couldn't manage. This resulted in a one-way communication where students were not part of the discussions because of the lack of reading on their part. This challenge experienced by students was raised and they expressed their concern in the following way:

... the readings they give us are quite complex and in-depth, the content is what we are battling with so we need to ask questions related to understanding the readings first...

Lecturers were well aware of the students' feelings regarding this mode of lecture delivery as Lecturer M (TEI 2) again indicated:

... I do find that students are not enjoying this, it is far too abstract. Students, therefore, in their evaluation of lecturers, will question the relevance of the course.

There does, however, seem to be a significant difference in the percentages of responses between the students in the Foundation Phase, and those in the Intermediate Phase. Generally, in the Foundation Phase, students were exposed to a much more discussive approach and only 50 percent of them indicated that lectures were delivered mainly using the top-down approach. This, however, generally occurred in certain subjects where Intermediate specialists lectured to them.

The findings clearly indicate that most of the students felt that the lecture approach, as instituted by the lecturers within the various faculties, was not beneficial to them.

Much negativity existed among students with regard to the one-way approach used to teach them. Students felt that they were disadvantaged, since they were not given the opportunity to negotiate meaning and be part of the process of their own learning. Reading 'huge packs of notes' resulted in a lack of understanding and interpretation of the knowledge, which left students with feelings of isolation and despair. Lecturers were fully aware of this situation and empathised with students, but the status quo remained.

Both lecturers and students were of the opinion that the number of students in a class also had a great impact on the mode of delivery used by lecturers.

One student (F/G4: TEI 4) felt that in the very large classes of up to 500 it became difficult for lecturers to divert from the top-down approach in their teaching mode. Lecturers, who used the traditional approach and who focused mainly on the 'chalk and talk' style of lecturing, agreed that as a result of circumstances, it was the easiest approach to use and the 'only one that worked well'.

At some institutions, as noted by Lecturer P (TEI 2), classes ranged from between 300 and 400 students. Even though these groups were further broken up, classes still comprised 100 or more students per lecture which resulted in the lecturer still doing most of the talking. Only 21 percent of the lecturers agreed that the large classes limited a more discussive approach and that there was a need to rely on the lecturing mode, using PowerPoint presentations, discussion and the occasional group work models.

Very large classes also impacted on the students' learning and this was evident in the contrasting views expressed by most of the Foundation Phase students. In their opinion, most of their lectures were not delivered in a mainly top-down approach, and they believed this was so because they had classes of around 40 as opposed to the other phases where the classes were as large as 400 students. The Foundation Phase students complained that when they had combined lectures with other phases they were exposed to learning in very large classes which were mainly lecturer dominated, and they felt as if they had 'learnt nothing'.

In F/G 2 (TEI 4), one student stated that:

...because of this new approach, they [lecturers] also pose questions and allow us to discuss, and they get feedback on how we are performing. It's easy to have class discussions because there are only 40 of us in our class. We get a lot of questions and answers and reading through the study guides.

4.2.1.2. Interactive approach

In some instances, according to students, lecturers offered some interaction through discussion, over and above the notes. Only 26percent (see Figure 4.1), however, attempted to vary their teaching styles and methods. One student indicated:

The lecturer provides his information and then the students have a chance to ask questions or they discuss between each other but it's usually the lecturer stays in front and we just take notes ...

(F/G7: TEI 3)

Of the lecturers interviewed, 37 percent (see Figure 4.1) indicated that since they were in the process of training teachers, exposing students to the right kind of teaching strategies was very important. They also revealed that although there was a need for the lecture method from time to time, most of their lecturers were very interactive and covered a large variety of teaching strategies. Lecturer N (TEI 3) fervently indicated that it was important to

... model good teaching. So if I expect my students eventually to go out and to do group work and to develop debates and to use small discussion and focus groups and things like that, I need to model that to them in order for them to be able to go and apply it in the school environment. I ... use a variety of pedagogical strategies in order to demonstrate to them what kind of tools are available ...

The variety of lecture delivery modes used, as indicated by these lecturers, included lecturing (kept to a minimum), but mainly consisted of interactive approaches which included group work, debates, focus group discussions and presentations, questioning, role play, field trips, and demonstration lessons. Many lecturers seemed to understand the importance of the 'model' they represented when teaching and this was evident in more than one response, one of them being:

... as a teacher I must give them a model they must emulate when they go out into the school. ...I teach for meaning because they must teach like that as well...The purpose is not ensuring that they know the content but that they know it in order to teach it...

(Lecturer E: TEI 1)

A student felt that lecturers were not 'practising what they preached'. Students were expected to teach using interactive approaches, yet what was expected of teachers in the classroom was far removed from what was being modelled in the lecture hall.

...if you are dealing with an inclusive classroom with a variety of different races and gender with particularly different learning styles and then you should educate at the university in exactly the same manner... Not everyone can learn the same way, not everybody can understand by chalk and talk so you should try and implement a learning strategy that works for everybody not just one particular group.

(F/G3: TEI 4)

In the Foundation Phase, however, students noted that because their classes were much smaller, it was a lot easier for lecturers to be more interactive in their approach. One group of students (F/G2: TEI 4) intimated that they experienced a lot of practical activity in their

classes where lecturers organised field trips and varied their lectures, making it easier for all students to participate. One student pointed out the following:

I feel that in numeracy there is a lot of interaction between us and our lecturer and I find that the knowledge that we gain from those lectures sticks. I understand it a lot better because I ask a lot of questions. The more questions I ask the better I understand. I feel more interaction between students and lecturers is much better than just reading off the notes like some lecturers do.

(F/G5: TEI 1)

Lecturer Z (TEI 3), who lectures in early childhood development, said that their lectures were also based on the underlying principle that they should use the methodology which students were supposed to use within their own teaching, that is, varied approaches which were interactive and made students part of the learning process, thus catering for all learning styles. Lecturer V (TEI 3) looked at her past experience and expressed her thoughts in the following way:

I was a student in this institution about four years ago. I completed my degree and I'm teaching honours and the way that I want to lecture is the way that I would have liked to be lectured to and so I keep a very practical base because I think very often students don't see the relation between theory and practice...

Two of the lecturers felt the need to adopt a more reflective approach since they needed to counter the previous approaches used in the colleges¹, which Lecturer K (TEI 2) called the 'recipe approach'. This approach focused on the lecturer as the 'transmitter of knowledge' or 'dishing out recipes they were taught'. Teaching, according to this lecturer, was much more complex and required the use of 'more interactive methods', thus the need for lecturers to become reflective practitioners.

As related by students, when they were constantly exposed to learning from a 'one-sided approach' or via 'one-way communication', they invariably became 'passive' learners. Within a critical paradigm, it is important for students to interact and have their voices heard for them to become the critical agents of their own learning processes. They also need to promote critical thinking once they are in the field, and unless they were exposed to working within this paradigm, using more interactive approaches, they will not be able to become the change agents they need to become in order to be part of the continuous transformation in education.

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¹ Section 21 of the Higher Education Act (No. 101 of 1997) made all teacher education (colleges of education) part of the higher education system. On 1 January 2001, colleges of education were formally incorporated into existing universities and universities of technology.

Lecturers become the 'model teachers' for pre-service teachers and very often they emulate the very approaches that they have been exposed to. It is necessary for the 'teachers of teachers' to present their content through more interactive approaches, since this is the way that they expect their students to present lessons within a classroom. Various strategies should be implemented in teaching, especially since we want teachers to develop into critical pedagogues. If they were exposed to a limited number of teaching strategies or approaches they will, invariably, use only these approaches in their classrooms.

Darling-Hammond (2000) agrees that teacher education impacts greatly on pre-service teachers and their use of various practices. She contends that successful teachers tend to be those who use a variety of teaching strategies in their teaching rather than just one approach. Research into the teaching of science has also shown, according to Costa and Rangachari (2009), that getting students more actively involved does much more for student learning.

4.2.1.3. Meeting the needs of student teachers

Research shows that students are the best sources to use to inform whether their learning experiences are relevant, productive and worthwhile (Sajjad, 2009:2). In this study, students felt that there were certain approaches that lecturers needed to employ in order to meet their needs in a variety of contexts. The modes used to deliver knowledge to students should provide opportunities for them to engage with content; this will result in their linking theory to practice, as well as developing them into critical thinkers and, therefore, motivating them to become life-long learners.

Most of the students indicated that their needs were not being met. One respondent (F/G 8: TEI 2), however, felt that 'we can use some of these methods, for example, using transparencies in our classrooms can sometimes save time'. In contrast, the majority of lecturers who participated in the interviews indicated that the modes of lecturing used by them served the students' needs well. When asked what they based these assumptions on, lecturers indicated that there were various ways that this information could be obtained from students, such as student feedback, evaluation forms and questions asked during lectures. Some lecturers indicated that they could gauge whether students understood the content and its application.

Students (F/G6: TEI 1), however, felt that much of the work presented was based on a 'one-sided approach' where they felt deprived of the opportunity to engage rigorously with the materials, since there was very little opportunity for feedback and discussion. According to the students (F/G1: TEI 3; F/G 8: TEI 2, and F/G6: TEI 1), many of the lectures were a regurgitation of what had been discussed and/or printed in tutorials and course work notes. Very little time was spent on the interpretations of these notes and the lack of discussion, and concomintantunderstanding, therefore, did not satisfy student needs and contradicted the expectations of teachers developing into life-long learners and critical thinkers. One student commented on their experience in a lecture hall:

Actually they concentrate a lot on content and forget that they were delivering content to students. It's what you do with the content which makes the difference. They regurgitate whatever is on paper ... one lecturer was quite knowledgeable but we never really got to interact. He had so much potential to actually make us challenge our own thinking but he tended to stick to the oral tradition. He was the one always delivering and we never got a chance to feed back...

(F/G6: TEI 1)

Students also felt that lecturers were not satisfying their needs since many of them lacked the knowledge or experience of the then new curriculum, RNCS, and the demands it placed on new teachers. Two of the respondents (F/G3: TEI 4) indicated that a lot of theory was learnt but when they entered a classroom they found it difficult to translate the theory into practice. They felt that it would help tremendously if lecturers could explain the theory but also 'show us how it is implemented in practice'. Lecturers needed to allow for greater discussion of the topics, and added to this, they needed to include demonstration lessons, as well as excursions or visits to schools. They believed that this would assist in closing the theory – practice gap and satisfy their need to understand how theory should be linked to practice.

Those lecturers using the co-operative or participative learning strategies in their lectures felt strongly that their students' needs were being satisfied because 'the training they were getting was relevant to their teaching practice' (Lecturer G: TEI 1). The methodology used in lectures could be used by students and incorporated into their own classroom practice.

Lecturer H felt that because he had 'very strong school classroom teaching experience', he had a sound knowledge of what worked and what did not work in classrooms and understood

² Revised National Curriculum Statement (Grades R-9): A curriculum framework constructed in South Africa between 2000-2002.

student needs. This classroom teaching knowledge informed his own teaching practice and, therefore, also served his students well. The lecturer indicated that there were problems that students encountered which impacted greatly on quality and these were, amongst others, very limited development of classroom management skills; students having to be taught how to deal with group work; and more importantly, students not being shown how to align the theory with the practice. He notes that one of the needs students have is for lecturers to help them to understand how the theory they are taught can be translated into practice, and states:

I don't believe that the students are incompetent. If they are lacking in competence it's because we as lecturers are not taking enough time to show that this is how theory must be applied to practice. Now I've been in the curriculum, I've taught curriculum for example, so theoretical you know, and just because of my own background I always bring in the practical.

(Lecturer H: TEI 1)

Most of the students in this focus group interview (F/G 1: TEI 3) felt that the majority of the lecturers that taught them were out of touch when it came to what happens in present-day classrooms since many of them had not taught in a classroom recently. They complained that lecturers were still 'doing things the old way' which dated back 20 years or more. This means that many teacher educators were still very traditional in their approach to teaching. In an age where teachers are faced with constant change in curriculum, pedagogy and administration, there is a need for students to feel equipped in order to meet the challenges in the classroom and still remain motivated. This, therefore, required a more interactive approach from lecturers generally in order to satisfy student needs more adequately.

Lecturer H (TEI 1) reiterated that one of the struggles or challenges faced by lecturers in the development of teachers was the following:

The struggle for me is to get them to make a conceptual link between content and practice because we are looking at content – practice relationship. Unless you can make that link you are wasting your time to put it very bluntly. It is not an easy thing for me to do or learners to do. They have to help them make conceptual links with what they are doing in class and the world outside the school. That to me is the great challenge in teacher education.

The lecturer explained further that as 'teachers of teachers' they were in the business of knowledge construction and as such, should be developing the intellect of young people. In order to serve the students' interests well most lecturers found that they needed to focus on the practical aspect and not just on the theory. One lecturer shared the following:

I must give them a model they must emulate when they go out into the school. I think it serves our purpose well because I go in-depth because I teach for understanding.

(Lecturer E: TEI 1)

Two of the lecturers acknowledged that although they believed they were serving the students' purposes well, there were aspects that needed to be addressed, for example, students' language skills were poor and at fourth-year level they experienced difficulty in expressing themselves both orally and in writing. Lecturer Y (TEI 3) questioned the students' perceptions of the expectations of studying at a university. According to him, there was a feeling that students still wanted to be spoonfed, they did not see the need to prepare by doing the reading expected of them and they saw the university as an extension of high school.

Sajjad (2009:2) explains that there is substantial evidence linking 'student satisfaction to effective teaching'. While there are many researchers who question the efficacy of student ratings, Ory (2001), feels that students are the 'consumers' and, therefore, are the most reliable sources to distinguish between what the relevance, the usefulness, as well as the quality of lectures and lecturer engagement with students are.

The findings in this section indicate that students felt that their needs were not adequately met by their lecturers and/or by the teaching approaches that they employed. One of the greatest problems for students was that the approach was too theoretical, which made it difficult for them to translate the knowledge presented into classroom practice, which was what they were supposed to be educated to do. Darling-Hammond (2000:10) suggests that 'effective teachers adjust their teaching to fit the needs of different students and the demands of different instructional goals, topics and methods'. As 'teachers of teachers' lecturers need to adapt their approaches to suit the needs of students. The focus of a pre-service teacher is the classroom and the ability to translate the knowledge gained at the training institution to make it relevant to the classroom and to learners, and this needs to be borne in mind by all stakeholders.

4.2.2. Expectations of lecturers

As final-year candidates, students had been exposed to the lecturers and how and what they taught. They had also been exposed to the kind of expectations that were set in schools, especially schools that had hosted them during practice teaching. Based on this experience, students were asked to signify what their expectations of quality lecturers were. Lecturers

were also asked to indicate which specific characteristics they should possess in order for them to be regarded as good quality lecturers. Accumulatively they indicated that the qualities that directly impacted on the training of teachers were as shown in Figure 4.2 below.

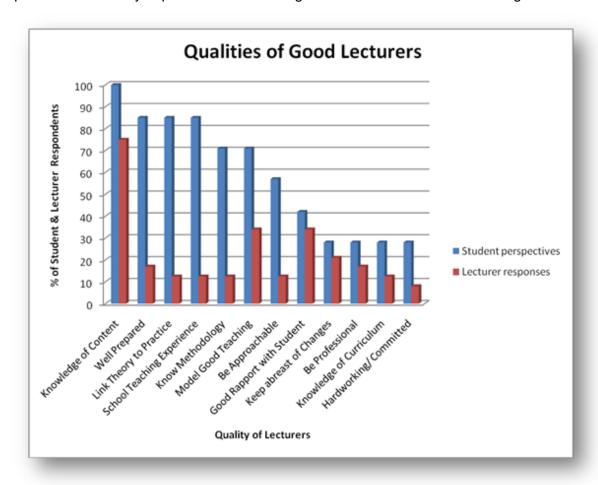


Figure 4.2: Qualities of good lecturers

4.2.2.1. Knowledge of subject matter

Of the students interviewed, 100percent felt that the lecturers who had made the greatest impact on them were those that had mastered their content, who knew how to deliver, who were enthusiastic and had a passion for teaching. Many students (F/G2: TEI 4 and F/G 8: TEI 2) experienced lecturers who read from texts all the time and who were not able to answer their questions. It is, therefore, important that lecturers have a 'sound knowledge' of their subject because this will enable them to provide many more practical illustrations. This, one student felt, was more interesting than reading from a text. The respondent stressed that those who were currently improving their education by doing their doctorates, were also 'lifelong learners and were proving to be good examples to us as students'.

Seventy-five percent of the lecturers felt that knowledge of subject matter was very important. Some lecturers felt that it was also essential that the focus was not just on content but also on theory, and more significantly, on practice. There was a general feeling that some lecturers think that 'if they know theory they know everything'. Lecturer E (TEI 1) felt that if you were training teachers you needed to 'go out there and keep your ears to the ground'. It was also significant, according to Lecturer D (TEI 4), to know your subject matter well so that when your students interact with you they 'feel that you are also a resource they could use'.

When looking at teacher effectiveness, one would regard subject matter knowledge as an important variable, and although there is much support in this regard, studies have proved that the relationship between the knowledge of subject matter and the performance of teachers is minimal (Darling-Hammond, 2000). While one would surely believe that knowledge of subject matter is most important, it has been found that the 'teachers' content preparation' and 'knowledge expertise' are more positively related to student achievement' (Darling-Hammond, 2000).

4.2.2.2. Model good teaching

According to 71 percent of the students, most of the lecturers did not fulfil their expectations in terms of modelling good teaching. 'Lecturers teach us not to use talk and chalk but they set the example of how not to do it. They do not use their teaching time to model good teaching to us'. Another student from the same group (F/G 3: TEI 4) argued that lecturers are not 'practising what they preach'. She spoke about a lecturer teaching them to use the overhead projector to only highlight important facts but in her experience, she says that the same lecturer used it to 'write up compositions'. One respondent (F/G 6: TEI 1) felt that when you are exposed to teaching for the first time, you 'emulate your lecturers because that is all that you see, but when you try to emulate them during practice teaching you get bogged down [sic] for it, and I am thinking you did the same thing that I did today'.

On the other hand, there were lecturers who worked very hard, and students indicated that those were the lecturers from whom they benefitted greatly. One student (F/G 5: TEI 1) spoke about a specific lecturer and stated that she had made sure that 'we learnt the theory in class and straight away got to the practical in the classroom and experienced how they come together'.

Only 34percent of the lecturers felt that modelling good teaching was very important in the initial teacher-training programme and that students needed to see in lecturers what an 'ideal teacher' should be. Also very significant is that lecturers teaching students should 'emulate, though at different levels, how we expect teachers to conduct themselves with their learners in a classroom'. One lecturer expressed the view that good lecturers should always be mindful of 'what they do, how they do it, and how they carry themselves'. They should exemplify 'the qualities of a professional with high ethical and moral standards'.

The daily work of a teacher comprises mostly the transmission of knowledge, among other aspects. It is this process of teaching and learning which will affirm or negate the teaching quality, which, according to Darling-Hammond (2000) and Whitehurst (2002), is the 'single most important factor influencing student achievement'. Kaplan and Owings (2002:23) believe that 'knowing how to teach is as important as knowing what to teach'. According to them, the practices and instructional ideas studied, combined with content knowledge, determine the quality of the teaching situation.

4.2.2.3. Methodology

Seventy-one percent of the students felt that it was critical for lecturers to be well versed in the importance of different teaching methodologies. Methodology, according to students (F/G 1: TEI 3), was done in a very 'rushed and presumptuous way'. Lecturers, she said, assumed that students knew and as a result they were 'thrown into the deepend'. Students felt that important aspects were left for too late, for example, in the last month at university they were being taught, in a rushed way, how to manage assessment at school level. The student related, 'I promise you I can't assess learners on multi-levels. I will have to see if I can learn it in the school next year'. Another student, from the same group, stated that her mentor teacher had told her that universities should focus on aspects like discipline, since students experienced problems managing their classes.

A significantly lower percentage of lecturers indicated knowledge of methodologies used in the classroom as an important factor. Although many lecturers acknowledged that with the constant change experienced in schools, it was difficult to 'keep up to date' or 'keep abreast of' aspects like managing diversity, understanding the challenges teachers face daily and knowing the realities teachers experience each day were essential. It was also felt that lecturers should not 'create any false impressions or give grandiose ideas' about schools but familiarise students with the host of challenges presented in schools. A good lecturer, according to one respondent (Lecturer C: TEI 2), will motivate students to meet the

challenges so that they 'do not become part of the problem, but rather become part of the solutions'. Lecturer W (TEI 3) agreed and stated that from seminars attended and discussions with stakeholders, she realised that 'there's a huge gap between what is happening in schools and what is happening here, and I would like to see a greater alignment between the two'.

4.2.2.4. Knowledge of the curriculum

Twenty-eight percent of the students complained that many lecturers 'worked with the old curriculum' and had not fully engaged with the National Curriculum Statements (NCS). Many of them 'have only seen it on paper but they don't have a clue of what it means in a classroom'. A respondent (F/G 3: TEI 4) suggested that they be taught about curriculum development right from the first year because, 'what we need to know about the curriculum are issues around planning, designing, understanding how planning lessons and assessment fit into the curriculum from the beginning and not only in our fourth year, since that is too late'. With regard to implementing the curriculum, two respondents indicated:

We haven't touched on that, we have no clue. When I finish my varsity work and get a degree I want to walk into a class and know what I am doing. I don't want to be told that it's going to take five years of my teaching to know what I am doing. Basically it boils down to, I have the piece of paper and I can now teach but I can't. I think they should start with the fundamentals first ...

(F/G 3: TEI 4)

Some lecturers have a very good knowledge of policy documents and are able to engage well with these and others don't know anything about outcomes, assessment standards and integration of learning areas and often confuse us...

(F/G 8: TEI 2)

Only 12.5 percent of lecturers felt that there was a need to know the policies and expectations regarding curriculum planning and assessment as required by the DoE, because they needed to know 'what we are preparing our students for'.

4.2.2.5. Teaching experience

The findings show that 85percent of the students felt that it was important for lecturers to have recent teaching experience, because some of them 'were last in a classroom 23 years ago. How are they going to be able to relate to us what is happening in classrooms today?' (F/G 1: TEI 3). Another student (F/G 5: TEI 1) stated that 'we think they are out of touch with

reality. They say one thing but it happens differently in a classroom. They just don't have the experience'.

'Lecturers must try and get themselves in schools because most of them ... come straight from studying their honours or master's to become lecturers,' stated another respondent (F/G 6: TEI 1). She felt that it was unfair that they had to 'teach themselves how to deal with children in a class, how to approach a lesson and how to do the admin'.

A significantly low 12.5 percent of the lecturers agreed that teaching experience for all lecturers was invaluable. 'If you do not have teaching experience', one lecturer stated, 'how would you know what classrooms or learners are like? Unless you know it's very difficult to prepare teachers adequately'. Lecturer P (TEI 2) agreed and believed that if quality were to be achieved, some staff members should go out into the schools and teach for a term to really see what it was like and to see whether they were adequately preparing students to go into that kind of environment.

Lecturer P (TEI 2) suggested that:

I think there should be a system where all working at the university, training students to become teachers, should have been teachers themselves, staff should have been teachers...

4.2.2.6. Dealing with diversity

Only 14percent of the students indicated that it was important for some lecturers to consider individual needs where necessary. 'I have difficulty writing notes without an interpreter.' This student (F/G1: TEI 3) felt that those aspects needed to be taken into consideration and should be integrated into daily lessons so that all students could benefit. Students (F/G3: TEI 4) alluded to the fact that lecturers should be made aware of the inclusivity policy and should implement it in their daily teaching: 'If you are dealing with a variety of different races and genders with particularly different learning styles, then you should educate at the university in exactly the same manner.' She explained that everyone does not learn in the same way so various strategies should be implemented to benefit all students. The *Education White Paper6*, on Inclusive Education, recommends that 'the education and training system should promote education for all and foster the development of inclusive and supportive centres of learning that would enable all learners to participate actively in the education process so that they could develop and extend their potential and participate as equal members of society (DoE, 2001:5).

Considering our very distinctive social background, only 12.5percent of the lecturers indicated that being able to deal with diversity was important. These lecturers pointed out that it was imperative for all lecturers to be aware of and open to the realities of South Africa today while preparing their lectures, since students came from such diverse environments in terms of language and culture. This, according to Lecturer W (TEI 3), impacted greatly on the knowledge they came with as some were exposed to 'rich schemata' and others came from impoverished backgrounds. 'As lecturers we do not always consider the diversity and in our teaching we aim at one level and that's the problem.' Lecturers also needed to become more approachable, another respondent pointed out, especially when students found themselves in financial predicaments where there was often not enough money to pay for transport to campus. This lecturer stated that in South Africa 'this is a fact of life for some'.

The above responses clearly indicate that students were aware of the shortcomings of some lecturers. Students generally felt that certain criteria had to be met by lecturers in order for their expectations to be met. Lecturers, however, generally felt that they were doing what they were expected to do considering the challenges they were faced with regarding the students they taught each day.

4.2.3 The quality of the lectures received/provided

In their interviews, students were asked to comment on how their lecturers measured up in terms of quality. Lecturers were also asked to comment on the general quality of lectures. The results are shown in Figure 4.3 below.

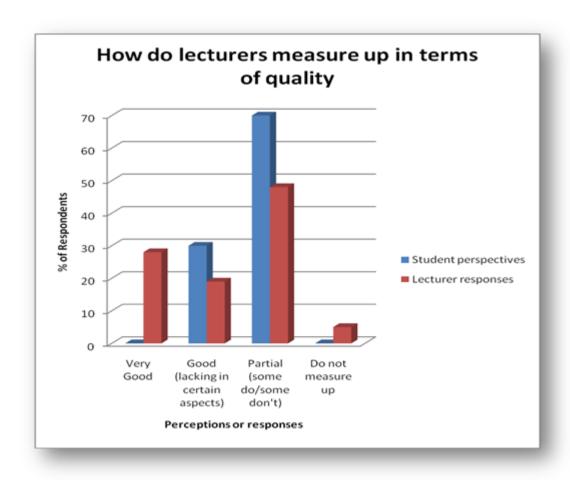


Figure 4.3: How lecturers measure up in terms of quality

According to students, aspects that rendered the quality of lectures and lecturers less than satisfactory, included:

- Very large classes
- Lack of resources
- Lack of punctuality of lecturers
- Lecturers not coming to class to teach students
- Lecturers' lack of experience in the phase they were teaching
- · Lectures too theoretically orientated
- Repetition of assignments over the years
- Reading through notes and not teaching
- Assignments and work that were irrelevant
- Lecturers not up to date with the changes in curriculum

Even though the students indicated that the quality of the lectures was generally acceptable, many aspects that they felt were lacking were discussed in the interviews. Students at all four institutions indicated that the quality of lectures varied greatly. One student (F/G 5:TEI 1) stated that she had 'some phenomenal lecturers' who knew their subject, had experience in a classroom and were really 'passionate' about their teaching, whereas there were others who 'have no interest, who had never been in a classroom and didn't know what they were talking about'. Another respondent from the same group said that in her experience she came across lecturers who knew their subject very well but 'could not communicate it to an audience' and another response (F/G 2: TEI 4) indicated that 'on the whole the quality of lectures is very good'. Students from this focus group (F/G 1: TEI 3) felt that although the quality of lectures varied, 'the quality ...is not all that bad. The content is of good quality but then the delivery mode of ... that is where the problem lies...'. On the other hand, it was very difficult for one respondent (F/G 6:TEI 1) to 'generalise', since she felt that she had learnt from 'the good ones and the bad ones', but in her opinion, the quality lecturers were the ones that inspired her to do better. Similarly, lecturers agreed that at each of the institutions there were 'brilliant lecturers', but on the other hand, they also felt that just as many 'were not doing justice to both the student and the institution'. Some of the more specific comments made are discussed below.

Lecturer B (TEI 1) intimated that in the mathematics department all lecturers shared the same views and that he was positive that they were delivering quality lectures. Lecturer E (TEI 1), however, expressed that while she had great respect for all lecturers, there were some who were very resistant to change and went on to reveal that 'they do the same thing over and over and you'd think by now we need to get it right'. She went on to explain:

I think it's a refusal of wanting to change according to the times. I have been doing this twenty to thirty years and it worked and who are you to come and change us. But I think we have technology at our feet, [so] use it.

