

**WHY IS CLASSROOM PRACTICE SO
DIFFICULT TO CHANGE? LESSONS FROM
FIVE SCHOOLS IN THE TOYOTA TEACH
PRIMARY SCHOOLS PROJECT IN DURBAN**

BY

LESLEY JEAN LEE

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DECLARATION:

I, Lesley Jean Lee; Student number: 961097998 declare that the research undertaken entitled: *Why is classroom practice so difficult to change? Lessons from five schools in the Toyota Teach Primary Schools Project, in Durban* is my own original work for the above thesis.

All quotes and data sources in this thesis have been acknowledged and referenced to support the arguments.

This thesis has not been previously submitted to any other university.

Signed

Lesley J. Lee

ACRONYMS

ACRONYM	FULL DESCRIPTION
ACE	Advanced Certificate in Education
BA	Bachelor of Arts
C2005	Curriculum 2005
CCD	Centre for Community Development
CPTD	Continuing Professional Training and Development
DoE	Department Of Education
FDE	Further Diploma In Education
HoD	Head of Department
Inset	In-Service Education and Training
IPEB	Institute For Partnerships Between Education and Business
JPTD	Junior Primary Teachers Diploma
LAC	Learning Area Committee
LO	Life Orientation
LLC	Language, Literacy and Communication
MLMMS	Mathematical Literacy, Mathematics and Mathematical Sciences
NCE	Natal College of Education
NGOs	Non-Governmental Organisations
NS	Natural Science
PD	Professional Development
PEI	Presidents Education Initiative
PSP	Primary Science Project
PTD	Primary Teachers Diploma
RADMASTE	Centre For Research And Development In Mathematics, Science And Technology
READ	Read Educational Trust
RNCS	Revised National Curriculum Statements
SGB	School Governing Bodies
SMI	School Management Initiative
SPTD	Senior Primary Teachers Diploma
TEC	Technology
TIMSS	The Third International Maths & Science Study
TSAF	Toyota South Africa Foundation
TSAM	Toyota South African Motors
TT	Toyota Teach
TTPSP	Toyota Teach Primary School Project
UCFFE	Umlazi College for Futher Education
WSD	Whole School Development

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ABSTRACT

Twelve years after the introduction of Toyota Teach Primary Schools Project (TTPSP) to change schools and teacher practices in selected schools in the Durban South region, my observations as the then Project manager suggested that the status quo remained. Evidence from monitoring and evaluation reports (e.g. Peacock, 1998; Moletsane, 2002) also concluded that despite all the efforts, teachers were not internalising the knowledge, skills and values taught in the project, and that classroom practice remained largely unchanged. To investigate the reasons for this phenomenon, this thesis examined stakeholders' experiences of the interventions and the perceptions of its role in changing school and teacher practice. The study aimed to identify the various factors that facilitated or hindered change in classroom practice among teachers participating in the project.

To do this, the study utilised a multi - site case study design focusing on five primary schools in the Umlazi and Umbumbulu catchment area of the TTPSP. Data collection methods included teacher and principal questionnaires, document analyses, interviews with teachers and the principles as well as classroom observations.

Informed mainly by three bodies of literature, diffusion of educational innovation (Rogers, 1972, 1985), teacher learning (Borke, 1995; Green et al 1996; Fullan, 1991) and organisational learning (Senge, 1990; Davidoff & Lazarus, 1997) the findings from the study confirmed that the fact that in spite of the intervention, teacher's classroom practice remains largely unchanged. Reasons for this included personal and professional factors, institutional factors; context related factors as well as project design. From these, the thesis argues that for effective professional development to occur, interventions must involve the whole school as a learning organisation rather than largely individual teachers for off-site training.

Furthermore, the thesis argues that generic interventions implemented in different schools with different social and educational contextual realities will not have the desired effect. Rather, such interventions need to take these realisations into considerations and design projects that aim to address them.

This study has several implications. First, the most significant for professional development policy and practice is that a thorough

situational analysis in the schools targeted for interventions is needed to establish the readiness and areas of need. This is to inform the design and implementation of the intervention to address the contextual realities and needs of the schools and its targets.

Second, with regards to further research, several questions emerge from the study, the most significant of which relates to the notion that teacher's inability to change the classroom practice is a function of poor resources in schools. From this a question emerges: To what extent and in what ways do/can improved resources contribute to positive classroom change in classroom practice? Until we know how teachers learn best and what conditions facilitate such learning, our efforts and resources will remain futile and costly.

CHAPTER ONE
INTRODUCTION: THE TOYOTA TEACH PRIMARY SCHOOL
PROJECT

1.1 INTRODUCTION

Prior to 1994, South Africa was 'enveloped' in the Bantu Education Acts of 1953 and 1954. This Act was designed to bring all schools for Africans under the control and administration of the central government. During the Apartheid period, schools were racially segregated and the curriculum was much racialised, prescriptive, detailed and authoritarian with little space for teacher initiative (Jansen, 1998). Teacher training, accordingly, also followed this format. In addition, teacher training colleges and schools were unequally resourced, with those catering for Africans receiving the least support from government.

In these African Teachers' Training Colleges, teaching strategies for pre-service teachers included largely teacher-centred pedagogy, in which learners were regarded as 'empty vessels' that had no voice. Teachers encouraged the process of repeating facts and learners merely copied notes from the board. Teaching involved primarily chalk

and talk and teachers resorted to a strong dependency on the textbook. Most teachers had what Paulo Freire (1970) calls the 'banking' conception of teaching, in which the teacher is the banker or controller of knowledge.

Available international literature attests to the fact that classroom practice is difficult to change (Hargreaves, 1998; Darling-Hammond, 1997). There are several explanations for this lack of change in classroom practice. One explanation is that teachers teach the way they were taught themselves. They learn what school and teaching are first as students, and perpetuate through deed and action, these conceptions in their new roles as teachers (Zeichner, 1983). Thus, in South African schools, 'rote' learning and related teacher practice remains largely the status quo in many schools, particularly in township and rural schools that have historically served African learners and in which most of these teachers teach. Learner discussions and problem solving in the classrooms remains superficial and as a result, learners are not cognitively challenged and remain passive in the classroom.

A second explanation is that there has been little change in the way that pupils have been taught in schools. According to Cohen (1998), since the 1960's there has been a historical pattern of teacher talk (70% of input and low levels of student involvement). Teachers have generally worked within a curriculum they did not devise, used instructional materials they did not like and accepted a schedule that contained little flexibility. Teachers were trained in the process but were not for the most part instrumental in saying how, or what should be taught. These conditions have restricted opportunities for teachers to change.

In an attempt to depart from this status quo, the government introduced Curriculum 2005 (C2005) to radically reform education. The new curriculum was attacked for several reasons, including among others the anticipated difficulty of implementing it in a system with so many under-prepared and under-qualified teachers (e.g. Jansen, 1999; Chisholm, 2004, 2005).

In response to what has become known as the 'crisis in education', numerous professional and school development interventions by government and Non-Governmental Organisation's (NGO's) have been

developed and implemented to change school and classroom practice. For example, The President's Education Initiative (PEI) suggested that teacher development programmes should be geared to assist teachers with systematic learning otherwise no real change in their professional work will take place. In this respect, teaching and learning cannot "occur in an environment which is lackadaisical, unpredictable and not directed towards optimising quality classroom time" (Taylor & Vinjevold, 1999:136). In their then Further Diploma in Education (FDE) programme at the University of Witwatersrand (WITS), Adler and Reed (2002:9) found that the "underlying conviction was that teachers shape their professional development and are not shaped by it". Thus, in spite of these numerous interventions, research evidence suggests that classroom practice remains largely unchanged.

In particular, within the Toyota Teach Primary Schools Project, an intervention meant to change school and teacher practice in selected Durban primary schools, evaluation and monitoring reports (e.g. Peacock, 2000; Moletsane, 2002) have found that teachers involved are not internalising what they learn in the project. Thus, this study focused on the reasons for the failure of professional interventions to change classroom practice. In particular, reasons for the failure of the

TTPSP to change classroom practice among participating teachers were investigated.

1.2 THE TOYOTA TEACH PRIMARY SCHOOL PROJECT

The Toyota Teach Primary School Project (TTPSP) is a consortium of professional development agencies that focus on In-Service Education and Training (INSET) training for teachers in the areas of Mathematics, Science, and Language and Cognitive development. The establishment of the TTPSP stemmed from the belief that an improvement in the quality of primary education in the region, particularly in the areas of Mathematics, Science and Language, would enable more learners to become prepared for further education in the technical and vocational fields.

The TTPSP was established in 1989 under the auspices of the Toyota South Africa Foundation (TSAF). The project represented an extension of the Foundation's existing commitment to educational development. The Foundation provided funding for three high schools in the Umlazi area for technical education. It intended to assist this process through the provision of a better quality of education, especially for African communities. Professor De Lange, who chaired the De Lange

Commission for Education, was commissioned to investigate what focus the Foundation should take in the Umlazi and Umbumbulu areas. These are the areas from which the Toyota Manufacturing plant draws the bulk of its labour force. De Lange's conclusions showed that African students at technikons and colleges were not able to maximise their potential due to the poor standard of basic education and a lack of basic skills. He advocated that the TSAF focus on supporting primary school education in science, mathematics and language as well as programmes in cognitive development. It was from this, that the TTPSP was conceptualised and developed.

The commission's findings revealed a number of weaknesses in the school system in these areas. In particular, these included children 'chanting' blackboard texts, poor quality of school management in some schools, inadequacies in the teaching of English language and inadequate teaching of mathematics and science. This was mainly due to the lack of suitably qualified teachers in these subjects.

Arising from the above, the TSAF made a firm decision to focus on the primary schools as it was felt that the basic inputs needed in a school were to be systemic and sustainable over the long-term. Assistance

would be given to schools by using four Non Governmental Organisations (NGO's) that were experienced in the field of educational transformation. The organisations that formed the initial partnership were READ Educational Trust, the Primary Science Project (PSP), Centre for Cognitive Development (CCD) (now known as the Centre for Community Development) and the Centre for Research and Development in Mathematics, Science and Technology (RADMASTE). These organisations came to the project with considerable experience in teacher development having provided in-service support for schools in the forms of workshops. The main form of information sharing between the organisations were quarterly reports and at the management council meetings that met thrice yearly. Meetings and interactive sessions were also scheduled to deal with particular issues and concerns. It was important for each organisation to have an equal stake in the project.

The project was implemented in three phases. These are described below.

1.2.1 TTPSP Phase One: School-Based Teacher Support

There are approximately 150 primary schools in the catchment area where the TTPSP works. The TTPSP targets schools in Umlazi, a township outside Durban, and Umbumbulu, a peri-urban settlement outside Durban. Initially, the TTPSP intended to work in all schools in Umlazi and Umbumbulu, but it soon became apparent that this was an impossible undertaking due to the lack of human resources in the project. Hence, in 1992 the project operated in 18 Umlazi schools, which became known as Wave 1 schools with 18 more from both Umlazi and Umbumbulu being included the following year. These became known as Wave 2 schools.

In the first phase of the TTPSP (1992-1994) the NGOs worked in the 36 Wave 1 and Wave 2 schools in Umlazi and Umbumbulu. The organisations held workshops for the teachers on language and science teaching and provided resource materials to the schools. In these workshop sessions, the importance of active involvement in learning was highlighted. For example, facilitators from READ, one of the NGO partners of the TTPSP, would demonstrate a specific methodology (in demonstration lessons) during the contact sessions with educators. This was followed up with classroom visits in which

teachers were expected to implement the same in their classrooms, with support from the TTPSP. The classroom support ranged from helping teachers to organise their classroom furniture to aid improved learning, to getting learners to read more language books. The nature of classroom support also differed by learning area. For example, RADMASTE, the mathematics specialists, concentrated on problem solving and discovery learning. Constructive criticism and support were given to the educator once the lesson was completed.

