



**Exploring the knowledge bases and professional learning of the Part-Time Post Graduate Certificate in Education (PGCE) students**

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**Submitted in fulfilment of the requirements for the degree of Master of Education in the School of Education at the University of KwaZulu-Natal, Pietermaritzburg, South Africa**

**209521238**

**December 2013**

## DECLARATION

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## **ABSTRACT**

The University of KwaZulu-Natal introduced a part-time Post-Graduate Certificate in Education programme in 2008, to enable graduate teachers to study part-time in order to become professionally qualified. To date, there has been very little academic research on how these professionally unqualified student teachers acquire professional knowledge informally on the job and from the formal Post-Graduate Certificate in Education programme.

This study addresses such a gap in the academic literature by exploring the acquisition of professional knowledge through informal learning from their schools where they are teaching and formal learning from the Post-Graduate Certificate in Education. Given that the Post-Graduate Certificate in Education programme may continue to play a pivotal role in the training of teachers, this study has gone some way towards enhancing our understanding of how part-time teachers acquire professional knowledge through formal and informal learning.

This study, which is located in the interpretative paradigm, used 10 in-depth interviews with Post-Graduate Certificate in Education students (aged 25 to 42), who were purposively sampled to solicit their views on the acquisition of professional teaching knowledge. Grossman's model of teacher professional knowledge domains proved to be the appropriate lens and heuristic tool for this study, as it offers insights into the acquisition of general pedagogical knowledge, pedagogical content knowledge, content knowledge and knowledge of the context by these student teachers.

The findings from the study suggest that teacher learning occurs in both formal and informal places. Drawing from a teacher knowledge model, it can be argued that propositional knowledge is acquired through academic institutions of learning and practical knowledge is obtained in different school situations of learning. Professionally unqualified teachers can learn general pedagogic knowledge and knowledge of context on the job, with the help of dedicated mentors.

These findings could possibly be valuable for lecturers who are involved in teaching and preparing learning materials for Post-Graduate Certificate in Education programmes at the University of KwaZulu-Natal and other universities. In brief, the findings of the study could perhaps inform the curriculum and delivery of the part-time PGCE programme.

## **ACKNOWLEDGEMENTS**

I wish to express my sincerest gratitude and appreciation to the people who have assisted and encouraged me throughout my study.

- To my heavenly father, for always sustaining me and giving me strength, courage and determination to complete this thesis.
- Dr Carol Bertram, for giving me great support, motivation and guidance throughout the research process. Your understanding and expertise constantly encouraged me. Thank you for developing me into a scholar.
- To my wonderful husband, Sybert Mutereko, for invaluable commitment and sacrifice to assist me to work on this project. Thank you for believing in me and being there for me.
- My beloved children Kudakwashe, Mufarowashe and Munashe, for being strong pillars of love. Thank you for bringing so much happiness to my life.
- A special thank you to dearest relatives and friends, who always play a special part in my life. Your motivation, support and love is greatly valued and appreciated.
- Last, but not least, a very special thank you to all of the 10 PGCE part-time teachers who participated in this study. Without your willingness to participate in the study this research would not have been possible. Thank you for your support.

## **DEDICATION**

To my dear parents, Willie Sigauke and Moud Manyau Sigauke, who taught me how to persevere. I know you are proud of my achievement. From you I shall continue to draw inspiration.

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## **LIST OF ACRONYMS**

BSc	Bachelor of Science
BA	Bachelor of Arts
BEd	Bachelor of Education
CHE	Council of Higher Education
CK	Content Knowledge
DoE	Department of Education
FET	Further Education and Training
GET	General Education and Training
GPK	General Pedagogic Knowledge
KC	Knowledge of Context
MA	Master of Arts
NCS	National Curriculum Statements
NPDE	National Professional Diploma in Education
PCK	Pedagogical Content Knowledge
PGCE	Post-Graduate Certificate in Education
SACE	South African Council of Educators
UKZN	University of KwaZulu-Natal
UTE	Unprotected Temporary Educator

# CHAPTER ONE

## OVERVIEW OF THE STUDY

### 1.1 Introduction

The main aim of the study is to investigate the experiences of learning to teach of the Post-Graduate Certificate in Education (PGCE) part-time students at the University of KwaZulu-Natal in South Africa. Chapter One will discuss the motivation behind the study, outline the key question and sub-questions of the study and present the overview guiding this research.

### 1.2 Background and context of the study

The history of teacher education in South Africa has been influenced by numerous historical and political factors (Abrahams 1997:410). In the literature, Welch (2001:18) describes the roots of previous teacher education in South Africa “as segregation, fragmentation, authoritarian and bureaucratic control of the curriculum, institutions and governance, inefficiency and inequity”. This history is very important to understand, as this heritage has a considerable effect on the present teacher learning. Teacher education has been faced with many challenges during and after apartheid in South Africa.

After apartheid, several measures were put in place to give justification to teacher education. Keevy (2010) posits that in 1994 significant interventions were made to accelerate access of unqualified and under-qualified teachers to further and higher education, to increase the teaching workforce of these under- or unqualified teachers. According to Mays (2004), many teachers had no professional qualifications and had limited subject-specific training. As a way to rectify the problem, a number of programmes were put in place. While programmes like the National Professional Diploma in Education (NPDE) and the Advanced Certificate in Education (ACE) were for teachers who did not have a university degree, the part-time PGCE targeted professionally unqualified graduate educators to be professionally qualified. This route enabled them to study for a professional teaching qualification while working as full-time teachers.

The main aim of teacher education programmes in all countries is to enable teachers to become more competent in their professional practice, which is to organise systematic learning and nurturing their commitment to do so (Morrow 2002:69). This implies that teacher education is a specialised profession which requires knowledge of how to develop student teachers’ competence in a professional practice.

Schools of teacher education design programmes that help prospective teachers to deeply understand a wide array of things about learning, social and cultural contexts, teaching and being able to enact these understandings in complex classrooms, serving increasingly diverse students (Darling-Hammond & Young, 2002). This implies that student teachers are trained in a special, professional way that will enable them to perform their classroom duties competently. For novice teachers to be competent, student teachers at teacher training institutions are offered professional and academic programmes to equip them for practice. Together with other teacher education programmes in South Africa, the PGCE is aimed at producing professionally competent teachers, to improve the quality of practice in the education system of South Africa.

### **1.3 Rationale of the study**

The area of the present study, which is the learning experiences of part-time PGCE students, has been under-researched. This means that there is limited literature in the field of education in this area. There is little evidence of research in the field of teacher training for part-time student teachers who are already working as teachers. These teachers are professionally trained in the same manner as the pre-service educators. Given the nature of their teacher training, these teachers are likely to be faced with challenges. Regardless of these, their teacher training programme needs to be flexible, to cater for their training needs. It is hoped that the results of the study will give better clarity on the nature of the training given to part-time teachers. They will contribute to the body of knowledge in the professional development of teachers.

The present author's motivation for the study is largely personal, considering my background in the teaching field. I have been trained as an intermediate primary school teacher and have been teaching for the past 11 years. During my teaching I had the opportunity to teach in different school environments, which I felt widened, my understanding of the teaching practice. I had been teaching in a farm school, where there were combined (multigrade) classes, a village school, a township school and former model C schools. Although I thought I was highly qualified and experienced, I realised that there were other things that I had to learn "on the job" in those schools. I become conscious that there was so much to learn in the teaching profession and therefore developed a passion for teacher education. Teacher education focuses on teacher training, which involves how student teachers learn how to teach. My motivation in this study can be traced back to my personal experience as a

classroom practitioner. My interest now lies in how educators acquire professional knowledge “on the job” in the teaching profession.

Interest in the area of teacher education has increased due to my engagement with literature on teacher learning and teacher knowledge, as well as my personal experience in the teaching field. My deep motivation in undertaking this study will enable me to understand that the acquisition of knowledge in teacher learning is a lifelong process. This research will also enable me to reflect on my own tutoring practice in the teacher training of part-time, under-qualified teachers who are currently upgrading their teaching qualifications. I will reflect on to what extent my tutoring practice requires changes in the teaching profession, so that I can make a positive contribution in the teaching field.

#### **1.4 Purpose of the study**

The purpose of this study is to investigate the experiences of learning to teach by part-time PGCE students at UKZN. The study sought to discover how the PGCE part-time students acquire relevant professional knowledge vital for their teaching. Professional knowledge such as content knowledge, general pedagogical knowledge, pedagogical content knowledge and knowledge of the context are the domains that will be explored. In other words, the study sought to describe what kind of professional knowledge unqualified teachers develop “on the job”, before the acquisition of a formal professional qualification, that is the PGCE, what kind of professional knowledge they developed or learned in the PGCE part-time programme. The study also sought to reveal how these teachers talk about their learning from the core modules and specialisation modules, as well as professional learning from the teaching practice of the formal PGCE programme.

Exploring how these professionally unqualified teachers learn to teach in their schools, with the help of colleagues and mentors, and from the PGCE programme, would contribute to improving teacher education programmes.

#### **1.5 Key research questions**

This study sought to discover out how part-time PGCE students describe their experiences of learning how to teach. In order to answer this main question, the research intends to answer the following research questions:

- How do part-time PGCE students talk about learning to teach ‘on the job’ and what kind of professional knowledge did they develop before enrolling in the PGCE programme?
- How do part-time PGCE students talk about their learning from the PGCE core modules and specialisation modules?
- How do part-time PGCE students talk about their learning to teach from the practice of teaching?

## **1.6 Becoming a teacher in South Africa via the PGCE**

PGCE is a well-established and internationally recognised qualification undertaken by graduates to prepare them for a career in teaching (Wilson 2008). It is a one - or two - year professional educational qualification which caps a three-year undergraduate degree programme. The programme assumes that the first three-year degree has already laid a solid foundation in terms of content knowledge, so the programme is aimed at preparing prospective teachers for issues like how to deliver content knowledge (PCK), general pedagogic issues in teaching (GPK) and other issues related to the teaching and learning of children. The PGCE programme itself has opened avenues to many students with Bachelor’s degrees who wish to become teachers. In order for the students to be enrolled for PGCE they should have majored in teaching subjects. The programme enables student teachers to register with the South African Council for Educators (SACE) as qualified teachers after completion of the course. The PGCE programme is offered at the UKZN and other universities in the country. At UKZN it is offered in the following phase specialisations: Foundation Phase, Early Childhood and Development (ECD), Senior Phase or General Education and Training (GET) Grades 7 to 9 and Further Education and Training (FET) Grades 10 to 12. Student teachers choose ECD, FET and GET for specialisation when enrolled in this course. This choice is normally driven by individual passion for a specific phase specialisation and the nature of the primary degree.

### **1.6.1 Purpose of the PGCE**

In South Africa, the reviewed literature has shown that the majority of teachers are not been sufficiently equipped to meet the demands of a growing democracy in the twenty-first century (Department of Education 2006). Due to the shortage of educators in the country, for a number of years unqualified educators have been allowed to teach without a teachers’

professional qualification. A report from the DoE (2008) asserts that ensuring an adequate supply of teachers has received major attention from government, following findings that there are challenges around attrition and turnover and the fact that only a small proportion of students in higher education institutions were studying in the field of education. In relation to this departmental statistics point to a massive gap between the natural attrition of approximately 20 000 teachers lost to the system annually and only 6 000 new teachers graduating each year (DoE 2008). The concern is about the shortage of professionally qualified teachers, as well as the quality of teachers produced. To meet the demands of the growing democracy in education the South African government embarked on a number of initiatives to promote a better quality of education for learners.

With regard to this project, there are a number of professionally unqualified teachers who are currently teaching. Some of these teachers are university graduates who do not have a teaching qualification for them to be recognised as fully qualified teachers. In order for these teachers to become professional qualified teachers they have to go through the PGCE course, which takes one year full-time or two years part-time. The PGCE is a programme designed as a pre-service teacher education programme, but in the case of part-time students, they are already teaching in the classroom. This means that they have already developed some kind of professional knowledge through practice that full-time PGCE students would not have. The aim of this study is therefore to find out how part-time PGCE students describe their learning experiences of learning how to teach.

The PGCE focuses primarily on developing a wide repertoire of teaching skills, secure knowledge of the pedagogic content of the subjects and a deep sense of professionalism (UKZN PGCE, 2010). Students are expected to have a good disciplinary depth in their chosen subjects before embarking on the PGCE programme. The subjects that a student qualifies to teach are determined by the structure of the student's initial degree or major subjects. The undergraduate degree has to be approved by the university as a suitable degree for teaching purposes. In order to be enrolled, one must have at least two recognised degree subjects suitable for teaching purposes (UKZN PGCE, 2010). At UKZN a minimum of two teaching specialisations must be studied for GET and FET.

### **1.6.2 The structure of the part-time PGCE at UKZN**

The qualification follows the basic structure of the full-time qualification, but is spread over two years. Year one is made up of four modules: two core education and two professional

development modules. The professional development modules in the first year focus on giving the basic foundational skills in managing teaching and learning. They introduce teaching, learning and schooling in a South African context. The modules focus on curriculum assessment and effective classroom management skills. In both the first and second year there is a school experience module. In the second year there are four modules: one core education and professional development module, one school experience module and two teaching specialisation modules (UKZN PGCE, 2010). The professional development module in the second year provides students with an opportunity to gain knowledge and skills in diversity, inclusive education, education law and policy. The school experience allows the students to teach and be assessed by university tutors or school mentors. Usually lectures and tutorials take place on Saturdays and during school term holidays. This is because these are the only times that the teachers are available. The teaching practice will be conducted in the schools in which students are employed during July and August (UKZN PGCE, 2010). This is done in the schools where they are because it saves time in terms of teaching practice deployment. This helps student to gain contextual practical learning experience that is important in their learning to teach.

Teacher education programmes such as the PGCE are designed to empower prospective teachers with professional skills that will help them in their work.

In order for teachers to facilitate systematic learning they need to have that knowledge of teaching, knowledge of learners, how they learn and develop within social contexts, including knowledge of language development; understanding of curriculum content and goals, including the subject matter and skills to be taught in light of disciplinary demands, student needs, and the social purposes of education; and understanding of and skills for teaching, including content pedagogical knowledge and knowledge for teaching diverse learners, as these are informed by an understanding of assessment and of how to construct and manage a productive classroom (Darling-Hammond & Young, 2002).

All this is covered in the PGCE curriculum through different modules. All modules are developed in a way that will help the new teachers to gain professional teaching knowledge that will guide them in their teaching.

## **1.7 Overview of the dissertation**

The dissertation is made up of six chapters. The first chapter is an introduction to the study, focusing on the history of teacher education in South Africa, challenges in teacher supply and the shortage of teachers. The chapter presents the objectives of the study, the key questions of the study and its sub-questions. It concludes by outlining the structure of the PGCE programme.

Chapter Two reviews the relevant literature covering the history of teacher education in South Africa, current teacher education in South Africa, the PGCE and teacher knowledge. The chapter discusses teacher learning, that is formal and informal learning.

The third chapter describes the theoretical framework which informs the study. The chapter discusses Grossman's model of teacher knowledge as the theoretical framework of the study. The model is composed of four essential teacher knowledge domains, vital for teachers to have for them to be competent teachers.

The fourth chapter presents the research design and methodology that was employed by the study. It describes the research paradigm and design, as well as the teacher profile for the 10 participants who participated in the study.

The heart of this study is the fifth chapter which focuses on presenting the findings of the research. Detailed analyses of the learning experiences of the PGCE part-time teachers are presented. The data are arranged according to the themes that emerged for each research question. In the analysis the theoretical framework, which is Grossman's model, was used.

The last chapter analyses and discusses the 'learning to teach' experiences of the PGCE students, using the research questions as the lens with which to view the research findings. In this chapter, lessons learnt, and the implications of the research findings on the learning experiences of the PGCE part-time students, will be raised.

## **1.8 Conclusion**

Chapter One was the introduction to of the study. The chapter outlined the background and context of the study, as well as defining the research questions of the study. The reasons why the investigation was carried out were given and an overview of the study concludes the chapter.

The next chapter will focus on reviewed literature concerning teacher learning (informal and formal). It examines different ways in which teachers learn to teach. Attention will be given to teacher knowledge and how teachers acquire professional knowledge for teaching, that is, the knowledge domain vital for teachers to acquire for teaching purposes. The history of teacher education and teacher training in South Africa, with specific focus on the PGCE, will be discussed.

# **CHAPTER TWO**

## **LITERATURE REVIEW**

### **2.1 Introduction**

Any education system is defined by the quality of its teaching profession. The quality of teacher training programmes plays an important role in the education system of a nation. This chapter begins by giving an account of the history of teacher education and training in South Africa. Attention will be paid specifically to teacher training and past policies and practices. The chapter will give a better understanding of the present teacher education climate. The current teacher education situation in South Africa will be described, but emphasis will be on the PGCE, since it is the focus of the study. Aspects of teacher knowledge and teacher learning will be explained.

This literature review will focus on the following aspects.

- History of teacher education in South Africa
- Current teacher education in South Africa -PGCE
- Teacher knowledge
- Teacher learning, including formal and informal learning.

### **2.2 History of teacher education in South Africa**

Teacher education has been described by Morrow (2007:22) as a kind of education which enables someone to become more competent in the professional practice of organising systematic learning and nurtures their commitment to do so. This implies that teaching is a profession that requires teachers to be competent in their vocation.

In South Africa, teacher education has its own history, which cannot be ignored. Welch (2001) described previous teacher education in South Africa as segregated, inefficient, unequal and authoritarian. This means that during apartheid the education system was controlled in such a way that only the white minority benefitted. To improve the teacher education system as a way forward, history cannot be overlooked, given the historical disparities in the teacher education system.

From 1948, during the apartheid period, teacher education was marked by disorganised, pre-service preparation and ineffective in-service instruction. “Racial, gender, and regional

inequalities, as well as ideological distortions in teaching and learning, were apparent at almost all the nation's institutions of higher education where teacher training took place” (Gallie, Sayed, & Williams, 1997:462). Policies were put in place to control teacher education in terms of racial segregation, as well as teacher curriculum. In short, teacher education was organised according to four racially-based schooling systems, namely white, Indian, coloured and black education systems. As a result there were different, unequal professional qualifications among teachers in South Africa. Today challenges of varied unequal qualifications still exist and some of these effects are still felt by institutions as they try to enrol teachers with different qualifications for professional development purposes.

The teacher education programmes during apartheid were linked to colonial and apartheid laws. The introduction of the Bantu Education Act in 1953 enabled a racially stratified teacher education system in South Africa. The introduction of the Bantu Education Act reinforced the disintegration of South African education. Teacher education programmes were offered through contact and distance education by racially and ethnically separate institutions such as state and private colleges, universities and certain technikons and technical colleges in the country (Lemmer & Van Wyk, 2010:257).

During the apartheid era, separate government departments were established for the education of the coloured (people of mixed racial descent) and the Indian population group (the Indians are descendants of indentured labourers from India, brought to work on the Natal sugar cane plantations in the late nineteenth century) (Wolhuter, 2006:5). These separate governments would govern and control the education of people according to their race. This was a national plan to condition and maintain racial and ethnic segregation among different people in their communities.

In the late 1970s, teacher training for blacks was not of high quality, as they were given qualifications without proper training. As part of their training, teachers were asked to complete rote-learning assignments at their desk (Welch, 2001). Sayed (2001) stated that no dedicated teacher education institutions for Africans existed, and at times secondary schooling was their teacher education. Many African teachers received their training under apartheid and today some are still teaching with those qualifications, even though plans for educational equity were put in place.

### **2.3 Teacher training colleges during apartheid**

A closer look at teacher training colleges during apartheid is essential to this study, because it provides the context that will be used to describe teachers who are currently in the system who were trained during apartheid. Some of these teachers have been in the field for years and are actually helping and mentoring new teachers joining the profession today. It is thus of paramount importance to find out how teachers were trained during that time.

After 1948, teacher-training colleges mushroomed in the homelands, to cater for blacks who wanted to become teachers. The establishment of these colleges was driven not only by the need for trained teachers in the enrolment boom, but, given that teacher training was one of the few avenues of higher education and upward social mobility available to blacks, there was a high individual demand for teacher training education (Wolhuter, 2006:6). By 1960s teacher education colleges were segregated along the lines of race and ethnicity, creating partial, multiple and separate pathways to teacher education (Sayed, 2001). This meant that trained teachers were deployed to different racially and ethnically segregated schools. Wolhuter (2006) recorded that by 1981 there were 37 training colleges for black teachers, suggesting that colleges were burgeoning. During this time there had been a tremendous growth in the number of colleges, as the apartheid system advanced (Welch, 2001). The escalating number of colleges was caused by homeland leaders who built more colleges of education to show their commitment to education at the expense of the quality of teacher training. This led to the anomalous situation of a steady supply of unemployed teachers, while at the same time black schools had many unqualified or under-qualified teachers who had acquired their tenured positions before the onset of the surplus of teachers. These teachers were engaged in distance-teacher education, which was mostly in-service (Welch, 2001). As a result there was a large pool of unemployed primary school teachers who were trained but did not have jobs.