The lecturer also pointed out that the university exposed them to many seminars and workshops to keep lecturers updated but they were always optional and unfortunately, 'those that are adamant not to change, you won't see them there ... at the end of the day the students suffer because of the lack of information shared'. Lecturer H (TEI 1) argued that quality was not dependent on individual lecturers but should be seen within the context of what the institution had to offer. He asked, 'to what extent do we have richness of experience that we bring to the classroom to prepare them for teaching and to what extent do we have richness in terms of relationships with learners and students?' He went on to explain that at their institution lecturers taught in different ways and 'students are exposed to a rich variety

of people, of understanding South Africa, of information and of understandings of teaching that well prepares them for schools'.

An aspect that also impacted greatly on quality teaching, according to another lecturer, was the dependence of some lecturers on course notes. There was a feeling that, since the course notes were so 'important', why not just 'produce those materials based on teaching and learning and hand them to students and don't even see the students?' The lecturer felt that they needed to ask themselves 'what is the role of those course notes and how does it influence our teaching and learning strategy?' This lecturer also felt that while there was very good teaching and high-quality work, equally there were areas where there was 'poor quality'. A concern regarding the complaints they had received about the main focus or emphasis being on academic content, on theory, and leaving students under-prepared for practice, was raised by this respondent.

Students (F/G 6: TEI 1) also felt that too much emphasis was placed on the instrumental understanding rather than the relational understanding of content, for example, lecturers focused too much on the 'do' part rather than the 'why' part. This again brings us to the issue of theory versus practical. Three responses from various institutions were as follows:

I think the main focus of our degree now is to be able to teach children and that subjects we are taught are based on the curriculum itself and how to teach. It's more theory. It's not really relevant as to how you are going into the class one day to teach...

(F/G 3: TEI 4)

Some lecturers know a lot about their subject but they had no idea how to communicate it to an audience. They would rather be academics and researchers because they are terrible to listen to...

(F/G 5:TEI 1)

... you come to varsity you already have a sound knowledge if you're specialising in math, so give the same time to methodology, because methodology is the one they should be focusing on, they should focus on the practical part...

(F/G 1: TEI 3)

There was also concern about teaching experience and one respondent (F/G 8: TEI 2) said that 'I think you have staff members who have never taught in schools, so how can they measure up?' There was, however, according to lecturers, a current shift in that regard, where lecturers acknowledged the need for them to understand the realities of today's classrooms.

At most of the institutions students felt that quality lectures were delivered, specifically by lecturers who were currently upgrading their qualifications. They (F/G 2: TEI 4) felt that such lecturers were life-long learners and were setting a good example to prospective teachers.

4.3 DISCUSSION

4.3.1 Pedagogical approaches used by lecturers

The most obvious finding to emerge from this component is the fact that most lecturers still subscribe to very traditional, authoritarian ways of teaching. This limits the development of a dialogic relationship between the lecturer and the student and thus feeds the notion of passive learning (Freire,1993). This is evident in lecturer comments like 'a lecture is by definition a one-way process' and 'you know a little more than students', as well as student comments which include, 'it's a one-way communication' and 'it's very one-sided'. This is referred to by Freire (1993) as the 'notion of banking education' (see Chapter 2.1.2). The theory and practice of banking education, according to Freire (1993), serves to undermine the partnership which should be developing between teacher and student, raising a consciousness which allows students to have a voice. If students are not given an opportunity to be active players in their learning, they will not be able to 'use the already acquired knowledge' in the process towards unveiling new knowledge and, therefore, 'they will never be able to participate rigorously in a dialogue as a process of learning and knowing' (Freire, 1993:19).

It seems that the general opinion of lecturers is that the student's role is that of a receptacle into which knowledge is poured by the lecturer. There is, therefore, the suggestion, based on lecturer responses, that rote learning still has a place. This contributes to the thought that students should be passive, thus inadvertently, teaching them acceptance of one's place in society. Lecturing in this case, therefore, is still lecturer dominated, which leaves no or very little room for a balance between lecturer and student input.

Consistent with the critical paradigm, it is understood that the lecture halls should not become the place where knowledge is dispensed by lecturers and consumed by students. It should be a place where new knowledge is produced and this should be grounded in practice. To ensure quality instruction, all role players need to undertake a 'pedagogical renewal', which refers to 'planned qualitative change towards desirable teaching practices, practices which ensure hoped-for learning' (Lynd, 2005:67). It has been agreed by researchers that practices which are undesirable, much like the practices which have

emerged from this data, include chalk and talk, teacher-centred/dominated, lecture-driven pedagogy', in which students are relegated to a passive role.

The data does, however, reflect a tension that exists between the students and lecturers regarding the delivery modes that are used. While 73percent of the students felt that lectures were delivered mainly using the top-down approach, only 23percent of the lecturers indicated that they used that mode as their main approach in lecture delivery. From the foregoing responses it can be deduced that there may be varying interpretations of the lecture approach.

A study interrogating student perceptions of the best teaching methods used at a university in Karachi in the social science department, indicated that most students preferred the lecture method because: all the relevant information was provided by teachers, it saved time, it was good for large classes, and students could take notes (Sajjad, 2009:135). The lecture method referred to in this study, however, allowed the following: students could request clarification; teachers explained all points; students gave input; class discussions using simple language were held so that all could understand; and students gave their views at the end of the lecture.

One can argue that the lecture method employed in Sajjad's (2009) study was more interactive in nature than the lecture method referred to by respondents in the current data, since both students and lecturers referred to it as a 'one-way communication' where students had little or no input.

The data also revealed that lecturers were aware that their approach was mainly one-sided and certainly not ideal, but justified the extensive use of this approach in respect of particular challenges that presented themselves on a daily basis. This is evident in the following statements made by lecturers: 'students do not prepare for lectures', 'students do not do adequate reading for lectures', and 'classes are too large – from 300 to 400 students'.

The added dimension of large classes, according to the data, limited the variation of teaching approaches to just the lecture approach, and this is substantiated by student responses that indicated that only 26percent of the lecturers attempted to vary their teaching strategies and approaches.

Jaffer et al.(2007) agree that employing an interactive approach in large classes is difficult and indicate that generally, large classes 'posed problems for all students, but students who

were under-prepared were particularly affected'. Costa and Rangachari (2009:75) provide contrary evidence that a 'highly interactive approach' employed to teach in large auditoriums has had positive effects in institutions like Harvard University.

It is, therefore, important that the context of each class be understood, that the teaching approaches employed be chosen specifically to fit the needs of the students, and that all other variables involved in the process of teaching and learning be considered.

More evidence from the study suggests that the smaller the classes, the greater the possibility of more interactive approaches being attempted. The findings also reveal that the Foundation Phase classes were limited to about 40 students per class. Their experience in their training was generally characterised by more participatory approaches, which promoted both co-operative learning and enquiry.

The students indicated that the larger the classes, the more traditional lecturers were in their approach, and the smaller the classes, the more interactive the approaches were. The voices of the Foundation Phase students were heard since they experienced both scenarios. The implication was that in the smaller classes they were able to interact and learning occurred, whereas in the very large classes they were exposed to a very lecturer-dominated approach and felt as though they 'had learnt nothing'. This is consistent with Freire's (1993:73) ideology that 'dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue there is no communication and without communication there is no education'.

4.3.2 Characteristics of good-quality lecturers

Evidence from the results of this component strongly suggests that the perceptions or beliefs of students and lecturers regarding the qualities of good lecturers are at opposite poles, thus impacting student perceptions of the quality of lectures too. Contrasting views are especially evident in the following aspects: being well prepared; being committed and hardworking; linking theory to practice; school teaching experience; knowledge of methodology; knowledge of curriculum; and modelling good teaching. The primary focus of 'teachers of teachers' should be to teach and guide students to become effective teachers, yet they themselves, seemed to overlook, as indicated by the data, the qualities they should possess to be effective in their own teaching.

While research shows the importance of understanding the requirements for good quality teachers (Leblanc, 1998), indicates the quality standards (Morrison, 2012) as well as the principles involved in effective teaching (Scheerens, 2010), there is still the reluctance to make the necessary changes in order to improve the way we train teachers. It is evident, therefore, that we are faced with this paradox in teacher education. Good teaching is about caring for your craft; motivating students and teaching them how to learn; making every experience 'relevant, meaningful and memorable' (Leblanc, 1998:1), therefore, being well prepared, committed and hardworking are vital factors. Leblanc (1998) stresses the importance of bridging the gap between theory and practice. He suggests that lecturers should think about 'leaving the ivory tower and immersing themselves in the field, talking to, consulting with and liaising with practitioners within their communities in order to effect this'. However, the data reveals that few lecturers indicated this aspect as an important characteristic. Lecturers need to provide sufficient opportunities for students to apply what is done in theory to practice. 'Improvement orientated feedback' (Scheerens, 2010) will allow lecturers to understand the needs of students, so that maximum clarity can be obtained in order to narrow the theory-practice gap.

In the area of knowledge of methodology, curriculum, and modelling good teaching, few lecturers, as opposed to students, indicated these as priority features. Research on teaching variables which impact quality and effective teaching, places professional knowledge as an important 'teacher background characteristic' which consists of content knowledge, pedagogical knowledge, insight into student learning and pedagogical content knowledge (Scheerens, 2010:30). These forms of knowledge refer to the importance of:

- how teaching occurs –methodology;
- what is taught content knowledge; and
- understanding the needs of students insight into student learning.

These factors, according to Scheerens (2010:29), are strongly associated with achievement in 'classroom management, lesson preparation and organisation of teaching and learning activities, creating and maintaining a certain climate and evaluation and feedback'. Data reveals that more than 70 percent of the students and 45 percent of teacher educators placed the quality of lectures in the 'partial' (some measure up and some don't) category. This is as a result of many of the aspects discussed above which include: pedagogical knowledge, content knowledge, and lack of experience, among others.

4.3.3 Student needs

Based on the data, especially student responses, the implication is that student needs with regard to knowledge delivery were not satisfied in their entirety. Morrison (2012) suggests that lecturers need to plan and take into account the needs of students and will have to adapt to satisfy those needs where necessary. A more critical approach is needed, where teacher educators need to be aware of and be able to identify the problem, conceptualise it through research with a focus on trying to solve it, and then to finally take action in changing how they approach the issue (Wink, 2005). We need to constantly maintain a spirit of enquiry within our teaching environments as this will educate us with regard to whether student needs are being satisfied or not.

4.4 CONCLUSION

Professional knowledge and pedagogy are the cornerstones of teacher education. Delivering this knowledge using effective pedagogical principles is, therefore, of the utmost importance. The study concludes from the data collected that students felt they were disadvantaged with regard to professional knowledge acquisition, as most teacher educators had not made the shift from traditional modes of teaching to more co-operative and participatory modes. This resulted in their feeling that teacher educators had not met their expectations and, therefore, had not met their needs. The data also revealed that many lecturers were aware that students were not entirely benefitting and this is evident in the following: 'I do find that students are not enjoying this, it is far too abstract.' There is a need for lecturers to evaluate and reflect on their work more often with the hope of being more effective in their role as teachers of teachers. They need to use a 'variety of approaches which will empower, motivate and support' the development of teachers (Morrison, 2012:11). Morrison adds that lecturers, in their capacity as professional knowledge deliverers, should be able to:

- create and maintain an interactive, supportive and safe learning environment that promotes learning;
- communicate effectively and develop an ethos of mutual respect with learners, fellow curriculum team members and other professional and external agencies to promote learning and positive behaviour;
- implement effectively a broad range of strategies to promote active and independent learning at various levels by using different modes of delivery and technology;
- identify and take appropriate actions to address the collective and individual needs of

learners;

- promote positive attitudes to human diversity and global citizenship through accessible learning and teaching resources;
- use learning, teaching, assessment and feedback strategies, and resources effectively to meet diverse learning needs; and
- implement a range of strategies to evaluate the quality and impact of teaching on the learning experience and reflect on the implications for future practice.

The above standards reflect what is expected of 'teachers of teachers' currently, but are also an indication of what might be needed for lecturers to 'address the challenges of 2020 and beyond' (Morrison, 2012). Chapter 5 presents the findings and discussion for the next feature, which examines quality in the acquisition of teaching skills in the initial teacher-education programmes.

CHAPTER 5

ACQUISITION OF ADEQUATE TEACHING SKILLS

5.1 INTRODUCTION

The subject, didactics, addresses the development of teaching skills directly. Didactics forms one component of every subject/learning area in the teacher-training programme. The lecturer teaching individual subjects is also responsible for training students to teach this component to students. Teaching practice is also a very important aspect of teacher training, since it provides students with the opportunity to experience the 'real world' of teaching. Together, these should equip students with all the necessary skills needed to manage and administer their own classrooms once they enter the profession.

From the analysis of the interviews with respondents it was clear that students had great concerns about the following aspects:

- 5.2.1 Satisfying their needs in the development of teaching skills (on-campus) and improvement strategies; and
- 5.2.2 The organisation of teaching practice and improvement needed in this component.

Teacher-training institutions have the responsibility to train students to develop into knowledgeable and confident teachers who are able to manage a class of learners and deliver good-quality education. The students and lecturers were asked to carefully consider and then give their opinions as to how the current training could be improved in the following areas, and this can be seen in Figure 5.1.

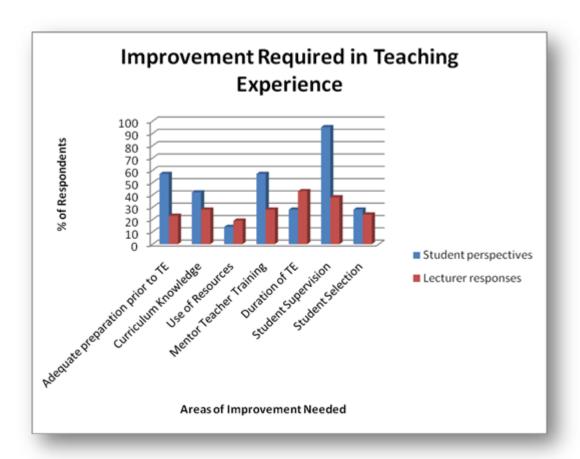


Figure 0.1: Improvement needed in teaching practice

5.2 STUDENT CONCERNS

5.2.1 Satisfying student needs in the development of teaching skills (on-campus)

Most of the students felt that they needed more opportunities to develop the skills that they were supposed to put into practice once they had qualified. There was a strong indication that there were too many students in a class and that 'the time is too short and often we found it rushed and [there was] not much opportunity to really come to grips with the real teaching situation'. One respondent clearly stated,

We didn't get much of classes where they gave us the skills that we need for teaching... (F/G 1: TEI 3)

Students (F/G 6: TEI 1) revealed that there were 'a selected few lecturers' that actually did the didactic component, while others still placed the greatest focus on the content. When asked about how they were taught to teach and whether demonstration lessons or model lessons were presented at the university, most of the students responded in a negative way.

I wouldn't say we have lecturers demonstrate teaching skills but it's them telling us, giving examples... But I don't think I have seen a lecturer with teaching aids actually demonstrating a lesson. They often draw on their experiences and often say, 'when I had a Grade 3 class this is how we did it'...

(F/G 2: TEI 4)

Students (F/G 3: TEI 4) felt that some lecturers were really trying hard and were equipping themselves with what was currently practised in education. However, there was the feeling that it was understood in theory only and the lack of practical experience limited their ability to satisfy students' needs adequately. In the analysis of the interviews, responses from the focus groups at each university indicated that too much emphasis was placed on theory and not enough opportunities were provided to put this theory into practice. One lecturer (Lecturer K: TEI 2) agreed, and indicated that although demonstration lessons were done at one institution and each student had an opportunity to teach, students did not get to experience the true realities of teaching a class of learners.

When lecturers were asked to comment on institution-based programmes that made provision to assist students in developing their teaching skills, the results indicated that 61percent of the lecturers did not include any form of demonstration lessons or provide students with an opportunity to physically teach a class, after which guidance through constructive feedback would be given. These lecturers taught academic subjects and were also responsible for the teaching of didactics of those subjects.

A mathematics lecturer (Lecturer B: TEI 1) agreed with the student responses, that in the didactics period the focus was mainly on the theoretical background of teaching and learning mathematics in conjunction with what the curriculum required. The important aspect, according to this lecturer, was to see how the curriculum related to the theory of teaching and learning. Students were expected to design lessons, and plan and do assessments in mathematics, but no provision was made for the actual physical teaching of a lesson in the programme. The lecturer commented that this was left for the Professional Studies course and assumed that they were taught to teach mathematics in that class.

Lecturer I (TEI 4) explained that the micro-teaching component had been replaced by a methods course. Lecturers at this institution felt that all lecturers responsible for teaching the methods course should come together and share ideas so that the same aspects could be incorporated into the different subjects. They were aware of the fact that no provision was made for demonstration lessons or practical implementation of what was taught, and

mentioned that there had been a suggestion to bus in learners from the neighbouring schools for this purpose, but that it had not materialised.

At another institution a lecturer (Lecturer C: TEI 2) stated that students who were in their third and fourth year of study had school-based evaluations. They had to find interactive and creative ways of teaching, applying various methodologies and teaching strategies that they had learnt, and were assessed on how these skills were used in the classrooms. One student felt that teaching theory in isolation of practice defeated the purpose of the training, and expressed her view in the following way:

... the content side of it deals with essays and the didactics deal with how you apply what you really learn in the main subject itself but a lot of didactics it's just essay, research and essay. So how is the essay...am I going to take this essay into class on teaching practice? ... it is irrelevant to my work so didactics should be used. Theory must be put into practice and that's one thing the lecturers have missed totally.

(F/G 6: TEI 1)

Lecturer K (TEI 2), however, claimed that part of their institution's vision was to 'develop theory from practice and not – we have the theory, now go out to practice. No, it's much more interactive than that'. Students who were currently doing the full internship in the fourth year disagreed and one respondent strongly voiced her opinion in the following way:

You can't really teach teaching skills and assess teaching skills until you are really in the classroom. One thing that this university does is to provide the immense amount of teaching practice experience. It's the only place where you can really learn how to teach

(F/G 5: TEI 1)

The general feeling among students, however, was that 'more teaching and practical sessions' would enhance their abilities and develop greater confidence within themselves as educators. One student also felt that teaching a class of learners in front of peers would help. She suggested 'a longer period where one learner presents the entire lesson and the remainder of the students critically evaluate it; and in this way we all will learn and develop confidence'.

Of the lecturers interviewed, 17percent expressed the view that the subjects they taught did not lend themselves directly to the development of teaching skills, for example, philosophy and education, and that to assess whether students were being adequately equipped, they used assignments and tests. One of the lecturers (Lecturer M: TEI 2), however, responded in the following way:

I think it's also one of the areas that's lacking to make it more relevant to the classroom but that's something we're still working on. We haven't really got it to where we want it to be in terms of how students can apply what they are learning in the classroom. As I say, we touch on it in class but it's not done to the satisfaction of the students or myself.

Lecturers, whose courses did not require practical application, used case studies and reflection on teaching to link theory to practice. Lecturers were fully aware of the importance of practical application and Lecturer V (TEI 3) stated:

... due to time constraints unfortunately there is not enough time to get students to put things in practice...on a weekly basis they should go into a school and put in practice what we teach them and I mean that would be the ideal but we are dealing with time constraints so I think the best is that we get them to do a lot of practical work in lectures; you know as I said they make a lot of visual aids: they make pictures, they make games, they make puppets and they learn how to use...

The data showed that only 13percent of the lecturers provided some kind of practical experience through demonstration lessons and a mere 9percent provided actual teaching experience besides the practice teaching sessions.

5.2.1.1 Improving the nature of the on-campus training

Most of the students (F/G 5: TEI 1) felt that their respective institutions needed to provide opportunities for them to see and experience 'real live' guided situations throughout their training. They agreed that demonstration lessons and using actual learners to create classroom scenarios could be used to expose students to a variety of learning situations. This would enable students to watch, evaluate lessons and be exposed to different approaches to teaching. One student suggested:

You need to see a classroom situation. It's all very well dealing with us and using us as the learners but we don't respond like the children do. We are responding to the way the lecturer wants us to respond... but children come up with their own answers and they have got completely different ideas. We also don't know how to deal with that because sometimes they go completely off the topic and we don't know how to bring them back or ask questions to make them further understand. If the lecturers are actually dealing with a class with learners and we're watching, then we can see how the lecturer interacts and deals with those kinds of situations.

(F/G 5: TEI 1)

Almost all the students felt that this would greatly help them in their training and prepare them more for practice-teaching sessions. They also felt that this opportunity could be used to allow students to teach specific concepts to the learners and these lessons could be used for evaluation purposes as well.

The development of teaching skills should be one of the primary foci in teacher education institutions. Preparing students adequately for the teacher's 'world of work' would include equipping them with the necessary tools and experiences that would make the transition from 'students of teachers' to 'teachers of students' easier.

Generally, students felt that the development of their on-campus teaching skillswas inadequate. Data revealed that most students were exposed to a theory-rich environment and little effort was made to provide a more practical base. This was evident in student responses like: 'I wouldn't say lecturers demonstrate teaching skills', 'there is a lack of practical experience', and 'more teaching and practical experiences needed'. This was also justified in lecturerresponses: 'not enough time to get students to put it into practice', and 'I think it's one of the areas that is lacking'. The data bore evidence that 61percent of thelecturers indicated that there was no form of demonstrations or actual teaching experience offered to students on campus because of the 'time constraints'.

On-campus development of teaching skills forms the bridge between the university and classroom situation. Ball and Forzani (2009:497) clearly advocate that practice is the core of teachers' professional training. The word 'training' in itself makes reference to 'discipline, systematic instruction and exercise, education, rearing, and bringing up in some art, profession or occupation, with a view to achieve proficiency in it' (Ball & Forzani, 2009:498). Bearing this in mind, they indicate thatthe focus of all teacher educators should be on practice. Students need to be constantly immersed in the materials of practice which include working with 'examples of student work, artifacts from the classroom, videotapes of teaching and learning in classrooms and cases of teaching and learning', which will enable students to make the connections between the coursework and what are expected in classrooms (Darling-Hammond et al., 2005:401).

Ball and Forzani (2009) add that watching demonstrations and learning to analyse work under close supervision will assist in narrowing the gap between theory (university) and practice (classroom). It becomes apparent from the data that if lecturers understood how students learn and how they learn to teach, there would be greater emphasis on the oncampus development of teaching skills. If students are presented with exemplary preparation programmes they will learn to 'use specific practices and tools that can be applied in their practice teaching sessions'.

Although the general assumption of most students, as revealed in the data, was that more practical work on-campus would make better-prepared teachers, students from one particular institution disagreed. These students spent their entire fourth year in a full internship and according to them, 'you can't teach teaching skills and test out teaching skills' in a university setting. These students believed that 'teaching practice is the only place where you can really learn to teach'.

Data also revealed that students found this aspect, particularly, in great need of improvement. Students felt that simulations or demonstrations using peers would not suffice since 'if a lecturer is actually dealing with a class of learners and we are watching, then we can see how the lecturer interacts and deals with those kinds of situations'. The evidence from the study suggests that these experiences would prepare students much better for their teaching practice, thus more relevant learning would occur during these sessions.

5.2.2 The organisation of teaching practice and improvement needed in this component

5.2.2.1 Curriculum development

Another area of concern, as indicated by most of the students in this group, was the lack of experience of lecturers with regard to the relevance of the current curriculum. They felt that most of the lecturers that taught them had qualified prior to 1994, and as one student indicated, 'are still doing the old system or way of South African teaching'. Generally, most of the students felt that the lecturers were not fully equipped to deliver training in the new curriculum. One respondent indicated that:

... some lecturers are excellent and we can see that they have a very good knowledge of the policy documents and are able to engage with these well and then there are others who don't know anything about outcomes, assessment standards and integration of learning areas and often confuse us...

(F/G 3: TEI 4)

Students (F/G 2: TEI 4) felt that there seemed to be reluctance to change and that for lecturers, 'it is easier to stick to the old than implement the new'. Students were prepared to work harder if it meant that what they were learning was more relevant to the current curriculum. This, according to students, resulted in 'much being left on [sic] them to learn and sometimes it is only through trial and error that they get things right'.

Lecturer H (TEI 1) was fully aware of the constant changes that occur within the curriculum and believed the following:

I think it's important for lecturers, from time to time, to make contact with the schools; [what's] happening in schools from 2000 up to now and what happened in schools when we were teaching are two different worlds... Sometimes we hide behind the arrogance of experience and a faculty with a collection of degrees; that is not good enough. I have to contact teachers constantly. I visit schools and have a fairly good knowledge of what is happening.

Lecturer C (TEI 2) agreed that students needed to be updated and found that:

They are not familiar with the curriculum statements, assessment standards and the kind of text they are supposed to be teaching... I'm quite shocked by that, I think more of that must be included in our teaching... students have to devise lesson plans and outcomes and they don't know what it is all about...

Although students felt competent in certain areas, there were still important aspects in which they felt they needed to receive more focused training. Most students indicated assessment as one such area, specifically the techniques, methods and tools used. Other areas included comment and report writing, the development of learning programmes and work schedules, applying concepts like differentiation, various teaching strategies, etc. One of the key issues in this regard, however, was the importance of lecturers updating their knowledge as changes in the curriculum occurred. One response was as follows:

...our four years of study is already old...we are going into the schools and we are outdated...they have to reassess what we are learning right now, change it and update it for this year...

(F/G 3: TEI 4)

5.2.2.2 Improvement in teacher educator knowledge of the curriculum

Lecturer B (TEI 1) believed that it was very important for lecturers:

to know the curriculum that they train students to use, to know the policies and the expectations regarding planning and assessment so that we can prepare them for that. Some say it's not our job to teach them what to plan and what to assess but I believe it's part of our preparation for students.

Students agreed and requested that there be a module to develop these aspects since it would make them more confident. One of the students stated:

...often we are left on our own and if we are fortunate and get a very good supervisor for our teaching practice then we are taken through the process by him/her and we are then comfortable to work with designing of lesson plans.

(F/G 8: TEI 2)

Students also indicated that there was a need to improve the administrative processes involved in teaching. One respondent suggested the following:

They should have an entire module where students are taken through the process of applying the assessment standards, learning outcomes, [and] critical outcomes for the relevant learning areas, and have a good working knowledge of this prior to the real teaching programme.

(F/G 8: TEI 2)

One of the more significant findings to emerge from this study was that, according to both students and lecturers, teacher educators were not able to teach students about the new curriculum and how it should be implemented. This was evident in the following comments from students: '... some lecturers are excellent... then there are those who don't know a thing about outcomes, assessment, integration'; 'it is easier to stick to the old' and 'we learned through trial and error'. Lecturer responses included: 'lecturers are not familiar with curriculum' and 'lecturers need to contact teachers, visit schools ... have knowledge of what is happening in schools'.

According to the OECD (2008:305), universities with teaching faculties 'were not closely involved with designing new policies'. Some teacher educators, as a result, had 'little or no practical experience of implementing new policies and had little sense of ownership of them at the time'. This seemed to create a situation where students were disadvantaged, since teacher educators were not able to exemplify, model or relate how the new curriculum was to be implemented (OECD, 2008). The data indicated that both students and lecturers felt that this was an area which needed great improvement. This was evident in student responses: '... create a module where students are taken through the process of applying the assessment standards, learning outcomes – critical outcomes, for the relevant learning areas' and lecturer responses which include: '... to know the curriculum that they train students to use, to know the policies and the expectations regarding planning and assessment, so that we can prepare them for that'. Teacher educators should be able to bring new insights to students regarding the curriculum, since there should be an ongoing interaction between teacher educator and student involving the 'inter-flowing' of new curriculum strategies (Wong &Pang, 1999:2).

5.2.3 Organisation of teaching practice

Teaching practice is the time spent in schools and serves as an internship for students. Here they have the opportunity to put into practice what they have learnt within their institutions. Students are to familiarise themselves with schools and learners and have the opportunity to see whether they have the necessary skills to teach and manage the curriculum for learners.

Lecturers were asked to comment on whether they thought the teaching experience served the students' purpose adequately and 42percent felt that it did not, 25percent felt that it was inadequate and 33percent indicated that they were not directly involved or didn't give a direct answer. Many reasons for the students' needs not being met adequately were furnished and include:

5.2.3.1 Duration of teaching practice sessions

The time allocated to teaching experience varies from one institution to another, ranging from four to eight weeks per year, with one institution having the full fourth year being a school-based one.