After this process, the NGOs got together and discussed the progress of the schools. Whilst the efforts of the various organisations focused on the same schools and there was some collaboration at the conceptual level, it became increasingly important to find ways for them to work more collaboratively. Hence the then Further Diploma in Education (FDE) was conceptualised, heralding phase 2 of the project.

1.2.2 TTPSP Phase Two: The Further Diploma In Education (FDE)

In Phase Two of the TTPSP (1995–1998) a decision by the Management Council of the Project was made to integrate and accredit the work of the Project within a formal programme of study, which

would lead to the award of a formal qualification. It was agreed that all organisations would collaborate in developing a Further Diploma in Education (FDE) for educators in project schools. The intention was to formalise the work of the participating NGOs and to give educators an opportunity to consolidate their work with these NGOs whilst studying for a formal qualification. The then Natal College of Education (NCE) and later the Umlazi College for Further Education (UCFFE) joined the project to accredit the FDE.

With the closure of the Colleges of Education in 2001, the TTPSP approached the Durban School of Education of the then University of Natal (now known as the University of KwaZulu-Natal) to accredit the qualification. At this stage a new National Qualification Framework had to be implemented so the FDE programme was replaced by the Advanced Certificate in Education (ACE). This formal diploma would enable the teachers to improve their qualifications as well as their classroom practice.

In February of 1996, the Further Diploma in Education: Primary School Teaching Competencies commenced with an intake of 36 students. In 1997 and 1998, 32 and 13 educators respectively registered for the

diploma course. The focus of the FDE was on the development of educator competencies and the enrichment of methodological and subject understanding, particularly in mathematics, science, language and cognitive development. The FDE was designed to develop independent and critical educators. Its general aims were to encourage primary educators to develop:

1. Teaching methodologies which will ensure meaningful learning and thinking.
2. A quality understanding of Language, Mathematics, Science and technology.
3. Ways of moving from authoritarian teaching to mediative practices that foster interactive learning.

(Toyota Teach Primary Schools Project, 1998)

It aimed to develop key competencies that include the ability to teach in a mediative/cognitive style; have the knowledge and confidence to teach mathematics; science and language effectively; develop critical thinking; understand curriculum issues; respect community values; acquire conceptual and study skills and to ensure that learners develop a sense of responsibility towards the school, community and society as a whole (TTPSP,1998). Thus, educators on the course had to do the

following modules: Primary Teaching Competencies 1 and 2; Junior Primary Science Education; Language and Learning; Senior Primary Mathematics; and Technology or Environment.

1.2.3 TTPSP phase three: The School Management initiative

During Phase One and Two, the TTPSP monitoring and evaluation evidence seemed to suggest that school governance and management could facilitate or hinder change towards effective teaching and learning. In response, a new component of the project entitled the School Management Initiative (SMI) was launched in 1998. The SMI aimed to address issues of school management as well as to ensure that the investment in educators through the ACE was supported and effectively utilised at the school level. As Hopkins (1996:233) writes, “there is no educator development without school development, just as there is no school development without educator development.” The SMI aimed to develop the whole school environment, working with the whole staff so that everyone could be involved. The programme was run under the auspices of Institute for Partnerships between Education and Business (IPEB), an NGO member of the TTPSP based at the University of KwaZulu-Natal. Initially, the structure of the SMI involved

a three year programme targeting ten of the schools in which teachers were enrolled for the ACE programme.

In the first year of the SMI (1998) professional and organisational development work took place at schools and focused on developing a cadre of school-based change agents who would take responsibility for improving the quality of learning at the school. Schools were assisted to develop their vision and mission statements as well as the establishment of school maintenance and development principles and plans. In the second year (1999) the schools were to draw up a school developmental plan, and the TTPSP facilitators would assist them in drawing up this plan. In the third Year (2000) the schools would still receive support from the project, but the role of the facilitators would be to simply ensure that the programme was sustained. However, as seen from evaluation reports (e.g. Raubenheimer, 1999; Peacock, 2000; and Moletsane, 2002) the SMI initiative was not well supported in some schools. This in turn seems to have affected the success of the TTPSP interventions negatively.

This seemed to suggest that the nature of the school environment is an important factor in the success or failure of professional

development interventions. To illustrate, many of the schools in the project, particularly those in Umlazi, are overcrowded. As a result they still do platooning in the classroom, where teaching and learning is scattered throughout the school day due to a lack of adequate classroom facilities (for example, Grade 1: 08:30 –10:30; Grade 2: 10:30 to 12:00 using the same classroom). Added to this is the poor management in many of the schools. This results in a poor culture of teaching and learning, which further prevents changes in classroom practice. Low levels of internal and external communication exist amongst the staff which results ultimately in changes not occurring effectively.

Many of the schools in these areas are combined schools. This means that they cater for learners from Grade 1 to Grade 7. To illustrate, teachers in the senior primary phase specialise in certain subjects, whereas in the junior primary they teach all learning areas. Teachers merely repeat a standard lesson to the same grade - a labour saving device. In the senior primary phase, specialisation in certain subjects has been found to encourage the practice of “subject teachers simply repeating the same lesson to each of the classes in a particular group” (Peacock, 1994, 1998), with no real cognitive, challenging work for

learners. In particular, in mathematics and natural science the two learning areas targeted for change and improvement by the TTPSP; the results show no improvement in teaching practice as well as in learner achievement in the assessment tasks. For example, in an attempt to assess the impact of the TTPSP on maths and science learning in these schools, the Third International Maths and Science Study (TIMSS) assessment exercise was administered to a random selection of Grade 6 pupils attending eleven of the schools that the project had worked with. The results were generally poor, with eight out of the eleven schools scoring less than 30 per cent. The assessment exercise indicated strongly that the TTPSP initiatives were not impacting directly on pupil performance in any consistent or reliable way.

This suggests that in spite of the various interventions by the TTPSP, classroom practice in the targeted schools, as well as learner performance remained largely unchanged. Thus, this study aimed to explore the reasons for this.

1.3 FOCUS OF THE STUDY

As the then Project Manager of the above project, my own observations and evaluations of the project suggested that the graduates of the ACE and beneficiaries of the TTPSP were not changing their classroom practice accordingly. In addition, evidence from monitoring and evaluation reports (e.g. Peacock, 1998; Moletsane, 2002) suggested that despite all the efforts, graduates of the TTPSP were not internalising the knowledge, skills and values that they learnt from the project, and that classroom practice was not changing accordingly. If change did occur it was in the form of 'window dressing'. For example, Peacock (1998), states that while schools might adopt an outward appearance of change, it was clear that they had not fully internalised its implications, particularly in relation to extending the cognitive demands made on children. No real understanding or interaction was demanded from the children. Persistent poor management and the absence of a culture of teaching and learning further aggravated the situation in under-developed schools. On the other hand, Moletsane's (2002) critique of the TTPSP was that the design of the project tended to overlook the contextual realities of school and educational change, and to implement ready-made interventions from the TTPSP. An example of this was seen in

classroom observations where ACE students were meant to teach mathematics and science lessons using resources supplied to the mathematics and science teachers. However, these teachers did not know how to use the equipment appropriately. This is further explored in Chapter Six.

The purpose of the TTPSP was to change classroom practice through these interventions. However, as the preceding examples and others that are highlighted in the next chapters in this thesis suggest, the project seems to have failed to achieve this purpose. While a few successes might be identified in the schools (by teachers and principals) and the project as a whole, the most significant one: change in classroom practice, was not realised. Thus, this thesis is premised on the notion that the intervention had failed in its efforts to effect this change.

1.4 THE PURPOSE OF THE STUDY

Thus, this study examined how the TTPSP shaped the practices of teachers who participated in the intervention, particularly those who registered for the ACE. The study examined the reasons for the failure of the intervention to significantly change classroom practice among

the teachers. It aimed to identify the various factors that facilitated or hindered classroom practice change among the teachers and schools that were involved in the TTPSP. It focussed on five schools in the Umlazi and Umbumbulu catchment area of the TTPSP (a full description on the selection of the schools will be described in the methodology chapter).

It is important to note that this study was not part of an evaluation process for the TTPSP and was conceptualised after a conversation with the late Dr Peacock as to why the TTPSP teachers were not changing their classroom practice despite the project working in the schools. It is also important to note that the classroom changes were also measured against the assumption that previous knowledge had been acquired in pre-service education as well as through practice. Observations and monitoring reports of the teachers explored in the study were also indicators that classroom practice had not changed. As such, the study explored the factors that were impacting on the teachers' ability and willingness to implement the lessons that they learnt in the project and to change their classroom practice.

The main research questions addressed in the study include the following:

1. What are the professional and organisational development needs of the teachers and schools targeted by the TTPSP and in what ways do the project activities aim to address them?
2. To what extent might the design of the intervention lead to failure to change classroom practice in participating schools?
3. To what extent is the content (skills, values and knowledge) taught in the TTPSP reflected in the everyday classroom and school practice of the participating teachers and principals?
4. What factors within the school context as well as within the project assist or hinder teachers' ability/willingness to implement what they have learnt from the professional development programme of the TTPSP?
 - What conditions in the school and social context might lead to the failure of the intervention in the schools?

1.5 SIGNIFICANCE OF THE STUDY

On the one hand, international literature is already replete with findings which indicate that classroom practice is difficult to change, in spite of professional development activities implemented in schools

and with teachers. Based on this, it would not be difficult to expect that the TTPSP intervention would not significantly change practice in the participating schools. On the other hand, a gap in the literature exists which addresses the role of the local context (within and outside the school) in shaping teacher professional practice and improving the quality of teaching and learning in schools. Thus, this study is premised on the notion that, as confirmed by previous studies reviewed in this thesis, professional development activities that target individual teachers alone, and do not target the whole school as an organisation, cannot succeed. Also, the study is premised on findings which suggest that interventions which do not take into consideration, the contextual realities of schools, will also not succeed. Thus, this study aimed to fill this gap and to extend findings which illustrate how, in the context of complex organisations such as schools, a professional development intervention such as the TTPSP might fail to re-shape teacher practice in ways that significantly impacts the student learning in schools. In this context, the study then explored the reasons for particular teacher practices in the schools.

In addition, most studies which assess the impact of professional development interventions, tend to ignore the design of such projects

as a potential reason for their failure. As such, this study, aimed to fill this gap and to address whether and how the design of the TTPSP impacted on the teachers' effective implementation of what they learnt in the TTPSP, and in particular, in the ACE.

Although significant progress has been made with regard to policy development and infra-structure, the quality of education that the majority of people are receiving is far from satisfactory. The vicious cycle of poor performance has to be broken. This can only occur through higher expectations of teacher behaviour and standardised professionalism and training, which will ultimately result in a school environment that does not tolerate incompetent principals, pupils and teachers. A good understanding of the various factors that facilitate or hinder change in classroom practice will hopefully address this. Thus, this research will hopefully enable other stakeholders who are involved in professional and organisational development in schools to identify effective ways of changing school and classroom practice.

1.6 ORGANISATION OF THE THESIS

The thesis is organised into seven chapters:

- Chapter One: This chapter provides an introduction and the purpose of the study, as well as the nature and context of the TTPSP.
- Chapter Two: This chapter will review local and international literature related to the various factors that hinder or facilitate change in classroom practice among teachers, within the context of professional development programmes.
- Chapter Three: The focus of this chapter will be on the theoretical and conceptual frameworks that have informed research on professional development for classroom change.
- Chapter Four: This chapter describes the research design and methodology, including the data collection and analysis methods used in the study. The limitations of the design will also be discussed.
- Chapter Five: This chapter will provide a detailed description of the five research sites used in this study.
- Chapter Six: An analysis of the findings from the five case studies will be presented in this chapter.
- Chapter Seven: This chapter identifies lessons from the five case studies and, based on these, makes recommendations for the

TTPSP and for changing classroom practice in these and other schools.