The escalating number of colleges had some consequences in the South African education system. Although more teachers were being trained, the quality of teachers was compromised, as teachers were produced in their masses without proper professional training. Parker and Adler (2005) pointed out that teacher education during apartheid operated like high schools producing teachers with limited special knowledge bases of teaching and restricted intellectual growth. In a way these teachers were not fully professionally developed to be competent enough to deliver what was expected of them.

In the 1970s and early 1980s there was concerted effort to improve the qualifications of teachers as a whole and to increase the numbers of teachers in black schools (Welch & Gultig, 2002: 21). However, the problem in the upgrading of qualifications was that most teachers were ill-trained through rote learning and had unequal professional qualifications from different colleges. Blacks had two - and then three - year qualifications and whites had three - and then four - year qualification. In short, these teachers had unequal professional qualifications which were driven by racially divided streams of teacher training. These professional inequalities made it difficult for enrolling institutions to provide further professional development for these teachers. Welch (2001:19) points out that the effects of unequally trained teachers are felt even now. In order to address this challenge, the National Qualification Framework (NQF) was set up to deal with the classification of qualification at different levels. Qualifications were to be registered in an integrated system that shows uniformity across the country. This meant that the qualifications of teachers were put on the same level.

## **2.4 Teacher education after 1994**

This section will explore some of the changes in the teacher education system and approaches to curricula that have emerged since 1995, concentrating more on the policy plans which were put in place as a way forward after 1994. It will focus on the transition of teacher education from the system of apartheid to after the end of apartheid.

## **2.5 The closing of teacher education colleges**

One of the key policy changes that occurred in teacher education after 1994 was the integration of all teacher education colleges into higher education institutions (Lemmer & Van Wyk, 2010). This was important, because it shifted teacher education from provincial to national competency (Yusuf 2001:2). This shift was also driven by cost considerations. A number of analyses indicated that dedication to mono-function institutions was more costly than a dedication to multi-function institutions. The argument was advanced that it was four times more expensive to educate teacher in colleges of education than in universities, due to lower lecturer : student ratios (Sayed, 2001; Welch & Gultig, 2002). This shift was motivated not only on the grounds of comparative cost between the colleges and universities of education only, but also on the need for improved subject learning areas, content knowledge and a research culture which universities are seen to provide more so than

colleges. This meant that the number of public institutions offering teacher education was reduced to 23, from 150 (Welch, 2001: 21).

This intervention in teacher education had many consequences, some intended and others unintended (Lemmer & Van Wyk, 2010:249). The closure of teachers colleges led to the restructuring of departments of education within universities, to accommodate the fusion (Reeves & Robinson, 2010; Welch, 2001). This means that in universities there was a restructuring to accommodate the shift of teacher training from colleges to universities. Yusuf (2001), stressed that, in the final instance, the policy decision was to incorporate all teacher education colleges into universities, with the provision that some could exist independently, subject to being multi-site institutions. This idea had some consequences along the way, which were under-estimated. Welch (2001) recorded that this move led to decline in student teacher enrolments, loss of educator staff and lowering the morale in institutions providing teacher education with a matter of considerable concern. The former teacher training colleges were integrated into the newly formed departments of education within universities, meaning that former teacher training colleges were phased out. This process meant that universities were going to be the main providers of both primary and secondary teacher education. It also meant that all teachers were going to be trained at universities. This transformation brought some consequences such as low student teacher enrolment in universities, because of the higher entrance requirements for universities. A smaller number of student teachers would thus be able to meet the minimum requirements for teacher training in universities, since teaching had become a graduate profession.

The current system of making teacher education part of higher education seems to be much more manageable. This means that all teachers being educated in universities were going to training, given the number of credits and hours for the modules. The universities gained valuable capital assets from the process of merging with teacher colleges. With the colleges the important experienced skilled teaching college academic staff was lost after the integration process. The recruitment of student teachers was not going to be an easy task, as they required a university entrance pass to be enrolled, thus making it more difficult for more students to be enrolled.

This step of integration marked a contrast to other countries in Africa, which emphasise the school-based teacher training approach. The concept of school-based teacher training approach was that “ the students are attached permanently to one school for the duration of

the programme while studying by distance methods” (Stuart, Akyeampong. K, & Croft. A, 2009:77). This method is evident in Malawi and Zimbabwe, where essentially a school-based teacher education training is in place (Sayed, 2001). With this approach more time is spent in schools than in college, giving student teachers a more practical approach towards teaching. In this case, specially trained teachers are appointed as mentors of the student teachers, to give them professional assistance.

In South Africa, the removal of colleges aimed to further professionalise education, by making educators study in the hallowed halls of a university. This move seems to have been welcomed, as it promoted the quality of teachers, given that they were now required to go through the academic gateways of universities.

The changing landscape of teacher education came with a significant alteration to curriculum issues in teacher education. The improvement of teachers’ subject knowledge is a priority that has been underlined in recent teacher education research (Welch, 2001). In this view it is implied that teacher education programmes should be structured in ways that assist educators to increase their subject content and pedagogic content knowledge. According to Reeves and Robinson (2010:16), “the knowledge base for teaching envisaged in current policy documents specifies that teachers are expected to be equipped with foundational knowledge of the subjects or learning areas they teach, practical knowledge of how to teach their subjects across school phases”. This means educators should have sufficient content knowledge to have a deep understanding of what they are expected to teach.

Below is a short description of becoming a professional, qualified teacher in South Africa.

## **2.6 Present professional teacher education**

A number of universities in South Africa are offering teacher education programmes to all students wishing to become teachers. UKZN is one of these institutions. At UKZN students willing to become teachers do so by either completing a 480-credit Bachelor of Education (B.Ed.) degree or a 360-credit appropriate degree, followed by a 128-credit Post-Graduate Certificate in Education (PGCE). Both include a practical teaching experience, which is an essential part of the programme. These routes lead to a professional qualification for teachers. Once completed, both routes can lead to classification as a professionally qualified teacher. After qualifying, students can register with the South African Council for Educators (SACE) (Department of Basic Education, 2010). SACE is a professional council for educators that aims to enhance the status of the teaching profession. It encourages all educators to be

registered SACE members if they are to practice as teachers in South Africa. PGCE qualification is recognised at REQV 14 level and gives recognition of professional qualified teacher status. Learning programmes in teacher education mainly emphasise the content knowledge of the subjects, pedagogic content knowledge and teaching practice. Below is a description of the PGCE professional qualification for teachers, which is the qualification under scrutiny in this study.

## **2.7 Post-Graduate Certificate in Education**

The PGCE is a well-established and internationally recognised qualification undertaken by graduates, to prepare them for a career in teaching (Wilson & Demetriou, 2007). This is a one - or two - year professional educational qualification which caps a three - year undergraduate degree. The programme assumes that the primary, first three - year degree has already laid a foundation in terms of content knowledge so the programme is aimed at preparing future teachers to deliver content knowledge, and focuses on pedagogic content knowledge. The course offers education and professional development core modules, which focus on education issues like education policy; curriculum; learning theories; barriers to learning; assessment and planning and the roles of a teacher. These modules are important in all phase specialisations. After learning these, student teachers are expected to develop a better understanding of the learning process and a deep sense of professionalism in the field of teaching.

The programme has opened doors to many undergraduates with a Bachelor's degree who wish to become educators. At UKZN the programme is offered in the following phase specialisations: Foundation Phase, Early Childhood and Development (ECD), Senior Phase/General Education and Training (GET) Grades 7 to 9 and Further Education and Training (FET) Grades 10 to 12. For specialisation the students are given a choice depending on the initial degree and their passion. A minimum of two teaching specialisations must be studied for GET and FET.

### **2.7.1 PGCE curriculum**

The qualification follows the basic structure of a full-time qualification, but is spread over two years. All the modules are geared towards the development of teachers who can facilitate effective teaching and learning. In each phase there are 8 Modules. The table below illustrates the PGCE modules.

**Table 1: Modules required for the PGCE programme**

GET specialisation	3 Core Educational and Professional Development Modules 2 School Experience Modules 3 Teaching Specializations Modules
FET specialisation	3 Core Educational and Professional Development Modules 2 School Experience Modules 3 Teaching Specializations Modules

### **2.7.2 Teaching practice**

In teacher education programmes student teachers are given an opportunity to learn to teach on the job. For beginner teachers the workplace is the only real place for them to learn many of the skills and attitudes required in the teaching profession. The aim of the teaching practice is to allow student teachers to gain a deeper understanding of the school as an organisation and to engage learners in an authentic environment. The young teachers have to work with an often daunting group of senior teachers, with whom they need to build some sort of relationship (Whitelaw, Beer, & Henning, 2008). The cognitive approach to teacher learning suggests that for novices to become experts they need to learn a body of knowledge which constitutes professional expertise and then apply this in their practice (Kelly, 2006:508). Teaching practice is simply the marriage of theory and practice, thus application. This practice is carried out under the supervision of effective mentors, who will guide, support and help students in their teaching.

Within the PGCE, knowledge of practice is only developed in schools, meaning it can be developed by mentors offering professional guidance to mentees. Students are attached to experts or mentors who offer assistance in pedagogical approaches to teaching and learning. PGCE students are assigned a trained, specialist mentor teacher, who, in collaboration with the respective student teachers has to oversee and engage in the day-to-day activities of the school. The activities included facilitation of lesson planning and presentation, design of different assessment activities, execution of administrative duties and activities involving extra-mural activities. Stuart *et al.* (2009: 193) suggest that “all teachers develop some knowledge of teaching derived from practical experience of teaching practice”. It is during teaching practice that teachers reflect on their practice and develop a range of personal

teaching strategies and tactics, which they continuously use in their teaching. As teachers reflect on their own teaching, practical knowledge is developed.

Stuart *et al.* (2009) outline some examples of practical professional knowledge gained in practice, which are essential for teachers to use in their classrooms:

- Class control
- Open daily routines
- Different ways of dealing with disruption
- Marking and assessing
- Lesson planning
- Ways of organising classroom and pupils

This knowledge is special, in the sense that it cannot be developed in institutions of training but in the classrooms and schools where teachers work. Much of this knowledge is situational meaning it includes the knowledge of a particular school, class and how particular individuals are likely to behave (Stuart *et al.*, 2009:194). This knowledge is likely to develop with the help of professionally experienced teachers who may be referred to as mentors.

A portion of the curriculum for part-time PGCE students is school experience or teaching practice. In this study the terms school experience and teaching practice are to be used interchangeably. At UKZN, the PGCE school experience for part-time students is organised into five elements, namely “first school experience for seven weeks, second school experience for seven weeks, audio-visual resource development and micro-teaching and specific skills development” (UKZN PGCE, 2010:28). According to Stuart *et al.* (2009) a properly carried out school experience offers huge opportunities for the student to develop effective professional teaching skills and to take on many aspects of a teacher’s role. Student teachers are given a chance to apply the professional knowledge learnt in the university or colleges in a practical situation.

With reference to this study, part-time PGCE students are already teaching, so teaching practice is conducted in the schools in which students are employed during July and August, in both their first and second year of the programme. During this period student teachers are expected to work under the supervision of school mentors. School mentors are expected to offer assistance and guidance to student teachers during the planning of lessons and record-

keeping, lesson observation and making a favourable environment for learning that is classroom appearance.

Assessment during teaching practice involves a series of broad competencies, such as demonstrating knowledge of content and pedagogy, managing students' behaviour during teaching, communicating clearly and accurately and reflection on teaching (Stuart et al., 2009). Student teachers are assessed by university tutors or their school mentors. Students will be awarded a distinction, pass with merit, pass, referral (supp) or fail, after the assessment of teaching practice. If the students fail to meet the satisfactory standard, supplementary teaching practice may be required in order for the student to meet the required standard (UKZN PGCE, 2010). In cases where the student falls below the required standard, the PGCE certificate cannot be awarded. Students are assessed by university tutors both in their first and second school experience. Students are assessed on their learning progress by observing lessons and discussing their learning development.

### **2.7.3 Assessment in PGCE**

Assessment in teacher education is very important. It is guided by the aims and objectives of the programme, thus focusing on fostering what prospective teachers intend to do in the actual classroom. It mainly focuses on assessing the teachers' knowledge of the subject, educational issues, pedagogy, learning theories and child development (Stuart et al., 2009). This is assessed practically by teaching practice and theoretically by assignments. In the PGCE, students write assignments and submit portfolio tasks of all work done during the PGCE programme. Students are given summative assessments at the end of the programme, to determine if they can qualify to teach. These are made up of both theory and practical elements. During the course of the programme, students are given formative assessment. This aims at guiding them to improve their future teaching. This is highlighted by Stuart *et al.* (2009) who feel that formative assessment shows the progress of students and its aim is to improve future learning of the student teachers.

This section has provided, in brief, the history of teacher education, present teacher education in South Africa and the PGCE programme at UKZN. The next section discusses the acquisition of teacher knowledge in teacher education.

## **2.8 Teacher knowledge**

A scholar in the field of teacher education, Shulman (1986), was the first researcher to be interested in the kinds of knowledge that teachers should have in order for them to be able to

teach. Since the seminal work of Shulman in 1986, the concept of the knowledge of teachers has become a focus of interest to educators' policy-makers and researchers (Shulman, 1986). "Teacher knowledge is the total knowledge that a teacher has at his or her disposal at a particular moment which, by definition, underlies his or her actions" (Verloop, Van Driel, & Meijer, 2001:5). Given that teacher knowledge is, by definition, embedded in the personal context of the teachers, it is not easy to generalise teacher knowledge.

Wilson and Demetriou (2007:14) assert that teacher knowledge can be classified into two categories, namely codified academic knowledge and practical knowledge. They state that codified knowledge is based on the idea that learning is primarily a cognitive process of the mind. Knight (2002) refers to codified knowledge as declarative or propositional knowledge while Wilson (2008) reasons that this sort of knowledge is found in textbooks and it is related to our ongoing intellectual development and progress through a hierarchy leading to greater levels of abstraction. With this knowledge, teachers should be able to draw upon it to understand professional teaching and learning. This is the academic knowledge essential in shaping teacher education.

The second type of teacher knowledge is practical knowledge. This essentially plays a key role in school-based practices and activities. This knowledge is hard to verbalise because it is expressed through action-based skills. It is difficult to make it explicit or to represent it in a textual form, because it is largely acquired, through participation in teaching situations, and it is often so 'taken for granted' that teachers are unaware of its influence on their behaviour (Wilson, 2008; Wilson & Demetriou, 2007). This knowledge is context-specific and is not easily codified, but nonetheless plays a key role in school-based practices and activities (Wilson & Demetriou, 2007). This knowledge is sometimes learned as people engage in close social interaction.

It can be said that teacher knowledge is shaped by a strong relationship between theory and practice. Combining, integrating and exchanging the two components becomes more important in effective teaching (Verloop et al., 2001). Thus, although both types of knowledge are important one cannot take precedence over the other one. This is why many types of teacher education blend the two types of knowledge in teacher training.

Teacher knowledge is an essential tool for teachers. Teachers require this practical knowledge in order to engage fully in their professional practice. Teachers' practical knowledge is extended through their daily experiences, both inside and outside the

classrooms (Wilson, 2008). As teachers gain more experience in teaching they are able to develop insights about their work that go beyond simply applying the prescribed rules and strategies of teaching (Stuart et al., 2009). In this view, teachers act more naturally in response to a classroom problem, because they have experience of how to deal with such problems. Teachers are able to use knowledge and experience, so that they can decide quickly what teaching approaches are most likely to help students understand particular concepts and different ways to express themselves. Teacher knowledge might thus involve the development of new ideas about innovative teaching approaches, which might help the novice teachers.

### **2.8.1 Development of teacher knowledge**

Teachers have a variety of sources from which to construct their knowledge of teaching a specific subject (Grossman, 1990). This means that teachers have different ways in which to construct their knowledge of teaching. In teacher education, knowledge is acquired through informal learning and formal learning. Wilson and Demetriou (2007:215) stress that knowledge is acquired, renewed and modified in different ways and it is therefore necessary for new teachers to be exposed to a range of learning approaches, both formal and informal. Teachers' knowledge of learning to teach can be developed through informal or formal learning. In this study the concepts of formal and informal learning are important as they play a crucial role in trying to understand how the part-time PGCE students learn how to teach. Part-time PGCE students are exposed to both types of learning as they learn how to teach. The concepts of informal and formal learning will be described below.

### **2.8.2 Informal learning**

Eraut (2000:114) explains that "informal learning is often treated as a residual category to describe any kind of learning which does not take place within, or follow from, a formally organised learning programme or event". This consists of implicit, deliberative, unintended, opportunistic and unstructured learning, in the absence of a teacher or trainer (ibid). Informal learning is often unplanned and there is no awareness of learning at the time it takes place. With regards to this, developing knowledge can either occur individually or socially and therefore can be viewed from different perspectives. An individual perspective on knowledge and learning enables us to explore both differences in what and how people learn and differences in how they interpret what they learn. A social perspective draws attention to the social construction of knowledge and of contexts for learning, and to the wide range of

cultural practices and products that provide knowledge resources for learning (Eraut, 2004). Thus, from a social perspective, knowledge is socially constructed in social groups.

Informal learning can take place in a number of ways. This may happen in the form of “incidental dialogue with colleagues, supplemented by informal contact beyond the school with experienced teachers, colleagues from previous employment, and university lectures from initial teacher education courses” (Wilson & Demetriou, 2007:219). This implies that informal learning takes place in various different unique ways. In the following paragraph I describe how teachers learn informally.

Teacher learning also takes place in unplanned incidental dialogue with colleagues at work, or outside work premises. In the work field, this happens through formal work relationships, which encourage communication among workmates. For example, teachers engage in staffroom conversation on the school premises and in the process they sometimes learn from one another. Outside work premises colleagues can telephone, e-mail and send text messages to one another, leading to incidental learning from incidental talk. As colleagues form mutual relationships they sometimes informally contact experienced workmates who, in turn, offer assistance in different ways. This is how knowledge is constructed socially.

Informally, teachers learn when they engage in extra co-curricular activities in school, or with other schools. This happens as teachers share ideas on how to do certain things and are valued and supported by colleagues as they interact. Teacher learning is also enhanced through collaboration with other teachers by participating in out-of-class, social networks in their school. Such learning provides fresh solutions and new ideas and are valued by teachers (Padder et al, 2005 cited in, Wilson & Demetriou, 2007). It is through interacting with other professionals external to the school that helps to increase confidence in issues of concern in the new teacher’s classroom. Such collegial approaches, however, require shared understanding, values and goals, which are developed through sustained contact in which individuals participate in co-joint activities (Lasky, 2005 cited in, Wilson & Demetriou, 2007). In addition to this, teacher learning happens through the use of web based resources, other teacher friends and through family (Wilson & Demetriou, 2007:220).

While learning to teach is an ongoing process, it is interesting to note that ‘learning from experience’ encompassed both ‘negative’ experiences, learning from mistakes, and more ‘positive’ experiences, including very successful lessons or incidents (Hagger, Burn, Mutton, & Brindley, 2008:166). This happens with a strong desire to work hard and to keep trying

new things. In the process, new knowledge is created, learned, mastered and then used. Experience is vital, since it is in the processes of planning, teaching and evaluation that all the other sources of knowledge on which one might draw come together in action and acquire meaning (Hagger et al., 2008). This is enhanced through learning from own practice, that is, teaching experience in the classroom. This type of learning relies heavily on individual perspectives. Teachers learn as they work in their own classrooms and deal with problems as they arise. Lieberman and Mace (2010) discovered that as teachers work they became students of their own practice.

### **2.8.3 Learning communities**

Scholars in the field of teacher education, such as Cochran-Smith & Lytle (1999) and Lieberman & Wood (2003), describe learning communities as critical, collaborative networks of teacher informal learning. They are important in the making of knowledge of practice for newly practising teachers. Teacher learning communities, such as professional networks, critical friends' groups, study groups, and teacher research collaborative, provide suitable settings for teachers to learn and build knowledge together (Wood, 2007:284). These places offer opportunities for teachers to reflect on their practice while learning tacit practical knowledge useful in their teaching. These learning communities play central roles in shaping the way teachers view their world and go about their work (Putnam & Borko, 2000).