Lecturer I (TEI 4) felt that the time frame for practice teaching was inadequate and that as a result, they had had to adjust their curriculum for 2010. In future all their fourth-year students would be spending their final year exposed to 'service learning' which would be school-based. The focus for this teaching experience year would be on research and practice teaching only. At another institution, a respondent (Lecturer C: TEI 2) felt that an apprenticeship of six months would be of greater value to students. At that time students were only focusing on 'delivering individual lessons and pleasing the lecturers who evaluate them'. A longer period of time would enable them to participate in the 'life of the school'. Lecturer Q (TEI 3) felt that the time spent at schools might be a bit too long if it were a three-year course. Another respondent indicated that the time frames were adequate, but only if students were adequately prepared for the teaching experience and suggested that:

If the teaching practice is only to develop teaching skills then it's not enough. If, for example, it's three weeks, let's say it's 15 weeks and the last three weeks is teaching experience, the first 12 weeks should be specifically where you should have taught them how to teach and then during the three weeks of practice teaching, that is when they can implement it. I think that is for me, a very big concern...

(Lecturer J: TEI 3)

While this was an ongoing debate, according to a lecturer, the main focus should be that teaching experience is a 'model that allows students to grow and to develop their own teaching skills'. According to students, three of the institutions had two blocks of four weeks set aside for teaching practice each year. Students at these institutions felt that this was too short a time for them to gain enough experience in a classroom. One of these students responded that:

... we should actually spend more time in schools to be able to see what goes on in there so that they have a realistic feel of what goes on in the classroom nowadays and afterwards they can come to us and say this is what the theory says but this is how it is implemented in classrooms and you yourself can find a middle ground of how it is implemented.

(F/G 3: TEI 4)

At the institution where students spent their entire fourth year as interns, the greatest problem was, according to students, the fact that they had to organise getting into schools by themselves. The institution 'did not plan or organise it for you'. These students (F/G 4: TEI 4) also felt that they should be remunerated for this time spent in the schools since only eight lessons were observed throughout the year, four by the same lecturer and four by the mentor. They also indicated that their teaching experience had been marred or curtailed because they had not been sent out to do practical teaching during school assessment periods. Very little teaching took place and most of the time students could not fulfil the teaching requirements as a result of this. Most students were also unhappy with the fact that immediately after teaching experience they had to hand in many assignments and had to prepare for examinations in a short span of time. One student (F/G 1: TEI 3) felt:

You can't go for teaching experience and immediately when you get back it's examination time... you have 24 assignments to work on as well. One wonders whether they consider our needs as students.

5.2.3.2 Adapting the duration of teaching experience

The students from three of the institutions indicated that they spent too little time in the field. Eight weeks per annum, according to them, was not sufficient to develop and grow as teachers. One student suggested that:

...students should do a three-year course and spend a full year as an apprentice at schools to get a better understanding of the workings of a school...

(F/G 8: TEI 2)

While this was a good idea, another student (F/G 3: TEI 4) felt that their institution had changed the teaching practice for the new group coming up the following year. According to her, they had not gone out practice teaching in three years because they would be spending their entire fourth year in schools. The problem, she stated, was that those students would only have experience of teaching that one grade, whereas they were exposed to more than one grade during the two years that they had had teaching experience. Lecturers seemed to agree with these students and indicated that teaching experience was the most important part of the degree, since it gave a very good idea of how prepared students were. The period, according to the lecturers, was far too short and the supervision, which comprised two evaluations in the four weeks, was definitely inadequate. One of the lecturers also suggested that students spend at least one semester or an entire year in practice teaching in order for them to really experience teaching with all the administration and stress that come with it.

At an institution where only three weeks of practice teaching per semester was offered, lecturers felt that this time might be too short. Lecturer V (TEI 3) contended that teaching had to be practical

... to see whether their strategies are working or if it's [sic] not or to give the realisation or reality of what schools really are like ... you can deal with something in lectures but it's something that might not be ideal, whereas in teaching practice it becomes recognised and realised in practice. I do perhaps feel that sometimes it's a bit short, you know three weeks – by the time students find their feet and by the time they only get to know the children they're already leaving ...

Many students agreed that a period of three weeks was too short, and a second suggestion, which most of them found would work, was that 'students can perhaps go out for one day in the week initially, and when they return to college they can discuss their experiences and work on their problem areas' (F/G 8: TEI 2).

In this way the exposure would be ongoing, leaving greater opportunity for growth and development of students in their capacity as teachers.

The results of this section of the study support the idea that teacher experience is the most important feature of teacher education. Both lecturers and students, in three of the four institutions, indicated that the duration of the teaching experience was too short to learn what was needed. This is revealed in the following statements: 'If teaching practice is to develop teaching skills, then it is not enough'; it serves as 'a model that allows students to grow and to develop their own teaching skill'; and 'to see if strategies are working'. Both lecturers and

students also earmarked this as an area that required substantial improvement. According to Darling-Hammond (2006:310), there is evidence that the number of sessions and the duration of the sessions of teaching experience affect student outcomes. Generally, for most teacher-training programmes, the duration of teacher experience is about 10 to 12 weeks. 'More supervised experience with graduated responsibility can have positive effects on candidates' practice and self-confidence' (Darling-Hammond, 2006:310). NCATE (2008) also supports the idea that teacher experience is vital since it is the 'culminating experience for teacher candidates'.

The underlying assumption for most students and lecturers was that the longer the teacher experience, the more developed the teaching practice and performance of pre-service teachers would be. The data revealed many suggestions from all respondents in this regard. Students felt that the following would improve practice: 'students go out one day a week [and] return to college to discuss their experiences';and'students should do a three-year course and spend a full year as an apprentice';while a lecturer suggested that students go out for one semester per year. Zeichner (2010:6) contends that 'high quality clinical preparation' requires at least 450 hours (one semester) of full-time student teaching. The opinions of respondents that longer teaching experience sessions would enhance their practice are echoed by Darling-Hammond (2006:311),who indicates that more practicum experiences and student teaching, if aligned with coursework, have been found to make a difference in 'their practice, confidence and long-term commitment to teaching'.

Arguing about the length of teaching experience, students who completed their coursework and then one year of experience as an internship, felt that they were more ready to enter the field. However, data expressing the views of other students in this regard indicate that the one-year teaching experience limited the students' exposure to some degree. Students from one focus group discussed the issue and related that these students with a full year of teacher experience were only exposed to the teaching of one grade for the year. There is research, according to Darling-Hammond (2006), which suggests that students who have multiple opportunities to teach in many different classrooms have a stronger footing than those who have experienced only one 'limited clinical experience' because they have a stronger 'frame' with which to interpret important concepts in teaching and learning' (Darling-Hammond, 2006:311).

5.2.3.3 Mentoring system

While some lecturers indicated that ample opportunity was provided for exposure to the actual teaching situation in schools, there was one aspect that needed to be addressed and one respondent indicated:

whether the guidance and supervision and mentoring they do get in schools is sufficient, that I don't know.

(Lecturer B: TEI 1)

Forty-six percent of the lecturers felt that a mentoring system at schools needed to be properly organised and developed. Mentor-teachers, according to these lecturers, needed to be trained and there should be specific guidelines regarding the outcomes in terms of what student teachers needed to achieve at the end of each teaching experience. The training was urgently needed as mentor teachers were still 'giving students marks as high as 90percent'. One respondent asserted that they had designed a course for mentors, but thus far they had had very little success in getting mentor-teachers to attend the workshops.

Lecturer B (TEI 1) reported that 'most of the teachers in schools are still in the old teaching and learning paradigm'. Teaching was still about learners following and mimicking teachers and there was very little opportunity created for understanding. 'Our students are constantly exposed to this and are told to just teach what learners need to know and to get on with the job.' This, according to the lecturer, was completely contrary to what the students were trained to do and because they were intimidated, they followed the teacher's example.

Lecturer E (TEI 1) reported that students in many cases 'are just left to their own devices' and are at the mercy of mentor-teachers, and that the supervising lecturers just 'pop in' and then left them without any assistance or guidance and related that:

I spend two hours with each student when I go out to evaluate them...I speak to the mentor and I am not in a hurry to leave. I really leave when they are tired of me... So I have realised that there are pitfalls. So yeah, you can send them out for many months but if you are going to leave them and not collaborate, that's when the problems are going to start.

More than half of the students interviewed stated that the schools they were assigned to were not well-run schools and that their mentor-teachers did not provide the guidance or assistance required. This negative attitude impacted greatly on their entire teaching experience. One student expressed her opinion in the following way:

Some of the rural/semi-rural schools have educators who think that when we as students arrive, it is time for a holiday for them. They do not assist us at all. They tell us that we are coming from a university and we should know everything...

(F/G 8: TEI 2)

Students faced another problem when the teachers with whom they did their practical experience were not prepared to help.

Some of us actually end up doing all the teacher's work, whether you know the learning area or not.

(F/G 1: TEI 3)

Many students (F/G 5: TEI 1) also felt that the mark given by the mentor-teacher was dependent on 'whether she likes you or not. If you don't get along ...she may mark you down ... she may also give you a ridiculous mark like 89% if everything is going well'. Another student (F/G 5: TEI 1), however, indicated that 'I am lucky. I have had tutor-teachers – the right way, fortunately, because I have heard that a lot of students have problems with their tutor-teachers'.

5.2.3.1 Training of mentor-teachers

There was an overwhelming call from lecturers for the re-evaluation of how mentor teachers could provide a greater service to students during their teaching experience. Most lecturers felt that there was a great need for the design of a mentoring course that could guide mentor-teachers in how they could assist, guide and evaluate student teachers placed in their care. While they were aware that mentoring students was an additional burden, it would make the task easier if they knew exactly what was expected of them. Lecturer H (TEI 1) felt that as an incentive, mentor-teachers could be granted credits towards further study at universities. This would create links between universities and schools, since there should be a 'reciprocal relationship between them'. The lecturer asserted that schools should be seen as an extension of university for student teachers to better understand the relationship between theory and practice. Another respondent (Lecturer X: TEI 3) felt that developing this relationship 'is a mode of value', and while there was room for improvement, it would come about 'as we reflect over the years to come'.

Similarly students felt that many of the mentor-teachers had not been the role models they had expected and that there was not much they could learn from them. Another student related from her own experience:

... they need to evaluate the teachers that they are sending us to because some of the teachers that we get sent to are horrible. Teachers like... we don't learn anything from them. So I think they need to evaluate the teachers that we get sent to.

(F/G 5: TEI 1)

These did not appear to be isolated experiences and there was a suggestion from another respondent that:

The mentor-teachers must be trained to assist and guide all students or else choose schools that are well run in order for us to benefit...

(F/G 8: TEI 2)

Lecturer G (TEI 1) recommended:

I want a revision of the whole thing... There should be a handout in terms of what they need to do, there should be guidelines, these are the outcomes in terms of student teachers and we want to see if this was achieved...we need to train our mentors. Call them up just before teaching practice...engage them to know what to look at...

For students to make sense of their experiences during practice teaching sessions, as well as learn from them, depends on the kind of support they receive during this time (Darling-Hammond, 2006:311). This study reflected a lack of quality support provided to students during their practice-teaching sessions. The evidence is reflected in the comments given by lecturers which included that students were expected to mimic classroom teachers and 'are told to just teach what learners need to know and to get on with the job' and 'they [students] are left to their own devices'. Students justified this through the following comments: 'teachers do not assist us at all' and 'we don't learn anything from them'. This is supported by research conducted by Kiggundu and Nayimuli (2009:70), where respondents had to indicate the role that mentors played during their teaching experience. They indicated that they were dissatisfied because classroom teachers saw them as 'relief teachers', they were overloaded with work, they showed no confidence in the student teachers, did not trust them enough to leave their classes in their care and they were made to feel that they were wasting the learners' and the teachers' time.

Both students and lecturers in this study felt that this area was in great need of improvement. They recommended that 'there should be guidelines'; 'we need to train the mentors'; and 'teachers must be trained to assist and guide students'. Zeichner (2010:1) indicates that there are 'crucial elements of professional practice' that can only be acquired while in a classroom, doing practice teaching. The guidance of strong mentors is, therefore, very important. Zeichner (2010) suggests the following steps in order to redress the issue.

Mentor-teachers should be selected based on the quality of their teaching; should be formally prepared; and should be provided with incentives and financial support for their work.

This is important, since teaching experience can 'build a sound knowledge base, [and] 'set a stage for best practice', and can ultimately 'result in a better prepared teacher to meet the needs of learners' (Gentry, 2012:12).

5.2.3.4 Student supervision

Most lecturers felt that it was critical that subject specialists were responsible for their students with regard to evaluations during teaching experience and that this should be considered carefully when organising teaching practice. Other lecturers felt that there were many cases of lecturers who had had no school teaching experience, yet they were out there evaluating students' ability to teach in the school. Lecturer Q (TEI 3) admits that:

I did teaching supervision for the first time this year... I have never been formally trained as a teacher. I did not go through that path – I went through the Arts.

Students felt that all lecturers did not assess them using the same criteria. This could be as a result of the different major subjects lecturers were responsible for or a lack of experience. They did feel that many times they were disadvantaged as a result of this. One student indicated:

... please don't allocate a lecturer who doesn't have any knowledge about the learning area... at some point I was doing accounting and I was allocated a lecturer who knew technology... I had to explain everything that I was doing to him. How is he going to judge what I am doing, whether right or wrong?

(F/G 1: TEI 3)

Another student also felt that she had received a very low mark as a result of the lecturer's limited knowledge of the learning area and the requirements set out for that learning area. Her response to this:

I am a science specialist... they send an English person to come and critique me on a science lesson. What does she know about science first of all? Secondly, she gives me a low mark and I know I am worth more...

(F/G 6: TEI 1)

Expectations of lecturers regarding observations during teaching practice, according to students, differ greatly, and one student felt that:

... with lecturers, I think they need to be sat down and told this is what we expect from the students, because one lecturer will expect this and you do it, and the next time you do it you are told this is completely wrong, change it. You change it [and] you are told that this is completely wrong.

(F/G 1:TEI 3)

Lecturer W (TEI 3) similarly expressed his disappointment with supervision in the following way:

... your aim which must be aligned to the NCS ... I find ... disconnected from the NCS ... this is my point of view ... it's getting on with the old stuff, just carrying on with the old stuff, but takes me to this point where the appointment of lecturers, okay, do they ever ask about how many years of experience you have? So why is it that in the teaching profession it's fine just to do anything and churn [out] all these students by lecturers who have never set a foot in a classroom but who dictate how classroom should be managed, what methods work, if they themselves have not been in a classroom and they have not experienced classroom life? For me it's a major issue; I just think every lecturer should have had classroom teaching experience ...

Lecturer S (TEI 3) stated that in the Further Education and Training (FET) phase, students were evaluated by specialists in their learning areas, but in the other phases students 'get who they get'. This, according to the lecturer, was a very controversial issue since there were some staff members who were 'out of touch with classrooms', which resulted in many complaints from students. Lecturer K (TEI 2) also felt that specialists should supervise their students as it gave them an opportunity to 'get a sense of learning the process in initial education, so I feel it's very important...'

Lecturer I (TEI 4) also indicated that:

You are expected to teach all the methodologies... then when they go out it's a different set of lecturers who are going to assess them... some of them have not even taught them methodology...

Lecturer Q (TEI 3), however, felt that because of the large number of students the following would be true:

I don't think there could be a possibility of assigning people according to their speciality, that's completely impossible ...

Generally, however, there was a strong feeling among both lecturers and students that lecturers who were responsible for teaching methodology should, as far as possible, carry

out the student supervision, as this was the only way for them to assess whether students were implementing adequate methodologies in the classrooms.

5.2.3.5 Training lecturer-supervisors for student supervision

Most students felt that if the mentor-teachers were adequately trained, they should be allowed to critique them rather than have contract lecturer-supervisors, who did not know them, come in and observe their lessons. They agreed that there were too many inconsistencies as a result of the subjective nature of the process. Standardised criteria were neededfor all lecturer-supervisors assessing students. One student complained that:

... because it's a subjective thing, I don't think we should be marked for it because all the different lecturers mark differently; it's a completely subjective process. Either they must have the same lecturer coming to every one so the marking is consistent...

(F/G 5: TEI 1)

Another student (F/G 6: TEI 1) felt that all lecturers should be 'sat down' and should discuss what they actually expected from students when they came to critique lessons. The manner in which they were critiqued was also an issue as some students felt that some lecturers 'completely bash you' and 'I find that they doing a good job of killing my self-confidence'.

'Every lecturer should have teaching experience' was a sentiment shared by at least 40percent of the lecturers interviewed. Lecturer W (TEI 3) said that lecturers who had no teaching experience were not 'doing justice to student teachers. This is the biggest grouse I have with universities' training teachers'. Lecturer P (TEI 2) suggested that 'there should be a system where all working at universities training students should have been teachers themselves'.

Another aspect that required attention was the supervision of students by lecturers who did not fall into their scope of specialisation. To protect students from being disadvantaged in these evaluations, Lecturer (E: TEI 1) stated, 'I will recruit my own evaluators to do supervision' and indicated that it would be followed-up with training of these recruits who would most likely be retired educators in specific fields of specialisation. She remarked 'I wouldn't like any other lecturer or mentor teacher to evaluate my students in my subject.' She also argued that:

standards are very different to yours; even if you have workshops, it's still very different and so I believe there is some consistency of assessment if you see all your students. I

personally believe that you see all your students. I wouldn't like anybody to see my students...

Some students (F/G 5: TEI 1) also complained about lecturers who were not punctual for their observations or did not arrive at all. They felt that since classes had to be prepared for observations it was unfair on them, the class teachers, and the learners when this occurred. On the other hand, some students from the same group, especially in the Foundation Phase, found the teaching experience exciting and were very happy with their supervision. One student indicated that she had never had a lecturer arrive late for a critique lesson and felt that this was evidence of the inconsistencies that existed in supervision.

One of the more significant findings to emerge from the data relates to the importance of student supervision during practice teaching. This is supported by Darling-Hammond et al. (2005:411-413) who contend that novices often refer to the importance of this role, yet there is 'very little systematic research' referencing what exactly university supervisors should do to be effective. This is evident in the data from both students and lecturers indicating that 'lecturers need to be sat down and told this is what we expect from students', '... we get different sets of lecturers...some of them have not even taught methodology' and 'don't allocate lecturers who don't have any knowledge about the learning areas to supervise us'.

For many years there have been 'calls for more rigorous initial teacher preparation, yet the preparation of university supervisors who work with students remains unchanged' (Rodgers &Keil, 2007:65). Furthermore, Rogers and Keil (2007) feel that it is 'virtually impossible to guarantee that students will have the opportunity to be supervised by talented and gifted faculty members'.

During their teaching practice, pre-service teachers have the opportunity to develop their own teaching identity, but this is often constrained by the style of the supervisor, since students have to present their work to the supervisor for final approval (Cavanagh & Prescott, 2007). The results also suggest that this area should become a focus area for improvement and this is supported by research which indicates that the nature of the support given to student teachers during their practice teaching is critical because it enables them to make sense of their experience and learn from it (Darling-Hammond, 2006:310).

5.2.3.6 Feedback and discussion

Two of the 24 lecturers felt that although the teaching experience was important, the feedback and discussion thereafter was vital. It is in these sessions that the opportunity to 'strike a balance between what we theorise and what they experience in practice' is created. According to them not enough emphasis was placed on these sessions, and this should be catered for in the organisation of the teaching experience.

Students also felt that greater organisation was needed in the setting up of sessions for feedback and discussion, and because there was not enough time set aside for this purpose, they felt that the whole process of the practical experience was defeated. A respondent (F/G 4: TEI 4) related:

We do have lecturers that give you marks on time, who give you feedback, and so you think this is what it should be like but when you go to another lecturer, and that's not done, it completely devastates any expectation you had of the institution...

Feedback was a vital component for teacher-training students and they felt there was a need for lecturers to 'sit down and talk about what students were battling with and make recommendations on how to assist these students'. Another student indicated:

After teaching experience we are back to varsity and everybody has forgotten about school experience. I mean there is no connection with school experience and what we do here. That is one of the biggest mistake that they are doing.

(F/G 1: TEI 3)

Most of the students felt that this was an aspect that needed to be addressed urgently. The evidence from this study suggests that lecturers spend more time on feedback after practice-teaching sessions as students need to 'strike a balance between what we theorise and what we experience in practice'. Darling-Hammond and Brandsford (2005:410), in support of students, indicate that continuous feedback and coaching are rated as two of the factors influencing the success of student teaching. They further contend that considerable research has suggested that learning does not occur by leaving a student to 'sink and swim' in their practicum experience. On the contrary, there needs to be regular guidance through coaching, feedback and other forms of mentorship. Zugelder and Nichols (2012 – 2013) feel that at the initial level of teaching experience, after observations, supervisors are expected to provide essential feedback about student performance in order to assist students in the development of requisite skills.

NCATE (2010) promotes a collaborative culture of learning requiring rigorous review of student practice; this can only happen if there are enough opportunities for feedback from all stakeholders. In order for students to engage in worthwhile learning, they need to be given opportunities to 'reflect upon and think about what they do, how they make decisions, how they theorise their work, and how they integrate their content knowledge and pedagogical knowledge into what they do' (NCATE,2010:9). Students need to be provided with continuous feedback in order for reflection to take place, which will then lead to developing the subsequent processes in their learning.

5.3 SUMMARY

The results of this study indicate that students and lecturers are calling for more learner-centred and practice-based teacher education models with the main focus on practice, both on-campus and during teaching experience. While there is a need for more practice to become part of the programme, we must guard against over-emphasising the 'why' of teaching and neglecting the 'how'. Sankey (1996:72) contends that 'in marginalising all theory it is throwing out the baby with the bath water' and 'it is simply naive to believe that the practice of teaching can be cut entirely from theory'. Sankey (1996) argues for a more holistic approach that focuses on practice, but also an approach that realises that practice can only be developed through theoretical learning and practical doing, since these concepts cannot be separated in the development of teaching and learning. Theory, therefore, needs to be integrated with practice in such a way that it becomes conceptualised as practice.

The data reflects the students' need for more systematic instruction and exercise in order to develop their skills so that they can take those into the classrooms during their teaching practice. Ball and Forzani (2009:504) concur, and make suggestionsfor the development of the fundamental components needed to 'teach and learn professional work', also referred to as the 'pedagogy of enactment' by Grossman et al. (2009). These include creating settings within which 'practice can be tried out, corrected, refined and mastered'. Approximations of practice where pre-service students experiment, are: asking a series of probing questions of a learner (where students' likely responses are already detailed); role-playing a phone call to a parent; and working with small groups of learners.

These will give students the opportunity to experiment with the realities of classroom challenges (Ball & Forzani, 2009:504). Teacher educators should be working on a programme where the daily cycle consists of: presentations, demonstrations, scaffolding, planning, coached rehearsals, teaching, and debriefing. The focus would be on the

development of skilled practice of students, which respondents in this study indicated as a need.

One of the more significant findings to emerge from this study is, therefore, the bringing together of the two domains, namely classroom teaching (coursework at university) and field experiences (teaching experience in schools). In examining this union, Gentry (2012:11) indicates that if managed successfully, the following can result:

Table 0.1: Two domains: classroom teaching and field experiences

Classroom teaching Field experience	can impart knowledge about curricular content can make the curriculum responsive
Classroom teaching Field experience	can delineate skills needed for successful teaching can display the skills to achieve objectives
Classroom teaching Field experience	can explain the importance of commitment in teaching can make commitment a reality
Classroom teaching Field experience	can enumerate the criteria for professional competence can make professional competence a collaborative venture
Classroom teaching Field experience	can highlight procedures for accommodating diversity can make diversity a beneficial disposition
Classroom teaching Field experience	can ensure the ability to operate teaching technologies can make technology revolutionise the enterprise

The second major finding drawn from this data refers to the importance of the duration of teacher experience, as well as the training of mentors and supervisors who greatly impact the development of teacher identity. Having longer sessions of teaching practice will not benefit students, if supervisors and mentors are not able to adequately supervise, and provide critical feedback which will guide their practice and result in students adapting their practices.

The data revealed that students were not satisfied with the supervision processes and felt that supervisors and mentors needed to be trained in order for students to derive maximum benefit from them. Feiman-Nemser (2001), in her examination of the key strategies used by an exemplary supervisor, found that in order for supervision to be more successful, both mentors and university supervisors should focus more on some of the following strategies:

Pinpointing problems – university supervisors should help students to develop language with which to articulate problems they experience in order to solicit assistance and

support. Supervisors must be able to help students to understand the relationship between typical problems like classroom management and curriculum instruction, for example, understand cause and effect – discipline problems can arise with children if unclear tasks or instructions are given, etc. 'Finding openings – noticing fruitful topics that are not obvious to student teachers but which lead them to key issues that all teachers need to think about. Probing the novices' thinking – asking students to carefully articulate their rationale and thinking and in so doing, develop a critical analytical stance so that they can explain themselves, but also enquire into their own practice. Supervisors need to recognise any growth on the part of the students and remain focused on the students in the teachers' classrooms, while directing discussion to students and their learning.

These are only some of the key strategies referred to by Feiman-Nemser (2001) that could improve the nature of the supervision applied in practice-teaching settings. Darling-Hammond et al. (2005:441) agree that teaching teachers is no easy or simple task, but has proved to be very demanding. It requires that 'teacher educators constantly model practices, construct powerful learning experiences, thoughtfully support progress, understanding and practice, carefully assess student progress and understanding and help link theory to practice'.

Chapter 6 presents the findings and the discussion of the third feature in this thesis, which relates to the examination of the readiness of students to enter the teaching profession.

CHAPTER 6

In-service educators' perceptions of the quality of initial teacher-training programmes and the readiness of pre-service teachers to enter the teaching field

6.1 INTRODUCTION

In the interviews with in-service teachers, they were asked to respond to the following areas of concern:

- How ready were pre-service teachers to enter the teaching field?
- What were in-service teachers' perceptions of the quality of the teachers entering the teaching profession?

Since in-service educators experience, first-hand, the knowledge bases of student teachers and their ability to teach, it was felt that their contribution to this research would be invaluable. During the interviews with teachers, they were asked to define what they thought were the aspects that needed to be considered to improve the quality of training in current teacher-training institutions and render students ready to enter the teaching profession.

Accumulatively, the responses could be encapsulated within the following nine categories.

- 6.2 The theory practice divide
- 6.3 Lecturer experience
- 6.4 Time on task: increasing the duration of teaching experience
- 6.5 Curriculum development
- 6.6 Developing a mentorship programme
- 6.7 Student selection processes
- 6.8 Managing change/diversity in education
- 6.9 Training in the use of resources
- 6.10 Teachers as researchers

A general statement by Respondent 2 was that 'students leaving schools should be exposed to a good education to be successful teachers'. Furthermore, the 'results that we are producing in our country as far as literacy is concerned' indicates that it 'obviously has to be a teacher issue. You know, if you think that there are schools who still get a zero for external examinations, that's got to be a teaching issue'.

These statements seemed to corroborate the responses of all the respondents who indicated that their perception of the training was that it seemed to be inadequate based on the 'product' they had experienced within their school contexts. There was a clear indication that quality largely depended on each institution and varied from institution to institution. Respondent 2 felt that the major difference in the training was the fact that students were now being trained in universities as opposed to colleges, as in the past.

Generally teachers felt that there was much enthusiasm among students and newly qualified teachers and although they had the subject knowledge there were certain aspects in their training that were lacking. The request to discuss what they thought was lacking and how it could be improved solicited considerable response.

6.2 THE THEORY – PRACTICE DIVIDE

Respondent 1 intimated that the students who were trained at the universities that were previously technikons still fared better but:

I don't feel that they are equipped to deal with the day-to-day requirements of the classroom. It's not their fault and I don't think it's the institutions fault – they [lecturers] have not been in a classroom in a long time...

Respondent 2 indicated, 'I do not think teacher training is as good as it used to be... primary school teachers used to be trained in colleges... I do not believe they are getting what we used to get.' The third respondent agreed that the quality of teachers coming into the system now was 'terrible' and that the universities were not keeping pace with what was happening in schools.