CHAPTER TWO

CAN PROFESSIONAL DEVELOPMENT SUCCESSFULLY CHANGE CLASSROOM PRACTICE: A REVIEW OF THE LITERATURE

2.1 INTRODUCTION

The purpose of the Toyota Teach Primary School Project (TTPSP) investigated in this study is to provide professional and organisational development in the participating schools in order to improve teaching and learning in the classrooms. The previous chapter has argued that despite all the interventions by the project, many teachers in the project failed to internalise what they learn in the project. Classroom practice among many of them remains largely unchanged. Thus, this study intended to identify the factors that hinder and facilitate this change in classroom practice among the teachers involved in the project.

This chapter reviews literature related to professional development and identifies the factors that hinder and facilitate its effectiveness in changing classroom practice among the participating educators. The chapter begins with an examination of the various understandings of professional development. In this regard, the concept and process of

change are examined in an effort to understand factors that impact on change in general, and change in classroom practice in particular. In essence, the chapter seeks to examine factors that explain the difficulty of changing classroom practice among teachers despite professional and organisational development efforts implemented in schools.

2.2 WHAT IS PROFESSIONAL DEVELOPMENT?

There are various understandings of professional development. Thus, in order to understand the role that professional development programmes can play in changing classroom practice, it is necessary to first review the various understandings of the concept. From there it is important to define how professional development is understood in the Toyota Teach Primary School Project (TTPSP) and the way it is used in this study.

Guskey (2000:16) defines professional development as:

[T]hose processes and activities designed to enhance the professional knowledge, skills and attitudes of educators so that they might, in turn, improve the learning of students.

The advocacy of career long professional development is not a new phase. Goodson (1991:53) argues that teacher development needs to focus on the teacher "as a person, not just on the teacher as an educator". Hopkins Et Al, (1996:46) states that the key element in professional development is that of the work group, because that is where teachers obtain understandings of new practices, see demonstrations of teaching strategies that can acquire and have the opportunity to practice. Looking at the school as an organisation (Hargreaves et al 1998, Fullan; 1991, Fink & Stoll, 1998) clearly state that the different stakeholders of schools are increasingly intertwined and that learning organisations and professional learning communities must be more robust to the changing forces like the school.

In reality, there tends to be a narrow understanding of professional development by both teachers and school managers alike. According to Fullan (1993:146), many teachers and school administrators regard professional development as special events that are restricted to three or four days during the school year. Some teachers interpret this as meaning enrolment in graduate courses to attain advanced degrees or simply to move ahead on the salary scale. The limitations of

improvised and discontinuous workshops have been extensively criticised.

The different ways in which diverse stakeholders understand professional development suggests that there is a need for them to interact with each other. It is only from this interaction that negotiation of meanings and understandings derived from their shared personal experiences will enable continued growth. As Fullan (1993:78) explains, when educators are actively engaging in building knowledge and making meaning; the role of the teacher in In-Service programmes should change from being a consumer to being an active participant in the construction of knowledge.

Obviously, participation in such professional development programmes, as is the case with the TTPSP, does not always translate into change in classroom practice by teachers. The study focuses on the reasons for this lack of change.

2.2.1 What makes effective professional development?

Evidence from literature suggests that, depending on several factors and characteristics, different programmes yield diverse results in

terms of changing classroom practice. To illustrate, firstly, there is growing consensus that professional development yields best results when it is long term, school-based, collaborative, and focused on students' learning and linked to curricula (Darling-Hammond & Sykes, 1999; Elmore & Burney, 1999). This means that the programmes must be focused on a specific target to ensure ongoing teacher participation which has relevancy and effectiveness in a school.

Secondly, in order to be effective, professional development must be intentional, have clear achievable goals, must be ongoing, and have built-in monitoring and support; and must be systemic, and involve the various levels of the school and the education system (Guskey, 2000). In practice this would mean involvement from all stakeholders.

Thirdly, it is important for training to be continuous because it provides:

[Opportunities] for teachers to consider, discuss, argue about, and work through the changes in their assumptions. Without this, the technical changes that they are exposed to during the training are unlikely to make a deep lasting impact on their practice" (Evans, 2001:65).

Fourthly, ultimately the effectiveness of any staff development program must be measured in terms of student outcomes (Wyatt, 1996; Day et al, 2000; Guskey, 1995; Guskey, 2000). This means that the learners must show some form of progress; i.e. have all the learners in the class been able to pass, have the lessons been able to extend the learners cognitive capability.

Hargreaves (et al 1998) states that this type of learning (i.e. where no measurement of student outcomes is seen) is superficial and narrow in perspective, and will not make productive and fundamental changes in practice.

Little (1994:39) states,

Staff development programmes must maintain a fragile balance between cultures where collaboration and collegueship are promoted and where individual integrity and artistry are allowed to flourish.

Thus, from this perspective, professional development is a systemic process. This implies that the whole school system should be completely immersed in the change process. If the above scenario

does not occur, organisational variables can hinder or prevent the success of improved efforts. If changes at individual level are not encouraged and supported at the organisational level, even the most promising innovation will fail (Little, 1994; Barnard, 1998). For professional development to be worthwhile, Guskey (1995) recommend that the following steps be taken with regards to professional development: Begin with a clear statement of purpose and goals; ensure that the goals are worthwhile; and determine how the goals can be assessed.

2.3 PROFESSIONAL DEVELOPMENT AND CHANGE IN SCHOOLS

Change in general, and educational change in particular, has been defined and explained differently by different researchers and theorists in the field. First, the Oxford Dictionary (2004) defines change as “the transition from one state to another, to remove the old, make or become different, become new, arrive at a fresh place.” The Philosopher Jean-Jacques Rousseau (1988:25) states:

there is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success than to take the lead in the introduction of a new order of things.

This might explain why, as suggested by a number of researchers and change theorists (Samuel et al 1998; Sarason, 1982), educational change - particularly that aimed at changing classroom practice - is so difficult to achieve. This study focuses on identifying and analysing factors that lead to teachers in the TTPSP being unable or unwilling to change their classroom practice and implement what they have learnt from the TTPSP.

Second, on the one hand, Carl Rogers (1998) arguably the founder of client-centred counselling and person-centred approaches to human relations, believes that change is what 'feels right'. To be 'fully functioning' is not a finished state, but a direction we should continuously be moving in. On the other hand, he views schools as generally rigid, bureaucratic institutions which are resistant to change. The question we might ask is: Why does the change advocated by the TTPSP not 'feel right' to the participating teachers and schools? Why does their classroom practice remain unaffected by the inputs of the TTPSP?

Third, whilst the rhetoric of reform recognises that the problems of teacher morale need to be addressed (Hargreaves, 1994; 1998 and

Carlson, 1999), there is little in practice that demonstrates an understanding of the essential link between the delivery of quality teaching and the need for continual professional development. There is a conflict of personal work versus professional work. Periods of reform may be characterised as 'extrinsic critical incidents' in which macro-political changes impinge on and interact with classroom and personal lives. This is clearly the case of Outcomes Based Education (OBE), which, as a reform, has been implemented in the schools. Evan's (2001) work in exploring the effects of emotions such as fear, anxiety, loneliness, helpless and hostility in the context of change and the strategies put in place to address them is an important issue to investigate. Unless teachers are free to meaningfully engage in reflective practice and professional practice, very little meaning can be given to their professional lives and to the lives of learners.

2.3.1 Conditions for effective change in schools

Several conditions on an organisational and individual level are necessary for sustainable change. To illustrate, Rogers (1983) in his book entitled *Diffusion of Innovations*, argues that for change to succeed, organisations need change agents. According to him, these are individuals who "influence clients innovation decisions in a

direction deemed desirable by a change agency" (Rogers, 1983:312). This communication relationship is intended to change the behaviour of clients, in this case teachers in participating schools. Rogers goes on to say that these change agents in the system are usually individuals who "possess a high degree of expertise" (Rogers, 1983:313). In the case of the TTPSP, the various NGO's and facilitators could be viewed as such agents and experts. Yet, evidence indicates that they have not been able to change the behaviour and practice of their clients: the teachers. This suggests that, beyond expertise, there are other characteristics and conditions that are necessary for the change to take root and ensure that classroom practice in these schools changes. This thesis intends to find out what these are.

Second, as educationists have suggested, change, more than anything else, characterises the reality of school life (Fullan, 2003; Bassey, 1999; Vally, 2003). Everything about school changes all the time: the children change; the communities they come from change; the subject matter changes; teachers change; the process of school changes; the sources of support change as do the demands for supportive resources. On the other hand, in spite of these obvious and generally accepted changing conditions of school life, schools themselves appear

to be relatively stable. Rather than confronting the issue of change, it is more likely that teachers teach as they were taught (Day, 1993). Teachers learn what school and teaching are first as students, and then enact similar practices and actions in their new roles as teachers in their own classrooms (Zeichner, 1983). Often these practices and actions are not educationally sound or effective, hence the TTPSP's efforts to try and address this.

Third, change theorists and researchers (Russel, 1992; Barnes, 1992) suggest that the very nature of change brings resistance. Teachers are often afraid of the unknown and don't understand why they need to change. Many are inherently cynical and suspicious about change, and there are often conflicting goals about the change process. This often brings about a sense of disorder and chaos between groups and people. All organisations, including schools, are driven by the dynamics of change, and this process needs to be understood if people are to work together in the midst of change. If anything, the rate of change is increasing, driven by developments like new technologies and the growth of international trade. Schools as organisations tend to be both complex and difficult to change. What is needed for sustainable change in schools is to make sure those individuals and

groups within them understand and buy into the rationale and content of the proposed change (Rogers, 1983). This thesis also attempts to ascertain the extent to which teachers in the schools understand the need for change in their classroom practices, particularly the need for implementing the strategies advocated by the TTPSP.

Fourth, Fullan (1993) posits that teaching at its core is a moral profession, and that teacher education and professional development programmes must help teaching candidates to link the moral purposes that influence them with the tools that will help them engage in change. He goes on to say that change and moral purposes are natural alliances, which bring about improvements.

Fifth, in order for change to succeed, both the intervention and the participating school need to anticipate and acknowledge the emotional reactions of those involved to the planned change. An emotional phenomenon identified by Fullan (1992) as the "Implementation Dip" occurs when people agree to implement a new procedure or policy, and a decline in performance or work quality is commonly experienced. This can be frustrating and feelings of awkwardness and guilt often emerge. Thus, change agents should anticipate their own

emotional reactions to change, as well as the often strong reaction from others (e.g. the intended targets of their innovation). The extent to which the TTPSP took this into account in developing and implementing the various professional development projects for schools and teachers was examined in this thesis.

Sixth, change agents need to anticipate restructuring problems and identify problem solving skills in others. To address this Richert (1998) concludes that learning about uncertainty needs to be part of the teacher education curriculum. To illustrate, in his research of schools embracing change, Miles (1994) identified common process factors such as a lack of co-ordination, planning, or communication and a lack of resources. Since each change effort is undoubtedly fraught with problems such as these, it is crucial to use a myriad of coping skills. For example, sensing what is appropriate for any situation is an important intuitive skill to develop. The ways in which the TTPSP and the participating schools anticipated and dealt with existing and emerging problems were explored during the course of my study.

Seventh, for widespread change to take hold, it is necessary to collaboratively share control of the project and work with others.

School leaders may shape their actions and behaviours but their strategies, operationalised by their actions and behaviours, remain consistent. For example, a leader in an economically disadvantaged school may introduce the idea of school change in a different way from a leader who is in a 'comfortable' school. For successful restructuring it is also necessary to develop effective communication channels to ensure that all 'stakeholders' are involved in the process and are aware of what will be required from them during the process of the intervention. The ACE teacher in the TTPSP had no formal route to communicate the new methodologies that they had learnt at the project and as such the change was not effectively seen in the classroom.