The idea of teacher communities has been embraced by most educators all over the world as a way of meeting the challenges of improving schools in this fast-changing global society (Lieberman & Pointer Mace, 2008:233). In this view it is essential because it allows geographically dispersed teachers to meet, exchange ideas and learn from one another (Lieberman & Pointer Mace, 2008). In most cases, teaching is a commonly professionally lonely occupation, where teachers operate behind doors and there are not good structures for recognizing, affirming and sharing good practice (Beijaard, Meijer, Morine-Dersheimer, & Tillema, 2005:305). Wood (2007:282) enthuses that "learning communities are a golden opportunity to get teachers focused on best practices so they will stop doing the same old, same old". It is through these learning communities that teachers have a lot to share that is common and are able to speak the same language. All-in-all, collaboration within teacher communities can be very helpful for teachers to share and learn from others.

Wenger, (1998), (cited in Lieberman and Mace, 2010) described how people learn in "communities of practice" in three processes. These processes are learning, meaning and

identity. They stress that learning takes place through experience and practice. In practice, teachers learn by doing; through meaning, teachers reflect and learning is unintentional; and through identity, it is learning and changing who we are. These three processes are important as they help us to understand that learning is social in communities of practice.

It is also through teacher teaching communities that teachers built their own knowledge, as they share ideas and experiences. It is contended by Wood (2007) that, increasingly, literature abounds recommending collegial communities of teachers who learn together for the sake of improving student learning. It is for these learning communities that teachers are not only users of pedagogical knowledge, but creators of knowledge as they work together.

Kelly (2006) describes a socio-cultural approach to teacher learning in which learning takes place in communities of practice. It encompasses collegiality, where teachers learn to work together. In communities of practice, teacher learning is social and sometimes informal. Teachers come together, bringing a collective understanding of their work. There is evidence in research that shows that teachers learn best when they are members of a learning community (Lieberman & Pointer Mace, 2008:227). For example, Lieberman and Mace (2008) described network communities for teachers, where educator participants learn to talk with one another, built trust and discuss teaching practice. These networks helped teachers learn new ways of being with their peers, while increasing their ability to talk about their practice and improving their teaching by working with their colleagues. This provides opportunities for teachers to learn from one another outside the classrooms. This makes it possible for teachers to influence how and what they learn. This is important in the sense that it promotes and supports a culture of professionalism among teachers

#### **2.8.4 Formal learning**

According to Eraut (2000:114), formal learning involves any of the following characteristics of a learning situation or features of formal learning.

- a prescribed learning framework
- an organised learning event or package
- the presence of a designated teacher or trainer
- the award of a qualification or credit
- the external specification of outcomes.

From the definition given above, formal learning takes place when individuals acquire skills, knowledge and understandings of a designed programme for a particular purpose, with the help of a teacher or trainer. For student teachers this takes place at either formalised training institutions or in their schools for teaching practice. This learning is structured, planned and involves intellectual development, greater levels of abstraction, progression through a hierarchy of knowledge, and skills directed to attain both practical and theoretical knowledge. Again, learning is structured in terms of objectives, aims and time. It involves instruction and teaching, theory and practice, as well as continuous supportive feedback. At the end of the training period individuals are awarded a qualification. Thus the PGCE is an example of formal learning.

Teacher education programmes focus on teaching propositional knowledge and practical knowledge. The PGCE offers formal learning to those students who wish to become teachers. It is made up of a structured programme that offers prospective teachers a recognised teacher status, after completion. Its curriculum is made up of core education modules, teaching specialisation modules and teaching practice. These modules equip teachers with knowledge about education and teaching, theories of learning, human learning, social organisation, curriculum issues, teaching material, assessment strategies and cognitive psychology (Stuart et al., 2009). The programme's core modules are compulsory and teaching specialisation modules are optional. For specialisation modules student teachers choose subjects in which they want to specialise and this depends on individuals, as well as the student's primary degree. In formal learning, knowledge is gained in modules and forms propositional professional knowledge. This knowledge equips student teachers intellectually and helps to shape their thinking in practical experience of teaching practice. Although propositional knowledge is necessary, it is not sufficient and this is why teaching practice is important (Lieberman & Pointer Mace, 2010; Stuart et al., 2009:198). Teaching practice is carried out by all part-time PGCE students in their schools where they are already teaching. Teaching practice forms part of the assessment for part-time PGCE students.

### **2.8.5 Mentoring**

The role of mentors in teacher education cannot be overlooked. Beginner teachers do not work in isolation, but alongside experienced teachers who may also be professionally experienced. Good mentors are skilled and they offer quality instructional support to new teachers. Wilson and Demetriou (2007) explain that expert teachers provide support to teacher learning by modelling reflective and deliberative classroom processes. In the

classroom the mentee is lead through the classroom processes, where they work together and share experiences. For most student teachers, the mentors act as the main source of advice and feedback about their own practice and the main confidant and counsellor when things go wrong (Calderhead & Shorrock, 1997). Research has shown that mentors influence student teachers' practice in different processes (ibid). The crucial mentoring processes were identified by Calderhead & Shorrock (1997) as follows:

- Mentoring by example
- Mentoring by coaching
- Mentoring through practice focused discussions
- Mentoring through structuring the context
- Mentoring through emotional support
- Mentoring through devised learning experiences

These processes, together with good mentoring skills, will help student teachers to understand what teaching is all about. They are enhanced when mentors are adequately prepared to mentor and encourage professional development in student teachers. They need to have special skills, such as being a competent practitioner, and be able to demonstrate a variety of classroom practices and counselling skills (Calderhead & Shorrock, 1997; Stuart et al., 2009). Mentors should also have coaching and modelling skills, so that they are able to demonstrate a variety of classroom management skills that will benefit student teachers. Teacher learning in teaching practice usually happens in a formal way, though sometimes the discussions between the mentor and the mentee can take place in an informal way. In the process of mentoring, counselling skills are important. For many student teachers, learning to teach comes with a lot of anxiety, self-doubts and disappointment. A good mentor should be able to provide necessary support whenever necessary and provide appropriate counselling to student teachers who are stressed.

During mentoring, collegial discussions based on shared experiences are powerful in assisting student teachers to acquire knowledge. This takes place in informal ways and such shared experiences enhance learning in new teachers. It can take different forms, for example, mentors and mentees can engage in team teaching or team planning, mentees can observe mentors, mentors can observe mentees, or both can observe other teachers (Rowley, 1999). In

a way the purpose is to promote friendly dialogue, focused on enhancing teacher performance and student learning through professional practical experience.

## **2.9 Conclusion**

Chapter Two focused on the history of teacher education in South Africa and current teacher education, with specific reference to the PGCE which is offered at UKZN. There has been a great shift in teacher education from the apartheid era to the present. On the one hand, the shift came with benefits of professionalising the teaching profession and, on the other hand, making it inaccessible for many people who wish to become teachers because of its entry requirements in universities. The concepts of teacher knowledge and of teacher learning (formal and informal), how teachers acquire their professional knowledge was also discussed. The present teacher education in South Africa, with special reference to PGCE, was explained in depth.

The next chapter engages with the concept of teacher knowledge. The four domains of teacher knowledge will be described in detail in Chapter Three, as they form the conceptual framework for the present study.

## **CHAPTER THREE**

### **THEORETICAL FRAMEWORK**

#### **3.1 Introduction**

The purpose of this chapter is to outline the theoretical framework of this study. The framework of this study is based on a model of teacher knowledge. This chapter will focus on the model and its sub-concepts which compose this framework of teacher knowledge. This teacher knowledge framework by Grossman (1990) is the most suitable framework to use in this study because it aims to describe and explore the kind of professional knowledge developed by PGCE part-time students from their schools through informal learning and how they are learning to teach from the formal programme. The chapter also describes in depth the domains of teacher knowledge and professional learning which inform the study.

#### **3.2. Theoretical and conceptual frameworks of teacher knowledge**

This study is informed by the domains or principles of teacher knowledge. American Lee Shulman was one of the first researchers to describe teacher knowledge, and all other studies acknowledge his work as a starting point. Shulman (1987:127) described seven categories of teacher knowledge namely “knowledge of content, knowledge of pedagogy, knowledge of curriculum, knowledge of learners and learning, knowledge of contexts of schooling, pedagogical content knowledge and knowledge of educational philosophies, goals and objectives”. The reviewed literature has shown that a number of researchers have proposed frameworks for domains of teacher knowledge (Anderson, 1995) and other scholars have built on Shulman’s ideas, (Adler and Reed 2002; Morrow 2007; Bisset 1999; Banks *et al* 2005 and Grossman 1990). These domains of teacher knowledge are said to be interwoven in practice. In the sense that for proper learning and teaching to take place all the knowledge domains must be present. It is for this reason that scholars mentioned above acknowledge that content knowledge; general pedagogical knowledge, pedagogical content knowledge as well as knowledge of educational context are vital cornerstones of professional teacher knowledge.

The knowledge base of teaching as a profession remains a highly contentious issue (Hoyle, 1995:13). Grossman (1990:5) contends that “there are four general areas of teacher knowledge that can be seen as the corner stones of the emerging work on professional knowledge for teaching”. These include general pedagogical knowledge, subject matter

knowledge, pedagogical content knowledge and knowledge of context. Shulman (1987) described seven categories of teacher knowledge and Grossman described only four teacher knowledge categories. In her four categories Grossman described pedagogical content knowledge as a broad category which includes other elements of knowledge of curricular, knowledge of learners and knowledge of strategies of teaching, whereas with Shulman these categories, such as knowledge of educational ends, knowledge of learners and their characteristics and curriculum knowledge are described separately. Anderson (1995) agreed with Shulman and Grossman on the listed domains of teacher knowledge but added knowledge of self as another important domain of teacher knowledge.

In the present study, Grossman's model of teacher knowledge will be used as a starting point of the theoretical framework. Her model of teacher knowledge is composed of four components, namely subject matter knowledge, general pedagogical knowledge, pedagogical content knowledge and knowledge of context. This model is relevant to the study because it enables me to understand the professional knowledge developed from their schools and from the PGCE programme by part-time students. The categories of teacher knowledge used in Grossman's model are the ones that I am going to use to analyse my data. This model is thus quite useful, because it is made up of all the components of professional knowledge bases that are relevant to my study. The next section will describe the four domains of teacher knowledge from Grossman's model.

### **3.2.1 Subject matter knowledge**

Subject matter knowledge encompasses knowledge of the content of a subject area, as well as knowledge of the substantive and syntactic structures of the discipline (Schwab 1964 cited in Grossman,1990). Subject matter knowledge can be referred to as content knowledge. According to Shulman (1986:7) , “content knowledge refers to the amount and organisation of knowledge *per se* in the mind of the teacher”. Knowledge of content refers to knowledge of the major facts and concepts within a field (Grossman 1990). Subject-matter knowledge is made up of the teacher's knowledge of, and about, the content that he or she will teach.

“This type of knowledge rests on two foundations, namely the accumulated literature and studies in the content areas and the historical and philosophical scholarship on the nature of knowledge in those fields of study” (Shulman, 1987:9). This implies that the teacher must have an in-depth knowledge of understanding structures of particular subjects or learning areas taught in schools, so as to facilitate better understanding of concepts in learners. In

addition, the teacher has a special responsibility to serve as the primary source of learners understanding of subject matter as he/she is a facilitator of learning. It entails that teachers should have sufficient knowledge of the subject or learning area in order for them to deliver what is expected of them because without knowledge of the structures of a discipline, teachers may misrepresent both the content and the nature of the discipline. This knowledge directly influences what and how they teach (Grossman and Shulman 1987 cited in Grossman, 1990).

McNamara (1991) emphasises that knowledge of subject content is essential, not only for teaching itself, but also for the evaluation of text books, computer software and teaching aids. This is very important, as teachers are expected to evaluate content from different books before teaching and produce suitable learning materials which suits the learners' level and that can be easily understood by learners. This suggests that teachers need to possess relevant content knowledge in order to make appropriate decisions when choosing learning materials for students. He adds that teachers with strong content knowledge may teach in a more interesting and dynamic way, while those with little content knowledge may shy away from the more difficult aspects of the subject, or approach their teaching in a didactic manner.

Calderhead and Shorrock (1997) stress that teachers who are insecure in their subject knowledge tend to adopt a slavish adherence to textbooks and reliance on narrow questions and have an inability to extend children's answers. Shulman, cited in Calderhead and Shorrock, (1997) explains that in order for one to be able to teach a subject, one needs breadth and depth of knowledge and a rich factual knowledge base with many interconnections which represent a much more thorough understanding than that which is achieved purely as a learner. This pure knowledge helps teachers to facilitate better understanding of concepts to learners.

Today, many teacher education programmes, especially in developing countries, weigh subject content heavily in an attempt to strengthen student teachers' background knowledge of school subjects (Stuart et al., 2009). This is done to try and overcome teachers' lack of content knowledge, because it may affect classroom discourses or affect how teachers critique and use textbooks. Many studies have found that teachers' subject knowledge and pedagogical content knowledge both affect classroom practice and are modified and influenced by practice (Turner-Bisset, 1999).

From the findings of previous research it can be said that the teachers' knowledge of the concept is very important in the teaching of students. Without adequate knowledge of content, teachers are likely to rely more on the use of textbook and what and how they teach is also likely to be affected and this will impact on the learners.

Developing content knowledge does not only require the knowledge of the understanding of the content knowledge, but also an understanding of the learning theories, how children learn, their abilities and how they respond to situations and the use of teaching strategies (Calderhead & Shorrock, 1997). This is what makes teacher education. Teaching involves practical and intellectual activities. This crucial knowledge is what makes teaching a profession.

### **3.2.2 General pedagogic knowledge**

According to Grossman (1990:6), general pedagogic knowledge has been the focus of most research on teaching. It includes a body of general knowledge, beliefs and skills related to teaching, knowledge and beliefs concerning learning and learners and knowledge of the general principals of instruction. It is also a complex set which includes knowledge of classroom organisation and management, different teaching strategies or methods, assessment strategies and understanding classroom communication and discourses (Morine-Dershimer and Kent 1999, cited in Bertram, 2011). Shulman (1987) claims general pedagogical knowledge as the broad principles and strategies of classroom management and organisation that appear to transcend subject matter. This refers to common knowledge of academic principles of learning and teaching, which implies that this type of knowledge deals with generic skills that educators are expected to obtain to help them to deal with the general demands of the classroom.

This means that as teachers manage their classrooms they take care of certain administrative responsibilities in order to do their work properly. This includes among others, programme planning, space management and time management. It also encompasses understanding of learners and learning, classroom management and curriculum and instruction (Grossman, 1990). It includes knowledge of learners and their characteristics, knowledge of learners of a particular age range and cognitive knowledge of learners. This might be regarded as common knowledge that teachers should have for them to teach, manage and supervise learners effectively in their classrooms. Within this knowledge group, knowledge of child

development and knowledge of a particular group of learners is also important for effective classroom management.

This knowledge component is vital for teachers to do their work properly. Without this knowledge teachers might find it difficult to deal with some of the day-to-day classroom challenges. Cognitive knowledge of learners enables teachers to deliver learning material that is suitable for the cognitive level of learners. It is also through the use of this knowledge that teachers are able to deal with issues of discipline in the classroom.

Knowledge of educational contexts include a specific school, catchment area and the wider community, knowledge of educational ends, purposes, values and philosophical and historical influences; both short and long-term goals of education and of a subject (Capel, Hayes, Katene, & Velija, 2009:52). All these knowledge components are vital in the development of general pedagogic knowledge for professional teachers. These enable teachers to deal with learners in their specific area context. Thus, when teachers are in the classroom, they need general pedagogical knowledge so that they can deal effectively with the common demands of managing classes.

### **3.2.3 Pedagogical content knowledge**

The term pedagogical content knowledge was initiated by Shulman in 1986. Shulman (1987a) defined it as an amalgam between content and pedagogy. The term was further conceptualised as a combination between content and pedagogy by other researchers (Turner-Bisset, 1999:9; Verloop et al., 2001). This is the special knowledge of teaching a particular subject. Shulman (1987), cited in Turner Bisset (1999:4), identified pedagogical content knowledge “as being of special interest because it represents the blending of content and pedagogy into an understanding of how particular topics, problems or issues are organised, represented and adapted to the diverse interests and abilities of learners, and presented for instruction”. Other scholars claimed that pedagogical content knowledge is an integration of general pedagogical and specific subject-matter knowledge (Cochran-Smith & Lytle, 1999; Garrahy, Kulinna, & Cothran, 2005; Grossman & Thompson, 2008).

That special amalgam of content and pedagogy is uniquely the territory of teachers, where they acquire their own special form of professional understanding of their job. It represents the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are reorganised, represented and adapted to the diverse interests and abilities of learners and presented for instruction (Cochran-Smith & Lytle, 1999:8).

This is where specific content knowledge and generic pedagogic knowledge come together and blend. This is a special skill of making the subject more comprehensible to the learners. Shulman (1987) explains that this understanding includes representations of knowledge (analogies, illustrations, examples, explanations and demonstrations), and student learning difficulties as well as strategies to deal with them. This particular knowledge should help learners to learn and understand new concepts of different subject matters. Shulman (1986:10) adds:

*It 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. If those preconceptions are misconceptions, which they so often are, teachers need knowledge of the strategies most likely to be fruitful in reorganizing the understanding of learners.*

Pedagogical content knowledge (PCK) is different from content knowledge. Firstly, PCK focuses on the special communication between teacher and student on how to teach the subject. This is basically the representation of ideas by explanations, examples and illustrations by the teacher. Secondly, PCK focuses on what and how specific topics of subject matter are taught to make learners understand. (Verloop et al., 2001). In a research work done by Grossman (1988) with high school English teachers, she developed an expanded definition of PCK. She defined it as composed of four central components, namely knowledge and beliefs about the purposes of teaching a subject at different grade levels, knowledge of the students' understanding of explanations and representations, knowledge of the curriculum and knowledge of teaching instructional strategies and representations of teaching particular topics (Grossman, 1990). Below is a description of the four knowledge components.

The first component knowledge is of teachers' knowledge and beliefs about the purposes of teaching a subject at different grade levels. This knowledge is essential as it enable teachers to achieve their aims and objectives of particular subjects in particular grades. Their teaching must also be driven by the purposes of teaching a subject at that grade level. Let us examine, for example the subject of Maths Literacy at the FET phase. The question would be what are the teachers' knowledge and beliefs regarding teaching Maths Literacy? The teachers'

purpose might be to promote a variety of problem-solving skills in the calculation of basic numbers. This perspective will inform how the subject is taught at that grade level.

“The second component of pedagogical content knowledge is about knowledge of the students’ understanding, conceptions and misconceptions of particular topics in a subject”, (Grossman, 1990:8). Knowledge of the conceptions and preconceptions that students of different ages and backgrounds bring with them to the learning of most frequently taught topics and lessons need to be addressed. If these preconceptions are misconceptions, which they so often are, teachers need knowledge of the strategies to deal with them (Shulman, 1986).

This knowledge category is vital for teachers to have, because it enables them to teach a subject concept from what the children already know, to what they do not know. In teaching terms it is referred to as teaching from known to unknown and concrete to abstract. This will help teachers make suitable explanations and representations about a topic they want to teach. This includes an understanding of what makes the learning of specific topics easy or difficult.

The third component of PCK is simply knowledge of the curriculum (Grossman, 1990). For teachers it is important to understand and have deeper knowledge of the curriculum. It is important because it helps teachers to be aware of what is included and not included in the curriculum as they draw upon knowledge of what students have learned in the previous grade and what they are expected to learn in the next grade. Teachers are thus required to know how to organize the curriculum of their learners.

The fourth component of PCK is “knowledge of teachers’ instructional strategies and representations for teaching particular topics” (Grossman, 1990:9). This is developed through teachers’ everyday work in and out of the classrooms and experience. It includes theory learned during teacher preparation and experiences gained from ongoing schooling activities to develop this knowledge. Developing this knowledge not only involves an understanding of the subject, but also an understanding of children’s abilities and interests and how they respond to different situations. Calderhead and Shorrock (1997) asserts that this is a special knowledge which helps the teachers to communicate the subject matter in a way that learners understand. This develops with experience, so experienced teachers have more of this knowledge than novice teachers.