Each of the respondents felt that the universities were still not linking theory to practice. Respondent 1 suggested that:

... what happens at tertiary education training and what happens in the classroom, it's theory and it's practice. As I have said – all the theory that I went through and the notes that I sat up taking. I have never opened those files. I didn't need the philosophy of education, maybe I needed a few hours to put things together into perspective ... If I had an interest in it I can go and study it elsewhere, but it does not help me in the classroom. Methodology, subject knowledge, dealing with the curriculum, discipline – huge, that is one of the biggest problems that young teachers have to deal with, particularly at a high school.

Respondent 3, in her experience, had also found that the link between theory and practice was missing and she explained that:

... my biggest problem is that they may know the theory and many things, e.g. there is a theory that we looked at in great depth ... Lecturers know theory from an academic point of view which they should, but there is not enough practical emphasis on implementation of theory to [the] classroom situation.

Respondent 2 also stated that 'teaching is a practical activity, it's also academic, definitely, but to be thrown in with the theory only, it is not the best'.

One of the more significant findings to emerge from this part of the study is the theory versus practice debate where the results of the investigation showed that both lecturers and students found this aspect to be an area of contestation and, interestingly enough, this emerged strongly in the data collated from in-service teachers as well (see Chapter 5.3). Echoing the in-service teachers' perceptions are Cheng et al. (2010:94), who intimate that the gap between students' theoretical and practical knowledge is only realised once 'student teachers enter the real classroom setting'. According to them, many studies show that 'student teachers feel that there is a lack of 'connection' between the teacher- education programme and the school-based teaching experience'.

Lampert (2010:24) refers to the traditional model of teacher training where 'the university provides the theory, skills and knowledge about teaching through coursework, the school provides the field setting where such knowledge is applied and practiced and the beginning teacher provides the individual effort that integrates it all'. Maguad (2010) indicates that theory is important, since it helps one to understand the relationship between cause and effect which can be used to make predictions in decision-making processes. If there is no theory, there are no questions that need to be asked and, therefore, no learning will take place so 'without theory, experience teaches nothing'. However, teaching needs to embrace the world of practice.

Lampert (2010:23) states that 'practice is the process of actively carrying out an idea one learns or articulates in theory, then using or applying it'. This justifies the in-service teachers' comments, since the university was clearly only providing theory and depended on schools and students' field experiences to integrate the theory with practice. Therefore, the in-service perceptions that the theory – practice gap existed and that it negatively impacted student development in the field, is one perception that seems to be warranted. However, Morrow

(2007:79) contends that 'theory and practice are internally related to each other. Neither can be adequately pursued, understood, learned or appreciated independently of the other'.

6.3 LECTURER EXPERIENCE

Of the respondents, 67percent felt that lecturer experience played a vital role in the training of teachers. There was a clear feeling that if lecturers did not have actual school teaching experience, students would be disadvantaged. Respondent 1 indicated that lecturers:

... have not been in the classrooms for a long time... if you say you have been out of the classroom for five years, five years is a long time... And I feel strongly that if they have teaching experience they would 'understand what a classroom situation is like'...

Respondent 3 agreed and stated that:

I think that those university lecturers should be, not necessarily younger, but teaching experience should be relevant and up to date. There are some lecturers who taught last 20 or 30 years ago. The conditions and systems of education, everything is different and they don't seem to understand what the classroom situation is like now.

She also believed that the lecturers were faced with great difficulties if they had no experience in the actual teaching of learning outcomes and assessment standards and said:

How do you teach other people to 'implement' if you don't have the experience? Therefore I feel strongly that lecturers should have recent teaching experience since these are aspects that need to be internalised before one can teach it [sic] to students.

The data collected from in-service teachers showed a significant link to the findings drawn from lecturers and students with regard to the importance of school teaching experience for lecturers (see Chapter 4.2.2.5). There was the assumption that if lecturers had school experience, they would be able to train teachers from a point of departure of such experience. This was evident in the claim made by one respondent that 'if they had teaching experience they would understand what a classroom situation is like' and 'how do you teach others to implement if you don't have the experience?'

Celik (2011:73) defines teacher educators as 'the ones who are responsible for the quality of teachers and, therefore, that of education'. Similarly, Koster et al. (2005:157) define them 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'. In order for teacher educators to provide the correct guidance and teach about

school systems, it is important for them to have recent school teaching experience, as stated by novice teachers in a study conducted by Smith (2005).

These teachers questioned the ability of teacher educators to adequately teach students about their 'trade' if they themselves lacked the knowledge of today's schools and students; their credibility was thus at stake. Novice teachers in Smith's (2005) study believed that teacher educators could only be effective if they were knowledgeable about the current educational system.

6.4 TIME ON TASK: INCREASING THE DURATION OF TEACHING EXPERIENCE

All the respondents felt that students needed more time in actual teaching experience. 'I think teachers need more classroom time' (Respondent 3). She explained that she was fairly newly qualified and indicated that she had completed ten weeks of teaching experience and felt that 'it may sound like a long time, but it isn't'. Respondent 1 claimed that:

... to be a good teacher you have to ... must be in the classroom, where you have to be at school from 8 to 2 o'clock in the afternoon with your children...I believe that there should be far more practical experience in the teaching of teachers. I think the idea of learner teachers in the schools is very, very important.

Another respondent felt that being in the field as much as possible would help since 'you learn on the job'. He also felt that students:

have to be in the classroom as long as they can, maybe some kind of mentoring going on, I don't know. There has to be some theory obviously. I'm sure that the current students would say they learn while they are in the classrooms. So they need to be in the classroom as much as they possibly can.

Respondent 2 agreed and said that besides working out lessons, 'you have to be at school from 8 to 2 o'clock in the afternoon with your children; you have got to do your planning, teaching and marking and everything else that goes with teaching and administration'. He further contended that it is important that you are exposed to every part of the school, 'every learning activity, every different job and every extra-mural activity and everything that goes with being a teacher'.

The underlying assumption for most students and lecturers was that more time was needed for clinical experience in the teacher-training programmes (see Chapter 5.2.3.1). The data collected from in-service teachers reflected very similar results. The number of clinical experiences, as well as the number of hours of clinical experience, varied from institution to

institution, yet the requirements were the same. These included becoming orientated to the school learning community; becoming aware of socio-cultural contexts of each learning community; becoming aware of various classroom management and organisationaltechniques and observing various teaching – learning strategies from diverse backgrounds; and becoming aware of how curriculum and diverse learners influence the planning process and how assessment and evaluation are used to inform teaching practice (Sivakumaran et al., 2009:3).

Ball and Forzani (2009:503) suggest that opportunities to practise the intricate work of teachers need to be increased. Teacher-education programmes should offer more 'deliberate' opportunities for student teachers to 'develop more general and adaptable skills of practice'.

6.5 CURRICULUM DEVELOPMENT

For all the respondents, having a sound knowledge of and being able to manage the curriculum were vital as these formed the cornerstone of their daily work. They felt that students were not fully equipped in that regard. Respondent 1 indicated that he was 'impressed with their approach, attitude and subject knowledge' but he was not very sure about 'their methodologies'. He went on to state:

'They have no idea of paper work, no idea. The paper work that is required, the tracking and the demands that are placed by the department on teachers... I don't think the universities are aware, things have changed in five years. I seriously feel that the educational departments of tertiary institutions must keep track of what is happening in the schools.'

The administrative aspect within a classroom was an area, according to one respondent, that 'haunts' teachers if they fall behind. This was explained further:

They do not know how to organise, they do not know how to time manage. They know how to plan and teach a lesson but I'm afraid teaching is much more than that. You are a paper chaser and they have no idea how to do that. We spend our time with teachers checking have you done this, have you done that, because if you haven't it's going to hold you back later on; for example, if I am going to make contact with the parent of a student I have to have put in place intervention. For every single contact that I have, I have to keep records. Now in a school like this you could have up to 200 students and I don't think the universities are aware of this.

(Respondent 1)

The current curriculum becomes the context within which each teacher has to work and 'unless these young teachers know, they will have no idea of what to expect'. In-service

teachers felt that students were not equipped with adequate knowledge of the implementation of the current curriculum and stated that the 'lack of knowledge with regard to curriculum is an area of great concern and results in students sinking by the end of the first term'. One respondent indicated that students had the subject knowledge of the curriculum but were not sure whether they understood the approach. In practice, 'they must have some understanding of the role of a teacher. It's not just talking to the kids, there is so much more to it and they must have an understanding of the curriculum' (Respondent 1). It's about helping them to be organised and to manage the administration within the classroom (Respondent 2). Another respondent goes on to say that:

You have to work with documents, the learning outcomes and the assessment standards all the time and sometimes I get the feeling that they are not being subjected to working with these documents and coming to grips with them.

(Respondent 1)

Respondent 3 also felt that the only way to train students was to actually

sit the students down, give them the NCS documents(I know it may sound juvenile), give them examples, give them questions based on the learning areas and assessment standards. Then you are actively engaging with the learning outcomes and assessment standards.

Unfortunately, according to this respondent, 'the universities are not keeping pace with what is going on. On a practical level, when a teacher comes into the teaching profession for the first time they should understand and know all the curriculum documents'. Another respondent (Respondent 3) related the following:

I feel strongly that it is no good to talk about assessment standards, talking about learning outcomes within a broad frame, without explaining these within the context of the subjects.

According to her, students had indicated that they 'have heard about learning outcomes and heard about assessment standards but the universities have failed to explain these to us'.

Because students were not trained to understand how assessment standards fit into the curriculum, many of them had great difficulty setting up assessments for learners. On the other hand universities were not training students to assess learners.

Respondent 1 related his experience:

when I set foot into the classroom for the first time I had never set a test I had, I think, set a couple of worksheets when I was on teaching practice. I had never set a test I had never set an examination. I did not even know how to start. It's exactly the same with the students who come in now...

He felt that this happened with first-year teachers, 'I have to sit down and teach her/him how to set a test, how to set a work sheet, how to set a project'. The teacher felt that 'forme it's a huge requirement'.

Up to now, respondent 2 had found that 'the young teacher is a lost soul. You don't know what to do, you are thrown into a classroom and you feel alone. You are thrown into this deep end and you have to make major decisions on a daily basis'.

The data, therefore, bears evidence that much work is required in preparing students to meet the daily demands of managing a classroom(See Chapter 5.2.2.1). Curriculum development in schools is a component that needs to receive greater focus in the teacher-trainingprogramme, since this is the core of what teachers are supposed to do.

According to Cogill (2008:5), curriculum knowledge is the knowledge teachers should possess in order to guide what should be taught to a specific group of learners. Teachers are expected to understand the national syllabi, year group plans, shorter term planning documents as well as children's learning potential. Added to this, they also need to take into consideration the 'what' and the 'how' of examinations and testing and understand the accompanying syllabi. In addition, teachers should be able to identify and consider any contextual factors that would impact teaching and learning.

The data strongly suggests that this component requires more intense training in order for pre-service teachers to be ready to enter the teaching arena. School curricula do not remain constant and have changed considerably over the past years, for example Curriculum 2005 (C2005), NCS, RNCS and currently the new NCS with the Curriculum and Assessment Policy Statements (CAPS). Since curriculum development forms the core of what teachers teach, teacher educators should keep abreast of the continuous changes in order to effectively train teachers for future classrooms.

6.6 DEVELOPING A MENTORSHIP PROGRAMME

All three respondents felt that a good mentoring system would assist with the training of students. Mentors could assist in making clear the 'role of the teacher' and also teach

students about aspects such as assessment and other areas concerning the day-to-day management of a classroom. Respondent 2 felt that finding the right mentor could be critical for students and states that:

The success of a teacher is the mentor who is available for him/her. We have a very different mentoring process where our young teachers are assigned mentors as soon as they get into our school. The mentor is responsible for everything that the young teacher does, down to setting examination papers, tests and every aspect of the teacher is monitored and mentored. That young teacher also knows that there is somebody who she/he can go to and ask questions about anything.

Respondent 2 raised a concern about the kind of mentoring or guidance provided by the teacher-training institutions and stated that:

... in the past when we had students in our schools, we saw lecturers coming into our schools to observe a student after which there would be a discussion. It does not appear to me to be happening now. I don't know when was the last time I saw a lecturer here. Does this still happen because I certainly do not see it?

Respondent 2 related that 'there are many students around from many other universities and we have to do the assessing of the teacher'. Although she was prepared to do that, she still felt that students' needs were not being met and perhaps they could 'ask teachers what students need to know before they come into the classroom'.

The results of the data collected from the in-service teachers strongly support the findings of the students and lecturers with regard to the importance of the role mentor-teachers play in their training (see Chapter 5.2.3.3). The data reflects that there needs to be a closer relationship between schools and universities and, therefore, between teacher educators and in-service teachers, in order for student needs to be met.

These findings are supported by Walkington (2005:55), who contends that experienced teachers who provide some form of mentorship for student teachers during their clinical experience, often do so 'with relatively very little guidance or with little understanding of what the university course entails'. When teachers accept students into their classrooms to conduct their clinical experience, they automatically take up the role of mentor. In most cases, according to Walkington (2005), the mentors have to rely on or draw from their own beliefs and experiences in order to provide some learning to students. During clinical experience the students need to immerse themselves in the school, 'learn about teaching and themselves as teachers, as well as learning to teach' (Walkington, 2005:57). During this period the school-based mentor needs to be a 'master teacher, sharing special expertise which needs to be developed to a level where the practices and underlying principles are

understood so the teacher [student] can adapt and innovate, an activity central to professional development' (Thailand Education Reform Project, 2002:34). Therefore, the need for mentor teachers to be trained specifically for the task of promoting collegial, professional relationships is vital. This will result in each pre-service teacher being able to work at developing his or her own professional identity, which will render him/her ready to enter the profession.

6.7 STUDENT SELECTION PROCESSES

There was also a concern voiced regarding the 'quality of student' that entered the institutions, and one respondent felt that since education did not have a good reputation in this country, he didn't feel that we have had the best people entering education. He went on to explain:

I don't think we have always had the best people deciding to go into education. Some are not committed to the kind of work that goes on in the schools ... I got the impression that there are people who are here for 3-4 years and are not planning to stay in education, and they use it as a stepping stone to go into something else.

(Respondent 1)

Respondent 1 suggested 'some kind of a learnership programme which will encourage young people to enter the profession. 'We really need excellent people to enter the profession.'

Respondent 2 was also of the view that it was vital that students entering teacher training be identified first and then

be promised incentives, for example, earning while they are learning when they go to practice teaching, and here we actually paying our own student teachers. We found it useful to pay these young people, to earn as they learn. They earn as they are learning so you end up having the best teachers in the school.

A lecturer also agreed and stated that some students were 'just not interested', and what was very significant for this lecturer is expressed in the following:

... on the basis of my observations of students at teaching practice, there is a very distinct difference between people who want to teach and people who simply got a bursary, you can see it. They not actually interested in learning to become teachers and they do sometimes not even the absolute minimum...I discern a difference where you see people are genuinely interested in teaching, they seem to get much more out of the teaching experience because ... they become involved in what the schools are doing ...So it is whether people are genuinely interested in becoming teachers or whether they're simply doing it because they got a bursary...

Another lecturer indicated that whether students were interested or not, they should still be able, at the end of the course, to teach or leave with some knowledge of teaching. However, since the admission requirements at their institution were being changed, there was the hope that this would attract students who were really interested in teaching, thereby resulting in the intake of better candidates.

These results, therefore, suggest that students, lecturers and in-service teachers were calling for more stringent selection processes. This is supported by Barber and Mourshed (2007) who, after studying the best performing school systems worldwide, found that besides applying effective selection procedures at the certification level, there were also selection and recruitment procedures which restricted certain candidates from entering the initial teacher-training programmes. This ensured that their candidates were as strong as possible. Barber and Mourshed (2007:17) found that in the top performing schools, two important aspects were focussed on: '[They] have developed effective mechanisms for selecting teachers for teacher training, and they pay good starting compensation. These two things have a clear and demonstrable impact on the quality of people who become teachers.' They also indicate that for someone to become an effective teacher,he/she needs to possess very specific characteristics, and these should be identifiedeven before entering the profession. These characteristics include, 'a high overall level of literacy and numeracy, strong interpersonal and communication skills, a willingness to learn, and the motivation to teach' (Barber &Mourshed, 2007:17).

6.8 MANAGING CHANGE/DIVERSITY IN EDUCATION

'Classrooms change all the time, the education system changes and the curriculum changes constantly' was the response from Respondent 3. The teacher felt that educational institutions needed to take this 'fact' into consideration in the training of teachers. Respondent 1 felt that it was important for lecturers 'to keep abreast of these changes' since it directly impacted their training and how they would manage their classrooms. Today classrooms are so diverse, and Respondent 3 related that we 'have a history of people who have been disadvantaged', resulting in 'a back log that is not going to go away'.

The nature of the diversity in South African classrooms includes, as related by Respondent 3, 'poor people sitting with 40, 50 or 60 children in a classroom; kids who cannot read or write properly; don't have enough text books; stomachs grumbling and going to a place where they are permanently cold and hungry'. This respondent suggested that:

I don't think the universities are aware, they must say in five years this has changed... I seriously feel that the educational departments of tertiary institutions must keep track of what is happening in the schools.

At this time in the South African democracy, we also need to be aware that classrooms are very diverse in terms of language as well, and there is a great need to teach English to 'second-language learners'. Students (F/G 5: TEI 1) felt that there was not enough emphasis placed on this aspect and that they were not equipped with the necessary skills to manage this.

Respondent 2 related that while learners in the classroom were diverse, with great focus on language diversity, the same applied to students in tertiary institutions. He was shocked by the language levels of the newly qualified teachers and stated:

One of things that we find is that teachers don't know how to write things very well. We ask them to write comments, for instance, and the spelling is atrocious and the grammar is worse. So, there is a lot of training that has got to go on, on how to write comments for reports. You have to be able to write comments, you have to be able to identify children's weaknesses and turn them into some kind of comment which is useful to a parent. So it's that kind of thing I found worrying. And when it comes to practical work like recording of marks, how to interpret how the child is coping, how to use the marks, you have to diagnose problems and correct them, I don't think they have that.

The third respondent felt that the problem lay largely at the feet of lecturers and her opinion was:'I don't think many lecturers in South Africa know what they are trying to teach or how they have to teach.' According to her this was one of the biggest problems.

The findings indicate that in-service teachers have also experienced the lack of skills, knowledge and attitudes displayed by students when it comes to embracing diversity within educational settings. Respondents, particularly, referred to the culturally diverse settings and found that insufficient preparation on the part of training institutions resulted in students' inability to deal with diversity in the classroom. Le Roux and Möller(2002) point out that all teachers need to be trained to deal with multi-culturalism. If not, there are two possibilities which await these classrooms, either the teacher teaches using a mono-cultural model where the teacher depends on 'tried and tested recipes', or all learners are 'simply assimilated into the teacher's culture or the dominant culture in that classroom. More than three decades ago, problems in the training of teachers to teach poorer or disadvantaged learners in the USA were highlighted by Smith's *Teachers for the Real World* (Le Roux &Möller, 2002:185) as the following: Teachers were unfamiliar with the backgrounds of poor students and the respective communities where they lived; teacher-education programmes usually did little to

sensitise teachers with regard to their own existing prejudices and values; teachers lacked the cultivation skills needed to perform effectively in the culturally diverse classroom; most teacher-education programmes prepared students to teach children much like themselves; and most teacher-education programmes were in need of major adjustments as far as diversity and equity issues were concerned.

According to Zhao (2010:426),globalisation has brought many challenges to schools, and to be able to 'meet these challenges schools need teachers who understand these implications and are able to effectively work with the increasingly culturally and linguistically diverse student populations and deliver a globally orientated curriculum'. This study revealed that lecturers were not equipping students to meet these needs and, as indicated by Le Roux and Möller (2002:185), this could have resulted from the fact that the issue of diversity in teacher training tends to be 'a superficial add-on, or 'optional extras' to an already overloaded school curriculum'.

6.9 TRAINING IN THE USE OF RESOURCES

Respondents felt that students were not trained adequately in the use of resources, especially technological resources. 'Something that is missing ...is how to use technology in education. Students don't know how to work with them. They may understand the computer but are not familiar with the software that goes with it and how to use it.' Respondent 1 contended that:

...technology in education is so crucial now. Even in the out-resourced schools the facilities are there to tap into. So the student must have subject knowledge, methodology and knowledge of how to use technology in education...

From the responses in the interviews it was found that the choice of schools also played a big role in the teaching experience sessions. Some students had been exposed to well-resourced schools and could teach with the aid of 'state-of-the-art' technology, whereas other students had only been exposed to poorer or under-resourced schools.

This just highlights another one of the challenges students faced, which was the use of these technological tools and the latest resources used in schools, for example, white boards, computers, data projectors, etc. Students (F/G 5: TEI 1:03/09/09) also felt that there was a need for them to be trained to use these resources effectively to enhance their teaching. The students stated that these resources were available at the institutions but there was no one equipped to do the training with them.

Students indicated that they were not provided with the opportunity or adequately equipped to use the resources available in order to enhance their teaching. One student responded:

... the majority of us fourth years, we don't even know how to operate things, resources, because they don't teach us.

(F/G 6: TEI 1)

Another student stated:

... I saw this job application yesterday and it said knowledge in computers: we learnt how to copy and paste and that is not what schools are looking for. They are looking at smart boards, Pastel and I don't even know what that is. There is so much potential at this university and it's not even exploited. It's dormant...

(F/G 6: TEI 1)

The underlying assumption for all the stakeholders was that while some of the components focusing on the development of teaching skills were there, it was their implementation that created the problems currently experienced in the teacher-training programme.

The findings again suggested that all the respondents, for example, lecturers, students and in-service teachers, felt that developing the technological skills of pre-service teachers was vital for teachers being prepared to teach in the 21st century. Morrison (2012) agrees, and states that while teachers should understand their subject knowledge well, there is also a need for them to be skilled in understanding the potential of technology use in teaching and learning. There is a need for lecturers, especially, to become digital practitioners, infusing information technology with pedagogical skills in order to support teaching and learning. In the current system, where classrooms consist of a diverse range of learners with changing expectations, technology can be used to create 'learning opportunities and possible "bite-sized" learning development, responding to the learners' wishes for individual development' (Morrison, 2012:20).

The evidence from this study seems to suggest that students were willing to develop their information and communication technology (ICT) skills, but there was a paucity of training inthe use of ICT at their respective institutions. According to Lee et al. (2007), teachers will find it difficult to move from the traditional, teacher-centred approach used in classrooms and embrace more learner-centred, critical approaches if they are not provided with opportunities to experience 'the connection between pedagogy, learning theories and the use of ICT to support thinking. Many of them will be stuck with the idea that ICT is a tool used only for

information transmission'. Lee et al. (2007:555) describe some of the characteristics that will result from an ICT-infused curriculum, which are: self-monitoring of own learning process; meaningful collaboration; support deeper thinking; instructor becomes facilitator; active knowledge construction process; engaging in authentic tasks; and meaningful forms of scaffolding.

Gill and Dalgarno (2008:330) support this, and see the role of ICT in classrooms as vital because:

...of the need for children to develop skills, that will empower them in modern society, and because of the potential value of such technologies as tools for learning...

They indicate that one of the challenges which faces teacher educators, therefore, is to ensure that 'graduate teachers have the necessary combination of skills and pedagogical knowledge that will enable them to both effectively use today's technologies in the classroom as well as continue to develop and adapt to new technologies that emerge in the future' (Gill &Dalgarno, 2008:330).

6.10 TEACHERS AS RESEARCHERS

It was indicated by teachers that students definitely had 'gaps' in their knowledge. Respondent 2 stated that this resulted in 'their knowledge being sketchy'. Respondent 2 indicated that in his experience:

... you have to have knowledge about almost every subject, science, mathematics, geography and others. I think the teachers who are coming to us do not have a good general knowledge. I don't know how you teach teachers this but I think that it comes with a lot of reading and research...

Lecturers agreed that research needed to be part of a teacher's daily preparation and planning and one lecturer indicated:

I don't think they are sufficiently trained in terms of many things. I mean we don't train them to be researchers...when I go out to schools for supervision, I insist that a part of the lesson prep must reflect the type of research they have done and I don't see that. I don't think students do that, they simply go out and mimic what other teachers do. They look at one textbook, for example – that's not what we should be teaching them, we should be training them to become good researchers...

In agreement with one respondent who felt that teachers needed to do more reading and research to improve content knowledge is Stafford (2006), who contends that content

knowledge is one of the aspects critical to the teaching process. Other aspects include the ability to implement various teaching strategies, develop effective performance tasks as well as design appropriate assessment tools and understand different learning styles. In order to accomplish all of these aspects, it is important for teachers to be knowledgeable about new research and be determined to implement it. Thiswould improve both 'pedagogical practices and student learning' (Stafford, 2006:1).

According to Field (2011), research needs to underpin all learning and teaching. If not, education may run the risk of being based on one or more of the following: dogma, theory, prejudice, ideology or convenience. Research is evidence-based, and this will ensure morally sound decisions that are not based on any of the above-mentioned factors. Field (2011:2) also indicates that research can help teachers 'to understand what works and why, what the short- and long-term implications are, provide a justification and rationale for decisions and actions, help to build a repertoire to help deal with the unexpected, identify problems, inform improvement and so forth'.

6.11 SUMMARY

Data collected from in-service teachers was used to determine the readiness of students to enter the teaching field. The evidence in the study suggests that teacher-training institutions and teacher educators play a vital role in developing pre-service teachers in such a way that they are ready to enter the profession. According to the respondents, the institutions need to change, improve or include some of the following components: student-selection processes, lecturer school-teaching experience, knowledge of curriculum, duration of teaching experience, and development of a mentoring system to render students ready and equipped to enter the teaching arena.

The underlying assumption for most of the respondents was that if stringent selection processes were in place, students who wanted to be teachers would fare much better. Respondents indicated that 'some are not committed to the work', '... they are not actually interested in learning' and '... they're simply doing it because they got a bursary'. This is a serious indictment on teacher-training institutions. Generally, in most countries, the recruitment process for entry into pre-service teacher education is merely a secondary school certificate (Thailand Education Reform Project, 2002:39). According to the project, the possession of certain characteristics, which would render candidates suitable for teaching, would require additional processes which could include interviews as is currently done in

many western countries. The strength of the candidates will determine the strength of the teaching force, which will directly impact standards of education.

The data also reflected the gaps created by teacher educators as a result of a lack of school teaching experience, and this may result in a lack of knowledge of the current curriculum used in schools. Respondents indicated that in their experience lecturers 'don't understand what a classroom is like', since 'many of them haven't been in a classroom in many years'. Another respondent felt that students were not prepared to implement the curriculum successfully once they went out to teach, because 'how do you teach people to implement if you don't have experience?'

The data also revealed that students who went out to conduct their teacher experience have no idea of paperwork'. They were not able to manage assessment: 'When I was on teaching practice I had never set a test, I didn't know where to start... it's exactly the same with the students who come in now.' Students couldn't write reports, especially comments for learner reports. It was also indicated that managing discipline was an area that needed attention.

The diverse nature of classrooms today is another challenge pre-service teachers have to face. The data implies that teacher educators, as a result of the lack of school-teaching experience, do not equip students with the necessary knowledge, skills and attitudes that are needed to manage diversity within the current educational settings. This is evident in the following statement: 'Lecturers must have their finger on the pulse in respect of change.' The implication is, therefore, that 'if they[lecturers] had teaching experience, they would understand what a classroom situation is like', since 'these are aspects that need to be internalised before one can teach them to students'.

Opre et al. (2008:29) feelthat with a rapidly changing society, it becomes more important for higher education to be ready to face the challenges these changes bring. It is, therefore, imperative that universities are persuaded to 'focus on the quality of their faculty and to offer them appropriate opportunities for professional development' in order for them to meet the changing demands they face each day. These opportunities should address the specific needs, knowledge and priorities expressed not only by teaching staff, but also all other stakeholders.

One such priority, which university faculties should consider, and which is evident from this data, is the extension of the duration of clinical experience for pre-service teachers during their training. The data reveals that more time is needed for students to be exposed to every

aspect of school life. This is evident in the following statements made by in-service teachers: 'Students say they learn while they are in classroom, therefore they need to be in a classroom as much as they possibly can' and 'it is important that you are exposed to every facet of school life'. However, while the 'balance of time devoted to teaching practice' is questionable, what is more important is the quality that arises from the on-site experience (OECD, 2008:308).