Eighth, the ultimate goal of restructuring the change processes is to enhance the learning of children and the teaching of teachers at schools (Fullan, 2000; Rogers, 1985, 1998). As stated the TTPSP aims to improve the teaching and learning in the schools through the ACE. For this to occur and be implemented, support and pressure are required. The TTPSP offers support by observing the teachers in the classroom and offering support to the teachers as to how they can

improve their lessons and cognitively encourage the children so that teaching and learning can be improved in the school.

As argued in Chapter One of this thesis, available literature indicates that change, particularly in classroom practice, is difficult to achieve and maintain. Several factors have been identified as inhibiting and facilitating this change. This thesis examined the factors that hinder and facilitate this change process. The following sections will examine these.

2.4 WHY IS CLASSROOM PRACTICE DIFFICULT TO CHANGE?

The purpose of any professional development intervention in schools is to facilitate change in school and classroom practice. In essence, effective staff development must result in teacher and student learning. Part of the evidence for such learning is a positive change in teachers' classroom practice as well as in student learning. This thesis attempts to address the question: Why is classroom practice difficult to change even in the context of targeted interventions in schools? This section reviews literature that explores reasons for this.

2.4.1 Factors that facilitate professional development and change in schools

Facilitating and restructuring change is a non-linear process and does not always unfold in a predictable sequence. Various change theorists (Rosenholtz, 1989, Samuels et al, 1998; Fullan, 2003) and researchers identify several key factors that facilitate change. These might include the goals and processes of the innovation/change; the institutional context and culture; and the availability and effective management of resources. It is well documented that professional development and successful innovation or improvement is intimately related (Little, 1994; Rogers, 1983; Cohen, 1995). Professional development is likely to include any activity or process that is intended to improve skills, attitudes, understandings or performance in present or future roles. However, the fact that professional development is intermittent rather than continuous and sustained might inhibit classroom change.

2.4.1.1 Clearly Identified and Communicated Goals of the Intervention

Literature reviewed in this thesis suggests that for change to be successful, there needs to be set goals, which are not only realistic

and achievable, but which address the existing and perceived needs of the clients (schools). First, the school must create and communicate a model of change. According to Fullan (2000) and Smith (1998) this can be achieved when restructuring endeavours are well organised and co-ordinated, specifying short and long-term goals with the school. These can then be used to measure the extent of implementation of the innovation as well as its success or failure. This thesis examined the extent to which these goals were set, and the different stakeholders who were involved in their development within the TTPSP. In addition, the extent to which the TTPSP and the schools have been successful in achieving these goals, and the reasons for this success or failure were investigated.

Second, according to Fullan (1992), basic fundamental principles need to be observed for a successful approach to educational change. One fundamental principle is that the target population (schools and teachers in particular) need to be involved from the conceptualisation of the intervention through to the completion of the implementation and evaluation. A second principle is that effective change takes time and is continuous. Available literature repletes with examples of intermittent and often once-off interventions targeting teachers and

schools. This might explain the failure of these interventions to significantly change classroom practice.

Third, one of the reasons for a change agent's success is the "extent of effort he or she expands" (Rogers, 1983: 317). To illustrate, Niehoff (1964) concluded from his analysis of several hundred case studies that one of the most fundamental factors in the success of an innovation is the communication interface during the diffusion or implementation process. Given that an innovation will exist, communication must take place if the innovation is to be accepted and grow and develop among the targeted population. To this effect, Rogers (1983) identifies seven main roles in the sequence of change agent's role. These are to:

- develop the need for change;
- establish an information-exchange relationship;
- diagnose problems;
- create intent to change in the client;
- translate intent into action, stabilise, adopt and prevent discontinuances; and

- to achieve a confirmation of the innovation (this will occur if the individual know whether the diffusion of innovation has advantages or disadvantages for his or her own situation).

This thesis examined the extent these conditions have been met in the TTPSP intervention.

2.4.1.2 Institutional Context and Readiness for Change

Informed by a review of available literature, this thesis argues that unless the schools see the need for change, and are ready and willing to engage with the process, successful implementation and sustainability of the intervention might be threatened. To this effect, first, the school needs to identify a need for reform. According to Campbell (1998) restructuring can only begin with the initiation of honest dialogue at the school level. One interesting observation some educational reformers have made is that when teachers are asked to assess their school, many believe it is above average. This is also true of all TTPSP schools. Many of the participating educators believe that their way of teaching is far superior to the 'neighbouring school'. This will be explored in chapter six. However, as suggested in Chapter One, the TTPSP monitoring and evaluation reports paint a different picture. This suggests that either the teachers are not being honest, or that

they genuinely believe that what they are doing is better than the average. This implies that such teachers would not see any reason to change and that before they can be asked to change in sustainable ways, extensive formal and informal dialogue must be undertaken. This study investigated the nature of the teachers' understandings about the effectiveness of their teaching, as well as of the negotiations, if any, which are aimed at convincing them of the need to change, either by the TTPSP or by the schools themselves.

Second, to instigate significant change is to write or update an educational mission statement (Campbell, 1998). A mission statement clarifies a school's identity and underscores its distinct individuality. This thesis argues that if the school's mission and vision statements are in line with the proposed change, it becomes easier for them to adopt and sustain the innovation. So if schools vision and mission is about improving teaching and learning in the TTPSP schools the learner's abilities in the classroom should improve.

Thirdly, Hord (1999) suggests that successful change can take place when change is properly planned and executed. For those involved in promoting change, the lessons are clear:

- Respect those who are implementing it by listening to them and demonstrating an understanding that extra time, energy and support are needed.
- Recognise that change is a complex process, which involves both the head and heart, and
- Provide sustained critical support for teacher autonomy, in a collaborative, non-confrontational way.

Fourth, the school needs to seek support for educational change. According to Little (1994), support for change comes in two forms: information that provides reforms with a solid knowledge base to work from, and an advocacy from those inside and outside the school. When a change effort is initiated, strong advocates for the innovation from within and outside the school should be identified and their support actively sought (e.g. from the project itself, the teacher unions, as well as from the school).

This study examined the extent to which the TTPSP has been able to adhere to these in the participating schools.

2.4.1.3 Availability and Management of Resources

To effectively implement any kind of educational innovation, a variety of resources, both human and material, must be secured, developed and well managed (Adler, 2002; Southwood, 2002). To illustrate, first, the ultimate goal of the change processes is to enhance the learning of children and the teaching of teachers at schools (Fullan, 2003; Russel et al 1992). As stated the TTPSP aims to improve the teaching and learning in the schools. Change efforts must be linked to classroom practice. For this to occur, support, for example, in the form of acknowledging what the teacher is doing and providing assistance in the classroom, is required. In addition, extensive and ongoing staff support must also become a regular feature of school life so that educators can keep abreast of the knowledge base and continually broaden their range of educational tools. The nature and impact of the support provided within the TTPSP were investigated in this study.

Second, time is one of the most important resources available to those involved in restructuring in schools. As stated previously, the TTPSP schools are involved in a three-year cycle and this time cycle does not always translate into improved teaching and learning. The question asked in this thesis relates to the amount of time dedicated to, and

invested in, the activities of the interventions and the extent to which all stakeholders are fully and continuously engaged in them.

Third, according to Barnes (1992) teaching at its best is a passionate vocation and the professional practice in classrooms involves immense expenditure of personal and emotional energy. Factors like enthusiasm for teaching and personal commitment to the pupils contribute to successful change in the classroom. For example, according to Bernstein (1996), effective teachers have something 'extra' over and above competence in the defined roles, a classroom 'presence' embodied in achieved status, which enabled them to exercise interpersonal control. The characteristics and qualifications of the teachers and others involved in the TTPSP projects and the ways in which these might have impacted on the success or failure of the project were examined in this thesis.

2.4.2 Factors That Hinder Effective Professional Development and Change in the School

This study intended to particularly identify factors that hinder change in classroom practice despite the various interventions of the TTPSP. International research has identified several of these. First, Handy

(1990) suggests that for successful classroom change to occur there must be what he refers to as a 'proper selfishness' on the part of the educator. According to him, those who learn best and most, and change most comfortably, are those who take responsibility for themselves and for their future, have a clear view of what they want that future to be, want to make sure that they get it, and believe that they can. In this respect then, it is important that the educators themselves know why the change is necessary. Proper selfishness recognises that the goal needs to be turned to the goals of the group, or of the organisation, or society, while also being in line with our own needs and our own talents. This suggests that 'improper selfishness' would result goals that are at odds with the intended goals of the intervention.

Second, according to Handy, (1990:52) a further critical factor for successful change is that there must be a way of re-framing. Handy defines re-framing as the ability to see events, problems, situations or people in other/alternative ways; to put 'them' into another perspective or another context, and to think of situations as opportunities and not only problems. This suggests that as a way of improving their practice, educators and others in the school, must use

alternative lenses to view their teaching and learning environment and practice.

This thesis intends to identify factors that are hindering change in the schools participating in the TTPSP. These might include the social and professional identities of teachers; pre-and in-service teacher education; school organisation and culture; and the level of community participation and involvement.

2.4.2.1 Social and Professional Identities of Teachers

Available literature suggests that the social and professional identities of teachers play a significant role in effective implementation of change efforts. First, Senge (1990) and Fullan (1993) see four main core capacities for building change: Personal vision, inquiry, mastery and collaboration. Personal vision comes from within; however we face a huge dilemma. On the one hand, schools are expected to engage in continuous renewal and change expectations are constantly swirling around them. On the other hand, the way teachers are trained, the way schools are organised, the political decisions that are made and the way the educational hierarchy operates often result in the status quo remaining the same.

Second, according to Fullan & Steigelbauer (1991) there are several recurring reasons for resistance to change. These include the fact that participants are not involved in the planning, and there is often excessive work pressure. Fullan (1993) attributes this resistance to change to, among other factors, a poor understanding of the innovation, an imposed or forced process of change, disruption of established social relationships, and feelings of ineffectiveness or incompetence among the participants. The extent to which schools and teachers were involved in the conceptualisation and the initial diffusion of the TTPSP, and its impact on the project's successes and failures was examined in the thesis.

Third, according to Handy (1990), change often fails because of what he sees as the "They" factor. This refers to members of the organisation delegating their futures and their responsibilities to some mysterious 'They' (e.g. 'They will set the syllabus for life', just as 'they' set the syllabus for our courses at school; 'They' know what is best; 'They' must know what they are doing; and 'They' are in charge; leave it to 'them'). The phrases and excuses are endless. According to Handy, until teachers realise that 'They' don't know, that they are not all wise, that "they" are on the whole just like them, and muddling

through, change cannot be realised. In the TTPSP schools, where does the responsibility lie? Do the responsible parties accept and act on this role? These are some of the questions addressed in Chapter Six.

Fourth, Handy (1990) identifies the belief among stakeholders that things will fail and attempting to change them is pointless, as one of the factors that inhibit change. According to him, one can easily work out why it is that the unemployed or the newly redundant have little desire or energy to turn that wheel of learning. All they want is to turn the clock back, and to have the same job again. Self-doubters often fear success. Success puts more pressure on them to take more responsibility for even more action. Failure for some is easier to handle, particularly if one plans for it. Chapter Six examines these factors.

2.4.2.2 Teacher Education and the Status of the Profession

The nature and quality of pre-service teacher education is one of the factors identified as inhibiting educational change. To illustrate, there is general dissatisfaction with existing pre-service provisions in South Africa and internationally. This is coupled with the recognition that

training programmes by their very nature cannot equip intending teachers with all they need for a lifetime of work in the classroom.