#### **3.2.4 Knowledge of context**

Grossman (1990:9) defines knowledge of the context as:

The understanding of particular contexts in which teachers teach, thus having knowledge of districts in which teachers work, including the opportunities, expectations and constraints posed by the districts; knowledge of the school setting, including the school 'culture', departmental guidelines, and other contextual factors at the school level that affect instruction; and knowledge of specific students and communities, and the students' backgrounds, families, particular strengths, weaknesses, and interests (Grossman, 1990:9).

When teaching, all teachers must be able to draw upon their understanding of particular knowledge contexts. This knowledge is of paramount importance, because it enables teachers to have a better and deeper understanding of their learners, communities and districts at large.

In concurrence with Shulman (1986), Grossman (1990), states that knowledge of educational contexts is knowledge of schools, classrooms and all settings where learning takes place. This category is unique and interesting in the sense that knowledge of this category does not develop only through formal, learning but comes from situational learning. This means that through exposure to different learning environments it enables one to develop a better understanding of knowledge of different environments and thus school cultures. It is very important that educators familiarise themselves adequately with knowledge of their educational institution, as well as knowledge of other institutions, so as to respect and accommodate the type of learning in these institutions.

According to Turner-Bisset (1999), educational contexts have a significant impact on teaching performance and there are a range of contextual factors which affect development and classroom performance. She elaborates:

These included the type and size of school; the catchment area; the class size; the extent and quality of support for beginning teachers; the amount of feedback teachers receive on their performance; the quality of relationships in the school; and the expectations and attitudes of the head teacher (Turner-Bisset, 1999:46).

Although the components mentioned might be small, they impact on the teaching and learning of both teachers and learners. Therefore it is essential for educators to know the working of classrooms, schools, school governing bodies, school culture, values and the needs of the school and community in which they work. These aspects influence and control their teaching

and enable them to deal with problems at hand, knowing the culture of a specific school, catchment area and the wider community.

Knowledge of learners' cultures and backgrounds vary from one place to another and the knowledge that grows from regular contact with learners also differs. This includes social knowledge and cognitive knowledge of learners, knowledge of child development and understanding of a particular group of learners with reference to their particular area. This is context-bound knowledge which cannot be applied to other learners. This knowledge is thus vital to help teachers relate with particular learners in a given context.

Anderson (1995) feels that knowledge of the context includes knowledge of the historical, philosophical and cultural foundations of education within a particular country. Given the history of teacher education in South Africa, this aspect needs to be taken into serious consideration. In addition to this, the issue of poverty in South Africa and the socio-economic inequalities amongst people has an impact on the teaching and learning of both teacher and learners. This means that teachers should be well prepared to deal with such things when they come their way.

### **3.3 Conclusion**

Chapter three has focused on the theoretical framework which informs this study. It has described the four domains of teacher knowledge, as outlined by Grossman (1990). These are subject matter knowledge, general pedagogical knowledge, pedagogical content knowledge and knowledge of the context. According to Grossman (1990), these knowledge domains are essential for teachers to have, as they inform their teaching. In the present study the research questions were used for analysing the data from the interviews. The next chapter will focus on the methodology used in the present study.

# **CHAPTER FOUR**

## **RESEARCH DESIGN AND METHODOLOGY**

### **4.1 Introduction**

This study explores the learning experiences of part-time PGCE students and their learning how to teach. Chapter four discusses the research design and methodology used in this research. Its purpose is to outline, describe and justify the research methods and procedures that were used. It focuses on the procedure of the research, starting with the research paradigm, research design, sample and sampling procedures, research instruments, ethical issues, validity, data collection procedures and information about the participants. Each will be examined in detail, with relevant literature used in various aspects of methodology to substantiate the ideas.

The key research questions forming the study are:

- How do part-time PGCE students talk about learning to teach ‘on the job’ and what kind of professional knowledge did they develop before enrolling in the PGCE programme?
- How do part-time PGCE students talk about their learning from the PGCE core modules and specialisation modules?
- How do part-time PGCE students talk about their learning to teach from the teaching practice?

To respond to the above questions, semi-structured interviews were conducted to generate data. This particular study is part of a bigger group project, which collected data from 24 part-time PGCE students. The aim of the bigger project was to find out the kind of knowledge the part –time PGCE students bring to the programme in terms of content knowledge, general pedagogic knowledge and pedagogic content knowledge. The other aim was to understand what kind of knowledge the part-time students learn from the PGCE core modules, specialisation modules and teaching practice. The data was collected through semi-structured interviews. In my current study a total of ten participants taken from 24 were used. These were ten educators from Further Education and Training (FET) and General Education and Training (GET). This sample was extracted from the bigger group project.

## **4.2 Research paradigms**

All research studies are guided by paradigms. This investigation falls under the interpretative paradigm. This means that the study is qualitative in nature. The interpretative approach is central to understand the subjective world of human experience (Cohen, Manion and Morrison 2007:21). This means that the interpretative approach is subjective in nature. To understand the subjective reality is of great importance, because people experience reality in different ways and hence make meaning in different ways. In this paradigm, reality lies in each person's experiences. People are able to construct knowledge socially through values, beliefs and understanding of different views. With regards to this paradigm, the understanding of people's values and beliefs is vital, because values are an integral part of human social life. Knowledge is also socially constructed when researchers make meaning from collected data.

Given the nature of the present study and its purpose to explore the learning experiences of the PGCE part-time students, it automatically locates itself in the interpretive paradigm. The teachers' opinions, views and their personal experiences were vital to understand, given their learning experiences of learning how to teach. A total of 10 teachers were chosen to articulate their understanding of their experiences of learning how to teach.

The reason why this route was chosen was to allow a better description of the experiences of learning how to teach by the PGCE part-time students. In order to generate information, descriptions and explanations of learning experiences were important. These descriptions were the teachers' teaching experiences and this formed my data. The world is complex and dynamic and is constructed, interpreted and experienced by people in their interactions with each other and with wider social systems (Guba & Lincoln, 1994). This route enabled an in-depth exploration and description of the learning experiences of PGCE part-time students. Information from the teachers was collected with the use of semi-structured interviews. From the semi-structured interviews, descriptions were given on perceptions of how the teachers explained their learning experiences before the PCGE programme and from the PGCE programme. The given data revealed different realities of the teachers' learning, on how to teach.

## **4.3 Sampling**

A sample consists of the elements of the population considered for actual inclusion in the study (de Vos, Strydom, Fouche, & Delport, 2002). The population can also be referred to as

the target population, from which a sample is taken for research, Samples are taken because a complete coverage of the entire population is time-consuming and expensive and would produce large volumes of data which would be complicated to process, analyse and interpret. In this particular study, a fairly small sample size was used. 10 participants who were PGCE part-time students participated in this particular study. Of the 10 participants, five student teachers specialised in humanities and the other five in sciences.

A research population denotes all those who fall into the category of concern, or objects or events that conform to specific criteria and to which we intend to generalise the results of the research (MacMillan and Schumacher, 2006). The population of this study is approximately 100 part-time PGCE students, who registered in January 2009 and should have completed their certificates at the end of 2010 and graduated in April 2011. From this group, only 24 students were willing to be interviewed, implying that the participants selected themselves. From the group of 24 only 10 were selected for this particular study. Only seven managed to graduate in April 2011 and it is assumed that the other three graduated after April 2011, since they failed some of the courses. All of these 10 students were studying for the FET and GET phases of schooling. Purposive sampling was used for sampling, using the criterion that all students who were registered for the PGCE part-time programme were willing to be interviewed regarding their learning experiences on the programme. In this present study only potential participants who were interested and understood the expectations of the study while providing appropriate data were able to participate.

Purposive sampling is sometimes called non-probability sampling. In almost all qualitative research the sample is purposive (Fraenkel & Wallen, 1993). The same view was shared by Gays *et al* (2006), who says sampling in qualitative research is almost always purposive, as many people are reluctant to undergo the lengthy demands of participation (Gay, Mills, & Airasian, 2006). Purposive sampling was chosen because it fits very well into quality research, as it tends to provide an in-depth exploration of experiences of learning to teach by part-time PGCE students. It is important to understand that only a selected few individuals built up the sample in relation to the needs of the study. This type of sampling does not intend to represent the wider population, because of the small number of participants. For this study purposive sampling was the best, since it enabled the researcher to explore, in some depth, their learning experiences of how to teach.

## **4.4 Data collection methods**

Individual interviews were used for data collection.

### **4.4.1 Interviews**

Gwimbi and Dirwai (2003:77) define an interview as “a conversation between the interviewer and the interviewee with a purpose of obtaining relevant information for the study”. They reasoned that it is a good way of collecting qualitative data, in that it has high response rate since the interviewer physically confronts the respondent (ibid). In the present study, interviews were the best instrument for data collection, because they suited the nature of qualitative research.

In this study, structured interviews were conducted to investigate the learning experiences of part-time PGCE students (see Appendix 2). The questions in the interview were structured, meaning that a set of specified set of questions that extract certain specific information from the respondents was used.

Welman, Kauger and Mitchel (2005:164) advocate that the biggest advantage of interviews is that the interviewers have complete control of the interview situation. This means that the interviewer is in a position to ask questions from the interview guide and clear any misunderstandings on the part of the respondents and more data can be obtained with greater clarity. This is very important, in that this promotes the validity of the study. Above all, interviews provide in-depth qualitative data for qualitative research. For these reasons interviews were used in this investigation to discover more about the learning experiences of learning how to teach, from the part-time PGCE students.

The use of this method seems to be viable, but it has its weaknesses. Welman, Kauger and Mitchel (2005) caution that some interviews do not define limitations of the study and people often divert from their topics. To obviate this, an interview guide was used to keep track of all the questions, to keep a full record of the interview (TerreBlanche, Durrheim and Painter 1999:298). The interviews were audio recorded, in order to try validating and verifying the veracity of data from the study.

## **4.5 Data analysis**

Data analysis, according to Fraenkel and Wallen (1993), refers to analysing the data, by synthesising the information that the researcher finds from the interviews into a coherent description of what was observed. This involves a number of procedures in order to draw

meaningful themes and conclusions from the collected data. Data recorded from interviews was transcribed before the analysis. Since I was not part of the data collection team I also had a chance of transcribing some of the conducted interviews. This helped me to get a deeper understanding and familiarisation with the generated data. During this process I listened to the interview, to get a sense of the whole interview. This assisted me to immerse myself in the data, while trying to get a holistic sense of the interview. Whilst reading the data I wrote memos in the margins of the transcript. These were key ideas that I reflected on in the process of my data analysis. After transcribing some of the interviews I read through all the transcripts several times, with the aim of understanding the context for the emergence of specific units of meaning and themes (McMillan and Schumacher, 2006). After this, common themes or patterns were identified. Data was coded and groups of analyses were identified. Similar opinions expressed by teachers were grouped together, so that themes could be identified which are relevant to the research questions. Several themes emerged on how the teachers learned how to teach from the PGCE part-time students.

The process of sorting the data into different categories was not an easy one for research questions two and three, where participants were asked to describe their learning from the specialisation modules and core modules. This seemed not to be clear for some respondents, because they were talking about their learning from the specialisation modules when asked about learning from the core modules and *vice versa*. Lack of clear a distinction between learning from both the core modules and specialisation modules made it difficult to categorise the data correctly.

In order to overcome this problem, I had to read between the lines and search for other possible explanations from the data and the linkages among them. Alternative explanations always exist, but the researcher must identify and demonstrate why the explanation offered is the most plausible of all (de Vos et al., 2002).

Grossman's model was used as the theoretical framework of the study. The transcribed data was analysed, using Grossman's model of categories of professional teacher knowledge. This means that data was condensed into common phrases and then key themes were identified from the data. Data from qualitative research is usually detailed and requires heavy interpretation, as well as good organisation, so as to create meaning from it. In this study, organisation of data analysis was according to the research questions in their order.

## **4.6 Ethical measures**

If research is to be carried out and human beings are the subjects, then acknowledgment and handling of ethical aspects are vital if successful research is to be conducted (de Vos et al., 2002). They further construe that ethical issues are identified as informed consent, violation of privacy, release of findings, harm to subjects, clearance from local authorities and debriefing of subjects. These aspects are fundamental and are to be treated with caution when carrying out a research project. Each aspect will be elaborated on relation to how it was done in this particular study.

### **Clearance -Local authorities**

When conducting research in an institution like a university system, approval for conducting the research should be obtained from the institution, as well as the human subjects (McMillan and Schumacher, 2006). For this study, ethical clearance was sought first, before the collection of data. Ethical clearance and permission for the study was granted by the Faculty of Education Research Committee of the UKZN (see Appendix 3). After permission was granted, data collection commenced. This took place on UKZN premises.

#### **4.6.1 Informed consent**

McMillan and Schumacher (2006) stated that subjects have the option to participate or not to participate in any research. Then if the subjects are to participate in a study the researcher must obtain their informed consent. Welman, Kruger and Mitchel (2005:201) explain that, “informed consent entails that the researcher should obtain the necessary permission from the respondents after thoroughly and truthfully informing the participants about the purpose of the investigation”. This means that all sufficient information on the goal of the investigation must be thoroughly explained before the study. De Vos *et al* (2002) said that the procedures that will be followed during the investigations, well as possible advantages and disadvantages and dangers to which the respondents may be exposed, as well as the credibility of the researcher must be rendered to potential subjects. This means that research participants need to be enlightened about what they will do in the study. Participants were made fully aware of the aims and objectives of the investigation (See Appendix 1).

Since this research falls into a bigger programme I was not involved in data collection. It is assumed that the participants were enlightened about the objectives of the study before they participated and about confidentiality and anonymity if they wished to take part. With regards to confidentiality, pseudonyms for maximum anonymity of respondents were used in this

study. In any investigation, privacy is of great importance, as it safeguards the privacy and identity of the respondents.

#### **4.6.2 Trustworthiness in qualitative research**

In all qualitative research the issue of trustworthiness is very importance. In qualitative research trustworthiness refers to how credible are the particular findings of the study and how transferable and applicable are the research findings to another setting (de Vos et al., 2002). The point here is to establish the truth value of the research. In qualitative research it is possible to prove credibility, generalisability and transferability of the study findings. In order to enhance trustworthiness in this study all interviews were audio taped, thus making sure that all collected information is available for transcription. Member checks were used to validate collected data. This means that after all data was transcribed it was sent back to participants so that they could verify the data after that all data was analysed. In this study several measures were followed so that I ensured the rigour and quality of the research in order to eliminate major sources of error.

Cohen, *et al* (2000) propounded that in qualitative research it is impossible for research to be one hundred percent valid. This is optimism for perfection. This implies that in qualitative data the subjectivity of respondents' opinions, attitudes and perspectives together contribute to a degree of bias. This means that the absolute truth is not possible, but validity can be enhanced, so that research is as trustworthy as possible. Proper procedures have to be followed to validate data in order to authenticate the credibility of the results of the study.

Although some measures were carried out to enhance the credibility of the study, some of these were done before I became part of the research group. One was the reliability testing of the instruments before using them. The instrument for data collection was pilot tested before collecting data. This process helped to determine if the interview questions were clear, understandable and correct. I acknowledge that this was done in my absence, because at that stage I was not part of the project.

#### **4.7 Profile of the participants**

This section will focus on the profile of the teachers who participated in the study. Teachers' biographical information was taken from the students' records and from the interviews during data collection. Table 4.1 describes the 10 participants. Of the 10 participants 7 were female and 3 were male. All participants hold an undergraduate degree which was relevant to high school teaching and this is why they were enrolled for the PGCE programme. Their teaching

experience ranged from 2 to 15 years before they enrolled in the PGCE programme. All of them were registered for the PGCE programme at UKZN and were studying part-time. From this group of participants seven managed to graduate in April 2011 with a PGCE in education. Three of them did not graduate with the others and hence they did not complete in the minimum period of two years. Of the 10 participants, five specialised in Science and Commerce and the other five specialised in humanities subjects.

Table 4.1 presents a profile of the teacher respondents in terms of experience, gender, undergraduate degree and other variables. In this present study female constitute a majority number of the teachers as compared to males. The teacher respondents' experience ranges from two to fifteen years. Of the 10 teachers, 8 teachers had teaching experience below 5 years and 2 had over 10 years teaching experience. It is apparent from this table that very few teachers studied towards GET specialisation. Four studied FET and the remaining four specialised in both FET and GET.

**Table 4.1 Profile of teachers**

<b>Pseudonym</b>	<b>Sex</b>	<b>Age (Years)</b>	<b>Teaching experience before PGCE (Years)</b>	<b>Degree</b>	<b>PGCE Phase Specialisation subjects</b>	<b>Phase specialisa tion</b>	<b>Graduate April 2011</b>
Lily	F	42	2	B.Sc. Chemistry	Life Sciences; Natural Sciences; Maths	GET FET	Yes
Rex	M	35	2.5	B.Sc. Microbiology& Biochemistry	Life Sciences; Natural Sciences; Technology	FET	Yes
Tom	M	25	2	B.Sc. Technology and Internal Auditing	EMS; Accounting; Technology	FET	Yes
Kim	F	26	4	B.Sc Biological Sciences	Life Sciences; Natural Sciences; Maths	GET FET	Yes
Sam	M	37	5	B. Commerce Human Resource Management	Economic Management Science; Business Studies; Economics; Accounting	FET	No
Jane	F	25	2	BA-Fine Art MA-Fine Art	Arts & Culture; English, Technology	GET FET	Yes
Kelly	F	26	3	BA Drama & IsiZulu	Technology Drama; Arts & Culture	GET	No
Meg	F	34	4	BA Drama & English	Drama, English; Arts & Culture	FET	Yes
Sbu	F	41	11	BA Geography, Psychology & Sociology	Geography & Life Orientation; Guidance & Counselling	GET	No
Pelly	F	35	15	BA Psychology; Drama, Post- Graduate Diploma	Life Orientation & Drama Guidance & Counselling	GET FET	Yes

				in Education			
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**Lily**

Lily is a female teacher who is 42years old. She has been teaching for two years before enrolling for the PGCE. She is a holder of Bachelor of Science degree in Chemistry and has been working in research while doing her undergraduate degree at the university where she was studying. During the PGCE she specialised in Life Sciences, Natural Sciences, and Mathematics and is teaching Natural Science and Life Sciences from grade 8 to 12. She specialised in both Senior Phase, which is GET and FET. She received a merit in teaching practice and graduated in April 2011. Lily teaches at a private school in Pietermaritzburg. Although she is the oldest participant she only taught for two years before enrolling for the PGCE programme.

**Rex**

Rex is 35 years old and has been teaching for two and half years. He graduated with a Bachelor of Science, majoring in Microbiology and Biochemistry. He was a university tutor before he started teaching meaning he has got some experience in tutoring. He teaches in a rural school outside Pietermaritzburg. He specialised in FET Life Sciences, Natural Sciences and Technology. He is teaching Life Sciences and Physical Sciences. He enrolled for a PGCE so that he can be a qualified educator and can secure his post, which was temporary.

**Tom**

Tom is 25 years old, one of the youngest participants who has been teaching for two years before enrolling in the PGCE programme. He holds a Bachelor of Technology in Internal Auditing and majored in accounting and internal auditing. He specialised in FET Economic Management Science, Technology and Accounting and teaches at a public high school in a rural area. He has been teaching Maths, Technology, English and Economic and Management Science.

**Kim**

Kim is a young female teacher, aged 26 and who has been teaching for four years before enrolling in the PGCE programme. She obtained her Bachelor of Science in Biological Sciences and majored in Biochemistry and Zoology. She specialised in teaching GET and FET Life Sciences, Natural Sciences and Maths. Kim teaches Life Sciences, Natural

Sciences, Maths, Arts and Culture and Afrikaans. Kim received tutoring experience from the university where she was studying.

### **Sam**

Sam, aged 37 is a male teacher who has been in the teaching profession for five years. He obtained a Bachelor of Commerce degree in Human Resource Management, majoring in Training and Development. Sam teaches accounting and other commerce subjects at a rural high school near Pietermaritzburg. He specialised in teaching Business Studies, Economics and Economic Management Science at senior level. Sam did not graduate in April 2011 so did not complete his PGCE programme in the minimum semesters allocated. It is likely that he was unable to complete the programme on medical grounds, because from the interviews he mentions that he was not well and was recovering from his illness.

### **Jane**

Jane is one of the youngest participants, at 25 years old. She has been teaching for two years before enrolling in the PGCE course. She is an educator who holds an Honours Bachelor of Fine Art degree and a Master of Fine Art degree. Surprisingly, she intended registering for a PhD with the University of Oxford after completing her PGCE programme. At the school where she was teaching she was appointed to be a head of department. She received a merit for her school experience and teaching practice. She teaches at a private school.