Another important finding to emerge from this study focuses on the mentor-teachers that assist students during their clinical experience. One statement embracing the value of good mentor-teachers was that 'the success of the teacher is [due to] the mentor who is available to him/her'. 'Interns [students] are developing teachers', according to Zugelder and Nichols (2012 – 2013), and although they have been trained in pedagogy, the mentor becomes instrumental in 'allowing their craft to develop appropriately'.

From the foregoing beliefs we can deduce that the university and school need to develop a stronger relationship. This will assist in narrowing the gap between theory and practice, which is a very significant finding that emerged from this study. The tension that exists between theory and practice is evident in one respondent's assertion: 'What happens in tertiary education and what happens in the classroom, it's theory and practice.' In pursuit of closing the theory – practice divide, there is a need for greater institution – school collaboration.

Carr and Skinner (2009:143) acknowledge the difficulty in grasping the nature of the theoretical basis of teaching and how it is embodied in practice in teacher-training institutions. They state that 'because what is taught under the heading of educational theory has little direct or immediate application to classroom practice, academic learning can have no serious role to play in the professional development of teachers'. They further contend that effective classroom practice 'is a function more of experiential than theoretical learning'. Aleccia (2011) agrees and states that teacher educators need to do more than just present theoretical frameworks. Darling-Hammond (2006) asserts that while we need the theory, it is important for teacher educators to be able to teach students how to integrate this knowledge so that it can become useful to students when working in a classroom.

This chapter provided insight into how teacher-training institutions are currently preparing students for entry into the real world of teaching. The next chapter concludes the thesis, provides recommendations, and makes suggestions for further research that could be donetoimprove the provision of teacher education in this country.

CHAPTER 7 CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSION

7.1.1 Introduction

The demands placed upon the teaching fraternity, and the environments within which they have to work in this knowledge-based society, have become increasingly complex. Teachers occupy a unique territory in which they have to assume greater responsibility for ensuring a high-quality education that meets the demands of the 21st century. However, since the turn of the century, many challenges and problems have been highlighted, yet very little has changed, and some of the problems which faced the teaching profession thirty years ago, still linger. This brings us to a key question raised by Korthagen et al. (2006:1041), 'Which central principles shape teacher-education programmes and practices in ways that are responsive to the expectations, needs and practice of teacher educators and student teachers?'

Situated within a critical paradigm, this study attempted to rigorously interrogate the principles and practices usedinteacher-training institutions in South Africa. Freire and Macedo (1987), Shor (1992), and Lankshear and McLaren (1993)have criticised many teacher-education programmes for using a 'one model fits all' approach where the curriculum is structured in such a way that the background and needs of students involved are not taken into account. Students, therefore, become the passive recipients of the teachers' knowledge, rather than being the transformative agents in their own lives. Furthermore, education programmes should reflect a critical pedagogy that is is culturally driven, participant driven and socially empowering (Shor 1992; Freire, 1993;Lankshear& McLaren,1993).

Through investigating the problems experienced in teacher-training practicesitwas found that managing education in this globalised society is one of the greatest challenges. Scheerens (2010:12) notes that 'to equip learners with the wide range of skills that they will require to take their place in a world that is in constant evolution,...where learners are increasingly expected to become more autonomous and to take responsibility for their own learning', will require the development of different approaches. Working from a critical pedagogical stance will ensure that learners become active participants in their own learning, 'contributing their

own ideas, learning to wrestle with ambiguities and challenge assumptions (Degener, 2001:6).

This study hopes to create opportunities which will promote the transformation of teaching and learning in education, taking into consideration Shor's (1992) stance, that 'all people begin life as motivated learners, but when students sit year after year in classrooms that are not tuned into their backgrounds and experiences and where their own ideas are not valued, they lose their natural curiosity and become passive or even non-participants' (Degener,2001:6).

The study examined the quality of teaching practices inteacher-training institutions and focused on the following components:

- Professional knowledge delivery.
- Acquisition of teaching skills that would render pre-service teachers ready to enter the world of teaching.

The key features of the studyare an examination of current practices in teacher training, using the above components, and a discussion of possible improvements within a context of quality. This chapter sets out the conclusions reachedwith regard to what the study has established as challenges or problems experienced in teacher-training programmes. Based on these conclusions, recommendations as to how these challenges can be addressed, with the aim of initiating transformation in teacher education, are suggested.

7.2 PROFESSIONAL KNOWLEDGE DELIVERY

In order to examine this component adequately, it was necessary to examine the practices of teacher educators more closely. The studyfocused on the following aspects which could render professional knowledge delivery as either acceptable or in need of improvement:

- Delivery approach.
- Lecturer characteristics and student expectations:
 - Knowledge of subject matter
 - Modelling good teaching practice
 - Knowledge of school curriculum

- Diversity as part of managing curriculum
- Teacher educator school experience

Each of the above aspects will be discussed in greater detail below.

7.2.1 Delivery approach

The study has established that most teacher educators are still very bound to the traditional approaches to teaching. Teaching was generally approached from a 'one-sided communication' perspective, where students had very little input and were almost forced into non-participant roles. These top-down approaches to teaching consisted mainly of the lecture approach which, generally, was also lecturer dominated. In some cases, variations thatincluded the use of film clips, overhead projectors or question-and-answer sessions were included, but generally, students had to read reams of notes, which were then re-read anddiscussed in class. These discussions, as related by students, were once again lecturer driven. This, as revealed in the study, resulted from having to teach very large classes of between 100 to 400 students at a time, as well as teaching students who preferred to be 'spoonfed' and who came to lectures unprepared.

The study does, however, show that in the Foundation Phase department, where classes range between 40 and 50 students, a more interactive approach was favoured. Facilitating student learning was the most common approach used which includedone-on-one assistance and interactive discussion sessions where questions could be asked and concepts clarified.

Celik (2011) cites a key element that determines the effectiveness of teacher educators: knowing your students and how they learn. Hefurther states that teacher educators are expected to 'select, develop, evaluate and revise teaching strategies to improve student learning', 'improve knowledge of content and teaching strategies', as well as 'monitor the implementation of teaching strategies to expand learning opportunities and content knowledge for all students'.

7.2.2 Lecturer characteristics and student expectations

Since teacher educators are the key role players in the endeavour to improve education, they should be the catalysts for the development of quality teachers emerging from teacher-education programmes. Their profile should include their being teachers of education,

teachers of school subjects, teachers of didactics, trained and experienced teacher supervisors, researchers, as well as 'on the job' network supporters (European Commission, 2010). Since students are the first-hand witnesses of teacher educators' work, this studysought to seek from them those characteristics they thought teacher educators should possess in order to fulfil this key role. These included: knowledge of subject matter, modelling good teaching, knowledge of school curriculum, managing diversity, and teacher educator school experience.

7.2.2.1 Knowledge of subject matter

Conclusions drawn from this study indicate that while teacher educators should have a good command of subject matter, a tension existed between respondents with regard to subject matter knowledge. Generally students felt that subject knowledge or content was very important because teaching was about the transmission of knowledge. Many students experienced lecturers reading from texts and not being able to answer their questions.

Lecturers, however, felt that although subject knowledge was important and that they should serve as a resource that students could depend on, few focused on it because there was a feeling that what was more important in the transmission of knowledge was teacher expertise. Ellis (2009) refers to the view that great emphasis was placed on subject knowledge in the past, with the assumption that the more knowledge the teacher has, the higher the student achievement will be, resulting in candidates being subjected to high stakes testing. There is, however, another view that 'the knowledge of the subject taught is relatively less important in the teaching and learning than factors such as general pedagogical knowledge, teaching skills, contextual understanding and affirmation of values and ideals'. Ellis (2007) further contends that although subject knowledge is a prerequisite, the focus should be placed on the special category of teacher knowledge that exists between subject knowledge and effective teaching.

7.2.2.2 Modelling good teaching practice

The study reveals that lecturers did not fulfil the expectation of modelling good teaching strategies to students. Students felt that it was imperative that they model a pedagogy which reflected the best available practices in teacher education in order to improve their practice. While most of the lecturers' pedagogical beliefs seemed fairly well developed, as established in the study, there seemed to be some discord when it came to putting them into practice. Students' needs were, therefore, not met in this regard.

Teacher educators' work is complex and their role includes both the teaching of student teachers and the modelling of practices they advocate in their teaching. A significant component of their expertise is the ability to make professional knowledge and competence about teaching and learning explicit, in other words, to explicitly model for their students, the thoughts and actions that underpin one's pedagogical approach (Loughran& Berry, 2005). So in pursuit of training quality teachers, it must be borne in mind that it is important for teacher educators to model effective teaching strategies, since they play a key role, via their impact on student teachers, in improving and maintaining quality in the education system. They should 'create a balance between delivering essential knowledge and creating opportunities for student teachers to make knowledge meaningful through practical wisdom' (Celik, 2011:81).

7.2.2.3 Knowledge of school curriculum

Another conclusion drawn from this study is that there is a gapbetween what happens at teacher-training institutions and what happens at schools. Teacher-education programmes should have a practical curriculum as well as a didactical curriculum. Students need to be taught to understand curriculum plans and be able to analyse and apply what they were taught about curriculum; they also need to be cognisant of various teaching applications and other performance assessments. The data revealed that the divide between school and universities has perpetuated the disconnect students experience and the lack of knowledge of schools that teacher educators find.

The study revealed that there were gaps in the students' curriculum knowledge which included, among others, general administration of a classroom – dealing with the administrative aspect of the curriculum; organisation skills and managing the curriculum – time management; as well asplanning, teaching, assessment, tracking and intervention. Students felt that most of the teacher educators had not provided the necessary training to enable them to manage the curriculum. There is no understanding of the current school curriculum and students still cannot plan and design lessons correctly, choose appropriate teaching strategies, plan and design assessment tools or integrate within learning areas and across the curriculum. Walkington (2005:56) suggests that there needs to be a continuing interrogation of practice 'through the immersion in the school – learningabout teaching and themselves as teachers, as well as in the university – learningto teach. Therefore, university and school educators need to work together more closely and take joint responsibility for developing more meaningful learning'.

The study also revealed that since teacher educators had not had recent experience in the classroom, it was difficult for them to assist students in developing these skills. Teacher educators need to constantly engage with curriculum development and research, according to Celik (2011:79), as this is viewed as the 'indispensable part of their professional development. Unlike teachers, they are expected to be skilful in teaching learners of all age groups and present a high level of professional maturity and autonomy as well as having a comprehensive understanding of the educational system that goes beyond their own personal teaching context'.

7.2.2.4 Diversity as part of managing the curriculum

processes.

The very distinctive social background teachers experience in South African schools each day makes the management of diversity an important aspect to be dealt with in curriculum development. At university level, students felt that teacher educators did not considertheir diversity. Students experiencing language barriers, as well as students with financial problems, were not catered for. They felt that lecturers were not approachable enough when they wished to discuss the challenges they experienced. Suggestions were made by students for lecturers to vary the teaching strategies employed in the classrooms to accommodate students with language barriers, but to no avail. Lecturers made very little effort to heed their call and adapt their modes of delivery to accommodate all students.

Teacher educators are supposed to be teaching students how to manage diversity within the classrooms for which they will eventually be responsible, yet they do not model the appropriate application of suitable strategies within their own classrooms. As a result of this, students indicated that the training in this regard was, most certainly, insufficient. Students, therefore, cannot plan for the diversity they face during practical experience and eventually all the learners they teach are automatically assimilated into the most dominant culture in the classroom, irrespective of learner backgrounds, learning disabilities or language barriers.

Teacher-training programmesshould focus on cultivating skills to develop sensitivity-towards-difference and action-in-planning approaches within diverse settings. Sivakumaran et al. (2009) state that all teachers should be aware of the backgrounds of poorer people, their socio-cultural context, and the teachers' own prejudices before they can understand how to manage and organise the class, plan teaching and learning time, determine teaching strategies that will best suit the nature of the class, and plan evaluation and assessment

7.2.2.5 Teacher educator school experience

The research has shown that there is a need for teacher educators to have more recent school teaching experience so that they can really understand what they are training teachers to do. It was indicated that many lecturers last taught 20 or 30 years ago and since then much change has occurred within the context of schools. respondentsquestionedteacher educators' ability or readiness to deliver a curriculum to be applied within a school context, when they had no idea how these contexts had changed or what the real demands within the current contexts were. Added to this was the concern that they were also out of touch with the current curriculum (NCS), implemented in schools.

The discourse surrounding teacher educators possessing a teaching qualification or having had experience in the classroom is limited, according to the European Commission (2010). The European Commission does, however, indicate that it is vital that teacher educators have 'solid practical teaching experience, good teaching competence and a high academic standard', since they are the 'key role players in the endeavour to improve the quality of teacher education' (European Commission, 2010:1).

7.3 ACQUISITION OF TEACHING SKILLS

This research has separated the acquisition of teaching skills into two components:

- On campus acquisition of teaching skills
- Theory versus practice

The study established that institution-based programmes to assist in the development of teaching skills for students were minimal. Students indicated that although almost every subject had a didactical component attached to it, teacher educators focused mainly on the theoretical aspects. Generally, students were not exposed to demonstration lessons or any form of practical implementation of what was taught during lectures. Most of the students had never experienced lecturers teaching certain important skills through the use of classroom scenarios where actual learners or simulations were used. Very little effort, on the part of teacher educators and universities, was made to create teaching situations where students could observe teaching skills being applied, evaluate the teaching scenario and then get immediate feedback on the results. These would certainly have, according to the study, created many significant learning moments for students.

Gentry (2012:10) contends that the main objective of teacher-education programmes should be to 'have students participate in intensive and well-integrated coursework and field experiences that require continuous integration of theory and practice'. The study bears evidence that this is not the case. Students from one focus group (F/G 6: CPUT 02/09/09) discussed this issue and stated, 'theory must be put intopractice and that's one thing the lecturers have missed totally'. Research shows that gap exists between theory and practice (Korthagen et al., 2006:1041) and teacher educators need to understand that 'knowledge cannot simply be taken and applied to concrete circumstances'.

Students are not exposed to enough on-campus development of teaching skills which could be used during their field experiences. Students and lecturers felt that more opportunities should be created for developing teaching skills prior to practice teaching, so that students have some skills that can be implemented and 'tried out'. They would then report back on how successful the implementation had been and through discussion, more learning could occur. This is how the integration of these two perspectives, that is, coursework and teaching practice, can assist to arrive at a pedagogy of teacher education which is both empirically based and practically orientated.

7.3.1 Acquisition of skills during teaching practice

Central to teacher education is the development of the teacher's theory about teaching, analysis of the teaching process, and reflection. Field experiences, which are considered to be the most important and powerful component of the training programme (He et al., 2006), provide opportunities for this development. This study examines the organisation of and possible improvement to the teaching-practice component, focusing on the following aspects:

- Duration of teaching practice
- Supervision and mentoring
- Feedback and discussion
- Resource management
- Teachers as researchers
- Student selection processes

7.3.1.1 Duration of teaching practice

Generally, across the four universities, students spend approximately ten weeks per year doing their practice teaching. This study found that all the principals, teachers, lecturers and students felt that the time period spent in schools to develop teaching skills, gain experience of participating in the 'life of the school', and preparing students to manage their own classrooms, was inadequate. In-service teachers felt that the time was too short to orientate and expose students to 'every part of the school, every learning activity, every different task [and]extra-mural activity', as well asthe other administrativeduties that constitute the complex work of a teacher. Furthermore, the study also indicated that students felt too much was expected of them during this period. Besides having to plan lessons, produce resources and develop strategies for their lessons in the classroom, they were also inundated with institution-based assignments that had to be handed in immediately after the practice-teaching sessions.

Darling-Hammond (2006) supports the suggestion of increasing the duration of teaching practice and states that the most powerful teacher-training programmes are those that require longer and more intense sessions of practice teaching. Such programmes could easily require an entire year of student teaching, where great responsibility is placed on supervising teachers or mentors to allow students to apply the theory acquired at universities to practise within the classroom. This students' learning will then be situated in all parts of the school and not only in one classroom. These extended practice-teaching sessions 'afforded additional opportunities for students to raise questions, to conduct inquiries into teaching and learning, and to experiment with various management and instructional strategies' (Prater&Sileo, 2002:325).

7.3.1.2 Supervision and mentoring

He et al. (2006:135) refer to the key players during practice teaching to be the host school, the mentor-teacher and the university supervisor. The relationship between these role-players is inextricably linked and this is portrayed in the diagram below:

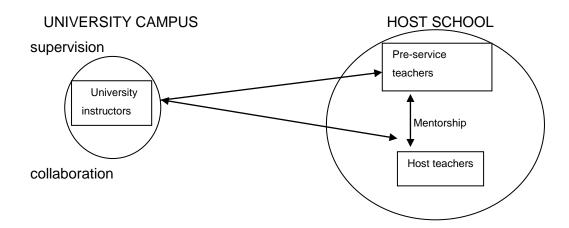


Figure 7.1: Field experience relationship

This study revealed that the component of supervision was in need of re-organisation. The following factors were highlighted as problem areas:

- Students felt that they were disadvantaged because there were no set criteria which all supervisors used to critique them.
- The evaluation process was too subjective.
- Supervisors who had no school teaching experience evaluated them.
- Subject specialists should supervise their own students.
- Supervisors who are teaching methodology should supervise students.
- Feedback and discussion were vital components.

The evidence in the data suggested that all supervisors/lecturers be trained to supervise students. Standardised criteria should be used to eliminate the factors mentioned above, therefore, minimising the inconsistencies currently experienced. Zeichner (2010:6) supports this, stating: 'All university supervisors are to be formally trained for their work and develop standards that define an acceptable mentor training program.' However, He et al. (2006) point out that it is generally difficult for university lecturers to supervise students who are placed in a variety of schools due to time and cost constraints.

In the same way, the study suggests that mentor teachers also require training in order to meet the demands of hosting pre-service teachers in their classrooms and schools. Lecturers, students and in-service teachers felt that developing a good mentoring system would enhance the quality of the teachers going out into the field. The data clearly indicated that most mentor teachers were currently not exposing students to 'best practices' and that many of the schools they were sent to were not well-run schools. The data suggested that many of the host teachers took advantage of the students and they learned nothing about the curriculum, methodology or pedagogy necessary for them to grow and develop within the field. They were made to feel as though they were a burden, and very few of the mentor-teachers showed any trust or faith in the students' abilities.

Kiggundu and Niyamuli (2009:8) suggest that before and during practice teaching sessions, there needs to be 'thorough public relations groundwork undertaken' in order to 'minimise the problems and maintain good relations between student teachers and other role-players'. Universities should also arrange workshops to empower and provide support to mentor-teachers.

In-service teachers also indicated that a strong relationshipshould be developed between universities and schools, with regular collaboration, as contended by Zeichner (2010). He also states that schools and mentor teachers who are prepared to serve as practice-teaching sites should receive some form of remuneration, whether it is in the form of incentives or financial support, for their work. This will encourage them to produce results which will enhance the quality of the teachers produced.

Good mentoring from the university perspective (supervisors) as well as from the school (mentors) is supposed to be dynamic, involving both the personal and psychosocial development. It should promote 'greater collegiality, professionalism and role fulfilment. It should emphasise evaluating beliefs and practices, questioning personal views and theorising more about practice' (Walkington, 2005:56). Ultimately, teaching practice allows students to experience immersion into schools where they *learn about teaching* and they *learn to teach*. As stated by Feiman-Nemser (2010), there are many crucial elements of practice that can only be learned within the context of a classroom and only under the expert guidance of a good mentor. Mentors, therefore, play a critical role in the development of teacher identity and need to continuously provide effective support in order to advance growth and development of pre-service teachers (He et al., 2006:136).

7.3.1.3 Feedback and discussion

Evidence in the data indicates that there was a great need for more organised feedback opportunities, as these would make the teaching-practice sessions more worthwhile. While

students received feedback from mentors throughout the teaching practice, there were not enough opportunities for, or sufficient time set aside, for supervisors to highlight common problem areas and hold discussions where recommendations could be made to students with the aim of improving their practice. The data suggests that more time be afforded after practice-teaching sessions to discuss these general aspects with all students.

Liakopoulou (2012:53) supports this evidence, stating that the feedback received from supervisors is of 'decisive importance' and 'contributes to the development of the reflection skills of teachers'. In order for the feedback to develop into reflection, there should be 'adequate and clearly demarcated time frames set for reflection on their teaching, a sense of security among pre-service teachers and the release of fear of evaluation of their teaching and structured discussion about their teaching'. Lecturers/supervisors should also possess the relevant knowledge to be able to give suitable and constructive feedback that will result in these reflections.

7.3.1.4 Resource management

The data reveals that students were not adequately trained in the use of the latest resources available at most schools. During practice-teaching sessions the use of computers, data projectors, certain software packages, the Internet and other technological tools could not be used by all students as a result of their lack of knowledge and experience. Students indicated that although some universities had all the latest technological tools, there was no-one available to train students to use them. In order to prepare today's students to become tomorrow's teachers, there needs to be an integration of pedagogy with the current and emerging technologies developed for the 21st-century learner. Lock and Redmond (2010) indicate that teacher-training programmes should be guiding pre-service teachers towards developing abilities and strategies, and changing their way of thinking to accommodate the learner of today and tomorrow. The need for this integration of technology in the classroom is vital as we strive to prepare learners to take their place in a modern society that is bothtechnologydriven and knowledge based. Supporting the data are Gill and Dalgarno (2008), who contend that a great challenge faces teacher-training institutions to ensure that all their qualifying teachers have the necessary skills and pedagogical knowledge that will enable them to use technology effectively in a classroom.

7.3.1.5 The teacher as a researcher

Teachers should be life-long learners as indicated by the *Norms and Standards forEducators* (DoE, 2000). The data, however, revealed that students were not making research part of their daily preparation. It was reported that students had 'gaps' in their knowledge and that was mirrored in many other elements of their practice-teaching sessions.

7.3.1.6 Student selection

Another important conclusion that emerged from this study was that more stringent student selection processes need to be put in place. In-service teachers, students and lecturers agreed that for many students entering teacher education faculties, the teaching profession was not their first choice. This meant that the standard of teachers produced was compromised since many of the students were not genuinely interested in teaching. Some only entered the programme because they had received bursaries or because they were the first generation to attend a tertiary educational institution.

Lynd (2005), who contends that although this does not apply to all teachers, there are some who choose teaching as a 'stepping stone' to other jobs which occupy a higher status in academe, or because of the working hours and holidays, or because nothing else isavailable. To combat this, many countries have put in place selection processes to assess the 'potential and demonstrable capability of would-be teachers or newly qualified teachers' (Hobson et al., 2010:8).

7.4 RECOMMENDATIONS

The purpose of this study was to investigate the initial teacher-training programmes in South Africa by examining their strengths and challenges in order to make recommendations thatwould positively influence the current processes, thus promoting a better quality teacher entering the education system. But we need to bear in mind that:

Change is not enough. Change is merely a variation of a situation, repetitive and cyclical in nature, while transformation is an alteration of its essence. Transformation assumes the need for a fundamental shift to another level of thought and action, a change in consciousness.

(Neal &Conhaim, 2000:64)

Transformation is necessary if we want to make sure that our future members of the teaching profession are ready to lead the nation in the 21st century. If not, we need to understand that greater division and exclusions within schools based on race, ethnicity and socio-economic status will be created. The nation will not have acquired the skills to thrive in the digital, knowledge-based and multi-cultural society in which we find ourselves. In order to effect transformation, we need to be open to the suggestions which could be used to overcome the challenges which face pre-service teachers daily.

Recommendations made in this study are:

- 7.4.1 The development of recruitment and selection policies:
 - 7.4.1.1 Governmental policies
 - 7.4.1.2 Recruitment and selection policies
- 7.4.2 Institutional change to reflect the real world of teaching and learning:
 - 7.4.2.1 Adapting delivery approaches
 - 7.4.2.2 Bridgingthetheory practice gap
- 7.4.2.3 Teacher educator practices
- 7.4.3 Re-organisation of teaching practice:
 - 7.4.3.1 Learnership/apprenticeship
 - 7.4.3.2 Placement in 'best practice' schools
 - 7.4.3.3 Supervisor and mentorship programme

7.4.1 The development of recruitment and selection policies

Research has proved that worldwide, although each country is unique in terms of characteristics, 'most countries are faced with the challenge of recruiting, training and retaining sufficient numbers of teachers to staff the growing number of institutions, while at the same time ensuring a high level of quality at a reasonable cost' (Lynd, 2005:7).

7.4.1.1 Governmental policies

The teaching profession, therefore, needs to be made more enticing for students who possess the passion to teach. A proposal should be made by teacher-education institutions to the educational sector within governmental structures to make the teaching profession

more appealing to possible recruits, focusingon better remuneration, improved working conditions and the availability of bursaries for all recruits.

Currently, pending retirements, growing enrolments at schools and initiatives to reform education have resulted in a greater demand for quality teachers to enter the profession. Over the years the supply of teachers has declined, which has resulted in many teaching positions not being filled or filled with teachers who are not adequately qualified. The successful recruitment into teacher-training programmes depends on the attractiveness of the profession, and in order to attract the best recruits, the following recommendations are suggested:

- Salaries offered should be competitive with other markets/occupations within the country and with teaching salaries in other countries. According to the OECD (2008: 301), there is evidence of campaigns to entice South African teachers to take up teaching jobs in other English-speaking countries where more favourable working conditions and better salaries are on offer.
- Improving working conditions by providing adequate support for teachers, employing more teachers to decrease learner-teacher ratio, providing incentives for best-practice schools and teachersandalleviatingteachers' administrative duties or employing more administrators at schools to assist and support teachers. During teaching practice, students are exposed to the realities and complexities experienced in the real classroom, and for many of the candidates this experience becomes the deciding factor, whether the correct career choice was made or not (Kiggundu&Nayimuli, 2009).Much of this results from the high administrative demands made on teachers and renders the working conditions 'too challenging' for candidates.
- For many candidates the financial demands of studying to become a teacher are too great and most cannot afford it. This has proved to be a great deterrent. The education department or the universities should make bursaries available to all candidates. These candidates should now work towards achieving certain quality goals as set out by departmental policy, and this should ensure that quality teachers are ready to enter the profession. In order to attract the best candidates into the profession, the necessary support should be provided to allow them to do so without having to face financial hardships in the process. These candidates should be

encouraged to focus on excelling, rather than on themeans of earning money to stay in the programme (American Federation of Teachers, 2012).

7.4.1.2 Recruitment and selection policies

The *Norms and Standards for Teachers in South Africa* (Appendix 8) sets out the fundamental characteristics teachers should have in order to ensure quality education. These standards should be taken into consideration when recruitment is done to ensure that the best and most suitable candidates are selected to enter the programme.

Policies which make explicit specific selection criteria should be used to determine which applicants are suitable. Candidates should be screened according to the following evaluative criteria. They need to have: high literacy and numeracy proficiency, good interpersonal communication skills, an eagerness to learn, and the motivation to teach. The following tools could be used to determine the above: evaluation of credentials/certification/qualifications (level of beginner pre-service teachers' knowledge of subjects); interview guides which could determine indicators of teaching ability; language proficiency tests; and other entry examinations (American Federation of Teachers, 2012).

Employing rigorous and effective screening of candidates entering the initial training phase will potentially ensure recruitment of the most effective teachers. This will also guarantee a large and strong pool of candidates feeding into the initial teaching-training programmes. Barber and Mourshed (2007:16) note that 'the top performing systems we studied recruit their teachers from the top third of each cohort graduating from their school systems'. According to them, the most important measures top school systems have put in place areeffective processes for selecting and recruiting teachers for initial teacher training. This feature, as indicated by Barber and Mourshed (2007), has frequently been found to be absent in lower-performing systems. If we do not control entry into the initial teacher-trainingprogrammes, we would be compromising the quality of education in our country. Just as in the medical and law fields, 'all prospective teachers should meet a universal and rigorous bar that gauges mastery of subject matter knowledge and demonstrates competency in how to teach it' (American Federation of Teachers, 2012:1).

7.4.2 Institutional change to reflect the real world of teaching and learning

Current teacher education policies do not auger well for preparing globally competent students and teachers. We need to emphasise the importance of global education, which

should result in policy change at all levels. In order to 'improve the quality of education for all students, teacher-training institutions need to be redefined and restructured to reflect the real world of teaching and learning' (Futrell, 2010:436), because 'the quality of an education system cannot exceed the quality of its teachers' (Barber & Mourshed, 2007).