A second factor which inhibits change in classroom practice is, according to Darling-Hammond & Sykes (1999) the status of teaching as a profession, and the view that teaching and teacher education are semi-professions. Elliot (1993) writes that teacher education is in fact a semi-profession lacking key elements of the older professions of medicine and law. According to Elliot (1993:45), "their training is shorter, their status is less legitimised, their right to privileged communication less established, and there is less autonomy from supervision". On one hand, Popkewitz (1998:134) states that professionalism is "an ideology that influences teachers work condition". Professionalism is an ideal to which individuals and occupational groups aspire to, which distinguish them from other workers. On the other, the lack of full professional status has inhibited teaching and teacher education from realising its full potential.

Exacerbating this problem is the fact that there seems to be no theoretical or methodological consensus on concepts like 'professional' and 'profession/alism'. Typically, professions have been defined as

occupations that require practitioners to undergo a long period of special training during which they acquire a broad theoretical knowledge base. The traditional view of professionalism is held as an ideal typical description of teacher's work. It can be argued that teachers have never been in a position to develop professional goals - that their professional mandate has always been tied to the schools and community within which they work. Thus professionalism, as an ideological construct available to teachers, contains diverse and contradictory elements (Ball, 1999 & Cohen, 1998).

Teacher ideology and professional identity also tend to inhibit change. Baritone (1990) states that teachers' ideology is mediated by their social position as well as their work situation. As reported by Hargreaves et al (1998:68) teachers tend to exhibit a "weak collective identity and a conflict[ual], incoherent and diversified culture". Thus, if teachers are to exert greater influence over the direction of education change they will need to act collectively. For example, in the South African context, if learning area committees (LAC) are not set up and few schools have planned sessions for staff curriculum workshops, change is likely to fail.

A lack of classroom change could be due to the fact that teachers themselves often do not have enough power to determine the nature of their roles and the resulting calls for reform in teacher education have resulted in contradictions in the direction of change (Felkins et al, 1993; Fink, 1998). Different standards of work will produce differing orientation to practice and this in turn will emerge in the classroom. Changes in the teaching process can be understood in the context of various controls. Maintaining the appearance of significant job autonomy legitimates existing constraints on teachers' work. The belief in professionalism can then be viewed as a form of control. This clearly adds to the dimension of change and why it becomes so difficult to execute.

The extent to which the TTPSP has taken these factors into consideration was explored in this thesis. Both socialisation and training refer to the weak classification of the profession and the intrusion of regulation from sources externally. The lack of shared technical vocabulary also points to the way that teachers define their professional identity.

A third factor impacting on change in classroom practice might lie in the nature and impact of professional development interventions on teacher practice. For example, available literature suggests that “teachers never really left school” and that much of teachers instructional behaviour in the classroom or the way they make decisions are influenced by their own “socialisation” (Hoadley, 2002:46) and that most teachers teach the way they were taught in their own schooling. Their notions of what it means to be a teacher are formed through their own schooling and remain the most enduring source of identification throughout their teaching careers.

A fourth factor that might inhibit classroom change is the assumption that professional development and personal development are distinguishable processes (Taylor & Vinjevold, 1999). As seen from monitoring reports within the TTPSP, many teachers do not see the need to learn new methodologies and take part in courses designed to equip themselves with these. The authors argue that professional development and personal development are the same, and that the responsibilities rest with the individual teacher rather than the national system, the employing authority, or the school.

The fifth factor involves the contradictions in the roles of teachers in society. On the one hand, as state employees, teachers are held accountable to the public for the services they perform. On the other, as professionals, their roles also involve exercising professional discretion and decision-making. Thus, tensions and contradictions in the teachers' roles may contribute to their failure to significantly change their practice in ways that benefit learners. This thesis grapples with these tensions.

2.4.2.3 Resource Provision

Literature reviewed in this thesis suggests that insufficient resources tend to compound the difficulties in changing classroom practices (Cuban, 1988; Creemer, 1996; Chisholm, 2000). Teachers are often of the opinion that an extra photocopier or extra computers would aid change and improve the teaching and learning in the classroom. On the one hand, according to Crouch & Mabogoane (1998), some of the most important predictors of cognitive development are the degree of access to learning materials such as books and stationery. The Third International Mathematics and Science study (TIMSS) which compared the Mathematics' and Science Study in 41 countries, has shown how decisive the effects of textbooks on pupil's learning has been. For

example, the Philippines Text Book Project reported “that students who used text books achieved more than those who did not” and those who used the project text book “performed generally better than the non-users” (De Guzman, 1993:168).

Taking these findings into consideration, in the TTPSP, educators who are doing the Science and Mathematics modules are given resources to use with the learners. Yet, monitoring and evaluation reports suggest that, teachers often make assumptions that learners would know how to use the materials and develop appropriate knowledge. This suggests that although teachers may have materials, they seldom know what to do with them, which implies that no significant change in classroom practice occurs. Thus, Adler and Reed (2002: 58) build a general argument that while new practices entail more resources, these “resources do not [necessarily] lead to better practice in an unproblematic and linear way”. So, this thesis has examined reasons why, in spite of the relative availability of resources in TTPSP schools, classroom practice did not change accordingly.

2.4.2.4 School Organisation and Culture

School organisation and management have also been identified as factors that inhibit change. To illustrate, the degree of bureaucratisation of schools will influence teacher discretion, many are divided on the degree to which, and the precise mechanism through which, bureaucratic organisational structure affects teacher's practices. The dominant assumption is that teachers, as professionals, are accorded classroom autonomy even though they work within bureaucratic settings (Coombe, 1996; Swenson, 1981; Edwards et al 1993).

Fullan & Bennett (1990) and Davidoff & Lazarus (1997) point out that school leaders need to understand the change niche in order to lead and manage change and improvement efforts effectively. They must learn to cope with the chaos that naturally exists in schools during the complex process of change. It is no wonder that teachers often distrust, resist and undermine the efforts of educational change. Understanding change often means that people need to learn new thought patterns. As the findings from this study will illustrate, there is often poor communication regarding the change and teachers are not involved in the planning stage of that change. This study examines

why teachers who had graduated from the ACE qualification provided by the TTPSP, in spite of all the input provided, often went back to their old way of teaching with no real classroom change taking place.

In addition, school contexts have also been identified as inhibitors of change (e.g. the school ethos, resources, management styles as well as the nature and level of community involvement). The school context is the set of conditions under which teachers operate and this context could be a factor in the successful or unsuccessful implementation of change (Evans, 2001; Fink and Stoll, 1998; Fullan, 2003). As McLaughlin (1998:79) puts it, "to ignore context is to ignore the very elements that make policy implementation a problem"). For example, in some schools discipline seems to be based on trust and friendliness, whilst in others it tends to be based on corporal punishment, despite its illegality.

The ways in which school context and culture impacted on the implementation of the TTPSP activities in the selected schools was examined in this thesis.

2.4.2.5 Poor Community Participation and Involvement

Literature reviewed in this thesis suggests that the nature and level of community involvement either constrains or complements the teacher's role as well as the teaching and learning in her classroom (e.g. Fullan, 1993 and others). If community members are involved they will take ownership of the project. Community participation and involvement in change processes becomes enhanced when people have access to information and are able to participate actively (Fullan, 1993). Thus, the success of professional development programmes (or innovations) depends on the school context in which they are implemented (Fullan, 1993; Hoyle et al, 1980).

While this study did not focus directly on this issue, it is important to consider it in analysing why interventions fail in schools.

2.4.2.6 The Nature and Design of the Intervention

Understanding why most attempts at educational reform fail goes far beyond the identification of specific technical problems such as lack of good materials, ineffective in-service training or minimal

administrative support. In fundamental terms, scholars in the field conclude that educational change fails partly because of the assumptions of planners and partly “because some problems are inherently unsolvable” (e.g. Day, 1999:67). Hord (1999) suggests external change agents and interventions that take contextual factors into consideration stand a much better chance of success than those who do not. Similarly, Moletsane, (2002) argues that the reasons for the failure of the TTPSP lie mainly in its design and delivery of the project rather than in school context itself. Moletsane goes on to say that the project seems to have ignored these insights and instead, imposed a generic intervention on a school with particular needs as well as challenges as perceived by the school community. Hence this thesis is premised on the notion that it is the assumptions inherent in the design of the intervention that lead to its failure in the schools. It is for this reason that the thesis explores the extent to which the design of the TTPSP might have negatively impacted on teacher learning and necessary changes in the project schools.

2.4.2.7 Teachers Conceptual Knowledge

Another factor that could impact on classroom change is that of teacher’s conceptual knowledge. Taylor and Vinjevold (1999) suggest

that the “teacher’s conceptual knowledge” is the disciplinary knowledge for improvement/change to take place. According to Huberman (1989) ‘we’ assume that teachers possess pedagogical expertise (knowledge and skills) and significant autonomy in the classroom. Improvement in student learning must be a function of teacher’s knowledge of the subject. Simply upgrading teacher’s content knowledge will not yield its promise of better learner attainment.

A comparative study conducted across Chinese and American mathematics primary school teachers by Ma (1999) found that the depth of a teacher’s conceptual and pedagogical understanding played the greatest part in learning in school. According to Ma, Chinese teachers have studied far less mathematics than their American counterparts. Moreover, Chinese teachers have continuously refined their “content knowledge through deliberation with their colleagues on the content of the lesson... Conceptual knowledge for teaching is as much about pedagogy as it is about content...” (Ma, 1999:45).

Monitoring reports suggest that in the TTPSP schools teachers did not have a holistic understanding of what they were meant to teach, and

often presented 'rehearsed' lessons. This became evident when different TTPSP facilitators visited schools and were often exposed to the same lessons (Peacock, 1998). Thus, this study aimed to establish the extent to which opportunities existed for the teachers to participate, refine and deliberate their conceptual knowledge.

2.5 CONCLUSION

This chapter has reviewed literature related to the role of professional development as well as the factors that could facilitate and hinder change in classroom practice. These factors range from availability of resources, to teachers' conceptual knowledge and professional identity. The review suggests that interventions are often implemented in complex contexts and teachers, who are key to successful implementation, have to respond to these. Unless addressed adequately and from multiple perspectives, these factors will continue to inhibit the very change that interventions aim to change in schools.

The focus of the next chapter will be on the theories and conceptual models of professional development and how these models explain classroom change or the lack thereof.

CHAPTER THREE: TEACHER LEARNING AS A FEATURE OF ORGANISATIONAL CHANGE AND LEARNING: CONCEPTUAL AND THEORETICAL FRAMEWORKS

3.1 INTRODUCTION

The Toyota Teach Primary School Project (TTPSP) investigated in this study provides professional and organisational development in selected primary schools in the Durban South region, KwaZulu-Natal. It aims to improve teaching and learning in the areas of Mathematics, Science, Language and Cognition in the classrooms. Thus, the ultimate outcome of the project is change in classroom practice among the participating teachers generally, but more specifically among the teachers who enrol in the Advanced Certificate in Education (ACE) described in Chapter One. To achieve these goals, as described in the previous chapters, the project has implemented a series of interventions in participating schools. These include professional development for teachers (through the ACE and school-based support for teachers); whole-school development activities aimed at developing the capacity of the schools for change; and management training to develop the capacity of principals in these schools.

The overall aim of the TTPSP is to develop primary school teacher competencies in the areas of mathematics, science, language and cognition. To this effect as described in Chapter One, the ACE is aimed at assisting educators to change their practice in ways that reflect a learner-centred approach to teaching and learning, and the School Management Intervention, which is aimed at developing principals' management capacity for the support of the project.

Yet, in spite of these interventions, evidence from monitoring and evaluation reports suggests that these stakeholders, and particularly the participating teachers, are not internalising and implementing what they learn in the project. What teachers learn in the various project activities is seldom translated into classroom practice.