### **Kelly**

Kelly has been teaching for three years before joining the PGCE programme. She is 26 years of age. Her primary degree was a Bachelor of Arts and Culture (Drama Studies) at the University of Zululand. She specialised in senior phase Art and Culture, Technology and Drama. She failed to complete the course because she failed two of the modules and did not graduate in 2011.

### **Meg**

Meg is a female educator who is 34. She started teaching by volunteering at school she attended. She obtained a Bachelor of Arts degree in English and Drama. Initially she wanted to pursue a carrier in drama but unfortunately opportunities did not open up for her and she ended up in teaching. Regardless of that, she believed that she has now settled as a teacher. Meg specialised in teaching senior phase Arts and Culture, English and Drama. From the

interview it was not mentioned which subjects she teaches and it was not clear why she joined the PGCE programme.

### **Sbu**

Sbu is one of the oldest female participants and is 41 years old. She had been teaching for 11 years before joining the PGCE course. Her 11 years teaching experience was not continuous as she had some breaks in between and has been teaching both primary and high schools. She holds a Bachelor of Arts degree in Geography, Psychology and Sociology. Sbu teaches English and Geography at a rural high school. She failed and did not graduate within the minimum time of two years, even though she had 11 years teaching experience.

### **Pelly**

Pelly is a female educator who started teaching in 1995. She is 35 years of age. She had been teaching for fifteen years before enrolling for the PGCE course. She has been tutoring at UKZN. She obtained a Bachelor of Arts degree in Psychology, Speech and Drama and a Post-Graduate Diploma Adult in Education. Her qualification was evaluated by Umalusi in 2002 and she was requested to upgrade her teaching qualifications, since she was not professionally trained to be an educator. Since from that time when her qualifications were evaluated she remained an Unemployed Temporary Educator (UTE) meaning her job was not permanent. She later signed up for the PGCE programme so that she could become a qualified educator. She also specialised in teaching senior phase GET and FET Guidance and Counselling, Life Orientation and Drama. Pelly teaches Life Orientation, Arts and Culture and previously has taught English, Afrikaans, maths literacy and Maths. She completed her PGCE in two years and graduated with a merit in teaching practice.

## **4.8 Conclusion**

In this chapter the study's research methodology was presented. It was shown that the study fits into the interpretative paradigm because of data collection methods used. A small sample was purposively chosen and all the ethical issues were properly followed, to safeguard the confidentiality of the participants. The chapter ended by giving the profiles of the participants, with pseudonyms, gender, age, teaching experience before enrolling for PGCE, name of undergraduate degree, PGCE phase specialisations subjects, phase specialisations

and whether they graduated in April 2011. The next chapter will focus on the research findings of the study.

# **CHAPTER FIVE**

## **RESEARCH FINDINGS**

### **5.1 Introduction**

Chapter Five will focus on the data findings from the interviews in which part-time PGCE students talked about their experiences of learning to teach as professionally unqualified teachers. 10 participants were interviewed and participated in the study. The data presented is from the interviews.

In the following section, I am going to organise the data in order to answer the research questions following.

- How do part-time PGCE students talk about learning to teach ‘on the job’ and what kind of professional knowledge did they develop before enrolling on the PGCE programme?
- How do part-time PGCE students talk about their learning from the PGCE core modules and specialisation modules?
- How do part-time PGCE students talk about their learning to teach from the PGCE teaching practice?

These three research questions try to elicit possible answers to the main question of the study, which is how do part-time PGCE students describe their experiences of learning how to teach?

In order to answer the main question I will start by looking at various reasons why the participants joined the PGCE programme. This theme is not directly related to the research questions, but was important data that emerged from the interviews.

### **5.2 Reasons for joining the PGCE part-time programme**

The way the PGCE part-time students learn might be influenced by their various reasons for joining the PGCE part-time programme. This sub-section explores such reasons in order to establish how their reasons for joining PGCE might be linked to how they develop professional knowledge in their teaching.

The majority of the participants joined the PGCE for extrinsic reasons, such as getting job security and getting qualified teacher professional status. This brought other expected

benefits, such as a better salary, because of the qualification and change of identity status. Below is a description of the respondents' reasons for joining the PGCE programme.

### **Lily**

She joined the PGCE programme by chance because she did not have any plans to become a teacher. She was probably influenced by family and friends to try teaching. She has this to say:

*If you have a basic degree, everybody will say go and teach. That seems to be the simplest thing to do and the easiest thing to get into, you know, ok what can I do now? I will probably try teaching.*

From her report it appears that Lily joined the PGCE programme by chance, because she was not clear what she was interested in doing besides giving it a try in the teaching field.

### **Rex**

At first he reported that he joined teaching to relieve financial pressures and later realised that he really needed to join the teaching profession by doing a PGCE. He enrolled for the PGCE so that he could be a qualified educator and could secure his post which was temporary. By having this PGCE qualification, Rex will be on the permanent staff in the teaching profession. He shared these feelings when asked why he joined the PGCE programme:

*Well it was to secure a better post, because at the moment I am working as an Unprotected Temporary Educator (UTE), a temporary teacher and will remain a temporary teacher until I get hold of a qualification in education so that's why I have done PGCE.*

### **Tom**

Firstly, he was inspired by his mother who is also a teacher and, to some extent, this inspired him. Secondly, he was teaching as a temporary educator and his contract expired at the end of the year, meaning there was no income for him. He then decided to get a teaching qualification so that he could continue in the teaching field. When asked why he joined the PGCE programme, he answered:

*Firstly, my mother is a teacher; secondly it's what happened at my first school. I started in April and the contract expired in December, the way it happened was painful. I had enjoyed receiving some cash and was very disappointed and then I*

*started at another school but decided that since I have started teaching I should continue.*

### **Kim**

Kim joined the PGCE for intrinsic motivation reasons. She had this excitement to build, construct, change the way people think, as a teacher. She seems to have a passion for helping people change the way they view the world.

Kim reported:

*I want to work with people I want to build and construct and change the way people think.*

### **Sam**

Sam joined teaching because he had enthusiasm for the teaching profession. He had felt excited being a teacher since he was at school. He shared these feelings during the interview:

*While I was at school, I liked teaching, cause while I was doing grade 12, I used to teach grade 10s Accounting, but during those days what was happening was that, teachers were being retrenched so I thought of doing something that would get me involved with people because I like helping people a lot.*

### **Jane**

Jane said that she joined the PGCE as she wanted to get the teacher qualification because it was very important to have. In order for her to get teacher status, this was vital for her.

*To be honest I really was going to get the teacher qualification because now that is so important in teaching to be properly qualified and be SACE registered, I was really hoping that I would learn some interesting stuff along the way [laughs] but it really was primarily to become qualified.*

### **Kelly**

Kelly reported that she enrolled for the PGCE because she was tired of being a temporary educator and wanted job security. She claimed that one can teach for many years and without the teacher qualification one would remain a temporary educator. In order for her to change the status the qualification was of great importance.

*I am really tired of being a temporary educator. So I find that I must do this PGCE course, because even if I can teach for 10 years it will be always temporary.*

### **Meg**

From the interview it was not mentioned which subjects she teaches and it was not clear why she joined the PGCE programme.

### **Sbu**

Her reason for why she enrolled for the PGCE was to protect her job, since she has been employed as a temporary educator.

*Cause there is that issue of that when you are serving for a year, the department said you are in the line to get the permanent, job, especially when you are studying. When I pass this year, that means I will become a qualified teacher.*

### **Pelly**

Pelly's qualification was evaluated by Umalusi in 2002 and she was requested to upgrade her teaching qualifications, because she was not professionally trained to be an educator. Since that time she remained an UTE, meaning her job was not permanent. She later signed up for the PGCE programme so that she can become a qualified educator.

*I saw that there is need for me to do a professional qualification because now I was put on as an unqualified temporary teacher (UTE), so I have decided to register last year.*

## **5.2.1 Summary of the reasons for doing the PGCE**

From this teacher background information the majority of the participants joined the PGCE programme in order to secure their teaching jobs. They came to the programme to earn the qualification so that they could become professionally qualified teachers. It seems some of the participants felt that they were inadequate without the teaching qualification and some even felt that they were tired of being labelled as UTE. These feelings probably emanated from evaluations or judgements given to them by their work colleagues. The Department of Education could not recognise these teachers as permanent teachers as they did not have professional teacher qualifications. According to the policy document these teachers needed a PGCE following an approved first degree, in order for them to be recognised as qualified

educators (Department of Education, 2006). All-in-all, lack of job security was challenging for all the teachers and this is why they decided to have a teaching qualification. Having a PGCE would mean a change of status, which would bring feelings of satisfaction, recognition and happiness as qualified professionals.

In order to answer the main research question, below are the themes that emerged from the interviews. The themes will be analysed according to their research question. Next are the themes that emerged from the interview for research question one.

### **5.3 Learning on the job before the PGCE**

From the interviews the teachers identified professional knowledge that was developed from the schools in which they were teaching before joining the PCGE programme. This professional knowledge was developed through informal learning in their schools, where they were teaching or learning in their undergraduate studies, and also from their memories of their own schooling experience. The identified themes were as follows:

- Drawing on memories of their own schooling experiences.
- Informal mentoring (supportive and unsupportive) experiences.
- Formal learning (undergraduate degree).

#### **5.3.1 Drawing on memories of their own schooling experiences**

Most teachers (eight out of 10) highlighted that they learned how to teach on the job by drawing from their own schooling experiences. New teachers are products of teaching and they know what is involved in a classroom from the perspective of being a learner for twelve years. They are aware of the classroom processes, since they have been exposed to them since the day they started school up to high school education, so they often imitate what their previous teachers used to do. This is referred to by Grossman (1990) as the apprenticeship of observation, while Stuart *et al.* (2009) referred to it as memories of own schooling.

In this study Lily, one of the participants, shared her thoughts about what knowledge she drew on when she first started teaching:

*Because I was taught as a learner, it's not as if I had any knowledge, but ...it was just from my own experience of being taught.*

Lily contended that she learned how to teach because she is a product of teaching and therefore she has a skewed vision of the nature of teaching because she was young as a pupil.

Her images of her schooling are something that cannot be easily erased from her mind, so she sees teaching from the viewpoint of a student. Sharing the same notion, Kim says:

*I started teaching two months before registering for PGCE, I was teaching the way I was being taught at school, where I stand and talk, ask the questions.*

Kim points out that she has been teaching the way she was taught while she was at school. It can be said that a new teacher's way of teaching is linked to the individual's memories of their own schooling (Stuart et al., 2009). Sam agreed:

*You think you are doing something right, because you refer to what your teacher used to do to you. During my school time I used to teach the other grades so from there I knew that if a learner is [inaudible] this way, he she does not understand. So I can say I had that thing since my school days.*

Jane did not teach the way she was taught, but managed to make a specific choice of teaching differently by modelling her practices from her previous teachers. Jane, commenting on modelling her practice on that of her best teachers, claims:

*I think maybe from my experiences at school when I was at school and you know I was taught. "oh I don't want to do it that way ... I don't want to be that kind of a teacher, I want to be this kind of a teacher", so how can I model myself on that.*

During schooling Sbu had an opportunity to teach her peers. Her imagination was put into practice at an early age, when she had a chance to practise teaching and learned that way. She received some teaching experience, whereas Jane while teaching tried, to model herself on the practice of some of the best model teachers and on the kind of a teacher she did not want to be. She concurred:

*I learned how to teach from my experienced teachers who taught me. I remember there is this other lady, she is very old but she taught me in standard two up until I started to teach and I was working with her again. I used to copy her style of teaching.*

The first time she started teaching she used to reflect on how she was taught as a student. She learned GPK from her previous teachers, by copying their teaching methods in order for her to be able to teach.

In essence, "student teachers bring with them memories of their own schooling both positive and negative, when they come for teacher training" (Stuart et al., 2009:13). In the present study the majority of the participants agreed that they were modelling their own practice on

their previous teachers' practice and reflecting on who was best, the first time they started teaching. The influence of their own schooling on beginning teachers is very strong, as future teachers spend thousands of hours in primary and secondary school watching what teachers do and develop images about and dispositions toward teaching, learning and subject matter (Feiman-Nemser & Remilad, 2000). A few others noted that they used the textbook approach for the reason that they had low levels of content knowledge and therefore felt secure to resort to the textbook.

New teachers tend to replicate the strategies they experienced as students (Grossman, 1990). Before they started teaching they had vivid images of good teachers and their practices because of their personal experiences of schooling. These images influence their perceptions and attitudes about teaching. Apprenticeship of observation supports the conservatism of teaching (Cuban, 1984 cited Grossman, 1990). This refers to the passing on of traditional teaching methods from one generation to another. The same teaching methods are used over, and over or are conserved. This may mean that some teaching methods and thus general pedagogic knowledge sometimes can be used without promoting learner autonomy and critical thinking in problem-solving skills.

With regards to the use of their own schooling memories in learning how to teach, new teachers said that they learned how to teach from an unconscious act of reflecting on their previous teachers' practices. It appears as though the new teachers acquired general pedagogic knowledge from their previous teachers. Unless we are conscientiously aware of what is driving our choices of behaviour in the classroom, we are all likely to revert to the ways of the teachers who taught us (Allender & Allender, 2006). It can thus be said that teachers developed some general knowledge of teaching and learning through apprenticeship of observation.

### **5.3.2 Formal learning (undergraduate degree)**

During teacher training a large amount of time is spent on relearning the subject matter for the purpose of teaching effectively (Calderhead & Shorrock, 1997). This is because prospective teachers need to have a deep understanding of the subject matter that they need to teach. With regards to the PGCE, it is assumed that students learned content knowledge from their undergraduate degree. In this study, participants varied considerably in the complexity with which they claimed their undergraduate degree prepared them to be teachers in terms of gaining content knowledge for effective teaching. The majority (eight out of 10) of the

participants reported that they actually benefitted from their undergraduate degrees in terms of content knowledge. This means that these participants believed that they had sufficient subject matter to be confident in what they teach. Sam explained:

*So I can say Bachelor of Commerce built me mostly on the content and the content was something that I could use in schools.*

Sharing the same view, Rex stated:

*Yes, because most of the content that I have comes from it. I am doing specialisation here but I think most of the content knowledge comes from my previous degree and the research skills.*

Rex reported that most of the subject content that he is teaching comes from his undergraduate degree. It is also from his first degree that he gleaned some research skills.

Jane shared a similar opinion:

*I have learnt a lot which has been quite exciting, I did everything at varsity and I actually majored in painting and then latched onto print making, so I know the theories and I can help the girls to that level.*

Very few (two out of 10) did not find their undergraduate degree useful for teaching purposes. One participant actually believed that his undergraduate degree was a complete waste of time. Lily echoed these feelings:

*No, not at all, although I did Botany and things, I don't think that has helped me at all, I have to go back and learn to do the things. My under-graduate degree I'm talking about, did not help me. The undergraduate did not prepare me for teaching I would say.*

Her undergraduate degree did not prepare her for classroom teaching and she seems to think that the content was not a good match with what she was teaching at that time. She has a Bachelor of Science in Chemistry and was teaching senior phase Life Sciences and Natural Science.

Sbu was emphatic:

*It did not prepare me so much, except that at least I should produce what I have for my undergraduate degree, and then I will get the job for a certain time. Just like that, but when coming to helping learners, no, no, no.*

Sbu noted that her undergraduate degree did not actually prepare her for teaching. For her it was just a certificate which she could use to look for employment purposes and not something that she could use in her classroom teaching. Her primary degree was a Bachelor of Arts in Geography, Psychology and Sociology, but she was teaching English and Geography.

As noted by a few participants that their undergraduate degree did not help them in any way in their day-to-day teaching, it might be possible for the following reasons. Firstly, their undergraduate degrees are partially not teaching subjects in high school. For example, Sociology and Psychology are not teaching subjects at high school, but could be aligned to other teaching subjects such as Life Orientation. Therefore prospective teachers who obtained such degrees are likely to face challenges when teaching other subjects at high school, because they are not fully prepared in terms of subject content knowledge.

Secondly, it might be that their teaching subjects in the classroom did not match their majors at undergraduate level. It was a mismatch between what they studied at varsity and what they were teaching at that particular time in their schools. For example, Lily did pure Chemistry for her undergraduate degree and was teaching Life Sciences.

With reference to Grossman's model of teacher knowledge, most teachers from this study indicated that they learned content knowledge from their undergraduate degrees. This knowledge category is said to be very important in teacher education, as it is composed of knowledge of, and about, the subject matter taught. It is equally important to note that subject matter concerns the core of a teacher's work and a teacher's subject content knowledge is one of the biggest concerns in teaching in South Africa at present (Henning & Gravett, 2012). This means that all practising teachers are required to have adequate knowledge of the subjects they are teaching.

### **5.3.3 Informal mentoring experiences**

Mentoring is a kind of supervision or support given to a novice teacher (mentee) during their initial teaching experience. Mentoring implies "a personal and supportive role" given to a novice teacher (Stuart et al., 2009). This section explores responses given by participants when asked about the professional skills and knowledge that they already had when they started PGCE and how they developed the knowledge gained. The majority of the participants were given assistance by other teachers (their mentors) in their schools before enrolling for the PGCE. A good number indicated that they received positive mentoring

experiences during their first years of teaching. They believed they were supported and mentored in a positive way the first time they started teaching.

### **5.3.3.1 Positive informal mentoring experience**

Most participants claimed that their mentoring experience was rewarding, in the sense that they gained much through the process. Jane explained:

*There was an art teacher who was extremely helpful to me when I got sort of landed in the deep end. She gave me all her notes and was available for me to ask questions. She was really good with helping me deal with the discipline side of things and how to make sure I'm keeping my class under control and how, what measures do I take.*

Jane was mentored in a constructive way and was assisted in content selection. She was given notes for her class and was helped on the issue of discipline. She felt she was lucky to be assisted in this way.

Sbu reported that she learned from colleagues, but mostly she worked with her principal.

*My first principal was also a very motivating person, because as new teachers he used to take us into his office and sort of tell us what teaching is all about and ask us about the problems that we have inside the classroom and help us to go through the challenges that we are experiencing in the school.*

She felt that she learned a lot from these school discussions held in the office. In a way she benefitted from the relationship with her school principal, as she was helped in an informal way while sharing experiences and insights. She learned informally from the support given to her by her principal.

Kelly had a similar experience:

*There is support from my HOD giving me information, sources and the subject advisors also play an important role.*

Tom said:

*I knew I was supposed to teach grade 8 maths and technology but I had no idea how to teach. So I asked them and learnt other things as time progressed.*

These statements highlight the responses given by the participants in their learning how to teach, with assistance from their mentors. The role played by heads of department, senior teachers and colleagues in school settings cannot be underestimated. Their supervision during

class visits, record checking and day-to-day dialogues was very important as it enhanced practical skills that are learned on the job. In this case, the teachers were given hands-on support, where they would learn by doing. Stuart *et al* (2009) states that student teachers learn by watching and imitating others, learn by doing, practising, trial and error and learning from their mistakes. Participants in this study took a strong initiative to be patient and learn, while showing a positive attitude towards learning. By so doing, general pedagogical knowledge was developed and nurtured in their different situations of learning.

### **5.3.3.2 Unsupportive mentoring experiences**

Two out of ten participants indicated that they received very little mentoring in their first months of teaching. They claimed that they were not given any mentoring in any way and suggested that they would have improved their teaching if they were given proper assistance by mentors. This means that these two participants were not offered professional help to support them in acquiring professional knowledge and skills needed in their teaching. Sam explained:

*It would have helped a lot, cause if you see teaching is not all about conveying a lesson these days there are a lot of things, so you need someone to just guide you on how to do these things. Not only to say, "You know the content, just go to class and teach".*

Sam stressed that he did not get any mentoring support meaning that he had to learn on the job on his own. He suggested that he would have benefitted a lot if he was attached to somebody who was able to guide him in his teaching. He also noted that teaching is not just about teaching in the classroom, since there are some other things in which one needs proper guidance. For example, circulars from the Department of Education usually heralded some changes needed to be implemented at school level and things like marking the register are not taught in PGCE. Such knowledge is learned on the job and proper guidance and support is essential. As Feiman-Nemser and Remiland (2000:4) point out that, "no matter how much teachers learn during pre-service preparation, learning teaching inevitably occurs on the job and in their first year teachers essentially have two jobs; they have to teach, and they have to learn to teach"(Stuart et al., 2009). This learning on the job can only be acknowledged by good school managers who support the professional development of new teachers.