In order to enhance the quality of teaching, we need to embark upon institutional initiatives focused on instructional improvement. The development of an organisational framework, within which all the components in the preparation of teachers are explored, leading to a core of instructional practices that will foster the necessary kinds of student engagement, is of the utmost importance. Windschitlet al.(2010:2) suggests 'high leverage practices' which aim to produce a 'beginner's repertoire which is grounded in:

- · important learning goals for all learners;
- literature on how students learn; and
- emerging longitudinal researchers about how novices learn to teach.

This needs to be part of a larger agenda, through which we continuously aim at moving towards equitable and effective practices by developing 'anevidence-informed system of learning opportunities, tools and formative assessments tailored to the needs of teaching novices'. Futrell (2010) supports this idea and contends that unless we are willing to make the necessary changes inteacher-education programmes, we cannot prepare our graduates to become change agents within schools, districts and ultimately, the nation. Institutional initiatives should comprise, among others, enhancing or including the following practices in order to prepare students for teaching in the 21stcentury:

7.4.2.1 Adapting delivery approaches

In the hope of transforming our nation into one that will consider the world from a more critical stance and developing a nation that is able to think for themselves and effect change, we need to move away from the traditional transmission model of instruction and programme structure, that is, move away from a model that physically and pedagogically separates the learning of 'what' from the learning of 'how'. This will, indeed, create environments that will promote greater collaboration, enhance communication and co-ordination, and encourage all students to better understand their role in bringing about meaningful change in the education system.

7.4.2.2 Bridging the theory – practice gap

If, however, we continue to persist in the use of traditional models in teacher-educationprogrammes, in which environments of non-collaboration with limited communication and co-ordination are promoted, we will be perpetuating the system where there will continuously be a separation between theory and practice, a distinction between faculty professors and field practitioners, and estrangement of faculty members from one another (Futrell, 2010). Curriculum development in teacher-training programmes should reflect the union of theory and practice. Aligning teacher-preparation programmes with the realities experienced in a classroom will result in a tighter coherence in the system.

This lack of alignment will further promote the fragmentation within the teacher-training-curriculum which Darling-Hammond (2006) refers in her research. It will also perpetuate the theory – practice divide, furthering the gap between mastery of content and application. This cross-pollination between universities (courses) and schools (classroom practice) becomes invaluable in bridging the gap between theory and practice, knowledge and skills, reflection and action (American Federation of Teachers, 2012).

There also needs to be a greater focus on the translation of learning theories into simple practical language. Currently, theoretical concepts are highly abstract and this makes it difficult for students to see the value of the theories and how they can be translated into valuable concepts to be used at classroom level. Deconstructing these theories to make them more accessible to students and help them understand their true value will be a step in the right direction.

7.4.2.3 Teacher educator practices

High quality teacher-preparation programmes depend on high-quality teacher educators. Teacher educators play a key role in continually seeking to encourage the formation of a teacher identity through the facilitation of activities that will empower them to build on and challenge their existing experiences and beliefs. If students are not afforded the opportunity to challenge their own personal philosophies and existing practices, they will merely perpetuate the behaviour and beliefs of the teacher educators they have been exposed to. This study recommends that processes be put in place to ensure that teacher educators are creating supportive learning environments in which pre-service teachers can develop, grow and build on their existing knowledge. A suggestion is made to develop an individual teacher

educator plan (ITEP) for each teacher educator that focuses on maintenance and further professional development.

The ITEP should consist of the teacher educator profile,indicating qualifications, experience and strengths, as well as areas that need development. It should also consist of specific criteria set out to endorse higher quality education. The ITEP should be seen as a developmental tool and should serve to monitor progress and ensure the development and growth of the individual. Among others, the following aspects can be monitored via the ITEP:

- Qualifications: The minimum qualification for teacher educators should be a master's degree. Teacher educators should be more qualified than the students they teach and be adequately equipped in terms of professional, pedagogical and content knowledge.
- Knowledge delivery: Teacher educators should possess a vast knowledge of various teaching and learning theories and should have acquired a large repertoire of teaching strategies which should be used for the purpose of teaching their students and also for the purpose of modelling best practice to students. Monitoring tools should be put in place to ensure that all teacher educators have, or are in the processof, developing this aspect. For the educators who are not equipped, a means of equipping themselves should be sought, for example, through workshops, conferences, etc.
- School curriculum development: Teacher educators have no or little practical experience of implementing new policies and have little sense of ownership of them. This places them at a significant disadvantage if they are to be the exemplars, models or proponents of the new policies to student teachers. All teacher educators should already have received training in the adapted school curriculum, for example, NCS: CAPS. Managing the curriculum and understanding assessment procedures are necessary for all teacher educators because they are ultimately part of the training which should prepare students to teach within the existing curriculum. The ITEP should monitor the knowledge acquisition in curriculum development of each teacher educator.
- Teaching experience: Teaching experience should initially form part of the selection criteria for teacher educators. Classrooms and education are constantly evolving and

unless we keep abreast of these changes, we shall not be able to provide the appropriate support and guidance to students. It is suggested that teacher educators spend at least 2 – 4 weeks per annum in classrooms and schools. During this time they should be observing the management and administration of the school and the classroom, since these are constantly changing. Aspects to focus on include, how the curriculum is implemented; the implementation of different teaching strategies; the development of assessment strategies and tools; criteria for marking, feedback and intervention; integration and differentiation; dealing with diversity; discipline; and the daily challenges teachers of today face; as well as their general administrative duties. Teacher educators will then have a general idea of what newly qualified teachersneed to be prepared for, and this will inform their own planning in the teaching of teachers. This process should be monitored in the ITEP.

- Linking theory to practice: Teacher educators should be aware that the lack of communication between universities and schools has broadenedthe gap between theory and practice. 'One of the perennial dilemmas of teacher education', according to Darling-Hammond (2006:4), is 'how to integrate theoretically based knowledge that has traditionally been taught in university classrooms with the experienced based knowledge that has traditionally been located in the practice of teachers and the realities of classrooms and schools'. The teacher educator is also responsible for working towards narrowing this gap. With their school experience being 'topped up' each year through observation in schools (see teaching experience), it will be easier to make the necessary links in order to narrow this gap. Since this seems to be one of the more significant factors which emerged from the study, it is suggested that the ITEP promotes critical networking and brainstorming with peers to develop different strategies that could be implemented to link theory to practice. Mutemeri and Chetty (2011:508) refer to the creation of 'third spaces' within teacher-education programmes which should aim to 'bring together school mentors, teacher educators and academic knowledge in new ways to enhance student learning' in this regard.
- Developing teaching skills: Part of the teacher educators' work is to create multiple
 opportunities for students to learn 'how' to teach. Teaching the course content is one
 aspect, applying it is the other side of the same coin. In order to effect this, teacher
 educators need to create opportunities for students which include, guided
 observations, demonstrations, simulations, video recordings of exemplary practice,
 and interactions with learners with the actual use of teaching resources. It is also

necessary, where possible, to provide opportunities to interact with exemplary teachers. These should occur, on-campus, before practice-teaching sessions and throughout the year to ensure that students are more confident to apply the knowledge acquired on-campus during practice-teaching sessions. Feedback sessions to evaluate and reflect on their applications should follow.

• Teaching with technology: To meet the demands of the 21st century, teacher educators need to enhance their teaching with the use of ICT, e-learning and assessment technologies. The techniques in the use of these technologies must be modelled but also taught to students. Training in the understanding of the potential of ICT to enhance teaching and learning, and the appropriate use of ICT to address the different needs of learners in a classroom, are essential. Teacher educators need to seek knowledge in the use of ICT in teaching via training sessions or workshops. If this is an individual teacher educator need, then it should be indicated in the ITEP and monitored. This is supported by Futrell (2010), who contends that teacher educators need to be ready to enter and work in this digital age where they are exposed to virtual learning environments, but they should also be able to equip their students to work within these settings. State-of-the-art technologies should be employed by all preparation programmes to promote enhanced productivity. Technology is an important tool which should be used to share best practices across partnerships and to facilitate on-going professional learning.

Developing students into researchers:

Teacher educators need to be researchers. Proof of research carried out should be indicated in the ITEP. As researchers, teacher educators will understand the significance and importance of research, and this will be reflected in their planning of projects or assessments. If students are taught to appreciate the potential and value of research in education, they will inevitably become life-long learners. Teacher educators have the responsibility of modelling the value of research in teaching and learning, which will result in the promotion of reflective practitioners. We need to bear in mind that as a graduate profession, specialist knowledge and critical practice need to be underpinned by both theory and research (Department of Basic Education, 2011).

The ITEP is a plan intended to cultivate among teacher educators the desire to meet the needs of all students in this globalised society. Monitoring teacher educators through the

ITEP will ensure the maintenance of a high standard of teaching, promoting the development of a higher-quality teacher. 'Those who lead the next generation of teachers throughout their preparation must themselves be effective practitioners, skilled in differentiating instruction, proficient in using assessment to monitor learning and provide feedback, persistent searchers for data to guide and adjust practice, and exhibitors of the skills of quality educators' (NCATE, 2010:6).

7.4.3 Re-organisation of teaching practice

Teacher-training institutions need to challenge traditional programmes and work towards a tighter coherence between coursework and practical experience. In order to effectthis, teacher education faculties need to work closely with school districts to restructure teaching practice with the aim of creating the best and most fruitful experiences for students. In the restructuring of teaching practice, the following components need to be looked at: placement in best-practice schools, duration of the teaching practice sessions, and the development of supervision and mentorship programmes (Darling-Hammond, 2006).

7.4.3.1 Learnership/Apprenticeship

The gap that exists between the preparation and practice of teaching leads to the belief that learning to teach can only occur away from the university's theoretical approach. This approach has led teacher educators to believe that their role is to disseminate content and students to believe that they can only acquire teaching skills through 'on the job' experience. The partnership between the two is fundamental, in that the university is supposed to provide the development of teaching skills and schools are supposed to provide an opportunity for teachers to implement and reflect on these skills.

Lynd (2005), therefore, states that the training of teachers is a process that should take place in a particular context and that the most effective form of professional development is that which is based in schools and is related to the activities of teachers and learners. The most successful teacher development opportunities, in addition to course content, are the 'on-the-job learning' experiences. NCATE (2010) calls for clinical internships to take place in school settings that are structured and staffed to support learning and student achievement.

Suggestions that the duration of the teaching practice be extended, to allow for the content and the theory to be woven together and for a more holistic view of the teaching task, will be presented to all stakeholders involved. The demands placed on teacher educators to

complete the coursework with students, during the existing four years, are high; however, it is hoped that the introduction of the ITEP will make the delivery of the coursework less stressful and demanding for teacher educators. In addition to this, the introduction of more stringent selection processes for students will ease the burden as well, since students who are then recruited would be more receptive, ready and more enthusiastic about their work.

Extending the duration of their teaching practice will give students the opportunity to experience teaching along its full continuum, following the learners' cognitive, social and developmental needs over this extended period of time. Critical factors pertaining to the development of teacher skills, which cannot be acquired during practice teaching of a few weeks at a time, include: the observation of how learners learn and how to satisfy their needs by understanding the different learning styles; developing and testing their own pedagogical skills, improving weaknesses and further developing strengths; learning to use evidence critically to make informed professional judgements and decisions; applying knowledge acquired during coursework; and developing themselves professionally and pedagogically.

This extended practice-teaching period will require mentorship programmes for the development of supervision skills for both host teachers as well as teacher educators, and this should enhance the quality of the learning provided within the host schools. Considering all these factors, I believe that an apprenticeship of one of the four years of the degree would auger well for the kind of development needed, where students are placed in 'best-practice' schools, mentored effectively and supervised regularly. Best-practice schools and mentor teachers should be remunerated for the role they play in the development of teachers and should, therefore, also be held accountable for their input.

7.4.3.2 Placement in 'best-practice' schools

The quality of the on-site experience for students is dependent on the schools in which they are placed. Links between university faculties and schools are generally not well structured and universities depend on the goodwill of schools to provide on-site experience for students. It is often just by chance that students find themselves in favourable circumstances. According to Mutemeri and Chetty (2011:514), the role of schools hasbeen 'taken for granted', without the creation of clearly defined and specific links developed between the school and teacher education with regard to teaching practice. It is suggested that hybrid professional practice schools are created, which are specifically structured and staffed for the purpose of student learning and practice teaching, much the same as teaching hospitals in

the medical profession. This will secure teacher learning across the full continuum, ensuring the development of more effective teachers.

7.4.3.3 Supervisor and mentorship programme

Supervising teachers see their role predominantly as one of giving advice about the practical concerns of classroom routines and organisation, rather than developing the student teachers' reflective pedagogy. Currently, the supervision of teaching practice in schools is typically assigned to a teacher as extra work. The teacher oversees interns and other prospective teachers with little or no extra pay, training or support, and limited time allotted in the schedule (NCATE, 2010:20).

There is, therefore, a need to establish new models of support during clinical preparation from both university supervisors and classroom mentors. Schools and districts need to develop a new instructional model that provides mentors with the much-needed training and support. Theuniversity education faculty must consist of experienced and highly competent teachers.

Qualified mentors/supervisors should know how adults learn, know mentoring strategies and how to use them, have a portfolio of assessment approaches, have a complement of personal skills for building trust, and have good rapport and communication with candidates. Training needs to be provided to render mentors qualified to supervise and develop students into effective teachers. These teachers need to be identified as teachers who possess a broad knowledge base, a varied range of effective teaching practices, and the ability to integrate the two to support professional decision-making. They must challenge and change environments, learn to use multiple assessment processes to advance learning, and inform their practice with data to assist and evaluate their students' progress. Mentors/supervisors need to be accountable for their candidates' performance and student outcomes, and should be rewarded for their services in this crucial role.

This training should be ongoing in order to constantly create and replenish the pool of expert teachers who have been identified and trained as mentors and supervisors. Universities do have the resources to reward schools for assistance given (OECD, 2008:308). These resources should be used to remunerate mentor teachersand the schools identified as professional practice sites.

7.5 FUTURE RESEARCH

7.5.1 Curriculum change

Rapid and constant change is the hallmark of education, and higher education, especially teacher education faculties, hasto keep pace in the interests of a modern and progressive society. Further research in the development of new policies regarding the adaptation of the curriculum in teacher-training programmes is needed. It is necessary to revisit the everchanging needs of schools, in-service teachers and learners, and adjust the curriculum to meet these new challenges.

Future research should explore ways of harmonising university curricula with school curricula and focus on the inclusion of the following features: the inclusion of ICT development and training; the development of research skills; and the management of diversity within educational settings, as these are key issues which should be brought to the fore and are particularly relevant in preparing students to teach in a globalised society.

7.5.2 Recruitment and selection criteria

Further research into the development of criteria for recruitment and selection for entry into teacher-education programmes is of significant importance. According to the American Federation of Teachers(2012:30), 'entry standards should be aimed at attracting academically capable students with authentic commitments to work with children' and to ensure that quality is enhanced. A policy outlining the selection criteria should be developed to ensure that students have the necessary knowledge and disposition to acquire the skills needed to become effective teachers. These criteria should include:

- Student grade average (matriculation results): According to Casey and Childs (2007), 'it is generally believed that to measure academic ability is thought to predict success in the instructional parts of the programmes'. Yet, there is research which shows that the link between the student grade average and performance inteacher-education programmesis quite weak (Byrnes et al., 2000).
- Experience in the classroom: During their final year at school, students would be expected to spend some time in a classroom to familiarise themselves with what the job entails. This can form part of the 'job-shadowing' programmeat secondary

schools.

- Language proficiency: Written application where students are expected to complete a profile consisting of questions related to their interest in teaching. According to Caskey et al. (2001), these profiles can provide information which could reveal the following: motivation related to learner needs, as opposed to self-interest; congruence with the philosophy and mission of teacher-education programmes; a vision of need or quality in schools; and an ability to express themselves in a compelling manner, in writing.
- Interview process: The interview should be designed to show whether the student possesses the personal and professional strengths necessary for the job of teaching. The essential qualities needed are: a well-developed desire to understand and to work with children and young people; an appreciation of the paramount importance to individuals and society of the role of education; and flexibility of mind, enabling one to adapt as education evolves.

(Open University, 2012).

Interviews, however, can become a time-consuming and tedious process for teacher-training institutions as well as for applicants, and it is, therefore, suggested that interviews be conducted only with applicants who have fulfilled all other criteria. Additional criteria could be considered, for example, letters of reference and standardised tests.

7.5.3 Developing teacher education faculty staff

Ongoing professional development for all teacher educators is necessary. A programme needs to be developed which should address:

- the development of teaching and research skills;
- training of teacher educators as supervisors; and
- training in the acquisition of ICT skills.

7.6 SUMMARY

The quality of teacher-preparation programmes has been extensively debated over the years and although some change has been effected, there is still a call for reform in order to keep pace with the changing contexts in education.

We must do away with the common rite of passage, whereby newly minted teachers are tossed the keys to their classrooms, expected to figure things out, and left to see if they [and their students] sink or swim. Such a haphazardapproach to the complex and crucial enterprise of educating children is wholly inadequate, unfair to both students and teachers, who want and need to be well-prepared to teach from their first day on the job.

(American Federation of Teachers, 2012:1)

Reform can only come about if there is close collaboration among all stakeholders, with theclear aim of aligningthe preparation programmes with the needs of contemporary schools and those of pre-service teachers. This research project has worked towards achieving this aim, with a vision to enhance and then maintain quality teacher education. It also reflects the features that would render pre-service teachers adequately prepared to enter the world of teaching.

The conclusions that were drawn from this chapter focused on the challenges facingteacherpreparation programmes and addressed the following components:

- The quality of the delivery of professional knowledge in order to meet students' needs.
- The acquisition of quality teaching skills.
- The readiness of pre-service teachers to enter the teaching field.

It was concluded that intervention in all of the components was required. A more critical pedagogical approach needs to be embraced in order to 'incorporate student experiences as part of the daily commitment to pedagogy' (Hao, 2011:282). A movement away from the traditional modes of teaching is required, since students inevitably emulate their teachers. This limits their understanding of pedagogy and their use of various teaching strategies, which does not augur well for the teaching contexts we experience today. Consideration should be given to the training of teacher educators to develop professionally and pedagogically in order to serve as adequate role models to students. The use of research and ICT skills adds value to professional development. Korthagen et al. (2005) contend that when teacher educatorsmodel good practice, students are able to translate that into their own practice, improving the quality of their teaching. This is one aspect which will ensure a positive influence on students' conceptions of teaching as indicated in the model of Cheng et al. (2010:93) below, simultaneously satisfying their needs to a large degree.

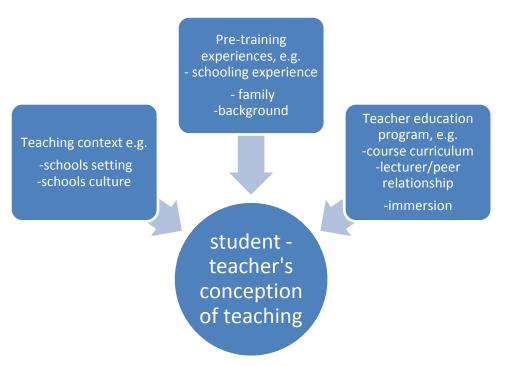


Figure 7.2: Different sources of influence on a student teacher's conception of teaching

Much of the research deems experience in a real classroom environment as one of the critical factors in teacher preparation. The study was designed to examine the concerns, anxieties and challenges that pre-service teachers experience on their journey to becoming competent teachers. This chapter concluded that too little emphasis was placed on the development of on-campus teaching skills. Too often this was left for acquisition duringteaching-practice sessions only.

This chapter also points towards a need to improve the organisation of teaching practice. The schools chosen as sites for teaching practice need to satisfy very specific criteria to ensure that students gain the maximum experience during their time there. They need to be well-run schools thatare able to expose students to a holistic view of what the expectations of teachers are. Teacher educators and teachers chosen as mentors need to be specially trained to manage this task. Mentoring is defined as a relationship between an expert and a protégé where the expert guides and assists the protégé in the development of certain necessary skills. Unless this is instituted, the teaching practice becomes a practice of trial and error, leaving the training of pre-service teachers to chance.

Finally, this chapter also recommends well-formulated policies that will promote the development of collaborative partnerships that will augment the development of high-quality, professional teachers ready to enter the world of teaching in the 21st century.

REFERENCES

Adams, D. 1993. *Defining educational quality*. Arlington, VA: Institute for International Research; University of Pittsburgh; USAID. Improving Educational Quality Project #1.

Airasian, P.W. & Russell, M.K. 2008. *Classroom assessment: concepts and applications*. 6th ed.Boston, MA: McGraw-Hill Higher Education.

Aleccia, V.2011. Walking our talk: the imperative of teacher educator modeling. *The Clearing House*, 84(3):87-90.

Allsopp, D.H., DeMarie, D., Alvarez-McHatton, P. &Doone, E. 2006. *Bridging the gap between theory and practice: connecting courses with field experiences. Teacher Education Quarterly*, 33(1):19-35, Winter.

American Federation of Teachers (AFT). 2012. Raising the bar: aligning and elevating teacher preparation and the teaching profession. http://www.aft.org/pdfs/highered/raisingthebar2012.pdf [8 April 2013].

Anderson, J.R., Reder, L.M. & Simon, H.A. 1996. Situated learning and education. *Educational Researcher*, 25(4):5-11, May.

Arcaro, J.S. 1995. *Quality in education: an implementation handbook.* Delray Beach, FL: St LuciePress.

Arends, F.&Phurutse, M.C. 2009. *Beginner teachers in South Africa: school readiness, knowledge and skills*. Cape Town: HSRC Press.

Badat, S. 2010. The challenges of transformation in higher education and training institutions in South Africa. Johannesburg: Development Bank of Southern Africa.

Ball, D.L. & Forzani, F.M. 2009. The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, 60(5):497-511.

Barber, M. &Mourshed, M. 2007. How the world's best-performing school systems came out on top (The McKinsey Report). New York: McKinsey &Company. http://www.mckinsey.com/clientservice/ socialsector/resources/pdf/Worlds_School_Systems_Final.pdf [9 June 2009].

Barlin, D. 2010. Better mentoring, better teachers: three factors that help ensure successful programs. *Education Week*, March 23.http://www.edweek.org/archive/ew/articles/2010/03/23/27/barlin.html [23 September 2011].

Barr, J. & Tagg, R.B. 1995. From teaching to learning: a new paradigm for undergraduateeducation. *Change*, 27(6):13-25, November/December.

Berliner, D.C. 2000. A personal response to those who bash teacher education. *Journal of Teacher Education*, 51(5):358-371.

Berry, A. 2004. Self-study in teaching about teaching. In Loughran, J.J., Hamilton, M.L., LaBoskey, V.K. & Russell, T. (eds). *International handbook of self-study of teaching andteacher education practices*. Dordrecht: Kluwer Academic: 1295-1332.

Berry, A. 2009. Professional self-understanding as expertise in teaching aboutteaching. *Teachers and Teaching: Theory and Practice*, 15(2):305-318, April.

Boe, E.E., Shin, S. & Cook, L.H.2007. Does teacher preparation matter for beginning teachers in either special or general education? *Journal of Special Education*, 4(3):158-170.

Bork, A. 2003. The dilemma of teacher training. *ContemporaryIssuesinTechnology* & *Teacher Education*, 3(2):172-189.

Bourgonje, P. & Tromp, R. 2011. *Quality educators: an international study ofteacher competences and standards.* Brussels:OxflamNovib; Education International.

Boyer, E.L. 1990. *Scholarship reconsidered: priorities of the professoriate*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Bruner, J. 1990. Acts of meaning. Cambridge, MA: Harvard University Press.

Byrnes, D. A., Kiger, G.&Shechtman, Z. 2000. Evaluating the use of group interviews to select students into teacher-education programs. *Paper presented at the Annual Meetingof the American Educational Research Association: Creating Knowledge in the 21*st Century: *Insights from Multiple Perspectives*, New Orleans, LA, 24 – 28 April 2000.

Cambourne, B. 2002. Holistic, integrated approaches to reading and language arts instruction: the constructivist framework of an instructional theory. In Farstrup, A.E. & Samuels, S.J. (eds). *What research has to say about reading instruction*.3rd ed.Newark, DE: International ReadingAssociation: 5-47.

Carlson, S. 2002. The missing link in educational technology: trained teachers. *Techknowlogia*,

October/December.http://www.techknowlogia.org/TKL_Articles/PDF/435.pdf [12 March 2010].

Carr, D. & Skinner, D. 2009. The cultural roots of professional wisdom: towards a broader view of teacher expertise. *Educational Philosophy and Theory*, 41(2):141-154, April.

Carr, W. &Kemmis, S. 1983. *Becoming critical: knowing through action research*. Geelong, Victoria: DeakinUniversity Press.

Casey, C.E. & Childs, R.A. 2007. Teacher education program admission criteria and what beginning teachers need to know to be successful teachers. *Canadian Journal of Educational Administration and Policy*, 67:1-24, January 14.

Caskey, M.M., Peterson, K.D. & Temple, J.B. 2001. Complex admission selection procedures for a graduate teacher education pre-service program. *Teacher Education Quarterly*, 37:7-21, Fall.

Cavanagh, M. & Prescott, A. 2007.Professional experience in learning to teach secondary mathematics: incorporating pre-service teachers into a community of practice. In Watson, J. &Beswick, K. (eds). *Mathematics: Essential Research, Essential Practice: Proceedings of the 30th Annual Conference of the Mathematics Education Research Group of Australasia,* Hobart, Tasmania, Australia, 2 – 6 July 2007. Adelaide: MERGA, vol. 1:182-191.

Celik, S. 2011. Characteristics and competencies for teacher educators: addressing the need for improved professional standards in Turkey. *Australian Journal of Teacher Education*, 36(4):73-87.

Chance, P. 2008. The teacher's craft: the 10 essential skills of effective teaching.Long Grove, IL: Waveland Press.

Cheng, M.M.H., Cheng, Y.N.A. & Tang, Y.F.S. 2010. Closing the gap between the theory and practice of teaching: implications for teacher education programmes in Hong Kong. *Journal of Education for Teaching: International Research and Pedagogy*, 36(1):91-104, February.

Chetty, R.P. 2000. Critical educational studies: ashift from Freirean critical consciousness to Foucauldian discourse formation in the teaching of South African literature in higher education institutions. *South African Journal of Higher Education*, 14(1):13-19.

Chetty, R. &Lubben, F. 2010. The scholarship of research in teacher education in a higher education institution in transition: issues of identity. *Teaching andTeacher Education*,26(4):813-820.

Christie, P. 2008. *Opening the doors of learning: changing schools in South Africa.* Johannesburg: Heinemann.

Cochran-Smith, M. 2001. Constructing outcomes in teacher education: policy, practice and pitfalls. *Education Policy Analysis Archives*, 9(11):1-56, April.

Cochran-Smith, M. 2004. Editorial: The problem of teacher education. *Journal of Teacher Education*, 55(4):295-299, September/October.

Cogill, J. 2008. Primary teachers' interactive whiteboard practice across one year: changes in pedagogy and influencing factors. Unpublished EdD thesis, King's College London.

Cohen, L., Manion, L. & Morrison, K. 2007. Research methods in education. 6th ed. London: Routledge.

Conrad, F.G. &Schrober, M. F. 2010. New frontiers in standardized survey interviewing. In Hesse-Biber, S.N.&Leavy, P.(eds). *Handbook of emergent methods*. New York: Guilford Press: 173-188.

Cornbleth, C. 2008. *Diversity and the new teacher: learningfrom experience in urban schools.* New York: Teachers College Press.

Costa, M.J.&Rangachari, P.K.2009. The power of interactive teaching. *Biochemistry and Molecular Biology Education*, 37(2):74-76, March/April.

Crandall, J. 2000. Language teacher education. *Annual Review of Applied Linguistics*, 20:34-55.

Darling-Hammond, L. 1996. The quiet revolution: rethinking teacher development. *Educational Leadership*, 53(6):4-10, March.

Darling-Hammond, L. 2000. Teacher quality and student achievement: a review of state policy evidence. *Education Policy Analysis Archives*, 8(1):1-44.

Darling-Hammond, L. 2006.Constructing 21st-century teacher education. *Journal of Teacher Education*, 57(3):300-314, May/June.

Darling-Hammond, L. &Bransford, J. (eds). 2005. *Preparing teachers for achanging world:* what teachers should learn and be able to do. San Francisco, CA: Jossey-Bass.

Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F. & Shulman, L. 2005. The design of teacher education programs. In Darling-Hammond, L. & Bransford, J. (eds). *Preparing teachers for a changing world: what teachers should learn and be ableto do.* San Francisco, CA: Jossey-Bass: 390-441.

Degener, S.C. 2001. Making sense of critical pedagogy in adult literacy education. In *Review of adult learning and literacy*, Vol. 2, Chapter Two.Boston, MA: National Center for the Study of Adult Learning and Literacy.http://www.ncsall.net/index.html@id=555.html [12 June 2011].

Desforges, C. 1995. How does experience affect theoretical knowledge for teaching? *Learning and Instruction*, 5:385-400.

Devlin, M. &Samarawickrema, G. 2010. The criteria of effective teaching in a changing higher education context. *Higher Education Research & Development*, 29(2):111-124.

Dewey, J. 1938. Experience and education. New York: Collier.

DfEsee Great Britain. Department for Education.

Dickson, B. 2007. Defining and interpreting professional knowledge in an age of performativity: aScottish case-study. *Australian Journal of Teacher Education*, 32(4):1-15.

Diez, M.E. 2010. It is complicated:unpacking the flow of teacher education's impact on student learning. *Journal of Teacher Education*, 61(5):441-450, November/December.

DoE see South Africa. Department of Education.

Edwards, J. 2000. The research and realities of teaching and learning in the middle years of schooling. Keynote address presented at the Middle Years of Schooling Conference, Melbourne, Australia, 14 – 16 August 2000.

Ellis, V. 2007. Taking subject knowledge seriously: from professional knowledgerecipes to complex conceptualizations of teacher development. *The Curriculum Journal*, 18(4):447-462, December.

Ellis, V. 2009. Subject knowledge and teacher education: the development of beginning teachers' thinking. New York: Continuum International.

European Commission. Directorate-General for Education and Culture. 2010. Education and Training 2020 programme. Cluster 'Teachers and Trainers'. Report of a peer learning activity in Reykjavik, Iceland 21 – 24 June 2010. 'The profession of teacher educator in Europe'.

Falk, B. &Blumenreich, M. 2005. *The power of questions: a guide to teacher and studentresearch.* Portsmouth, NH: Heinemann.

Feiman-Nemser, S. 2001. From preparation to practice: designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6):1013-1055, December.

Feiman-Nemser, S. 2010. The case for strong clinical teacher education. National Press Club press conference: 'Strong clinical teacher preparation: a must for long-term school improvement efforts'.

Ferguson, P. 2011. Student perceptions of quality feedback in teacher education. *Assessment&Evaluation in Higher Education*, 36(1):51-62, January.

Field, K. 2011. Education blog: The importance of research for education's future. *Express & Star*, June 14.http://www.expressandstar.com/education.2011/06/14/the-importance-of-research-for-education's-future [18 Dec 2012].

Frazer, L. &Lawley, M. 2000. *Questionnaire design and administration: a practical guide.* Brisbane: Wiley.

Freire, P. 1970. Pedagogy of the oppressed. New York: Continuum.

Freire, P. 1972. *Pedagogy of the oppressed*. Harmondsworth: Penguin.

Freire, P. 1973. Education for critical consciousness. New York: Seabury Press.

Freire, P. 1985. *The politics of education: culture, power and liberation*, translated by DonaldoMacedo. South Hadley, MA: Bergin & Garvey.

Freire, P. 1993. Pedagogy of the oppressed. New rev. 20th anniversary ed. New York: Continuum.

Freire, P. 1994. *Pedagogy of hope: relivingPedagogy of the oppressed.* New York: Continuum.

Freire, P. 1998. *Teachers as cultural workers: letters to those who dare teach.* Boulder, CO: Westview Press.

Freire, P. &Macedo, D. 1987. *Literacy: reading the word & the world.* Westport, CT: Bergin & Garvey.

Fullan, M. 1993. Why teachers must become change agents. *Educational Leadership*, 50(6):12-17, March.

Furlong, J., Barton, L., Miles, S., Whiting, C. &Whitty, G. 2000. *Teacher education in transition: re-forming teaching professionalism*. Buckingham: Open University Press.

Futrell, M. 2010. Transforming teacher education to reform America's P-20 education system. *Journal of Teacher Education*, 61(5):432-440, Novermber/December.

Gentry, R. 2012. Clinical experiences for teacher candidates: taking preparation beyond the four walls. *Research in Higher Education Journal*, 15(1):1-13, March.

Ghambhir, M., Broad, K., Evans, M. & Gaskell, J. 2008. *Characterizing initial teacher education in Canada: themes and issues*. Toronto, ON: International Alliance of Leading Education Institutes.

Gill, L. &Dalgarno, B. 2008.Influences on pre-service teachers' preparedness to useICTs in the classroom.In *Hello! Where are you in the landscape of educational technology? Proceedings of the Australian Society for Computers in Learning in Tertiary Education (ascilite) Conference, Melbourne, Australia, 30 November – 3 December 2008.* http://www.ascilite.org.au/conferences/melbourne08/procs/gill.pdf [15 October 2013].

Gilroy, P. & Smith, M. (eds). 1993. *International analyses of teacher education*. Abingdon, OX:Carfax.

Giroux, H.A. 1979. Towarda new sociology of curriculum. *Educational Leadership:* 248-252, December. www.ascd.org/ASCD/ pdf/journals/ed_lead/el_197912_giroux.pdf [16 June 2012].

Giroux, H.A. 1981. *Ideology, culture, and the process of schooling*. Philadelphia, PA: Temple University Press.

Giroux, H.A. 1988. *Teachers as intellectuals: toward a critical pedagogy of practical learning*. Granby, MA: Bergin & Garvey.

Giroux, H.A. 1992. The hope of radical education. In Weiler, K. & Mitchell, C.(eds). 1992. What schools can do: critical pedagogy and practice. Albany, NY: State University of New York Press: 13-26.

Gopinathan, S., Tan, S., Yanping, F., Devi, L., Ramos, C. & Chao, E. 2008. *Transforming teacher education: redefined professionals for 21stcenturyschools*. Singapore: National Institute of Education, Nanyang Technical University.

Gore, J.M. 1993. The struggle for pedagogies: critical and feministdiscourses as regimes of truth. New York: Routledge.

Gray, D.E. (ed.). 2009. *Doing research in the real world*. 2nd ed. London: Sage.

Great Britain. Department for Education.2011. *Framework for the national curriculum: a report by the expert panel for the national curriculum review.* London: Department for Education.

Grossman, P.& McDonald, M. 2008. Back to the future: directionsfor research in teaching and teacher education. *AmericanEducational Research Journal*, 45(1):184-205.

Grossman, P., Hammerness, K. & McDonald, M. 2009.Redefining teaching,re-imagining teacher education. *Teachers and Teaching: Theory and practice*, 15(2):273-290, April.

Grossman, P., Schoenfeld, A. & Lee, C. 2005. Teaching subject matter. In Darling-Hammond, L. & Bransford, J. (eds). *Preparing teachers for a changing world: what teachers should learn and be able to do.* San Fransisco, CA: Jossey-Bass: 205-231.

Guskey, T.R. 2002. Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3/4):381-391.

Hallet, F. 2010. Do we practice what we preach? An examination of the pedagogicalbeliefs of teacher educators. *Teaching in Higher Education*, 15(4):435-448, August.

Hao, R.N. 2011.Rethinking critical pedagogy: implications on silence and silent bodies. *Text and Performance Quarterly,* 31(3):267-284, July.

Harris, D.N. & Sass, T.R. 2007. Teacher training, teacher quality and student achievement. Working Paper 3. Washington, DC: Calder Institute. http://www.caldercenter.org/PDF/1001059 Teacher Training.pdf[16 June 2010].

Harvey, L. 1995. Editorial. Quality in Higher Education, 1(1):5-12.

He, W., Means, T. & Lin, G.Y. 2006. Field experience tracking and management in teacher development programs. *International Journal of Technology in Teaching and Learning*, 2(2):134-147.

Hegender, H. 2010. The assessment of student teachers' academic and professional knowledge in school-based teacher education. *Scandinavian Journal of Education*, 54(2):151-171.

Hemson, C. 2006. *Teacher education and the challenge of diversity in South Africa*. Cape Town: HSRC Press.

Henning, E., Van Rensburg, W. &Smit, B. 2004. *Finding your way in qualitative research*. Pretoria: Van Schaik.

Hennink, M.M. 2010. Emergent issues in international focus group discussions. In Hesse-Biber, S.N.&Leavy, P. *Handbook of emergent methods*. New York: Guilford Press: 207-220.

Hesse-Biber, S.N.&Leavy, P. (eds). 2010. *Handbook of emergent methods*. New York: Guilford Press.

Hobson, A.J., Ashby, P., McIntyre, J. &Malderez, A. 2010. *International approaches to teacher selection and recruitment*.OECD Education Working Papers, No. 47. OECD Publishing.http://dx.doi.org/10.1787/5kmbphhh6qmx-en[19 December 2012].

Hollins, E.R. 2011. Teacher preparation for quality teaching. *Journal of Teacher Education*, 62(4):395-407, September/October.

Hooks, B. 2010. Teaching critical thinking: practical wisdom. New York: Routledge.

Ingersoll, R.M. & Curran, B.K. 2004. *Out-of-field teaching: the great obstacle to meeting the "highly qualified" teacher challenge*. NGA Centre for Best Practices. Issue Brief, July 21.http://www.nga.org/Files/pdf/0408HQTEACHER.pdf[9 March 2011].

Jaffer, S., Ng'ambi, D. &Czerniewicz, L. 2007. The role of ICT in higher education in South Africa: one strategy for addressing teaching and learning challenges. *International Journal of Education and DevelopmentUsing Information and Communication Technology*, 3(4):131-142.http://www.ijedict.dec.uwi.edu/viewarticle.php?id=421 [18 December 2012].

Johnson, B. & Christensen, L.B. 2004. *Educational research: quantitative, qualitative, and mixed approaches.* 2nd ed. Boston, MA: Allyn& Bacon.

Kagan, D.M.1992. Through western eyes: quality teaching: a sample of cases. In Gilroy, P. & Smith, M. (eds). *International analyses of teacher education*. London: Carfax: 43-48.

Kanpol, B. 1998. *Critical pedagogy for beginning teachers: the movement fromdespair to hope*.http://www.wmc.edu/academics/library/pub/jcp/issuell-1/kanpol.html[23 September 2011].

Kaplan, L.S. & Owings, W.A. 2002. *Enhancing teaching quality*. Bloomington, IN: Phi Delta Kappa Educational Foundation.

Kárpáti, A. 2009. Teacher training and professional development. In Fazekas, K., Köllô, J. & Varga, J. (eds). *Green book for the renewal of public education in Hungary*. Budapest: Ecostat Government Institute for Strategic Research of Economy and Society: 203-226. http://planipolis.iiep.unesco.org/upload/Hungary/Hungary_Green_book_2009.pdf

[15 October 2013].

Kazemi, E.& Hubbard, A. (eds).2008. New directions for the design and study of professional development: attending to the co-evolution of teachers' participation across contexts. *Journal of Teacher Education*, 59:428-441.

Kennedy, M.M. 1999. The role of pre-service teacher education. In Darling-Hammond, L. & Sykes, G. (eds). *Teaching as the learning profession: handbookof teaching and policy*. San Fransisco, CA: Jossey-Bass: 54-86.

Kiggundu, E. 2007. Teaching practice in the greaterVaal Triangle area: the student teachers'experience. *Journal of College Teaching and Learning*, 4(6):25-36.

Kiggundu, E. &Nayimuli, S. 2009. Teaching practice: a make or break phase for student teachers. *South African Journal of Education*, 29(3):345-358, August.

King, N. & Horrocks, C. 2011. *Interviews in qualitative research*. Los Angeles, CA: Sage.

Koehler, M.J.& Mishra, P. 2008. Introducing TPCK.AACTECommittee on Innovation and Technology.(ed.). *The handbook of technological pedagogical content knowledge (TPCK) for educators*. New York: AACTE; Routledge: 3-29.

Korthagen, F.A.J. 2001. *Linking practise and theory: the pedagogy of realistic teacher education*. Mahwah, NJ: Lawrence Erlbaum.

Korthagen, F.A.J., Loughran, J. &Lunenberg, M. 2005. Editorial: Teaching teachers: studies into the expertise of teacher educators: an introduction to this theme issue. *Teaching and Teacher Education*, 21(2):107-115.

Korthagen, F., Loughran, J. & Russell, T. 2006. Developing fundamental principles for teacher education programs and practices. *Teaching and Teacher Education*, 22:1020-1041.

Koster, B., Brekelmans, M., Korthagen, F.A.J. &Wubbels, T. 2005. Quality requirements for teacher educators. *Teacher and Teacher Education*, 21(2):157-176.

Koutselini, M. &Persianis, P. 2000. Theory-practice divide in teacher educationat the University of Cyprus and the role of the traditional values of the Orthodox Church. *Teaching in Higher Education*, 5(4):501-520.

Kruss, G. 2007. Trajectories of restructuring: the changing context for initial teacher education in South Africa. Paper presented at the Teacher Development and Institutional Change in an Evolving Education Context Conference, Benoni, Gauteng, South Africa, 28 – 29 May 2007.

Kruss, G. (ed). 2009. Opportunities and challenges for teacher education curriculum in South Africa. Cape Town: HSRC Press.

Kumar, R. 1999. Research methodology: a step-by-step guide for beginners.London: Sage.

Lampert, M. 2010. Learning teaching in, from, and for practice: What do we mean? *Journal of Teacher Education*, 61(1-2):21-34, January/February.

Lankshear, C. & McLaren, P. (eds). 1993. *Critical literacy: politics, praxis, and the postmodern.* Albany, NY: State University of New York Press.

Leblanc, R. 1998. Good teaching: The top ten requirements. *The Teaching Professor*, 12(6):1, 7, June/July.

Lee, B.L., Teo, T., Chai, C.S., Choy, D. Tan, A. &Seah, J. 2007.Closing the gap: pre-service teachers' perceptions of an ICT based, student centred learning curriculum.InAtkinson, R.J., McBeath, C., Soong, S.K.A. & Cheers, C. (eds).*ICT: Providing choices for learners and learning. Proceedings of the Australian Society for Computers in Learning in Tertiary Education (ascilite)ConferenceSingapore, 2 – 5 December2007.* http://www.ascilite.org.au/conferences/singapore07/procs/lee-cb.pdf [6 February 2013].

Le Roux, J. &Möller, T. 2002. No problem! Avoidance of cultural diversity in teacher training. *South African Journal of Education*, 22(3):184-187.

Lewin, K.M. & Stuart, J.S. 2003. Researching teacher education: new perspectives on practice, performance and policy. Multi-Site Teacher Education Research Project (MUSTER) Synthesis Report. Brighton: Centre for International Education, Institute of Education, University of Sussex.

Liakopoulou, M. 2012. The role of field experience in the preparation of reflective teachers. *Australian Journal of Teacher Education*, 37(6):42-54.

Lock, J. & Redmond, P. 2010. Transforming pre-service teacher curriculum: observation through a TPACK lens.In Steel, C.H., Keppell, M.J. Gerbic, P. &Housego, S. (eds). *Curriculum, technology & transformation for an unknown future.Proceedings of the Australian Society for Computers in Learning in Tertiary Education (ascilite) Conference, Sydney, Australia, 5 – 8 December2010:*559-564. http://ascilite.org.au/conferences/sydney10/procs/Lock-concise.pdf[6 February 2013].

Long, J. 2012. Changing teachers' practice through critical reflection on pedagogy. *The International Journal of Interdisciplinary Social Sciences*, 6(4):145-149.

Loughran, J. 2002. Effective reflective practice: in search of meaning in learning about teaching. *Journal of Teacher Education*, 53(1):33-43, January.

Loughran, J.J. 2006. Developing a pedagogy of teacher education: understanding teaching and learning about teaching. London: Routledge.

Loughran, J.& Berry, A. 2005. Modelling by teacher educators. *Teaching and Teacher Education*, 21(2):193-203.

Lunenburg, M. &Willemse, M. 2006.Research and professional development of teacher educators. *European Journal of Teacher Education*, 29(1):81-98.

Lynd, M. 2005. Fast-track teacher training: models for consideration for southern Sudan. http://people.umass.edu/educ870/teacher_education/Documents/Lynd%20-%20Fast-track%20Southern%20Sudan.pdf[13 April 2010].

Maguad, B.A. 2010. Deming's 'profound knowledge': implications for higher education. *Education*, 131(4):768-774, Summer.

Maxwell, J.A. 1992. Understanding and validity in qualitative research. *HarvardEducational Review*, 62(3),279-300, Fall.

Maxwell, J. 2002. Understanding and validity in qualitative research. In Huberman, A.M. & Miles, M.B. (eds). *The qualitative researcher's companion*. Thousand Oaks, CA: Sage: 37-64.

Maxwell, J.A. 2005. Qualitative research design: an interactive approach. 2nd ed.Thousand Oaks, CA: Sage.

McCluskey, R. 2007. Professional knowledge in initial teacher education (ITE): a preliminary review of Hispanic literature. *Australian Journal of Teacher Education*, 32(3):1-15, August.

McDaniel, C.A. 2006. Critical literacy: a way of thinking, a way of life. New York: Peter Lang.

McLaren, P. 1989. Life in schools: an introduction to critical pedagogy in thefoundations of education. New York: Longman.

McLaren, P. 2007. *Life in schools: an introduction to critical pedagogy in thefoundations of education*. 5th ed.Boston, MA: Pearson/Allyn& Bacon.

Menon, M. 2007. Quality indicators for professional education. Workshop on Performance Indicators for Quality Assurance in Distance Higher Education, Colombo, Sri Lanka, 14 – 16 August 2007.

Menon, M., Rama, K., Lakshmi, T.K.S & Bhat, V.D. (eds). 2007. *Qualityindicators for teacher education*. Bangalore: NAAC; Vancouver: IOL.

Meri, M. 2007. Reasons behind the results – case admission test for class teacher education. (Working paper).

http://www.tickleproject.eu/document/meetings/tallin/general/reasons_behind_the_resultsmattimeri.pdf [23 September 2011].

Miller, J.&Glasner, B. 2011. The "inside" and the "outside": finding realities in interviews. In Silverman, D. (ed). *Qualitative research: issues of theory, method and practice*. 3rd ed. London: Sage: 131-148.

MoEsee South Africa. Ministry of Education.

Moletsane, R., Hemson, C. &Muthukrishna, A. 2004. Educating South African teachers for the challenge of integration: towards a teaching and research agenda. In Nkomo, M., McKinney, C. &Chisholm, L. (eds). *Reflections of school integration: colloquium proceedings.* Cape Town: HSRC: 61-77.

Morgan, D.L. 1997. Focus groups as qualitative research. 2nd ed. Thousand Oaks, CA: Sage.

Morrison, A.J. 2012. Professional standards for lecturers in Scotland's colleges: initial teacher training/education standards for lecturers in Scotland's colleges. Edinburgh: Scottish Government.

Morrison, G.S.2006. Teaching in America. 4th ed. Boston, MA: Pearson/Allyn & Bacon.

Morrow, W. 2007. Learning to teach in South Africa. Cape Town: HSRC Press.

Mutemeri, J. & Chetty, R. 2011. An examination of university – school partnerships in South Africa. *South African Journal of Education*, 31(4):505-517.

National Council for Accreditation of Teacher Education.2008. *Professional standards for the Accreditation of teacher preparation institutions.*

http://www.ncate.org/Standards/UnitStandards/tabid/123/Default.aspx [8 March 2012].

National Council for Accreditation of Teacher Education.2010. *Transforming teacher education through clinical practice: a national strategy to prepare effective teachers*. Washington, DC: National Council for Accreditation of Teacher Education.

NCATE see National Council for Accreditation of Teacher Education.

Neal, C., &Conhaim, W. 2000. Moving beyond change. An opportunity to transform our organisations. *Journal for Quality and Participation*, 23(4):64, Fall. http://www.asq.org/qic/display-item/index.pl?item=19462 [16 June 2011].

Ngidi, D. P. &Sibaya, P.T. 2003. Student teacher anxieties related to practice teaching. *South African Journal of Education*, 23:18-22.

No Child Left Behind (NCLB) Act of 2001. 2001. Public Law No: 107-110, Jan. 8, 2002, 115 Stat.1425 (2002). 107thUnited States Congress, Washington, DC.

Norton, L., Aiyegbayo, O., Harrington, K., Elander, J. & Reddy, P. 2010. New lecturers' beliefs about learning, teaching and assessment in higher education: the role of PGCLTHE programme. *Innovations in Education and Teaching International*, 47(4):345-356, November.

Nuangchalerm, P., Prachagool, V. & Sriputta, P. 2011. Online professional experiences in teacher preparation program: apreservice teacher study. *Canadian Social Science*, 7(5):116-120.

OECD seeOrganisation for Economic Co-operation and Development.

O'Leary, Z. 2005. Researching real-world problems:a guide to methods of inquiry. London: Sage.

Open University. 2012. *Becoming a teacher: 2013*. Milton Keynes: Open University. http://www.open.ac.uk/becomingateacher[27 May2013].

Opre, A., Zaharie, M. &Opre, D. 2008. Faculty development: teachingstaff needs, knowlege and priorities. *Cognition, Brain &Behavior*, XII(1):29-43, March.

Organisation for Economic Co-operation and Development. 2001. *Schooling for tomorrow:* what schools for the future? Paris: OECD. http://www1.oecd.org/publications/e-book/9601111E.PDF [8 March 2012].

Organisation for Economic Co-operation and Development. 2008. *Reviews of national policies for education:South Africa.* www.oecd.org/publishing/corrigenda[9 February 2013].

Ory, J.C. 2001. Faculty thoughts and concerns about student ratings. *New Directions for Teaching and Learning*, 87:3-15, Fall.

Pandor, N. 2007. Statement by NalediPandor, Minister of Education, on the release of the 2007 senior certificate examination results, Pretoria, 28 December, 2007. http://www.education.gov.za/Newsroom/MediaReleases/2007/tabid/181/ctl/Details/mid/581/ltemID/2759/Default.aspx[10 April 2008].

Partnership for 21st Century Skills. 2003. *Learning for the 21st century*. Washington, DC: Partnership for 21st Century Skills.http://www.p21.org/downloads/P21_Report.pdf [23 August 2012].

Polly, D., Mims, C., Shephard, C.E. &Inan, F. 2009. Evidence of impact: transforming teacher education with preparing tomorrow's teachers to teach with technology (PT3) grants. *Teaching and Teacher Education*, 26(4):863-870, May.

Prater, M.A. &Sileo, T.W. 2002. School – university partnerships in special education experiences: a national descriptive study. *Remedial Special Education*, 23(6):325-334, 348, November/December.

Quick, G. &Siebörger, R. 2005. What matters in practice teaching? The perception of schools and students. *South African Journal of Education*, 25(1):1-4.

Rinaldi, C. 2003. The teacher as researcher. *Innovation in Early Education: The International Reggio Exchange*, 10(2):1-4, Spring.

Rodgers, A. &Keil, V.L. 2007.Restructuring a traditional student teachersupervision model: fostering enhanced professional development and mentoring within a professional development school context. *Teaching and Teacher Education*, 23(1):63-80.

Rogers, C.R. 1969. Freedom to learn. Columbus, OH: Charles Merrill.

Rowe, K.J. 2003. The importance of teacher quality as a key determinant of students' experiences and outcomes of schooling. Background paper to keynote address presented at the ACER Research Conference 2003, Melbourne, Australia, 19 – 21 October 2003.

Russell, T.& McPherson, S. 2001. Indicators of success in teacher education: areviewand analysis of recent research. Paper prepared for the 2001 Pan-Canadian Education Research Agenda Symposium: Teacher Education/Educator Training: Current Trends and Future Directions, Quebec, Canada, 22 – 23 May 2001.

Sajjad, S. 2009. Effective teaching methods at higher education institutions. Paper presented at the 29th Annual Society for Teaching and Learning in Higher Education (STLHE) Conference: Teaching in Higher Education: Between the Tides, 17 – 20 June, Fredericton, New Brunswick, Canada.

Sankey, D. 1996. Beyond the ideology of school-based teacher training. *The Journal of Primary Education*, 6(1/2):67-77.

Scheerens, J. (ed). 2010. *Teachers' professional development: Europe in international comparison: an analysis of teachers' professional development based on the OECD's teaching and learning international survey (TALIS)*. Luxembourg: European Office for Official Publications of the European Union.

Scheyvens, R., Griffin, A. L., Jocoy, C. L., Liu, Y. & Bradford, M. 2008. Experimenting with active learning in geography: dispellingthe myths that perpetuate resistance. *Journal of Geography in Higher Education*, 32(1):51-69, June.

Schostak, J. 2005. *Education in dialogue*.http://www.enquirylearning.net/ELU/content% 20resources/Dialogue.html[13 March 2013].

Scott, A. & Freeman-Moir, J. (eds). 2000. *Tomorrow's teachers: international and critical perspectives on teacher education*. Christchurch, NZ: Canterbury University Press.

Segall, A. 2002. Disturbing practice: reading teacher education as text. New York: Peter Lang.

Shaw, A. 2006. What is critical pedagogy?http://www.21stcenturyschools.com/What_is_Critical_Pedagogy.htm[27 May 2013].

Shor, I. 1992. *Empowering education: critical teaching for social change*. Chicago, IL: University of Chicago Press.

Shor, I. &Freire, P. 1987. *A pedagogy for liberation: dialogues on transforming education.* South Hadley, MA:Bergin and Garvey.

Shor, I.&Pari, C. (eds). 1999. *Critical literacy in action: writing words, changing worlds / A tribute to the teachings of Paulo Freire*.Portsmouth, NH: Boynton/Cook Publishers.

Shulman, L.S. 1986. Those who understand: knowledge growth in teaching. *Educational Researcher*, 15(2):4-14, February.

Silverman, D. 2001. *Interpreting qualitative data: methods for analysing talk, text, and interaction*. 2nd ed. London: Sage.

Silverman, D. (ed). 2011. Qualitative research. 3rd ed. London: Sage.

Sivakumaran, T., Holland, G., Clark, L., Heyning, K., Wishart, W.&Flowers-Gibson, B.2009.University – schoolpartnership for clinical experiences: design, implementation, assessment, and data collection. *Journal of Case Studies in Education*, 3(1).http://www.aabri.com/manuscripts/ 10576.pdf [18 April 2013].

Skilbeck, M. & Connell, H. 2004. Teachers for the future: the changing nature of society and related issues for the teaching workforce. A report to the Teacher Quality and Educational Leadership Taskforce of the Ministerial Council for Education, Employment Training and Youth Affairs. September 2004.

Smith, J.A.& Osborn, M. 2008. Interpretative phenomenological analysis. In Smith, J.A. (ed). *Qualitative psychology: a practical guide to research methods*. 2nded. London: Sage: 53-80.

Smith, K. 2005. Teacher educators' expertise: what do novice teachers and teacher educators say? *Teaching and Teacher Education*, 21(2):177-192, February.

Smyth, J. 2011. Critical pedagogy for social justice. London: Continuum.

South Africa. 1996. South African Schools Act No. 84 of 1996. Pretoria: Government Printer.

South Africa. Department of Education. 2000. *Norms and standards for educators*. Pretoria: Government Printer.

South Africa. Department of Education. 2001. *Education White Paper 6. Special needs education: building an inclusive education and training system.* Pretoria: Department of Education.

South Africa. Department of Education. 2006. *Towards quality education in general education and training: Policy Brief 1.* Pretoria: Department of Education.

South Africa. Department of Education. 2009. Address by the Minister of Education, NalediPandor, at the Eastern Cape Provincial Education Summit, 13 March 2009. http://www.info.gov.za/speeches/2009/09031314451003.htm [14 July 2009].

South Africa. Ministry of Education. 2001. *National Plan for Higher Education*. Pretoria. Government Printer.

Spalding, E., Klecka, C.L., Lin, E., Wang, J. & Odell, S.J.2011. Learning to teach: it's complicated but it's not magic. *Journal of Teacher Education*, 62(1):3-7.

Stafford, J.T. 2006. The importance of educational research in the teaching of history. *Canadian Social Studies*, 40(1):1-8, Summer.

Taylor, N. 2008. What's wrong with South African schools? Paper presented at the JET Education Services Conference: What's Working in School Development? Boksburg, 28 – 29 February 2010.