This thesis intends to identify and analyse the reasons for this discrepancy. This thesis is based on the premise that in order for classroom practice to change, teacher learning is essential and that for this to happen, certain conditions and contexts need to prevail in the school. The successful implementation of the various TTPSP interventions in the schools, and therefore, change in classroom practice and learning experience depends on three conditions: Firstly,

the intervention and its activities need to address the contextual realities of the schools in the project. Secondly, the organisational (school) culture needs to change so as to accommodate and support the intervention. Thirdly, as important levers of the implementation of the intervention, teachers need to demonstrate actual learning of the content, skills and values necessary for them to change the ways in which they teach and assess learning; as well as the ways in which their learners learn. As such, this study aims to add insight into the complexities of teacher professional development and learning in the context of an educational innovation: namely the TTPSP.

Located within three broad bodies of literature: Diffusion of educational change (Rogers, 1972, 1983), organisational learning (Senge, 1990; Davidoff and Lazarus, 1997), change in school culture (Turbill, 1993), and teacher learning (Borke & Putnam, 1995; Greeno et al, 1996; Fullan, 2002), this chapter therefore, asks: How and why does classroom practice among teachers participating in the TTPSP remain unchanged despite the various inputs of the project? The chapter addresses three sets of questions: First, to what extent might the design of an intervention in participating schools be responsible for the lack of change, and particularly change in classroom practice?

Second, what conditions in the school and social context might lead to the failure of the intervention in participating schools? Third, what factors might lead to teachers' inability or unwillingness to change their classroom practice in spite of their experiences in the project/innovation?

3.2 DIFFUSION OF EDUCATIONAL INNOVATION

The diffusion of educational innovations first developed by Rogers (1972, 1983) and later advanced by the work of Fullan & Stiegelbauer (1991), was utilised to address the first question: To what extent might the design of the intervention be responsible for the failure of change in classroom practice, The above framework was used to examine the design, introduction and implementation of the TTPSP in participating schools and the extent to which these design factors might impact on the teachers' ability and willingness to change their classroom practice.

In his theory, Rogers (1972) writes about diffusion as the process "by which an innovation is communicated through certain channels over time among the members of a social system", such as schools. (Rogers, 1972:5). For him, it is a special type of communication, in

that the messages are concerned with new ideas. It is this 'newness' of the idea in the message content of communication that gives diffusion its unique character. The newness however also means that some degree of uncertainty is involved. Thus, it is a kind of social change, defined as the process in which alteration occurs in the structure and function of a social system.

According to Rogers, there are four main elements in the diffusion process: These are a) innovation, b) communication channels c) time and d) the members of a social system. (Rogers, 1972:10)

Firstly, Rogers (1983) defines an innovation as an idea, or practice that is perceived as new by an individual or other units of adoption, such as schools. Newness in an innovation need not just involve new knowledge. This newness may be expressed in terms of knowledge, persuasion or a decision to adopt. He concludes that diffusion is a process by which an innovation is communicated through certain channels over time among members of a social system. For him, in order to be adopted and implemented, an innovation needs to be perceived as compatible with existing values, past experiences and needs of potential adopters. This means that the design and

implementation process of an external intervention such as the TTPSP needs to first understand and take into consideration the existing needs and values of the potential adopters (i.e. the teachers and the schools) and then design and implement interventions that directly respond to these.

For Rogers, the greater the perceived relative advantage of an innovation, the more rapid its rate of adoption is going to be. This means that the change agents would need to 'sell' the innovation to the teachers and the whole school, and have them accept it and recognise its advantages before it is introduced and adopted. As Rogers asserts, "...an individual cannot adopt a new idea until an organisation has previously adopted it" (Rogers, 1972: 45). This is particularly important in the context of an organisation such as the school, which according to Rogers is a "stable system of individuals who work together to achieve common goals through a hierarchy of ranks and a division of labour" (Rogers, 1972: 26). A stable and predictable structure is obtained through: predetermined goals; prescribed roles; an authority structure; established rules and regulations and informal patterns. Interventions, whether externally or internally designed, need to directly respond to these. Otherwise, as

Rogers (1983:320) observes, many change programmes fail because “they seek to swim against the tide of the client”.

To illustrate, in her article entitled ‘Swimming against the Tide: External intervention in a non-resilient school?’ Moletsane (2002) argued that the reason for the non-implementation of the TTPSP in one of the participating schools may have been two-fold: The nature of the design and delivery of the intervention; and the influence of factors related to the school contexts. Ignoring the contextual realities of the school meant imposing a generic intervention on an organisation (the school) with particular requirements and challenges. This means that change agents from the intervention should have knowledge of their client’s needs, attitudes, and beliefs, their social norms and leadership structures, if programs of change are to be successful. This does not mean relinquishing their role in re-developing and re-shaping these. Rather, if the intervention is to be accepted and successfully adopted, the beneficiary schools and teachers need to see its value and the benefit of implementing it.

Secondly, according to Rogers (1972), diffusion involves communication of new information or ideas. The nature and quality of the information exchange relationship between and only a few

individuals is dependant upon the extent to which the change agents understand and are able to communicate the new ideas. Thus, the training such change agents have received in the intervention, as well as the extent to which they effectively communicate its design, purpose, values, principles and content to all recipients (schools and teachers) becomes important. Thus this study asked: How well were the TTPSP facilitators and change agents trained in the intervention targeting schools, as well as in strategies and the use of resources to present it to the recipients?

Thirdly, another element in the diffusion process relates to the rate of adoption by the recipient institutions and individuals. For Rogers, this is the relative speed with which members of a social system (school) adopt an innovation. His model of adoption suggests at first only a few individual adopt the innovation, but soon the diffusion curve begins to climb as more adopt, finally the shape curves upwards and the diffusion process is finished- i.e. the innovation is fully adopted into the system.

Fourthly, the success or failure of an innovation depends on the nature of the adopting agency (school) as a social system. Diffusion occurs

within a social system, because the social structure of the system affects the innovation diffusion in several ways. Change agents in the process are individuals who influence client's innovation decisions in a direction deemed desirable by a change agency (e.g. the TTPSP). Change agencies such as the TTPSP; tend to overemphasise adoption per se, tacitly assuming that the consequences of innovations decisions will be positive i.e. positive classroom change and improved teaching and learning. Change agents assume that their clients need the innovation and that its introduction will be acceptable and that adoption of the innovation represents success.

However these assumptions are not always valid. An innovation may be functional for a system but not functional for certain individuals and innovations cause both desirable and undesirable consequences (Rosenholtz, 1989). Consequences of innovation are difficult to measure. Judgements concerning consequences are almost unavoidably subjective and value laden, regardless of who makes them. Cultural norms, personal preferences and biases are an integral part of the frame of reference of every observer of a social scene. Individuals generally want to obtain the functional effects of an innovation (e.g. an academic qualification) and to avoid the

dysfunctional effects (i.e. time, effort). We are often more aware of what is stable in an organisation than we are of what is changing, and so we usually underestimate the rate of innovation in an organisation.

As stated in chapter two there are many barriers and resistance to change in an organisation. By understanding the innovation process, it helps illuminate the nature of the organisation structure and how it tends to shape individual behaviour within an organisational setting. Interventions need to think of three states of equilibrium in a system and or the innovation: Stable – there is no change in the structure, dynamic equilibrium – when the rate of change in a social system is commensurate with the systems ability to cope and disequilibrium – when the rate of change is too rapid to permit the social system to adjust.

Using the framework presented in the above paragraphs, firstly, this study investigated the ways in which the TTPSP was introduced and implemented in participating schools and the ways in which this might have influenced changes in classroom practice by participating teachers. Secondly, the study also sought to investigate the extent to which the nature of the design and delivery of the intervention itself

might influence change in classroom practice. Thirdly, the study examined the influence of factors related to the school contexts on the adoption of the innovation and change in the ways teachers conduct their practice in schools. This is further extended in the next section.

3.3 ORGANISATIONAL LEARNING AND CHANGE IN SCHOOL CULTURE AS PRE-REQUISITES FOR TEACHER LEARNING

In accordance with research findings (e.g. Christie, 1997; Day et al , 2000; Fullan, 2003), this thesis argues that for individuals and their practices to change, the whole school as an organisation needs to change accordingly. The culture of an organisation, or school, diffuses its particular qualities and characteristic into every corner of the school and affects the life of the school in ways that people in the schools are barely aware of. Thus, using theories of organisational learning and change in school culture, this section addresses the question: What conditions in the school context might lead to the success or failure of an intervention in participating organisations?

3.3.1 The school as a learning organisation

Teacher learning (a concept discussed in the next section) is an essential building block in the diffusion process and in changing the

way the school as an organisation operates. However, teacher learning fails when no organisational support (from colleagues as well as the management in an organisation) exists (Senge et al, 1994; Fullan, 2003; Hopkins et al, 1994). How a person learns a particular set of knowledge and skills and the situation in which he learns is a fundamental part of what is learned. This means that for individual teacher learning to occur, the school (organisation) in which they work must, of necessity be a learning organisation (Davidoff & Lazarus; 1997; Senge, 1990). In this study, I was interested in analysing the school context as a factor that either facilitates or impedes teacher learning and classroom change. Thus, Davidoff and Lazarus's (1997) concept of the school as a 'learning organisation' is used as the second framework to construct, and understand the factors that impact on the professional development of teachers; and as such their learning in the context of their schools and the TTPSP.

In order to understand how schools as organisations operate to support or inhibit change, it is important to understand the nature of organisations in general and of schools as organisations in particular. For example, the Oxford Dictionary (1998) defines organisations as a "systematic arrangement for a definite purpose". Taking this further,

Beare, et al (in 1998:172-173) describe organisations in the following way:

Organisations are essentially collective ties of people, who define policies, generate structure, manipulate resources and engage in activities to achieve their desired ends in keeping with their individual and collective values and needs. In the human service organisation called a school, one of the desired ends is helping people to learn.

The school is where educational policy is put into practice. As such the school and its teachers need to be equipped to understand, implement and manage change effectively. To do this, the school needs to become a learning organisation. Senge (1992) Stebbins (1975) Sarason (1982), Rosenholtz (1989) and others apply the psychological metaphor of learning to organisations and argue that fostering learning in individuals can be transformed into more general improvements that will lead to success and prosperity for organisations. Organisations can be seen to 'learn' as the collective patterns of behaviour amongst organisational members change and adapt to their environment. Individuals act as learning agents for the organisation by detecting and correcting errors in the organisational behavioural patterns.

Organisational learning occurs when an organisation performs in improved ways, usually as a result of requirements to adapt and improve efficiency in times of change (Beyers, 1989). This means that the school needs to itself be a learning organisation – an organisation that is constantly and systematically reflecting on its own practice and making changes as a result of this new insight. In the context of implementing an external innovation, such reflection involves the requirements of the intervention and whether members of the organisation are changing their behaviours accordingly. For this to happen, professional development for members of the organisation (e.g. teachers) as well as organisation development (for the school) is required to equip the school as a whole to become more effective in its purpose and goals. As Davidoff and Lazarus (1997) clearly suggest, to develop the organisation (the school) requires developing the people who work in it (the teachers).

Darling-Hammond (1998:40) suggests that for this to happen, the structure of schools must be such that possibilities and opportunities exist for collegial sharing and decision-making, where all members of the organisation feel part of the entire life of the institution. Teacher isolationism stands in the way (because there is no basis on which to

develop consensus to explore alternatives) of developing professional standards of practice and must be overcome so that opportunities to discuss problems of practice can be frequent and regular. In this context, if one looks at classroom practice and experience as the centre stage of school life, the whole school i.e. all aspects of school life, which interact with the classroom, must of necessity be conducive to the desired classroom practice. This thesis examined the ways in which the various aspects of the schools enabled or hindered the kinds of classroom practice the TTPSP targeted for development among the participating teachers.