It was shocking to note that mentoring programmes in some schools were not taken seriously. Two teacher participants did not get any mentoring at all. This seems to appear that, in some poorly organised schools, mentoring programmes are scarce or do not exist at all. In fact, in

these schools new teachers tend to be visited even less frequently, or not at all, either because the mentors do not exist or because school management teams simply fails to organise the visits and supervision of the novice teachers. Nevertheless, teacher upgrading programmes are aimed to assist new teachers in learning new teaching methods, which must be introduced and practised daily in the classroom, with the help of good mentors.

In answering research question one, the teachers spoke about drawing on their own schooling memories and informal mentoring to develop general pedagogic knowledge, since they had no professional qualifications to draw from. Teachers learning to teach from their own schooling experiences tend to be conservative, given the history of education in South Africa. Reviewed literature has shown that“ it is imperative that novice teachers need to cultivate a stance of equal expectations of all learners, and to overcome the matrix of demeaning, patronising or condescending, and ultimately disempowering, attitudes that have historically shaped human relations in South Africa” (Morrow, 2007 :151). From the research findings of the present study, content knowledge for most teachers was developed through undergraduate degree. Most teachers noted that they also learned GPK on the job, with the assistance of colleagues and mentors. This was enhanced by informal learning through collegial discussions and staff meetings. It appears that PCK and curriculum knowledge was not developed by learning on the job.

#### **5.4 Learning from the PGCE core modules and specialisation modules**

In attempting to answer research question two, I will begin by listing the themes that emerged from the interview data. From the interviews the PGCE part-time students identified their learning experiences from the specialisation modules and the core modules. The PGCE core modules are made up of three modules, namely Education and Professional Development 610, 620, and 630. They mainly focus on issues like assessment, curriculum, learning theories, teacher education policy, diversity and inclusive education. Specialisation modules are elective modules focusing on studies relevant to one’s teaching. These modules focus on pedagogy and assessment issues for a specific school subject, such as mathematics or history. The general structure of the elective modules also depends upon one’s needs and teaching context.

A number of themes emerged from the interviews for research question two. The key themes identified were:

- Teaching strategies

- Planning and assessment
- Knowledge of learners
- Barriers to learning
- Confidence
- Content knowledge

#### **5.4.1 Teaching strategies**

The majority of the participants talked about how they learned the teaching strategies from the PGCE programme. In their opinion, the programme was an eye-opener in terms of their learning about what teaching entails. Their core modules introduced them to a variety of knowledge and skills for the good management of teaching and learning. Sam explained this when asked about key things that he learned from the PGCE programme:

*I will say there is a lot that I have learned from the PGCE because I will say before I used to teach those who understand, they understand. If they don't, they don't and I will just go ... but now I know you can teach a concept for a month, and you can do the introduction for a week and there are different levels of introducing a lesson, because I learned that the most important thing is the introduction. If you did not do more in your introduction, your lesson will be nothing. So I have learned that because I used to say we are going to talk about assets, assets are this and this. Then we will go in practical without giving the learners the definition and also applying the language, because I have learned that every subject has its own language.*

Sam spoke about making learners understand concepts by teaching them for a longer period. He says he can spend a month teaching a concept, and making sure that learners understand. He reported that learning is also achieved by introducing lessons in an interesting way, so that learners can be motivated to learn. He spoke about the importance of introduction to a lesson as the most important part of teaching, because without proper introduction sometimes learners find learning concepts difficult to understand. Sam noted that subjects have their own terminology that is used in teaching and learning that subject. It is therefore important that teachers help learners understand subject vocabulary in order for them to understand the key concepts of a particular subject.

Kelly described his learning experiences from the core modules. It was evident that he spoke about teaching learners from known to unknown and from concrete to abstract. He noted that learners learn better when they take part, so he suggested that learners must be given opportunities to participate in all learning activities. Kelly comments:

*Before I was spoon-feeding my learners, but when I came to PGCE I have learned that I must test the prior knowledge of the learners. Then using that knowledge and link this with the new knowledge that I am going to teach I must come to class to teach and not spoon-feed, because the learners will also be interested when they participate. Learners want to talk, learners want to play, just give them the opportunity then test them. Are they able to use their new language? Are they able to transform the new knowledge that they have gained?*

Kim explained that learning from the core modules has given her a better understanding of what she is expected to do in the classroom. She clearly noted that her learning from the programme has changed her teaching behaviour to being someone who is able to construct ideas in the mind of the learner. This is illustrated in the extract:

*I completely changed from a person who transmits information to you and checks that you know it, to someone who constructs knowledge in the learners mind and who gives all the power to the child and makes sure that the child is building that bridge.*

Overall, with respect to the above extracts from the interviews on the aspect of teaching strategies, the majority of participants talked about transformative learning. This means that they talked about how they used to teach before enrolling for the PGCE programme and how they are teaching now as PGCE students. They acknowledged that they have changed their old ways of teaching, which they got from their teachers, to new methods which are able to stimulate learners to learn, to use a learner-centred approach when teaching, thus involving learners more in their teaching and teaching from known to unknown. Tom reported that he has improved his teaching by applying what he has learnt from the programme, and has improved to make learning and teaching much easier than before. Tom enthused:

*While what we learn in the PGCE, it's easier and more efficient to teach children. When you get along with them and understand them better you give them the opportunity to work and you just observe. That has worked, I have applied it and it has helped me even especially in Accounting.*

## 5.4.2 Lesson planning and assessment

Planning and assessment was identified as one of the key knowledge domains that the student teachers learned from their PGCE core modules. All participants noted that they learned planning and assessment from the programme. An analysis of the data shows that most teachers were planning their lessons using the old styles which they learned from their mentors.

The PGCE programme taught the proper way of lesson planning. With regard to assessment, a good number of participants regretted learning assessment a little late. One teacher blamed herself for joining the programme late, because she could have benefitted earlier in her teaching. She did not know how to assess her learners objectively, while catering for individual differences, and as a result most learners were performing poorly after being assessed. Some echoed deep feelings of remorse that they had been assessing their learners incorrectly and they were setting tests and assessments without using the Bloom's taxonomy technique. As a result, many of their learners were not scoring good marks in their assessments. When talking about how they learned assessment from the PGCE training, Kim confidently reported:

*I felt bad that I learned assessment now because I'm over worked because of it. Because when I was at Botanic high school I was never given a chance to set a test. I was not given the opportunity to set any of that. But as soon as I came to Tree high school I set the June exams for the grade 9s and when the kids wrote the test they were shocked.*

*They were shocked because I learned Bloom's taxonomy. I learned that every child has a different category so when they wrote the exam not one child left early. It was simple and easy for everyone to work through but at the same time it required them to think. It did not test learners on the stuff that they knew nothing about, but rather stuff that they could link and learners were able to link. I saw learners go from their 40% pass to like 50% and the confidence that arose with that was present in their attitude toward learning that subject. So Bloom's Taxonomy, I love it.*

Kim claims that she now has acquired adequate knowledge of setting assessments from what she learned from the PGCE programme. When setting assessments she noted that she is now able to cater for all learners' levels, which she was not aware of before enrolling in the PGCE.

Sam agreed with Kim on the issue of level of questioning when setting assessments for learners. Sam said:

*And also the level of learners, you may find that you are assessing at a lower level those who are creative or who are gifted they may find it boring, so you have to have a balance between those who are low riders and those who are gifted.*

*I thought personally research was only for the grade 12s but when I came here I realised that even grade 8 they can do the research so that is what I learned.*

Like Kim, Sam feels that the level of questioning in all assessments is very important because all learners are catered for, regardless of their different levels of understanding. It is essential for teachers to make sure that, all during activities done in class, learners are fully engaged and no one is left behind. Sam raised the view that previously, before being trained, he thought that research project assessments were only for grade 12s, but later learned that other grades can be given research for assessment. This issue of assessment was an eye-opener for most teachers, as they acknowledge that after learning from the programme they have actually changed their views and attitudes towards assessment. Rex was positive about what he had learnt:

*PGCE have improved the way I assess learners, some of them were totally new ways of assessment, I learned about them and seeing the importance of different forms and types of assessment. So I will try and balance them during my teaching and not focus on one form of assessment.*

Different forms of assessment were reported to have been learned from the PGCE programme. Rex claims that he learned some new ways of assessment, and the importance of varying the assessment methods, tools and technique, from the programme. It seems that all the participants learned something new about assessment. It is very important for teachers to have this knowledge of assessment, as it forms part of their essential component of knowledge domain in teacher training.

Pelly shared some interesting experiences with regards to failing learners, not because they performed poorly in the assessment, but because they were not disciplined:

*The importance of assessment, I was able to assess the learners in an objective way because when I came in the system 1995, there used to be this thing of troublesome learners and those who did not progress to the next grade no matter*

*what, until they changed their behaviour even though that learner is good in class but because of behaviour that learner would be failed, but now I would not do that because I know the impact of that on the personal development of the learner and my role as an assessor because I can't just fail one person because of misunderstanding or misbehaviour that one displays, but I need to be skilled enough to deal with the problems that the learners show in class. When they misbehave I need to have some ways of dealing with them instead of failing them at the end of the year.*

Pelly, being one of the most experienced participants, raised an interesting opinion in her discussion. She had not realised the impact of such decisions on the affected learners, other learners and the educators involved. Pelly happens to be one of the teachers who has been using the old methods and styles of teaching. She reflected that he is now aware of the impacts of not making a learner progress to the next grade because of behaviour problems. She is now able to separate discipline and assessment issues. She noted that, after being equipped with the right knowledge and skills from the programme, she can now deal with these issues in a professional manner.

With regards to Pelly, it seems a bit unfair to the learner, because that learner has not failed any assessment and is being punished because the teacher could not take enough responsibility to discipline the learner. From the learner's point of view, his or her rights are being violated. This can lead to serious consequences for the learner, like dropping out of school.

Jane suggested that there should be a module on assessment alone, as she felt that little was covered in terms of assessment. She felt that Module 620 (Education and Professional Development) on assessment covered other issues which were unnecessary. She felt that the emotional side of assessing learners and how it affects learners was unnecessary and could have been dealt with under one heading. Jane gave her thoughts on assessment:

*It was kind of brushed over which I thought was unhelpful. I thought that could have also be integrated a lot more and we touched on it again in 620 but the emotional side of assessing and how it affects learners , I don't think that was necessary but could not it have been together?*

*I mean perhaps there should be a module on assessment.*

It appears as though the majority of the respondents benefitted from the PGCE by learning different techniques, tools and methods of assessing their learners. One participant, Pelly felt that it was superficially dealt with and she gained very little from it. She believed that assessment should stand as a module on its own, so that in terms of content coverage it will be deeper and all novice teachers will benefit from this more thorough coverage.. Tracing back to her mentoring experiences, she said that she received good mentoring at her first school and so perhaps already learnt the techniques of assessment on the job, unlike other teachers. Given that she had learned some knowledge and skills in GPK, she was expecting to get deeper knowledge in such skills as assessment from the PGCE programme.

Educators plan lessons and present content and arrange classroom conditions, so that students are able to learn in a way that they understand. Only a few teachers talked about lesson planning. Drawing on her experience, Pelly pointed out that she learned lesson planning from the PGCE programme. Previously she used to plan her lessons in a manner that was not correct, but now that she is aware she always plans by following all the steps needed in the lesson plan. She acknowledged that step four of the lesson plan is the most essential part because that is where teachers can identify whether the learners have understood or not. She described her lesson planning experience as follows:

*I used to plan my lessons and thought that I was doing the correct way but now the steps that you need to start from the learners what they know until where they are able to apply their knowledge that they have in class and then know that you have achieved something. And this year I was doing that. Whenever I planned my lesson step 1 Step 2, step 3 step 4 and application I found that the application stage is the one that takes a lot of time because it is where you see that the learners actually haven't learned much, so I need to revisit certain concepts again so that it can be angled to make sense of what they have learned.*

With regard to the same issue, Rex pointed out that the knowledge he gained from the learning theories helped him to prepare his lesson plan. He realised that learners are not empty vessels when it comes to learning, so teachers should use that knowledge as a starting point when planning, preparing and teaching their lessons. This is called teaching from known to unknown. Teachers start from what students know and move on to more complex ideas. Rex said:

*The information that I got from the PGCE, like the different learning theories I have learned on how learners have built their knowledge. Like understanding of how a learner learn, helps me prepare their lessons so I will know that ok, learners learn like this, this theory that learners are not empty vessel, they have knowledge, it's just that you have to build on that knowledge and some of that knowledge is a misconception so you have the change it.*

### **5.4.3 Knowledge of learners**

The knowledge of learners is of great importance in teaching and learning. These issues include knowledge of their home background, how they learn, interests, capabilities, how they respond to particular situations, beliefs and values and anything that surrounds that child as a learner. About half of the respondents talked about the importance of knowledge of the learners as being essential to their teaching. Lily reported:

*I gained a lot, because before that I had no idea about background of the learners and there is so much. It helped a lot in the sense that understanding the learners as in inclusivity, understanding that there are different learners.*

*That helped a lot because realised that they all come with their own backgrounds and we do have that child headed households and problem children and it just makes you understand that if you are asking for homework, don't expect it tomorrow or maybe don't even give homework because that's what we do now, we just give class work and give extra activities to those who want to do it but if someone is not doing their home work, you go crazy and waste half the lesson, just walking round the classroom checking the class list, because everyday it's the same thing. So in that regard, it helps you understand the learners, so that helped me a lot.*

Generally, Lily stressed the importance of having adequate knowledge about the learner's background. She felt it is important as it sometimes helps the teachers to assist the learner according to his or her particular needs. She also noted that it can help teachers to treat learners with special respect when it comes to their home backgrounds, considering the history of South Africa, with its inequalities among different racial groups. Again due to the socio-economic inequalities in South Africa teachers as professionals must bear in mind that they need to be very careful when addressing other problems in the classroom.

Lily gained significantly from the learning theories in the PGCE, as they enabled her to gain a theoretical understanding of how learners behave and different ways to treat them in the classroom. She felt that she now has a better understanding of knowledge of learners and is able to respond to challenges in class in a professional manner, as many children in South Africa come from different racial home backgrounds.

Sam concurs with Lily:

*I did not know that as a teacher you have to be a parent, the pastoral care, so if you don't have a pen that is your problem I don't care. So if there is a problem at home you have to socialise with the learner, so that you can actually know what the problem at home is and it's not that the learner does not understand it's because of the problem at home. And also find out the social life of the learners.*

He stresses the importance of the pastoral care of teachers and acting like a parent to the learner. He feels strongly that caring assistance should be rendered, where necessary. He also points out that learners sometimes fail to understand certain concepts not because they want to, but because of some problems in their backgrounds.

It is crucial that educators have a deep understanding of the home backgrounds of their learners, so that they can establish good relationships with learners and assist as surrogate parents, where necessary. This will enable learners to develop a supportive community within the classroom and encourage and motivate them to learn. Learners will then feel valued and honoured and will learn better.

#### **5.4.4 Confidence**

Another key variable that was raised by the teachers was that of confidence. The majority of teachers acknowledged that they developed confidence from the PGCE programme. This means that their confidence levels were sufficiently lifted from a lower level to a higher level. For them it was something that made their teaching easier, because they were equipped with the necessary skills needed for their job. Most teachers were more confidently able to stand and deal with their daily challenges as teachers after the PGCE programme. This means that that the programme was useful in equipping them with the vital skills and knowledge that increased their self-esteem as teachers.

Kim reported that her confidence has been raised, since generally she was a shy person. She explains:

*It gave me unbelievable confidence, not only in teaching, because I am actually a shy person. When I left my science degree, was shy, quiet, wouldn't speak a word unless spoken to. Was quiet did not talk and now that I'm teaching I am a little bit out there. I am not so introvert. I am not so into myself. I speak my mind ... So the whole PGCE course the way it was structured for me, I don't know for everyone else, but for me it helped me came out of my shell.*

She says she found the PGCE very useful, since she feels a lot has changed with her teaching and her personality, from a shy person to a person who can confidently talk. Likewise, Sbu noted:

*Since I have done PGCE I feel very confident because even those things that were giving me trouble when I was at school. I now know how to do that easily.*

Her confidence seems to have come from the skills and knowledge that she gained from the PGCE programme. She reported that she now has sufficient knowledge to deal with the challenges she used to face before the programme. The PGCE programme thus boosted the confidence of the majority of the teachers. It was very beneficial in this regard.

With regards to confidence, it seems that most teachers wanted to have a recognised teacher status, because they were considered unqualified by workmates. This was also a threat in terms of their job security. After being enrolled for the programme they felt they were no longer going to be looked down upon by colleagues in the workplace. This brought confidence which enabled them to articulate newly formed ideas in a professional way.

#### **5.4.5 Pedagogical content knowledge**

Pedagogical content knowledge is a crucial component of the knowledge base of teachers. The literature showed that knowledge is important for teaching subject matter. (Grossman, 1990; Shulman, 1986). In the part-time PGCE it is assumed that students already acquired content knowledge from their primary degree and the teaching programme therefore only focuses on the pedagogical content knowledge and general pedagogical knowledge for teaching. The PGCE is not expected to develop the subject knowledge of the student teachers but to equip them with the specialised skills and knowledge needed for teaching.

More than half of the students learned pedagogical content knowledge from the specialisation modules. Sam shared his opinion on his learning from the specialisation modules.

*Yes, there's a lot of content. I have gained a lot. Especially in terms of the theories that are applied in teaching practice and to understand what teaching really is? Theories of teaching accounting and the way of assessing the learner, because if you know that you need to assess them give them assignments, tests.... So the way of assessing learners and how to look for the learner's progress I have learned that from the specialisation modules.*

Sam has acquired knowledge and skills from the theories of how to teach Accounting. From what he said it appears as though he learned GPK from the programme. He also has a clear conception of how to assess learners and check the progress of the learners in Accounting.

Lily explains that, although she gained pedagogic content knowledge from the specialisation module, she feels the depth of the content should have been much greater. She noted that the time allocated to the specialisation modules was inadequate as they were rushed through the topics. This means that there was not enough time and so much to cover. As a result, she partially lacked confidence in teaching these topics. She expressed these feelings in her report:

*The specialisations did help in the sense that as I said knowing the policy, knowing the curriculum, but it could have been more intense. I wish there was more that we could learn from it, I suppose it was short I felt.*

*Yes, and probably ideas on how to make it easier for the learners. How to make it easier for us to give it/to teach the learners you know because I felt lacking in that regard. And even Genetics the problems are difficult, but make it an easier way so that we can teach learners. We did cover it but not enough.*

Considering that she is a Senior Phase Natural Science teacher, she felt more could have been done in terms of time allocation. They should have gone deeper into PCK in order for them to gain much more confidence in teaching. She also suggested that more teaching skills, that is GPK, should have been more thoroughly dealt with in Life Sciences and Natural Sciences. Although GPK was covered, more could have been done, since she felt it was not adequately covered.

Kim believed that she learned general pedagogical knowledge from their specialisation modules and not content knowledge:

*I learned how to calm my learners down, how to focus them towards learning. I also learned that the whole idea of concept of learning something is not the teacher teaching it to the child, but the child understanding it on its own. Learning can only be done through the senses, when the child actively works with it, whether it's a Maths problem, whether it's an experiment, whether it's something in science, the child needs to break it down on its own.*

One teacher was silent about the issue, while Jane claimed that she did not learn anything from her Arts and Culture specialisation module. Jane expressed feelings of disappointment that she had not actually benefitted from the Arts and Culture specialisation modules, even though she had been looking forward to them in terms of pedagogic content knowledge and general pedagogic content knowledge. Jane said:

*I was disappointed in Arts and Culture specifically because that is what I was teaching in school and I thought, what a brilliant opportunity for me to be ....teaching it and learning about and hopefully this is going to inform me, give me ideas, fresh inspirations and different approaches and maybe I can pick up on some interesting tasks that I can give my kids and how to integrate Art, Music and Drama and nothing, there was absolutely nothing.*

She claims that she did not learn anything from the Arts and Culture specialisation modules, for various reasons. Firstly, Jane seemed to find the specialisation content module somehow not as challenging as she expected, since she has a Masters degree in Fine Art. Secondly she appears to have had high learning expectations of the specialisation subject and her expectations were not fulfilled. Lastly, Arts and Culture as a subject is based more on practical knowledge than theoretical knowledge and she did not get the expected content knowledge and pedagogic content knowledge. This is clearly outlined in the Revised National Curriculum Statement, that the main purpose of this learning area subject is to provide a general education in Arts and Culture for all learners and the intention of the Arts and Culture learning area is to provide exposure and experience for learners in Dance, Drama, Music, Visual Arts, Craft, Design, Media and Communication, Arts Management, Arts Technology and Heritage (Department of Education, 2002).