Thailand Education Reform Project. 2002. *Teacher development for quality learning.* http://www.edthai.com/publication/0005/fulltext.pdf [6 June 2012].

UNESCO. 2005. EFA Global Monitoring Report 2005: Education for all – The quality imperative. Paris: UNESCO.

Ur, P. 1997. Teacher training and teacher development: a useful dichotomy? http://www.jalt-publications.org/tlt/files/97/oct/ur.html [23 August 2012].

Walkington, J. 2005. Becoming a teacher: encouraging development of teacher identity through reflective practice. *Asia-Pacific Journal of Teacher Education*, 33(1):53-64, March.

Wang, J., Odell, S.J., Klecka, C.L., Spalding, E. & Lin, E. 2010. Understanding teacher education reform. *Journal of Teacher Education*, 61(5):395-402, November/December.

Welman, C., Kruger, F. & Mitchell, B. 2005. *Research methodology*. Cape Town: Oxford University Press.

Whitehurst, G.J. 2002. Scientifically based research on teacher quality: research on teacher preparation and professional development. White House ConferenceOn Preparing Tomorrow's Teachers, 5 March 2002.

Wilkin, M. 1996. *Initial teacher training: thedialogue of ideology and culture.* London: Falmer Press.

Willig, C. 2001. *Introducing qualitative research in psychology: adventures in theory and method*.Buckingham, PA: Open University Press.

Wilson, S.M. 1989. Understanding historical understanding: subject matter knowledge and the teaching of U.S. history. Unpublished PhD dissertation, Stanford University, CA.

Winder, R.E.& Judd, D.K.1996. Organizational orienteering: Linking Deming, Covey, and Senge in an integrated five dimension quality model. In *American Society for Quality Control (ASQC)Seventh National Quality Management Conference Transactions*.http://www.qualitydigest.com/html/qualitydef.html [29 June 2009].

Windschitl, M., Thompson, J., Braaten, M., Stroupe, D., Chew, C. & Wright, B. 2010. The beginner's repertoire: a core of instructional practices for teacher preparation. Paper presented at the 91stAnnual Meeting of the American Educational Research Association, Denver, CO, 30 April – 4 May 2010.

Wink, J. 2005. Critical pedagogy: notes from the real world. Boston: Pearson/Allyn& Bacon.

Wisniewski, R. 1982. Three scenarios for teacher education. *Journal of Teacher Education*, 33(2):2-6, March.

Wong, S.Y.W. & Pang, Y.Y.M. 1999. The interface between theory and practice: the role of teacher educators and teachers in a school-based teacher development initiative. Paper presented at the Joint Annual Conference of the Australian Association for Research in Education and New Zealand Association for Research in Education: Global Issues and Local Effects: the Challenge for Educational Research, 29 November – 2 December 1999, Melbourne, Australia.

Zeichner, K. 1983. Alternative paradigms of teacher education. *Journal of Teacher Education*, XXXIV(3);3-9, May/June.

Zeichner, K. 2006. Reflections of a university-based teacher educator on the future of college- and university-based teacher education. *Journal of Teacher Education*, 57(3):326-340, May/June.

Zeichner, K. 2010. The importance of strong clinical preparation for teachers. Presented at a USCongressional Briefing organised by the AmericanAssociation of Colleges for Teacher Education, Washington, DC, 17 June 2010. http://ccte.org/wp-content/pdfs-conferences/ccte-conf-2012-fall-zeichner-clinical-preparation.pdf. [6 February 2013].

Zhao, Y. 2010. Preparing globally competent teachers: a new imperative for teacher education. *Journal of Teacher Education*, 61(5):422-431, November/December.

Zugelder, B. & Nichols, J. 2012 – 2013. *Student teaching handbook: aguide for internship and clinical practice*.Orlando, FL: University of Central Florida.http://www.EDUCATION.UCF.EDU/CLINICALEXP[21 September 2013].

APPENDICES

Appendix 1: Subject information sheet

Quality in Teacher Education Project Subject Information Sheet

You are being invited to take part in a research project. Before you decide, it is important for you to understand the aim of the research

and why it is being done. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to be interviewed or respond to a questionnaire.

The *Quality in Teacher Education* (QTE) Project is an NFR funded collaborative initiative which involves Faculties of Education at CPUT, Wits, UKZN and NMMU. This project aims at determining the conditions for quality learning, teaching and research in teacher-training institutions. We are particularly interested in stakeholders' perceptions of quality education and how it can be achieved. You have been approached because of your position which leads us to believe that you can provide valuable insight on this topic. There are no foreseeable dangers or risks in taking part in this research project.

However, it is up to you to decide whether or not to take part. Refusal to take part will involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to take part you will be given this information sheet to keep and you will also be asked to sign a consent form. Even when you decide to take part you are still free to withdraw at any time, without penalty or loss and without giving a reason.

Whilst there are no immediate benefits for those participating in the project, it is hoped that this work will provide insight in ways of improving quality in teacher education and the quality of education in general. All information which is collected from you during the course of the research will be kept strictly confidential.

If you have decided to participate please sign the attached consent form. Thank you for taking part in this research project.

Dr. Dominique Mwepu Quality in Teacher Education Project Department of Research Faculty of Education Mowbray Campus

Cape Peninsula University of Technology P.O. Box: 652 Cape Town, 8000 Phone: 021 680 3932 Cell: 083 7172 415 Email: mwepud@cput.ac.za

Appendix 2: Lecturer interview schedule

Quality in Teacher Education Project 2009

LECTURERS' INTERVIEW SCHEDULE

The *Quality in Teacher Education* (QTE) Project is an NFR funded initiative which aims at determining the conditions for quality learning, teaching and research in teacher-training institutions. This interview will allow lecturers to provide their perceptions on the quality of education provided by their institution during the 4 years of initial teacher training. The discussion will not serve for any personal evaluation. **All responses are anonymous and they will be treated confidentially.** Thank you for your co-operation in participating to this interview

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Areas	Questions
Lecture delivery	-What mode of lecture delivery do you use mostly and
a)methodology	how do you think it is serving both your purposes and
b)assessment	students' purposes?
	M/h at internal reacherings are in place to compart your
	-What internal mechanisms are in place to support your
	teaching and learning by students?
	-How do you assess teaching and learning of student
	teachers and how do you use the information?
Teaching skills	-What provisions do you have on the programme for
	student
	teachers to practice teaching skills?
	-What is the duration of practice teaching and do you
	think
	it is adequately serving the purpose?
	-How do feel about student
	supervision?
Staff development	-What in your opinion are the qualities of a good lecturer
·	in a teacher education programme?
	·
	-How do you think you measure up to those qualities?
	-How do you feel about lecturer
	support within the department?
Product	-What are the knowledge expectations for exiting
	student teachers
	and how do they usually fare?

Thank you

Appendix 3: Teacher representitives interview schedule

Quality in Teacher Education Project 2009

TEACHER REPRESENTATIVES

INTERVIEW SCHEDULE

The *Quality in Teacher Education* (QTE) Project is an NFR funded initiative which aims at determining the conditions for quality learning, teaching and research in teacher-training institutions. This interview will allow teacher union representatives to provide their perceptions on the quality of education provided by their institution during the 4 years of initial teacher training. The discussion will not serve for any personal evaluation. **All responses are anonymous and they will be treated confidentially.** Thank you for your cooperation in participating to this interview.

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PROFESSIONAL TEACHER REPRESENTATIVES

- 1. What do you think of the quality of teacher training in South Africa currently?
- 2. How well prepared do you think new teacher are?
- 3. What do you think is the role of teacher-training institutions in improving the quality of teacher education?
- 4. What major transformation steps has the ministry of education taken to move towards democracy and justice in education?
- 5. What achievement has been attained in this regard and what improvements still need to be put in place?
- 6. Which areas of teacher training do you think need reinforcement?
- 7. Grade 12 results continue to drop, where could the problem lie?

Quality in Teacher Education Project 2009

STUDENTS' INTERVIEW SCHEDULE

The Quality in Teacher Education (QTE) Project is an NFR funded initiative which aims at determining the conditions for quality learning, teaching and research in teacher-training institutions. This interview will allow **students** to provide their perceptions on the quality of education received during the 4 years of initial training as teachers. **This is not an exam.All responses are anonymous and they will be treated confidentially.** Thank you for your co-operation in participating to this interview.

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Lecture delivery and assessment

- What mode of lecture delivery do lecturers use mostly?
- How do the methods used in lecture delivery meet your needs as teacher education students?
- How best do you think lectures should be delivered?
- Which do you consider to be the best learning opportunities that lecturers have provided for you?
- How would you describe the quality of lectures that you receive?
- What is your expectation from lecturers as far as lecturing is concerned?
- What do you consider to be the qualities or personal characteristics of an exemplary/outstanding lecturer?

Teaching skills

- What components of your programme focus on the development of teaching skills?
- Are these components of the programme meeting your needs in as far as the development of teaching skills are, concerned?
- Do lecturers find time to demonstrate appropriate teaching skills for you?
- How do you think your needs in teaching skills development could best be met?
- Are you happy about the organization of practice teaching?
- What is your evaluation of practice teaching supervision?
- How in your opinion could practice teaching be made more effective in the development of teaching skills?

Product

In which of the knowledge areas do you consider to be competent?

- Which of the knowledge areas contribute more to classroom practice?
- Do you have some knowledge area you consider as less important in the development of teaching skills?
- Which knowledge areas need improvement?
- Is there anything else you think I should know in order to understand how teacher education students are taught?

Thank you very much for your time and co-operation. Enkosi! Siyabonga! Dankie!

Appendix 5: Overview of Interviews

Schedule of Interviews

May – June & September- October 2009

1. Lecturer Schedule of Interviews: Number = 26

Date	Respondent	Venue	Duration
May 18	Lecturer A	Office	45minutes
May 19	Lecturer B	Office	35minutes
May 19	Lecturer C	Office	50minutes
June 2	Lecturer D	Office	48minutes
June 2	Lecturer E	Office	47minutes
June 5	Lecturer F	Office	46:21minutes
June 18	Lecturer G	Office	1hr 5minutes
June 18	Lecturer H	Office	1hr 4minutes
June 19	Lecturer I	Office	43:39minutes
June 19	Lecturer J	Board Room	31:27minutes
June 24	Lecturer K	Office	51:14minutes
October 12	Lecturer L	Office	50minutes
October 13	Lecturer M	Office	40minutes
October 13	Lecturer N	Office	55minutes
October 13	Lecturer O	Office	53minutes
October 13	Lecturer P	Office	30minutes
October 13	Lecturer Q	Staff Room	40minutes
October 13	Lecturer R	Office	35minutes
October 13	Lecturer S	Office	42minutes
October 14	Lecturer T	Office	23:30minutes
October 14	Lecturer U	Office	29:08minutes
October 14	Lecturer V	Office	25:48minutes
October 14	Lecturer W	Office	30:45minutes
October 14	Lecturer X	Office	39:10minutes
October 14	Lecturer Y	Office	45minutes
October 14	Lecturer Z	Office	32minutes

2. In-Service Teachers' Schedule of Interviews: Number = 3

Date	Respondent	Venue	Duration
May 18	Resp. 1	Office	35minutes
May 19	Resp. 2	Office	32minutes
June 3	Resp.3	Office	47minutes

3. Students' Schedule of Interviews: Number of focus groups = 9

Date	Respondents per	Venue	Duration
	gr.		
May 19	2 students	Lecture hall	40:37minutes
May 19	4 students	Classroom	48:42minutes
May 19	7 students	Lecture hall	42:27minutes
September 2	10 students	Classroom	1hr 7minutes
September 3	9 students	Classroom	1hr 4minutes
September 13	7 students	Science laboratory	37:46minutes
October 14	10 students	Lecture hall	1hr 13minutes
October 14	7 students	Classroom	44:54minutes
November 23	5 students	Classroom	1hr 10minutes

Appendix 6: Ethics Clearance



FACULTY OF EDUCATION AND SOCIAL SCIENCES

Office of the Chairperson Br C		Dr Cina Mosito
of researchers in the Faculty University of Kwazulu Natal. Before submission to the NF	y of Education in collaborat The application was succe RF, the application was app Ethics approval was grante	itted to the National Research Foundation by a team tion with researchers at WITS University and the essful and funding was received in November 2007, proved by the Faculty Research Committee (includes and to the research team to collect data for the Quality
Title of Project:	Quality in Teacher	Education Project
Funder	National Research Foundation	
Project leader	Prof R Chetty	
KwaZulu Natal an	id Nelson Mandela Meti search offices of the uni	rious sites (Wits University, University of ropolitan University) must be obtained from versities. Evidence of consent must be in the research proposal.

Signed: Chairperson Faculty Research Committee Date:

02/02/2009

Appendix 7: Interview consent and recording consent form

Quality in Teacher Education Project

Interview consent and recording consent form

- 1. I agree to be interviewed for the purpose of the Quality in Teacher Education Project.
- 2. The purpose and the nature of the interview have been explained to me.
- 3. a) I agree that the interview may be recorded (tick)
 - b) The interview must not be recorded (tick)
- 4. Any question I asked about the purpose and the nature of the interview have been answered to my satisfaction
- 5. I do not wish my name to be used or cited or otherwise disclosed

	Name of the interviewee:	
6.	I have explained the project and the implications of being interviewed to	o the
	interviewee and I believe that the consent is informed and that he/she understand the implication of participation	
	Name of the interviewer:	
	Signature:	
	Date:	

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APPENDIX 8

A LIST OF THE SEVEN ROLES FROM THE NORMS AND

STANDARDS FOR EDUCATORS DOCUMENT (2000):

GAZETTE NO. 20844

1) MEDIATORS OF LEARNING

PRACTICAL COMPETENCES

(Where the learner demonstrates the ability, in an authentic context to consider a range of possibilities for action, to make considered decisions about which possibility to follow, and to perform the chosen action.)

Using the language of instruction appropriately to explain, describe and discuss key concepts in particular learning area/subject/discipline/phase. Using a second official language to explain, describe and discuss key concepts in a conversational style.

Employing appropriate strategies for working with learner needs and disabilities, including sign language where appropriate.

Preparing thoroughly and thoughtfully for teaching by drawing on a variety of resources; the knowledge, skills and processes of relevant learning areas; learners' existing knowledge, skills and experience.

Using key teaching strategies such as higher level questioning, problem-based tasks and projects; and appropriate use of group-work, whole class teaching and individual self-study.

Adjusting teaching strategies to: match the developmental stages of learners; meet the knowledge requirements of the particular learning area; cater for cultural, gender, ethnic, language and other differences among learners.

Adjusting teaching strategies to cater for different learning styles and preferences and to mainstream learners with barriers to learning.

Creating a learning environment in which learners develop strong internal discipline; conflict is handled through debate and argument, and learners seek growth and achievement.

Creating a learning environment in which: critical and creative thinking is encouraged; learners challenge stereotypes about language, race, gender, ethnicity, geographic location and culture.

Using media and everyday resources appropriately in teaching including judicious use of; common teaching resources like text-books, chalkboards, and charts, other useful media like over-head projectors, computers, video and audio (etc); and popular media and resources, like newspapers and magazines as well as other artefacts from everyday life.

(Where the learner demonstrates an understanding of the knowledge and thinking which underpins the actions taken)

Understanding different explanations of how language mediates learning: the principles of language in learning; language across the curriculum; language and power; and a strong emphasis on language in multi-lingual classrooms.

Understanding different learning styles, preferences and motivations.

Understanding different explanations of how learners learn at different ages, and potential causes of success or failure in these learning processes.

Understanding the pedagogic content knowledge – the concepts, methods and disciplinary rules – of the particular learning area being taught.

Understanding the learning assumptions that underpin key teaching strategies and that inform the use of media to support teaching.

Understanding the assumptions that underlie a range of assessment approaches and their particular strengths and weaknesses in relation to the age of the learner and learning area being assessed.

Understanding sociological, philosophical, psychological, historical, political and economic explanations of key concepts in education with particular reference to education in a diverse and developing country like South Africa.

Exploring, understanding, explaining, analysing and utilising knowledge, skills and values underpinning Education Training and Development practices.

REFLEXIVE COMPETENCES

(Where the learner demonstrates the ability to integrate or connect performances and decision-making with understanding and with the ability to adapt to change and unforeseen circumstances and explain the reasons behind these actions.)

Reflecting on the extent to which the objectives of the learning experience have been achieved and deciding on adaptations where required.

Defending the choice of learning mediation action undertaken and arguing why other learning mediation possibilities were rejected.

Analysing the learning that occurs in observed classroom interactions and in case studies.

Making judgments on the effect that language has on learning in various situations and how to make necessary adaptations.

Assessing the effects of existing practices of discipline and conflict management on learning.

Reflecting on how teaching in different contexts in South Africa affects teaching strategies and proposing adaptations.

Reflecting on the value of various learning experiences within an African and developing world context.

Reflecting on how race, class, gender, language, geographical and other differences impact on learning, and making appropriate adaptations to teaching strategies.

Critically evaluating the implications for schooling of political social events and processes and developing strategies for responding to these implications.

2) INTERPRETER AND DESIGNER OF LEARNING PROGRAMMES AND MATERIALS

PRACTICAL COMPETENCES

(The demonstrated ability, in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibility to follow, and to perform the chosen action.)

Interpreting and adapting learning programmes so that they are appropriate for the context in which teaching will occur.

Designing original learning programmes so that they meet the desired outcomes and are appropriate for the context in which they occur.

Adapting and/or selecting learning resources that are appropriate for the age, language competences, culture and gender of learning groups or learners.

Designing original learning resources including charts, models, worksheets and more sustained learning texts. These resources should be appropriate for subject; appropriate to the age, language competence, gender and culture of learners; cognisant of barriers to learning.

Writing clearly and convincingly in the language of instruction.

Using a common word processing programme for developing basic materials.

Evaluating and adapting learning programmes and resources through the use of learner assessment and feedback.

FOUNDATIONAL COMPETENCES

(Where the learner demonstrates an understanding of the knowledge and thinking which underpins the actions taken.)

Understanding the principles of curriculum; how decisions are made; who makes the decisions, on what basis and in whose interests they are made.

Understanding various approaches to curriculum and programme design, and their relationship to particular kinds of learning required by the discipline; age, race, culture and gender of the learners.

Understanding the principles and practices of OBE, and the controversies surrounding it, including debates around competence and performance.

Understanding the learning area to be taught, including appropriate content knowledge, pedagogic content knowledge and how to integrate this knowledge with other subjects.

Knowing about sound practice in curriculum, learning programme and learning materials design including; how learners learn from texts and resources; how language and cultural differences impact on learning.

Understanding common barriers to learning and how materials can be used to construct more flexible and individualised learning environments.

3) LEADER, ADMINISTRATOR AND MANAGER

PRACTICAL COMPETENCES

(Where the learner demonstrates the ability, in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibility to follow, and to perform the chosen action.)

Managing classroom teaching of various kinds (individualised, small group etc.) in different educational contexts and particularly with large and diverse groups.

Constructing a classroom atmosphere which is democratic but disciplined, and which is sensitive to culture, race and gender differences as well as to disabilities.

Resolving conflict situations within classrooms in an ethical sensitive manner.

Promoting the values and principles of the constitution particularly those related to human rights and the environment.

Maintaining efficient recording and reporting of academic progress.

Maintaining efficient financial controls.

Working with other practitioners in team-teaching and participative decision making.

Accessing and working in partnership with professional services and other resources in order to provide support for learners.

Respecting the role of parents and the community and assisting in building structures to facilitate this.

FOUNDATIONAL COMPETENCES

(Where the learner demonstrates an understanding of the knowledge and thinking which underpins the actions taken.)

Understanding approaches to problem-solving, conflict resolution and group dynamics within South African and developing world context characterised by diversity.

Understanding various approaches to the organisation of integrated teaching programmes and team teaching.

Understanding various approaches to the management of classrooms, with particular emphasis on large, under-resourced and diverse classrooms.

Understanding descriptive and diagnostic reporting within a context of high illiteracy rates among parents.

Knowledge of available professional and community support services and strategies for using their expertise.

Understanding current legislation on the management of learners and schools.

Knowledge of teachers' unions, the South African Council for Educators and other relevant professional bodies.

Understanding constitutional commitments to human rights and the environment.

REFLEXIVE COMPETENCES

(In which the learner demonstrates ability to integrate or connect performances and decision making with understanding and with the ability to adapt to change and unforeseen circumstances and explain the reasons behind these actions.)

Reflecting on strategies to assist teachers working on integrated teaching programmes and in team teaching.

Critically examining a variety of management options, making choices based on existing and potential conditions, and defending these choices.

Adapting systems, procedures and actions according to circumstances.

4) COMMUNITY, CITIZENSHIP AND PASTORAL ROLE

PRACTICAL COMPETENCES

(Where the learner demonstrates the ability, in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibility to follow, and to perform the chosen action).

Developing life-skills, work-skills, a critical, ethical and committed political attitude, and a healthy lifestyle in learners.

Providing guidance to students about work and study possibilities.

Showing an appreciation of, and respect for, people of different values, beliefs, practices and cultures.

Being able to respond to current social and educational problems with particular emphasis on the issues of violence, drug abuse, poverty, child and woman abuse, HIV/AIDS and environmental degradation. Accessing and working in partnership with professional services to deal with these issues.

Counselling and/or tutoring learners in need of assistance with social or learning problems.

Demonstrating caring, committed and ethical professional behaviour and an understanding of education as dealing with the protection of children and the development of the whole person.

Conceptualising and planning a school extra-mural programme including sport, artistic and cultural activities.

Operating as a teacher-mentor through providing a mentoring support system to student teachers and colleagues.

FOUNDATIONAL COMPETENCES

(Where the learner demonstrates an understanding of the knowledge and thinking which underpins the actions taken.)

Understanding various approaches to education for citizenship with particular reference to South Africa as a diverse, developing, constitutional democracy.

Understanding key community problems with particular emphasis on issues of poverty, health, environment and political democracy.

Knowing about the principles and practices of the main religions of South Africa, the customs, values and beliefs of the main cultures of SA, the Constitution and the Bill of Rights.

Understanding the possibilities for life-skill and work-skill education and training in local communities, organisations and business.

Knowing about ethical debates in religion, politics, economics, human rights and the environment.

Understanding child and adolescent development and theories of learning and behaviour with emphasis on their applicability in a diverse and developing country like South Africa.

Understanding the impact of class, race, gender and other identity-forming forces on learning.

Understanding formative development and the impact of abuse at individual, familial, and communal levels.

Understanding common barriers to learning and the kinds of school structures and processes that help to overcome these barriers.

Knowing about available support services and how they may be utilised.

Knowing about the kinds of impact school extra-mural activities can have on learning and the development of children and how these may best be developed in co-operation with local communities and business.

REFLEXIVE COMPETENCES

(In which the learner demonstrates ability to integrate or connect performances and decision making with understanding and with the ability to adapt to change and unforeseen circumstances and explain the reasons behind these actions.)

Recognising and judging appropriate intervention strategies to cope with learning and other difficulties.

Reflecting on systems of ongoing professional development for existing and new teachers.

Adapting school extra curriculum programmes in response to needs, comments and criticism.

Reflecting on ethical issues in religion, politics, human rights and the environment.

Reflecting on ways of developing and maintaining environmentally responsible approaches to the community and local development.

Adapting learning programmes and other activities to promote an awareness of citizenship, human rights and the principles and values of the constitution.

5) SCHOLAR, RESEARCHER AND LIFELONG LEARNER

PRACTICAL COMPETENCES

(Where the learner demonstrates the ability, in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibility to follow, and to perform the chosen action.)

Being numerically, technologically and media literate.

Reading academic and professional texts critically.

Writing the language of learning clearly and accurately.

Applying research meaningfully to educational problems.

Demonstrating an interest in, appreciation and understanding of current affairs, various kinds of arts, culture and socio-political events.

Upholding the principles of academic integrity and the pursuit of excellence in the field of education.

FOUNDATIONAL COMPETENCES

(Where the learner demonstrates an understanding of the knowledge and thinking which underpins the actions taken.)

Understanding current thinking about technological, numerical and media literacies with particular reference to educators in a diverse and developing country like South Africa.

Understanding the reasons and uses for, and various approaches to, educational research.

Understanding how to access and use common information sources like libraries, community resource centers, and computer information systems like the internet.

Understanding and using effective study methods.

REFLEXIVE COMPETENCES

(Where the learner demonstrates ability to integrate or connect performances and decision-making with understanding and with the ability to adapt to change and unforeseen circumstances and explain the reasons behind these actions.)

Reflecting on critical personal responses to, literature, arts and culture as well as social, political and economic issues.

Reflecting on knowledge and experience of environmental and human rights issues and adapting own practices.

6) ASSESSOR

PRACTICAL COMPETENCES

(Where the learner demonstrates the ability, in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibility to follow, and to perform the chosen action.)

Making appropriate use of different assessment practices, with a particular emphasis on competence-based assessment and the formative use of assessment, in particular continuous and diagnostic forms of assessment.

Assessing in a manner appropriate to the phase/subject/learning area.

Providing feedback to learners in sensitive and educationally helpful ways.

Judging learners' competence and performance in ways that are fair, valid and reliable.

Maintaining efficient recording and reporting of academic progress.

FOUNDATIONAL COMPETENCES

(Where the learner demonstrates an understanding of the knowledge and thinking which underpins the actions taken.)

Understanding the assumptions that underlie a range of assessment approaches and their particular strengths and weaknesses in relation to the age of the learner and learning area being assessed.

Understanding the different learning principles underpinning the structuring of different assessment tasks.

Understanding a range of assessment approaches and methods appropriate to the learning area/subject/discipline/phase.

Understanding language terminology and content to be used in the assessment task and the degree to which this is gender and culturally sensitive.

Understanding descriptive and diagnostic reporting within a context of high illiteracy rates among parents.

REFLEXIVE COMPETENCES

(Where the learner demonstrates ability to integrate or connect performances and decision-making with understanding and with the ability to adapt to change and unforeseen circumstances and explain the reasons behind these actions.)

Justifying assessment design decisions and choices about assessment tasks and approaches.

Reflecting on appropriateness of assessment decisions made in particular learning situations and adjusting the assessment tasks and approaches where necessary.

Interpreting and using assessment results to feed into processes for the improvement of learning programmes.

7) LEARNING AREA/SUBJECT/DISCIPLINE/PHASE SPECIALIST

PRACTICAL COMPETENCES

(Where the demonstrates the ability, in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibility to follow, and to perform the chosen action.)

Adapting general educational principles to the phase/subject/learning area.

Selecting, sequencing and pacing content in a manner appropriate to the phase/subject/learning area; the needs of the learners and the context.

Selecting methodologies appropriate to learners and contexts.

Integrating subjects into broader learning areas and learning areas into learning programmes.

Assessing in a manner appropriate to the phase/subject/learning area.

Teaching concepts in a manner, which allows learners to transfer this knowledge and use it in different contexts.

FOUNDATIONAL COMPETENCES

(Where the learner demonstrates an understanding of the knowledge and thinking which underpins the actions taken.)

Understanding the assumptions underlying the descriptions of competence in a particular discipline/subject/learning area.

Understanding the ways of thinking and doing involved in a particular discipline/subject/learning area and how these may be taught.

Knowing and understanding the content knowledge of the discipline/subject/learning area.

Knowing of and understanding the content and skills prescribed by the national curriculum.

Understanding the difficulties and benefits of integrating this subject into a broader learning area.

Understanding a range of assessment approaches appropriate to the learning area/subject/discipline/phase/subfield.

Understanding the role that a particular discipline/subject/learning area plays in the work and life of citizens in South African society – particularly with regard to human rights and the environment.

REFLEXIVE COMPETENCES

(In which the learner demonstrates ability to integrate or connect performances and decision making with understanding and with the ability to adapt to change and unforeseen circumstances and explain the reasons behind these actions.)

Reflecting on and assessing own practice.

Analysing lesson plans, learning programmes and assessment tasks and demonstrating an understanding of appropriate selection, sequencing and pacing of content.

Identifying and critically evaluating what counts as undisputed knowledge, necessary skills, important values.

Making educational judgments on educational issues arising from real practice or from authentic case study exercises.

Researching real educational problems and demonstrating an understanding of the implications of this research.

Reflecting on the relations between subjects/disciplines/ and making judgments on the possibilities of integrating them.