Each classroom is affected by the culture and identity of the school as a whole. Thus the school needs to be equipped to manage such experience effectively so that it becomes a learning organisation. As stated above, if one looks at classroom practice and experience as the centre stage of the school, all aspects of the school need to be looked at holistically. The framework for the classroom is the school and each classroom is affected by the culture and identity of the school as a whole. These are in turn made up by the physical environment, the social environment and the instructional environment, all of which are interdependent and interwoven with each other. To illustrate, the

physical environment; which includes the class size, resources, infrastructure and the general condition of these, tends to affect the kind of learning and teaching that occurs in the classroom. As discussed in Chapter Two, in the context of the semi-rural and township schools included in this study, and their well-documented lack or shortage of resources, the nature of the physical environment and its impact on the success of the TTPSP intervention was of interest to this thesis.

Secondly, the social environment, which involves the nature of academic and social relationships among the members of the organisation (e.g. among teachers, among learners, as well as between teachers and learners) can also influence the nature of classroom experience. As such, teachers need to facilitate positive classroom dynamics and ensure that the students learn to mix well with each other. Thirdly, the instructional environment, or what is taught, how it is taught and the resources available for teaching and support needs to be carefully considered in any teaching and learning situation, and particularly in the context of implementing an intervention.

Davidoff and Lazarus (1997) clearly state that, practitioners cannot afford to concentrate on classroom practice alone. The first is that classroom practice is only one aspect of what students learn and experience at schools, while the second is that classrooms are part of schools. Thus, if we want to improve what happens in the classroom, we need to attend to both aspects of the classroom environment within the context of the school. In the event that any one of these element malfunctions, there will be a ripple effect throughout the organisation (the school) and the desired change (effective teaching and learning, or change in classroom practice) will fail to materialise.

It is when the collective ties become unstable or collapse that the organisation might not be able to achieve its desired goal: helping people to learn. For this to change, efforts to make the different aspects of school life interweave and interact, and to become coherent in relation to one another, are needed. This implies shared values and mission, as well as a collective support for the activities aimed at achieving these. Thus, not only do teachers and learners have to learn new ways of doing things in the classroom, the school as a whole needs to learn and adopt new strategies for supporting them in their efforts. According to Senge (1990:3) who describes himself as an "idealist pragmatist" learning organisations are:

...where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together.

According to him, the basic rationale for such organisations is that in situations of rapid change only those that are flexible, adaptive and productive will excel. For this to happen, he argues that organisations need to “discover how to tap people’s commitment and capacity to learn at all levels” (Senge, 1990:4). The structures in which people have to function should also be conducive to collective reflection and engagement (learning). Furthermore, people in the organisation must have the tools and guiding ideas to make sense of the various situations they face.

For professional development programmes, the “something larger” refers to helping people learn so that they might be able to teach their learners to learn effectively. In a school, for example, such learning takes place in three ways: at an individual level of the teacher, at the team level of the staff as they interact and formulate ideas and approaches to their work, and at the whole school level where the staff frequently reconstruct their understanding of the organisational purpose and direction [together] (Clarke, 1999:32). Thus, this thesis

explores the ways in which the physical, the social and the instructional environments of the participating schools interacted to produce effective teaching and learning practices and the desired change in the context of the TTPSP.

The concept of a 'learning school' utilises the self-driven theory espoused by advocates of the learning organisation (e.g. Senge, 1990). In such organisations there is congruence between the shared aspirations of staff on the direction they believe that school should move internally. In the case of the TTPSP it was that of improving teaching and learning in the classroom.

An important element in understanding schools as organisations is found in effective leadership and management. For teaching and learning (classroom practice) to be effective in a school, the leadership and management structures need to be effective as well. This requires vision, passion, commitment and a deep understanding of self. Leadership then is essentially about moving the school forward with a purpose. Management is essentially about ensuring the school is functioning effectively and achieving its vision. If a school focuses only on management and is task-oriented, the result is that there is no

focus on the purpose of the school. This tends to hinder genuine teaching and learning as isolated tasks are used as measures of success. Marris (1993) suggests that leaders and managers need to have an understanding of the stages of change; the roles that are necessary in the change phases; the personal qualities; and the appropriate interventions. A major challenge for schools and external agencies trying to implement interventions in schools is for them to work in an integrated way and focus on the tasks as well as the people and processes of the schools. For example, if for some reason the people-related processes are neglected, divisions within management structures and between management and staff often result, and the necessary support for teachers becomes difficult.

Thus, to understand whether the participating schools in this study could be regarded as, or had elements of learning organisations, this study examined the extent to which they had or were developing a shared vision/identity. Every school or organisation has what is known as its own particular identity (i.e. who are we and where are we going). This identity is what Davidoff & Lazarus (1997) refers to as the broad purpose of the school, which is reflected in the vision, particular mission and broad aims and tasks. While this is strongly influenced by

societal and educational forces, each school has its own identity and direction. Schools develop negative self-identities through lack of clear vision and a sense of purpose and through lack of effective leadership. When schools have a positive vision and the people and material resources can contribute towards the realisation of this vision, a positive identity for the school develops. It is crucial that the vision of the school is one in which everyone connected with the school can share. As Senge (1990) argues that when there is a genuine vision, not the all too familiar vision statement, people excel and learn not because they are told to do so, but because they want to.

The practice of a shared vision involves individuals and groups coming together to uncover what they see as their shared 'pictures of the future', and charting a map or maps for getting to that future. According to Senge (1990), such a shared vision tends to foster genuine commitment to the vision and how this is achieved rather than mere compliance to authority. Of particular relevance to the TTPSP and this study, is the extent to which such a vision and identity reflect the values, principles and purpose of the intervention, and are therefore, conducive to the desired change.

Adding to this view, Fullan (2003) argues that a shared vision means that the vast majority of the stakeholders in the system end up owning the problem and become agents of change. This means that:

every [staff member] has the responsibility to help create an organisation capable of individual and collective enquiry and continuous renewal, or it will not happen (Fullan, 1993:5).

This implies that stakeholders in the schools need to take risks and see themselves as active agents of change rather than victims of change. This does not mean that the problem should be handed over to the people, but that the conditions and processes should be created in such a way that it will enhance the possibility of greater ownership and commitment. However failure to understand the system dynamics can lead to cycles of blaming and self-defence. How many times have we heard or read of teachers in our schools complaining that they could not teach because they did not have the right equipment and blamed the principal for the way the school was organised? A shared vision, according to Senge, offers an alternative forum, and creates possibilities for new ways of behaving in the school and the classroom.

To develop a shared vision, Fullan (2003) argues for the creation of communities of practice. According to him, communities of practice are groups of people who share a concern, set of problems or passion about a topic and who deepen their knowledge by interacting with each other to determine solutions to the problems they face. In a sense, people who share expertise and problems are more likely to work better if they develop a shared vision of where they want their organisation or community of practice to go, and what strategies that they can acquire. Thus, one of the conditions in the school context that might be facilitating or hindering change in classroom practice is the existence and functioning of such communities of practice in the TTPSP schools.

Secondly, this study examined whether or not the schools had a clearly defined and developed strategy, which includes areas of achievement or goals as well as planning and evaluation. Strategic planning refers to a rational process of goal setting and planning that is pursued in most organisations. The way in which the strategy is developed in a school is dependent on the leadership and management style of the school itself. The goals and outcomes developed for the school need to be in line with the vision and mission of the school.

Likewise, they need to be developed within a context of internal capacity, need to revolve around aspects of: the school life, the school as an organisation, the curriculum, and staff development. Staff should be given an opportunity to develop personal goals within the context of the overall strategy.

Thirdly, an effective organisation has appropriate structures and procedures which serve the aims and goals that are developed in the school. It is important to know what structures are set up to facilitate all the decision making needed to manage and administer all the school's decisions. This raises an important question about participation. Asking teachers to implement an innovation when they were not part of the decision making process that adopted it in the first place can be problematic. An important alternative is to recognise that people are agents, able to act upon the structures and systems of which they are part. Obviously, this would mean that the whole school, and not only the teachers involved in the process of improving teaching and learning in the school, are working towards the same common goal brought about by the innovation. Beyond this training, such stakeholders also need to buy into and take ownership of the philosophy and principles of the intervention. The role played by these

structures and procedures in the school context of the intervention in participating schools was investigated in this study. In the context of the TTPSP, only selected teachers (particularly those who registered for the ACE) and to a lesser extent, the principals, were trained in the skills and knowledge necessary for the implementation of the TTPSP intervention. The impact of this choice on the success or failure of the intervention in the selected schools is further examined in Chapter Six.

Fourthly, for the school to realise its vision and goals requires appropriate technical support. Thus, the nature and quality of the school as a whole (teachers, learners, parents, and physical resources) is an important determinant of the success or failure of the intervention. In addition, the nature, extent and quality of resources provided by government and other outside agencies to schools also determine how successful the schools, and therefore, the innovation might be. Thus, schools that are poorly resourced and supported might find it difficult to implement an innovation, and those that attempt to, might not be able to do so effectively. In addition, the nature and quality of human resources in a school tend to influence the success or failure of an intervention. To illustrate, in an organisational context interpersonal relationships, conditions of service and staff professional

development are important features of an effective school environment. To this end, Senge (1990:13) declares that organisations learn only through individuals who learn. As stated in the preceding sections, this means that while individual learning does not guarantee organisational learning, without it no organisational learning can occur. For this to occur, individuals in the organisation need to continually clarify and deepen their personal vision, focus their energies and develop patience and objectivity in the way they look at reality. Building a culture of collegiality in the schools is providing opportunities for staff member to engage in some personal development processes. 'Professional Jealousy' according to Davidoff and Lazarus also forms part of the interpersonal dynamics seen at a school that could lead to the failure of an intervention.

Chapter six examines the ways in which these elements have influenced the implementation of the TTPSP in participating schools and led to the failure of educational change in general, and changes in classroom practice in particular. In looking at conditions that might lead to the failure of the intervention in participating schools, the study examined the influence of the school, community and national context,

as well as the innovation itself and the ways these interact to impact on classroom practice and students' learning.

Every teacher comes to school with specific knowledge and skills. Staff development programmes must be developed around the particular needs of the school and should be linked to the vision of the school. Added to the human resource factor is team learning (Senge 1990). In this dimension, learning is viewed as the process of aligning and developing the capacities of a team to create the results its members truly desire. People need to plan and act together. Senge suggests that when teams learn together, not only can there be good results for an organisation, but members will grow more rapidly than ever before. The notion of dialogue between and among individuals and groups in an organisation creates opportunities for developing language more suited for effective problem solving. This study investigated the extent to which, in the context of the TTPSP, opportunities for dialogue and cooperation exist for staff in the schools to collectively identify problems and develop strategies for addressing them.

For schools, this means that staff should be continually involved in learning (e.g. through continuing professional development) and are

continually exploring new ways of managing schools, supporting learning, and for teachers, new ways of teaching and assessing learning. As such, their own learning is a process aimed at the collective good of the institution and of the learners, and not for personal gain alone. Staff development programmes should also offer opportunities for the personal development of individual teachers. Process and programmes should provide space for teachers to understand as well as demonstrate their learning's. Ongoing personal development is therefore closely linked with ongoing professional development and should not be seen as separate. Day (1999) agrees with Hargreaves (1994) when he writes about teacher's development being located in their personal and professional lives and in the policy and school settings in which they work; and seeing teacher development as lifelong and a necessary part of teaching. Furthering this debate, Hopkins (1996:23) argues that:

...One of the greatest debates that our field is still to have is that on the theories, models and strategies that underlie the work of the school improvement practitioners, policy makers and researchers... Without considerable effort more at the level of theory and strategy, school improvement will still be referred to as random 'acts of kindnesses.

This means that if school improvement is only seen as an act of kindness, either by the intervening agency (e.g. the TTPSP), or the school and teachers, true change and learning will not be possible. If it occurs, it will not be sustainable. As such, organisations and individuals looking to change need to pay special attention to the relational patterns of schools, since it is those details that are experienced by the learners. In looking at conditions in the school context that might lead to the failure of the TTPSP in participating schools, this study examined these relational aspects.