This study revealed that most teachers learned GPK, which is teaching strategies, from the PGCE programme. They learned things like lesson delivery, teaching from known to unknown and learner centred teaching. They acknowledged that after learning GPK from the

programme their teaching was easier than before. They gained professional knowledge essential for their teaching and this made their jobs easier. In terms of assessment they learned and acquired skills and strategies useful for assessment. These were the methods, tools and techniques used in all forms of assessment. They understood the objective of assessing students in learning. From their specialisation modules, teachers indicated that they learned content knowledge and PCK. The knowledge of the context appeared to be important for most teachers, as they spoke about the knowledge of learners with regard to their community and districts from which they came.

## **5.5 Learning to teach from the teaching practice**

The teaching practice is a special component of learning to teach and it is the most useful part of the programme (Stuart et al., 2009). This refers to student teachers' practical experience of learning to teach. In the part-time PGCE, teachers are given an opportunity to apply in a practical situation professional knowledge that they have learnt from the university. It is assumed that in their teaching practice student teachers learn to apply different types of professional knowledge, such as lesson planning, preparation and teaching, assessment and learning to solve practical problems in teaching and learning. They are expected to work alongside more experienced or expert teachers by watching and imitating them. They will be learning by doing, while gaining new ideas as they engage in the daily activities of teaching and learning in their schools.

It is not first time these teachers have taught. They have been teaching and need to be assessed on their teaching. Although the part-time students have already been teaching for some time, teaching practice is compulsory for all PGCE students. Their teaching is assessed on the basis of tutor and mentor comments and reports and discussions. This means that students are allocated a colleague or mentor from their institution on their specialisation subjects and a tutor from the university, who liaises with the school mentors to assess the students. Mentors work with the PGCE students and help them to learn the culture and routines of the school. University tutors visit students on a regular basis during teaching practice.

Most students taking the part-time PGCE are teaching full-time in their own institutions and therefore the teaching practice experience takes place in their own schools (UKZN PGCE, 2010). The first teaching practice is for experiential, developmental purposes only and not for summative assessment. It entails to getting to know what teaching involves. The second

teaching practice is formally assessed by university tutors. All student teachers are expected to meet the requirements for them to pass.

Research question three was: How do part-time PGCE students' talk about their learning to teach from the teaching practice?

Only a few themes surfaced from the students learning experiences of their teaching practice. Data from the interviews is presented following the given themes:

- Mentoring by university tutors during school experience
- Mentoring by school colleagues during school experience
- Other issues that arose

### **5.5.1 University tutor mentoring during school experience.**

An analysis of data in the study showed that the majority of student teachers received professional assistance and guidance from their university mentors while one was silent on the issue and the other indicated that she was not observed teaching in one of her specialisation subjects. Tom had this to say about his teaching practice experience:

*When he [the university tutor] gave me feedback, he also gave me ideas on what he would expect when he returns for the second time. He also gave me examples of how to continue teaching technology, what I can use.....*

Tom received positive feedback from his university mentor. He advised him on what to do in order for him to improve his lessons when teaching. His university mentor also provided him with clear examples of how other things must be done professionally. It can thus be said that he learned GPK from his university tutor. In a similar case, Lily said:

*Well, they came in and they did observe and we got nice feedback from them. There was good feedback from university lecturers. They try not to be harsh and were very encouraging, which helps.*

Lily was observed by her university tutor, who gave her positive feedback. She felt that her tutor's comments were encouraging and seems to have helped her to learn more. Sbu reported that she relied on her tutor from the university who offered her professional assistance in terms of ideas on how to deal with certain problems in the classroom. She knew she would get the right professional guidance from her university tutor rather than asking some of her colleagues who sometimes advised her to do whatever she felt was right. This means she learned the GPK of classroom management. She said.

*When the university tutor comes, you have a chance to ask, “what must I do when the learners do not submit, doesn’t do my task”. Because you find that other teachers are lazy.... When you ask they said, “give them whatever you like to give them with your marks”. But at least when the university tutor is here, you know that this one is going to tell me the right thing.*

Pelly commented on her good school experience:

*University tutor said my lesson was very exciting and she actually learned a lot from my lesson and she actually spoke about how I used my voice, how the learners interacted with each other, how I disciplined the learners in class, how I managed the class and she was commenting all those in a positive way.*

It was an exciting learning experience for Pelly, because she was given an opportunity to display her professional practical skills she learnt from the programme. Her university mentor came three times to observe her and she received positive constructive feedback which informed her future teaching. Pelly’s university tutor would comment on GPK issues like discipline, voice projection and learner-centred teaching. She was happy with her teaching practice experiences because she received good encouraging comments from her university tutor.

Conversely, on student teacher, Jane, described her second school experience as awful. She reported that no-one came for lesson observation of one of her specialisation subjects during the second phase of her teaching practice. She was disappointed, because she was looking forward to it, but it had not happen the way she was expecting. She expressed her feelings of dissatisfaction:

*Last year was fine I was assessed twice and then this year Mr Tutor came once looked at my file and that was it. No one ever watched me teach.*

She stressed that she felt that she was let down because she wanted to learn more from her teaching and whether she was teaching English in the proper way, because she did not have enough ideas on how to teach that subject. She added.

*I actually wanted to know if I am teaching properly because I had not taught English before and I would like to know whether I am doing it correctly.*

It appears that assessment for teachers during their school experience or teaching practice is very important. During this period, student teachers want to get professional help as to

whether they are teaching and attending to all classroom matters in a professional manner. Many teachers mentioned that their university tutors were supportive, helpful and, at times, constructively critical during teaching practice assessment. Most of them were able to get constructive feedback from their university tutors. This feedback helped the teachers to get a sense of their own progress, while reflecting on their own performance. The data showed that the way the university tutors give feedback to teachers was crucial because it was done in a very encouraging professional way. The university tutors were probably professionally trained to supervise students on teaching practice and were able to give supervision in a recommendable, positive and professional manner.

### **5.5.2 Mentoring by school mentors during school experience**

The respondents talked about how they were assisted in their learning to teach by their school mentors. In their teaching practice, PGCE students were working alongside experienced teachers who were giving them professional guidance in terms of specific skills essential for teaching. They reported widely differing experiences with their mentors. Some received no mentoring and found it difficult to develop and grow professionally, because they were learning on their own and reflecting on their teaching without any help from their school mentors.

### **5.5.3 Unsupportive mentoring**

Some student teachers reported that they did not benefit from working alongside a mentor, or were not mentored at all during their teaching practice. Although they were expecting to get professional advice and guidance, there was absolutely nothing like that. Lily, for instance, was not mentored in her teaching practice and, when asked if she was mentored by a colleague from school during teaching practice, complained:

*Not at all, they don't exist, they are too busy. They are so bogged down with their work. There is no time on our time table to say I need to go and sit in and observe a learner. There is no time to observe a student. With my own experience, I did not have that.*

*You know you need a mentor who is at school to guide you and help you because there is so much more than just being in the classroom. If the department could allow teachers to have time to be a mentor to these students it will be much more valuable because then you have knowledge from the university, you are have*

*knowledge from the school... I think it would work so well and would produce fine teachers.*

She strongly believed that the absence of adequate mentor support constrained the development of her own teaching practice. Lily thought that if she was supported by her school mentor during her teaching practice she would have benefitted from it. She suggested the need for mentor training to help and guide mentors in mentee supervision. She reported that, if possible, all mentors should have a mentoring course to guide their knowledge of mentoring. Her idea is in line with the literature and is referred to as the crucial mentoring processes, identified as follows (Calderhead & Shorrock, 1997):

- Mentoring by example
- Mentoring by coaching
- Mentoring through practice-focused discussions
- Mentoring through structuring the context
- Mentoring through emotional support
- Mentoring through devised learning experiences

Lily further suggested that there must be specified time allocation for mentors and mentees. This would allow student teachers to have time with their mentors to discuss ways that enhance effective teaching. Her opinion was that school mentors do not have time to help new teachers. She believed that if adequate time is allocated then both parties would find time for discussions and this will be much more helpful. She felt she was disadvantaged in the sense that she did not have an opportunity to be mentored the way she was expecting. Thus, in teaching, not all skills are learnt within a day, but are learned over a period of time by working alongside expert teachers who are mentors.

Meg reported that, although she was mentored, she did not get any constructive feedback from her school mentor, except to say he enjoyed the lesson.

#### **5.5.4 Positive mentoring**

The majority of the participants noted that they received good supervision from their mentors. These participants found their teaching practice experience stimulating, because they felt that they had gained new ideas and knowledge from their mentors. Kelly reported that she was given professional help by her school mentor during her school experience:

*She observed my lessons and commented on my lesson plan. "You were supposed to do like this. You were supposed to do group work because there are so many learners. You are supposed to involve all groups, all groups must participate".*

She stressed that she was able to acquire some general pedagogic skills such as the use of group work in her teaching. This enabled her to sharpen her general pedagogic teaching skills, while building her confidence levels. Sbu was mentored by her school principal, who had just completed his PGCE course. Her principal mentored her because there was no Head of Department (HOD) for geography at their school. She had this to say:

*He knows everything, teaching styles, class management, everything.*

Sbu and her school principal were able to understand one another because they had been through the same course. She felt she actually benefitted from him since he had done the same course. In other words, she learned teaching styles and classroom management skills (GPK) from her principal. Although she had confidence in her principal she mentioned that sometimes it was difficult to see him because he was always stuck in the office doing other official school duties.

It is clear from the above that the participants learned special knowledge and skills, which are in line with Grossman's model of teacher knowledge. Participants spoke about learning PCK and GPK from their university tutors. Some received assistance in terms of classroom management skills and dealing with discipline. Besides that, school mentors also supported the PGCE students by showing them on how best they can improve their teacher knowledge GPK and PCK. It was interesting to note, however, that some mentors were too busy to assist and guide novice teachers in their schools.

## **5.6 Other issues emerging from the data**

There were other issues that arose from the generated data. These were the administrative work involved in the teaching field and the inspiration for studying further. These will be elaborated on below.

### **5.6.1 Administration work**

Two teachers raised the opinion that the administration work involved in the actual classrooms is not taught in the PGCE programme. This includes the marking of the register, record-keeping in terms of the intervention book and the observation book and the recording of marks. Knowledge of this paperwork was considered very important, but it was not taught

in the PGCE programme. Perhaps that issue is not part of the programme because it is assumed that these teachers have been teaching and are aware of such record-keeping. They felt it was vital to at least make the student teachers aware of such administrative work before they go for their teaching practice. Lily said that she was not aware of an intervention book, in which she was to record learners who misbehave in her class. Although she raised such an opinion, the issue of an intervention book is not common to all schools, but depends on the context of a particular school.

Lily reported:

*All the schools are different but I think just making the students aware of recording is so important. Having class list maybe it's like there are learners who are not disciplined and are not doing their work and you keep on reprimanding them and you wait until the parent comes and you have been telling this learner but you have no record it.*

She believed that PGCE students should be taught some of the administrative work of the classroom, so that they are not thrown in at the deep end when joining the teaching profession.

### **5.6.2 Inspired by PGCE to study further**

Most participants raised the opinion that they were inspired by the PGCE course to further their studies. Some said that the programme was actually a stepping stone in their future learning. Sam said that he developed a love of education from the PGCE programme:

*PGCE has helped me develop more love for education, because I'm also planning to do my honours, just to further my education.*

He believed that it is important to sharpen one's skills and abilities as a teacher, since a teacher is a lifelong learner.

Sbu declared:

*I have seen that there is a long run and I should go for studying because now studying is within me. It is even more than my first degree. My eyes are open now. When I finish PGCE ... just go on with my studies*

Sbu noted that she had learnt more from the PGCE part-time programme than from her primary degree. She felt that her eyes were opened and she wanted to carry on studying. She believed that the PGCE programme was able to equip her with professional skills that would

make her a qualified teacher. However, although she claimed that she benefitted from the PGCE programme, the PGCE records showed that she failed some modules and was not able to graduate with her class members.

It was fascinating to note that some teachers had a deep appreciation of their learning from the PGCE part-time programme and wanted to further their studies. It seems the way the programme was structured motivated some teachers to pursue their studies further.

The PGCE programme also helped in the personal development of these teachers. Learning from this programme enabled teachers make sense of fresh ideas giving them the ability to perceive things differently and thereby opening their horizon of thinking in terms of teaching and learning.

## **5.7 Conclusion**

Chapter Five presented findings from the interviews of 10 part-time PGCE teachers. The teachers talked about their professional learning before enrolling for the PGCE, learning experiences from the PGCE core and specialisation modules and teaching practice. Their views varied on how learnt from the PGCE programme, but overall the PGCE was highly valued by all respondents except Jane. Other issues raised were the administrative work involved in teaching, such as marking of the register and record-keeping. Most teacher participants reported that the PGCE programme was a stepping-stone for furthering their studies. The programme thus led the teachers to be scholars, researchers and lifelong learners. This supports one of the roles and competencies of an educator.

In Chapter Six, the findings, conclusions and recommendations of the study are discussed.

## **CHAPTER SIX**

### **DISCUSSION OF FINDINGS**

#### **6.1 Introduction**

Chapter six will deal with the discussion, recommendations and conclusion of the study. It presents the key findings of the study in relation to the research questions. The key findings are linked to relevant reviewed literature and to the conceptual framework of the study. Recommendations, conclusions and areas for future research on the teachers' learning experiences end this chapter.

#### **6.2 Discussion of findings**

In trying to answer this main question, how do Part-time PGCE students describe their learning experiences of how to teach? This chapter will briefly recap the following three sub-questions:

- How do part-time PGCE students talk about learning to teach 'on the job' and what kind of professional knowledge did they develop before enrolling in the PGCE programme?
- How do part-time PGCE students talk about their learning from the PGCE core modules and specialisation modules?
- How do part-time PGCE students talk about their learning to teach from the teaching practice?

#### **6.3. Learning “on the job” before the PGCE programme**

In response to the first research question, it was noted that new, professionally unqualified teachers developed professional knowledge “on the job” by drawing on three main sources of learning: their memories of their own schooling experiences, informal mentoring and formal learning from their primary degree. In this study, learning on the job falls under these three main ideas.

##### **6.3.1 Memories of own their schooling experiences**

The results of the study revealed that eight out of the 10 teachers learned how to teach by using their own memories of schooling experiences. For these teachers it is their own schooling experiences which were useful in helping them to teach in the classroom. It can be

said that all teachers have an opportunity to observe their own school-teachers at work. For this reason, all who decide to become teachers have an idea of what happens in the classroom if they are to teach. This is referred to as the apprenticeship of observation, where many teachers' ideas on how to teach can be traced back to their memories of how their own teachers used to teach (Grossman, 1990). This implies that many novice teachers' ideas and beliefs about teaching originate from personal experiences as young learners. In this study, these childhood experiences were largely personal and controlled by the teachers who were observed as models. The teacher models observed influenced the teaching and learning on the job, either positively or negatively. This apprenticeship of observation is developed informally and mostly unknowingly. This means that it is unintended and unplanned learning which develop when learners are schooled. Teachers develop this knowledge without the intention of using it, but at a certain point in life, beginner teachers may end up using this knowledge in their learning how to teach.

It is generally agreed that memories of their own schooling played a role in leading the participants to take up teaching. The effect of such memories in teaching is known as conservation of teaching (Grossman, 1990). This is where teachers replicate the teaching strategies they experienced as learners. This means that other traits in teaching are conserved and are passed on from one generation to next. One's perceptions about teaching are likely to be shaped by memories of one's own schooling. In reviewing the literature this apprenticeship of observation is likely to influence teachers' knowledge on curriculum, subject matter knowledge and pedagogical content knowledge. Traditionally, South Africans learners were exposed to conservative theories and practices of teaching and learning (Vayrynen, 2010). This means that learning and teaching were perceived as a set of prescribed contents which were to be learned in a certain order and time. Considering the history of education, rote-learning was widely spread and there was little space for allowing critical thinking and questioning in learners. Most educators trained during apartheid were in this framework, given that teacher education colleges were segregated along the lines of race and ethnicity, creating partial, multiple and separate pathways to teacher education (Sayed, 2001). Today the PGCE programme is not of value to new teachers only, but also old teachers, mentors and colleagues in their professional learning communities, where they have to share experiences and learn from them.

It can be said that memories of their own schooling have a positive or negative influence on shaping the way novice teachers do their work, depending on the teacher role-models that the

novice teachers experienced in their own schooling. Therefore this should not be overlooked, as it helps in shaping the development of new teachers in the teaching profession, positively and negatively.

### **6.3.2 Informal mentoring (positive and negative) experiences**

In the area of mentoring, the results of the study indicated that the majority of the participants were mentored in a positive manner when they started their teaching. This means that the novice teachers were assisted by experienced teachers in their learning how to teach. The participants actually gained in this way, because they were given professional skills, knowledge and supervision which enabled them to improve their teaching. The results are in line with findings from the literature, which are that professional expert teachers provide support to teacher learning, by modelling reflective and deliberative classroom processes to novice teachers (Wilson & Demetriou, 2007). This implies that most novice teachers in this study are not thrown in at the deep end when they begin teaching. They are given professional assistance, which guides them in their journey of teaching as they learn how to teach. Hence the role played by professionally experienced mentors in the teaching profession cannot be ignored. The reviewed literature has shown that support given by head teachers and other colleagues focuses on creating and maintaining a learning climate and professional learning opportunities for new teachers which relate to the core needs to sustain commitment (Day & Gu, 2007). Many studies from developed countries have shown that novice teachers do not work on their own, but alongside experienced professionals who are there to model reflective good classroom practices (Wilson & Demetriou, 2007).

In developing countries, with reference to South Africa, a review of the literature has shown that the mentoring process has great potential for developing the professional practices and skills of mentees. In South Africa, Moreeng, van Wyk, Alexander and Milondza (2011) report that at the University of the Free State, a mentorship programme, in collaboration with selected schools for PGCE student teachers, was implemented to increase the duration of work-based learning as a requirement for proper teacher training. The findings from the mentorship programme indicated that the student teachers learnt a lot and made more meaning from their interactions with mentors. The different learning environment created by the interaction that student teachers had with their mentors in a real, school-based learning situation went a long way in deepening students' knowledge and practical competencies. Student teachers gained advantage by developing GPK and PCK from that mentoring programme.

Two participants in my study specified that they were not given any constructive feedback from their mentors. They did not benefit from their mentors, meaning that they did not grow professionally, as they lacked supervision from their mentors. Perhaps they could have still grown professionally, despite the lack of mentoring. If they were assisted professionally they would have gained more practical professional knowledge, thus developing familiarity with the profession.

### **6.3.3 Formal propositional learning in the undergraduate degree**

In teacher education, propositional or codified knowledge is considered important by teacher educators (Wilson & Demetriou, 2007). In the PGCE it is assumed that students' learning from the first degree equips them with content knowledge which is vital for teaching. The current study noted that eight students acknowledged that they benefitted from their first degree, whilst two indicated that their first degree did not help them in any way. The majority of the students claimed that they gained from the content that they learned in their undergraduate degree. This resonates with the reviewed literature of scholars such as Shulman (1986), Grossman (1990) and Wilson and Demetriou (2007), who advocate that good codified subject knowledge is essential for teaching. This is developed in formal learning and enhances the intellectual development of teaching and learning. In this view, in order for a teacher to be able to teach a subject he or she needs both breadth and depth of knowledge in that subject area (Calderhead & Shorrock, 1997). This concurs with studies that have been done in the United States, about students' understanding of the subject matter they teach. Evidence from research has shown that a large amount of time is spent in the first few years of teaching, relearning the subject matter for the purposes of teaching it. From the present study it was noted that those teachers who benefitted from their first degree were actually teaching subjects which were covered in their first degree. In other words, they gained significantly in terms of content knowledge for teaching.

Content knowledge learned from a primary degree forms part of Grossman's crucial component of teacher knowledge domains. This knowledge is acquired during undergraduate studies and in teacher training. She says that without knowledge of the structures of a discipline, teachers may misrepresent both the content and the nature of the discipline itself. It is important that teachers should possess this kind of knowledge when teaching, as suggested by Grossman (1990). The higher number of educators who reported benefitting from the undergraduate degree may be linked to a few reasons. One could be that of experienced and qualified lecturers who were teaching different modules in different

undergraduate programmes. Another reason may be that the level of content that they were teaching at their schools could be lower than the one taught in undergraduate programmes.

The two students who did not benefit in terms of content knowledge from the first degree were not teaching subjects that were covered in their undergraduate degrees. Their primary degree had nothing to do with the subjects they were teaching. Research has generally shown that high school Maths and Science teachers, who have majors in the subjects they teach, elicit greater gains from their students than teachers who do not have any content knowledge of the subjects (Darling-Hammond & Young, 2002). The same studies suggested that possessing an undergraduate major in Maths and Science has a greater positive effect on student performance than certification in those subjects (Darling-Hammond & Young, 2002:8). This implies that subject knowledge for teachers is considered important for the purposes of teaching. According to the Department of Higher Education and Training (2010), one of the roles of teachers in a school is to be a specialist in a subject discipline. This means that a specialist ought to have well-grounded knowledge and skills, methods and procedures relevant to the learning and teaching of the subject discipline.

## **6.4 Professional knowledge learned from the PGCE**

On the question of how the part-time PGCE students talk about their learning from the PGCE specialisation and core modules, this study found that the teachers gained much professional knowledge from the PGCE part-time programme. Teachers learned teaching strategies, planning and assessment, knowledge of learners and confidence from the formal PGCE programme.

### **6.4.1 Teaching strategies repertoire**

In the current study, the students indicated that they learned a number of teaching strategies from the programme. According to Grossman (1990), knowledge of the teaching strategies is a component of GPK and PCK, which is important for teachers to have in their teaching. For new teachers they are still in the process of developing a selection of instructional strategies and representations that are particularly effective for teaching a particular topic (Grossman, 1990). The respondents felt that they learned ways of introducing a lesson, teaching from known to unknown, scaffolding and mediation. Most claimed that the use of instructional teaching strategies that they had learned from the programme made their teaching more effective than before. The teachers learned all this from the PGCE part-time programme and did not learn a wide range of teaching strategies on the job, as they had been

teaching before doing the PGCE. This means that they were now able to teach for understanding, while assisting and supporting the learners to construct their own knowledge during the learning process. They were able to understand universal ideas in the teaching and learning of children through what they were taught in the PGCE.

#### **6.4.2 Planning and assessment**

Planning and assessment emerged as another key domain from the data. The teachers felt that they learned much in terms of assessment and planning. This kind of knowledge is included in the domain of general pedagogic knowledge. Grossman (1990) explained that this kind of knowledge includes skills and knowledge related to the management of the classroom, as well as knowledge and beliefs about the aims and purposes of education. The participants felt that the PGCE programme equipped them with the necessary skills vital for teaching. All the teachers acknowledged the learning of planning and assessment from the PGCE programme. Although the teachers learned planning and assessment on the job, learning this from the PGCE programme made a difference, as it improved the quality of planning and assessment. The PGCE programme introduced them to more structured and coherent ways of lesson planning and assessment. This improved their teaching in the classroom. This is in line with the philosophy of Grossman (1990), who says, the knowledge concerning learning is crucial for quality learning.

The interview data indicated that assessment was something that almost all participants talked about. The participants said that they learned much about assessment that they had not learned in their schools. It can be said that the participants were equipped with fundamental skills they needed for teaching, which, it appears, they did not learn informally at school.

#### **6.4.3 Knowledge of learners**

The teachers in this research pointed out the importance of having adequate knowledge about the learners. These teachers seem to think that this knowledge is of paramount importance for teachers to have when teaching. Scholars like Shulman (1986), Turner-Bisset (1999) and Grossman (1990) found this knowledge domain crucial for effective learning. This is because teaching and learning always takes place in a social context and therefore cannot be ignored. Although most participants had some teaching experience ranging from two to 15 years, it appeared that knowledge of learners, which includes barriers to learning in different contexts was something that they were not aware of until learning it from the PGCE formal programme. This knowledge of the learners fits into Grossman's "knowledge of educational

context" domain. She asserts that teachers should draw upon their understanding of the particular contexts in which they teach (Grossman, 1990). This knowledge domain could not be acquired on the job, but through intellectual development from formal learning.

Evidence from this study indicated out that knowledge of learners is essential for teachers to have and teachers mentioned that they learned about barriers to learning from the PGCE programme. The teachers learned that there are certain barriers that can hinder children's learning. Rex showed that he was able to reflect and learn that backgrounds of learners are important to understand as a teacher:

*I did not know about learning barriers. I did not know that there are some things that can block the learning process. I have noticed that some learners would misbehave and will look like they are not eager to learn, but now that new knowledge has come to me, the learning barriers. So now this will change my strategy when assessing.*

The teachers learned that there are some things that can hinder the learning process and it is the duty of the educator to identify the learning barriers so as to assist learners in their learning process. This knowledge comes through a deep understanding of the differences in the background of learners. Most teachers reported that, even though they had been teaching for some years, they did not learn this aspect of barriers to learning in their schools. This knowledge was acquired and modified from the PGCE programme. It is important for teachers to possess this knowledge domain, given the education history of South Africa and the prevailing socio-economic inequalities among learners from different backgrounds.

#### **6.4.4 Confidence**

Many of the respondents emphasised that they developed confidence from their learning from the PGCE programme. A significant number of teachers agreed that confidence was something that developed through PGCE learning. These teachers developed confidence through learning new knowledge and skills from the programme. Through acquiring formal knowledge of aspects like planning and assessment, knowledge of learners and classroom strategies, most teachers developed confidence. Wilson and Demetriou (2007: 9) postulate that, "becoming a teacher requires huge levels of self-belief and confidence". This means that if teachers are good at what they do, they are in a better position to achieve their teaching goals, thus making teaching and learning more effective. These teachers gained teacher knowledge that they did not have before for example the knowledge, of barriers to learning,

and assessment and planning. It is likely that the feeling of becoming *qualified* after completion of the course brought a greater sense of competence and increased their confidence levels. Perhaps the confidence of these teachers has previously been undermined by an employment contract that could be terminated at any time. The teachers' confidence levels increased because they knew that after completion of course they were going to have a new identity and status.

Although the issue of confidence was mentioned by many of the respondents, it is not included in Grossman's model of teacher knowledge. Her model of teacher knowledge does not talk about this knowledge domain.

#### **6.4.5 Pedagogical content knowledge**

One of the key aspects mentioned by teachers was the learning of pedagogical content knowledge from the PGCE programme. Half of the teachers expressed the view that they also learned pedagogical content knowledge from the programme. This was learned from the specialisation modules offered by the PGCE programme. Some teachers claimed that they learned a lot from their specialisation modules, but some felt it was a waste of time, because they did not gain any required knowledge. Grossman explains that PCK involves knowledge and beliefs about the purpose of teaching a subject at different levels, knowledge of students understanding of particular topics, knowledge of the curriculum materials for teaching and knowledge of teaching strategies and representations of teaching particular topics (Grossman, 1990). This knowledge component is dynamic, in the sense that it draws from different teaching aspects at one time. From the study we can learn that, by acquiring this knowledge type, the respondents can be regarded as professionals. Teachers learned PCK from their different subject specialisation modules. They learned PCK specific to their specialisation and methods of teaching of their particular subject. Participants were introduced to curriculum and policy with reference to their subjects. This knowledge helped them in their teaching, by enabling them to teach what is in the curriculum. This can be linked with Grossman's model and the third component of PCK namely curricular knowledge which involves the curriculum material available for teaching.

Since PCK was developed from PGCE formal learning it can be concluded that formal professional development for teachers is important, as it provides deep meaningful learning essential for all educators. This knowledge domain is the one which distinguishes a

professional from a non-professional, because of its emphasis on effective teaching for quality, appropriate learning for diverse learners.

## **6.5 Practical professional knowledge learned from the PGCE teaching practice**

With respect to the third question, regarding learning from the formal teaching practice, three themes emerged from the analysed interview data. These were mentoring by university tutors during school experience, mentoring by school colleagues during school experience and other issues identified.

### **6.5.1 Mentoring by university tutors during school experience**

Findings revealed that university mentors play an important role in the development of a competent novice teacher. Most participants reported that they were tutored in a professional manner. From the teaching practice, new teachers learned practical knowledge with the help of other professionals. This knowledge is context-specific and is not easily codified, but nonetheless plays a key role in school-based practices and activities (Wilson & Demetriou, 2007). This knowledge is sometimes learned as people engage in close social interaction with other professionals in the same field.

Teaching practice is an essential component of teacher education, as there are some aspects that need to be learned when one occupies the school premises. Stuart *et al.* (2009) outlines some examples of practical professional knowledge gained in practice which are essential for teachers to use in their classrooms, namely class control, open daily routines, different ways of dealing with disruption, marking and assessing, lesson planning and ways of organising classroom and the pupils. This is learned during teaching practice through formal learning. Practical learning is an important condition for teachers to develop tacit knowledge, which is an essential component of teacher knowledge in all teacher education programmes.

### **6.5.2 Mentoring by school colleagues during school experience**

Some participants were mentored and some did not receive any support from their teaching practice mentors. Learning from the teaching practice for all participants was based on mentoring by colleagues, school mentors or university mentors. These people played a vital role in assisting the participants to acquire professional practical knowledge on the job.

The results revealed that mentoring exists in some schools, but not all schools. The present revealed that in some schools mentors are too busy to help novice teachers. This concurs with

a study done by Pillay (2012), which looked at the professional knowledge base and practices of school mentors in South Africa. The study found that one of the major challenges that mentors experienced at their workplace was lack of sufficient time to enact their mentorship roles as part of their duty. Pillay noted that “ in South Africa, in most public schools, the educators who volunteer their support to mentor students and novice educators generally carry high teaching loads and use personal time to fulfil their mentoring roles and responsibilities” (Pillay, 2012:119). However, in other schools mentoring does exist and new teachers are getting professional assistance. In their study in the United Kingdom, Jones *et al.* (2006) found that good mentors use strategies that address the specific needs of mentees and encourage them to realise their potential. The strategies mentors employed to convey mentor knowledge, skills and expertise were not arbitrarily and haphazardly selected, but chosen in response to the needs of the mentees and their stages of development (ibid).

With regards to mentorship, the Department of Higher Education and Training (2010) review of teacher education in South Africa indicated that many students, especially in PGCE programmes, are not given sufficient opportunity to engage in practice learning and the problem is compounded by weak institutional school relationships, poor communication and inadequate supervision and mentorship arrangements. To guard against these, basic parameters should be put in place to permit teachers and teacher educators, and institutions offering teacher education programmes, to draw upon their own expertise in facilitating professional learning (Department of higher education and training, 2010). This promotes the building of professional cultures, as well as communities of practice.

## **6.6 Conclusions of the study**

The study highlighted the important role played by a teacher education programme, the PGCE, in facilitating the formal learning of professionally unqualified teachers who are already teaching in schools. This programme enabled the professionally unqualified teachers to become qualified while continuing to teach.

The present study has shown that the majority of novice teachers bring their own schooling experiences with them in teaching. Sometimes it is difficult to alter teaching practices and this explains why teaching has remained so constant over so many decades of reform efforts.

As professionally unqualified teachers, the respondents had all been teaching in schools before they enrolled for the PGCE. They thus learned to teach “on the job”, before enrolling for a formal teacher education programme. For some participants, learning on the job was

fairly easy since they received adequate support from the right professional people. For some, however, learning on the job was not easy, as they had to learn on their own, without support from mentors and colleagues.

It can be concluded that the selected PGCE part-time teachers have gained a lot from the PGCE programme, even though they came to the programme without having any intentions of actually developing themselves as professional teachers. They came into the programme in order to change their unqualified status and become qualified. In other words, the main reason for the majority of the students to join the PGCE programme was for job security. However, they found that their learning experiences from the programme changed their professional practice and the way they view the teaching profession as a whole. This means that their practice was now informed and guided by principles of teaching and learning. As a result of learning from the PGCE, participants believe that they changed their attitudes, improved their knowledge and sharpened their skills. A change in behaviour was evident for some in terms of how they react to their learners in class. Therefore one may conclude that the PGCE programme has, to a large extent, met the specified outcomes of teacher education programmes.

It can be further concluded that gaining confidence from the programme was a valued aspect for most teachers. It appears that the issue of becoming qualified brought higher confidence levels in these novice teachers. Recognition and status could have increased confidence levels.

Some PGCE part-time teachers raised the opinion that they requested to be taught the administrative work that comes with the role of being a teacher. Although this is context-based, some participants felt that it was vital to have such knowledge as part of the PGCE programme, to enable teachers to be fully equipped for teaching.

The PGCE part-time programme acted as a stepping-stone for the personal development of some of the teachers. It is pleasing to note that this programme opened their eyes to wider opportunities of lifelong learning for those teachers willing to further their education.

Since the PGCE programme accepts students with a range of undergraduate degrees, the disciplinary subject knowledge that come with students needs to be reinforced and taken into consideration in the PGCE programme. It appears that some undergraduate degrees did not provide teachers with sufficient subject knowledge. The major subjects at undergraduate level need scrutiny. A review of teacher education in South Africa indicated that in many teacher

education programmes, there is insufficient professional screening of applicants prior to admission (Department of higher education and training, 2010). It is recommended that teacher education institutions become more selective in admission processes to match students' academic degrees and choice of subjects to teach.

The present study showed a conceptual understanding about the development of teacher knowledge and concluded that teacher knowledge can be developed formally and informally. The knowledge domain that was acquired both formally and informally was GPK. It was developed informally through social learning, meaning that it was learned in schools, in which the teachers were already teaching before enrolling for the PGCE, and later developed and moulded from PGCE learning. Teachers learn through working with others within a school setting, by seeking help and sharing information, and from academic institutions (Wilson & Demetriou, 2007). GPK learning was acquired through practice in the PGCE learning. PCK was learned from schools when university mentors visit students and from PGCE formal learning. This means that it was acquired from both schools and the PGCE. Teacher knowledge domains which were acquired through PGCE formal learning were GPK and PCK and KC. This was learned through instruction from an expert in a formal programme in an academic institution. However content knowledge was not developed from PGCE learning, but was learnt during primary degree.

## **6.7 Reflection on the framework**

In my study I used Grossman's model of teacher knowledge. This framework was a useful way of categorising teacher knowledge domains. The four domains of teacher knowledge categorised were content knowledge, pedagogical content knowledge, general pedagogical knowledge and knowledge of the context. Grossman's model of teacher knowledge was helpful as a tool for identifying, describing and analysing the four teacher knowledge domains. The model can be used as a firm, helpful knowledge base for teachers and can be used to improve expertise and professionalise the teaching profession. The absence of teacher knowledge domains was going to make it difficult to describe, identify and give us some insight on the teacher knowledge domains, learned from the PGCE part-time programme.

The framework used in this study had its own strengths in terms of senior phase and high school teaching, since the model was originally developed from high school studies. The framework could fit easily, considering that the respondents were senior phase or high school teachers.

The model used in this study excludes personal knowledge or knowledge of self. It does not engage personal knowledge as one of the teacher knowledge domains. It is silent on the teacher's awareness of own values, goals, strengths and weaknesses related to teaching. Turner-Bisset (1999) states that knowledge of self is an important element of reflection in practice. It found that knowledge of self was an important requisite for reflection at the higher levels. The work of some scholars suggested that it is an important knowledge base for teaching (Turner-Bisset, 1999). Grossman (1990) does not consider this knowledge domain. The present study revealed that knowledge of self is a crucial element in the way teachers view themselves and understand the nature of the job. Thus teaching is a profession in which in this knowledge of self is a crucial element.

### **6.8 Limitations of the study**

The research in this study was done on a small scale. A limited number of participants were used in the sample. A greater number of respondents could lead to a generalisation of the results. Because of the small sample, the results cannot be generalised to all part-time practising teachers enrolled in the PGCE programme.

Another potential shortcoming in this research is that the only data collection method used was interviews. The interviews relied on self reported data and not on the researcher's observations of practice. This implies that perhaps the strengths of relationships between certain trends and variables may be somewhat inflated.

### **6.9 Recommendations for further research**

While this study has provided a better understanding of the learning experiences of learning to teach in the PGCE part-time programme, this study recommends areas for further research.

- To carry out the same investigation on the learning experiences of the full-time PGCE students.
- Further research using a larger sample and other methods of data collection such as classroom observations, in a similar study, is recommended.

### **6.10 Conclusion**

This study showed that the PGCE part-time programme has played an essential role in the, development and moulding of the people willing to become teachers. The majority of teachers from this study had benefitted from this teacher training programme. It can thus be said that most of the respondents believed that the PCGE has adequately prepared them to

become qualified in the teaching profession. In this study the PGCE acted as the main significant source of professional skills and knowledge, as most teachers learned PCK from the programme. The majority of the teachers were offered professional learning through mentoring and learning from colleagues. University mentors played a major role in giving the novice teachers professional guidance and support during their teaching practice. The understanding from this study will assist the programme directors to inform them on the curriculum and the delivery of the PGCE part-time programme.

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# **APPENDIX 1: INFORMED CONSENT FORM**

## **Teacher knowledge and the PGCE programme**

**UNIVERSITY OF KWAZULU-NATAL      Informed Consent Form**

August 2010

Dear participant

### ***Participation in a research project: Teacher knowledge and the PGCE programme***

The purpose of the project is to explore and describe the kinds of knowledge that practicing teachers bring with them to the part-time PGCE programme and the kinds of knowledge that they develop through the programme. The study aims to find out your experience of learning on the Part-time PGCE programme, through an interview that will take place at the PMB or the Edgewood campus at a time suitable for you.

The project leader is Dr Carol Bertram (033 260 5349/ 084 4079827) from the School of Education and Development, Faculty of Education, Pietermaritzburg, UKZN. Other colleagues involved in the study are Dr Nonhlanhla Mthiyane, Dr Daisy Pillay and Dr Tabitha Mukeredzi.

Interviews will be audio recorded and then transcribed. All transcriptions will be analysed by the researchers and the findings published in academic journal articles. Names of participants will be anonymised. All data will be stored safely with the project leaders at the university and destroyed within 5 years,

Any participant who chooses to withdraw from the study at any time will not result in any disadvantage. Participation is voluntary.

Yours sincerely

Carol Bertram (PhD)

Project Leader

---

I..... (full names of participant)  
hereby confirm that I understand the contents of this document and the nature of the research project,  
and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

.....  
SIGNATURE OF PARTICIPANT

.....  
DATE

## **APPENDIX 2: INTERVIEW SCHEDULE FOR PGCE STUDENTS**

### **Teacher knowledge and the PGCE programme**

#### **Interview schedule for PGCE students**

1. Tell me about yourself. (Prompts: Name; Age; Years of experience as a teacher; Qualification; How long have you been teaching? How long at this school?)
2. Why did you decide to do the part-time PGCE course?
3. Which subjects do you teach and which grades?
4. What kinds of knowledge or skills (competence) do you think a person needs to be a good (Foundation phase/ maths/ history etc) teacher?
5. In what kinds of ways did you learn to 'become a teacher' in your school before you registered for the PGCE programme?
6. In what ways did your undergraduate degree prepare you for being a teacher? What kind of content knowledge did you gain from your undergraduate degree that you felt was necessary for teaching your school subject?
7. What kind of content knowledge did you gain from the PGCE specialisation/ method courses?
8. What kind of pedagogic knowledge (that is, HOW to teach your subject) did you already have when you started the PGCE? How did you develop that knowledge (eg from mentors at school)?
9. What kinds of pedagogic knowledge did you develop as a result of learning on the PGCE programme? How did you develop this knowledge?
10. How would you describe a good maths/ language/ science teacher? In what ways (if any) would you say the PGCE programme supported you in becoming a better teacher?
11. What did you learn from the specific teaching practice periods?
12. What did you learn from the core modules?
13. What did you learn from the specialisation modules?
14. Is there anything else you want to add about your learning experience on the PGCE programme?

Thank you very much for your time.

## APPENDIX 3: ETHICAL CLEARANCE



**UNIVERSITY OF  
KWAZULU-NATAL**

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26 November 2010

**Dr. CA Bertram (409420)**  
School of Education and Development

Dear Dr. Bertram

**PROTOCOL REFERENCE NUMBER: HSS/1336/010**  
**PROJECT TITLE: Knowledge bases and professional learning of the part-time PGCE students**

### EXPEDITED APPROVAL

I wish to inform you that your application has been granted Full Approval through an expedited review process:

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number. **PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years.**

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....  
**Professor Steven Collings (Chair)**  
**HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE**

cc. Dr. D Pillay  
cc. Dr. N Mthiyane  
cc. Mr. N Memela