So, this thesis argues that a related factor that contributes to teacher learning from professional development programmes is the institutional context in which teaching and learning occur. This means that in order for the programme to work, conditions in the school context have to be conducive to the required changes in teacher and learner practice (Fullan, 1992; Davidoff, & Lazarus, 1997). Thus, in order for the TTPSP to effectively influence changes in classroom practice among teachers in participating schools, the elements of organisational learning need to prevail. Not only is there a need for individuals and groups in the schools and classrooms to learn (develop: strategy, procedure, identity and technical support), they

need to do so collectively. In addition, to solve problems that confront them as schools, they need to develop a shared vision of their future(s), as well as the strategies for achieving this. This study examined the extent to which these conditions prevailed in the schools participating in the TTPSP.

3.4 TEACHER LEARNING

As described in Chapter One, the main purpose of the TTPSP was to change classroom practice among participating teachers, particularly those who enrolled in the ACE. The project aimed to develop and enhance new ways of teaching and of assessing learning among the teachers. As stated earlier, this desired learning among the teachers did not materialise—teachers seem not to internalise what they learn in the project, and classroom practice remains largely unchanged. To this effect, the main argument in this study is that for classroom practice to change in accordance with the TTPSP intervention, teacher learning is essential. Thus, using teacher learning as a framework, this section addresses the question: What factors might lead to teachers' inability or unwillingness to learn new ways of teaching and to change their classroom practice in accordance with what they learn in the project/intervention?

What is teacher learning? To understand this concept, Sfard (1998) distinguishes between two metaphors for learning: acquisition and participation. Acquisition refers to the teachers having a certain amount of knowledge, which needs to be extended, while participation is predominantly from the situational learning. While knowledge in the domains of personal, team level and whole school level exists, the critical issue is to see how teachers learn to think about the source and the role of that knowledge for their own school practice. Acquiring new knowledge is an important part of the process of learning to teach. Thus, teacher learning refers to the inspiration and facilitation of knowledge and learning which an effective social and cultural process allows for. Practising teachers continue to learn in many ways. They learn from their own practice and from their interactions with other teachers. (Lave & Wenger, 1991; Little, 1994). As teachers learn, it becomes important for them to become, partners in the innovation. For this; they need "collegial advisors rather than supervisors, they need time to learn, time to reflect, absorb, and discover" (McDonalds & Naso, 1986: 33)

Teacher learning involves long-term changes in teacher behaviours that extend beyond the life of a particular reform (e.g. the TTPSP),

also referred to as 'deep change'. Without such changes, effective teaching and learning is not possible. This requires that participants not only learn about the innovation and the desired behavioural changes they are expected to make, but that they in turn reflect on the nature, reasons for, and impacts of such changes. Fullan & Stiegelbauer (1991) notes that deep change involves constructing deep, sophisticated meaning of the change in terms of what the change is, the purpose of the change and how the change process proceeds. Deep change involves teachers actively seeking the best knowledge and ideas in order to go deeper into helping their students construct new meanings, solve problems, work in diverse groups and develop proactive learners in a complex changing world. This means that:

...every teacher has the responsibility to help create an organisation capable of individual and collective enquiry and continuous renewal, or it will not happen... It is only by individuals taking action to alter their own environment that there is any chance for deep change (Fullan, 1993:39-40).

Teachers cannot have an impact in the classroom unless they also have an impact on altering the working conditions surrounding the

classroom. As long as teachers and other participants in the schools depend on an outside agency (e.g. the TTPSP) to further the aims of the innovation and sustain it, change is unlikely. Fullan et al (1991: 68) argues that people who begin to think differently will almost certainly begin to act differently and they will then almost certainly affect someone else who will begin to behave differently. However people cannot be forced into changing in order to think or develop new skills. Rather, they should be provided with the appropriate conditions that enable them to “consider personal and shared visions” .The extent to which the TTPSP and the participating schools developed such conditions for teacher learning was explored in this study. The next section explores the ways in which teachers learn.

3.4.1 How do teachers learn?

In this study, my aim was to find out why teacher learning is not occurring, and in essence, why classroom practice is not changing despite the interventions implemented in the schools and the teachers’ success in the formal qualification: the ACE. Available literature suggests that the answer to this question might lie in how teachers as individuals and as groups learn. Firstly, Hopkins et al (1994) asserts that teachers learn best in their own classroom and in the concrete day to day work of the school. They learn best when their own

colleagues teach them and/or model what needs to be learnt. Interactions with people in one's environment are major determinates of what is learned and how learning takes place. The socio-centric view (Soltis, 1980) of knowledge and learning holds that what we take as knowledge and how we think and express ideas are the products of the interactions of groups of people over time. Richert (1998) suggests that educators recognise the role of others in the learning process and that this goes beyond providing stimulation and encouragement for individual's construction of knowledge.

Similarly, Southwood (2002) states that collaborative development is an approach to professional development that is based on a view of learning that is relational, where educators develop expertise by working with and listening to each other in 'communities of practice' (Gray, 1995). It is based on a situated learning, which goes beyond the individual and maintains that learning 'how to be' in the world happens as a consequence of collaborative actions that take place within frameworks of participation. In this context, solutions emerge through participants together dealing constructively with differences and allowing these differences to be unique. Such collaboration implies the formation of learning communities (Fullan, 1992) and aligning and

integrating new ideas with ideas that are already working to achieve greater coherence. In collaborative schools, teachers spontaneously self organise and assess new ideas. Fullan, (2003:47) refers to this as a culture of “knowledge sharing” where people are interacting; new shared systems of knowledge are produced, allowing critical changes to occur. The extent and nature of such relationships in the schools participating in the TTPSP were examined in this thesis.

Thirdly, teacher learning occurs when teachers build links between new information, experiences and their existing base. The nature of these links can go through various stages such as modifying or re-organising. However, unless new knowledge becomes integrated with prior understanding, this new knowledge remains isolated and cannot be used to most effectively transfer the new skills to the new situation. Thus, teachers learn when they are provided with opportunities and given support for reflecting on their practice and the new ways of thinking about and practising their teaching (Hoyle, 1980; Fink & Stoll, 1998).

Fourthly, teachers need opportunities to think through the implications of the reform goals, to try out new approaches and to assess the

effects of these approaches. Learning new roles and ways of teaching is a long-term development process that requires teachers to focus their attention on what educational reform means (Borko, 2000). Effort is another major indicator of motivation to learn. The acquisition of complex knowledge demands the investment of considerable energy and strategic effort, along with time. For the TTPSP this would mean that principals involved in the TTPSP need to allow the teachers to 'experiment' with the new methodologies that they learn in the project and allow the learning space to be more creative but at the same time meaningful. Learning does not occur in a vacuum. It is influenced by environmental factors, including cultural and instructional practices.

Professional development activities are vital to realising the vision of education reforms in any system. As discussed in Chapter Two, to enable teachers to learn what they need to know and change their practice, learning opportunities must consist of more than in-service workshops and short courses. This study investigated the extent to which these opportunities for teacher learning provided within the context of the TTPSP took into consideration, the various ways in which teachers generally, and teachers in the participating schools learn.

3.4.2 Conditions for teacher learning

Teacher educators have long struggled with how to create learning experiences powerful enough to transform teachers' classroom practice. Firstly, teachers both experienced and inexperienced, often complain that learning experiences outside the classroom are too removed from the day-to-day work of teaching to have meaningful impact (Brodie, 2002; Clarke, 1999; Gray, 1995). The idea that teacher's knowledge is situated in classroom practice lends support to this complaint. For professional development programmes, this means that, ideally, all activities need to be context-specific. Removing teachers from their school context in order to develop them in some specific areas often fails. Reddy, (2006) and Simkins, et al (2007) claimed that school activities, which do not share contextual features with related out-of-school tasks, typically fail to support transfer. Resnick (1987) states that the learning process goes beyond providing stimulation but rather interactions with the people in ones environment are major determinants of what is learned and how learning takes place. Concurring with this view, in her evaluation of the TTPSP, Moletsane (2002) charged that the reason for the failure of project was that the project seemed to impose a generic intervention on all the schools without adequate consideration of context-specific

issues that might influence teaching and learning in various schools. In line with this, this study argues that the project activities, which occur away from the school context, might contribute to the lack of change in classroom practice among TTPSP teachers. Using teacher learning as a framework, this study investigated reasons for the failure of teachers within the TTPSP to change their classroom practice.

3.5 SCHOOL CULTURE, TEACHER LEARNING AND STUDENT OUTCOME

To understand why the TTPSP and its intervention did not produce the desired change in classroom practice among participating teachers, this study explored the influence of school culture. As advanced by Davidoff, and Lazarus (1997:175), school culture includes:

The school's vision, mission, aims and tasks; its policies and the value and norms operating at the school, reflecting the general culture of the school. By this we mean the general ethos at the school, including such issues as the extent to which teachers and students are motivated, the way in which students and parents are involved in the life of the school.

This is based on the work of Turbill (1993), who argues that student learning, teacher learning, and classroom practice are not only

interdependent, but they are all embedded in a cultural setting: the school. According to Turbill, student and teacher learning are at the core of the school culture, and are shaped by the complex mix of, and interactions between a series of events and processes that occur within and between all the layers of the school culture (Turbill 1993: 23 - See Figure 1 below).

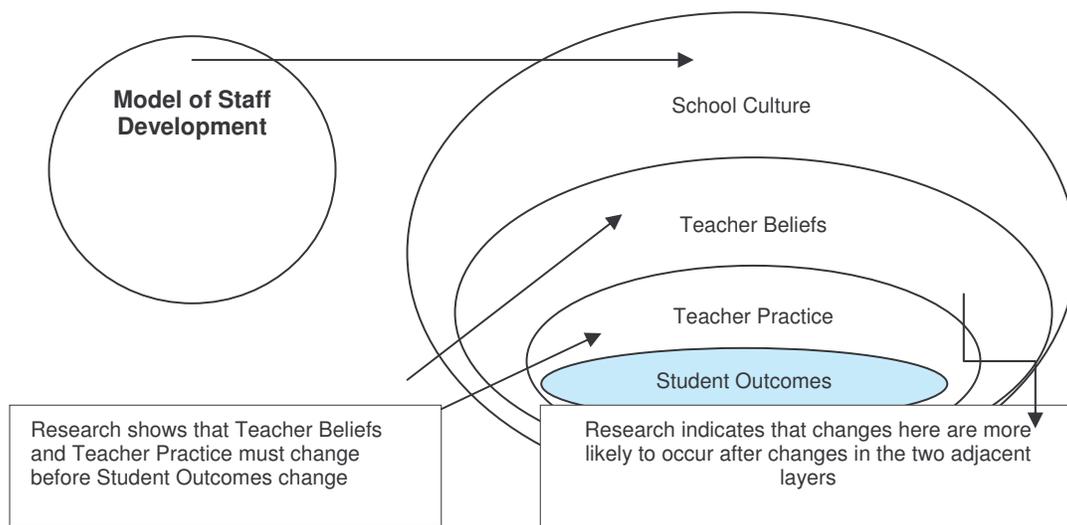


Figure 1: Model of Staff Development: (From Turbill: 1993)

In this thesis, Turbill's theory is used to understand how school culture and context might impact on classroom practice. Firstly, if student learning (the inner layer in Figure 1) is to be positively influenced then teaching practices must first change. Secondly; teaching practices (the next layer in Figure 1) are in turn shaped and framed by teachers' beliefs. This is especially true of their beliefs about learning, teaching,

and the nature and purpose of whatever they are trying to teach. Thirdly, before classroom practices can change, teachers must first be given the opportunity to examine and modify their belief systems (the next layer in Figure 1). By combining the two layers, the school is then in a better position to accept new and innovative practices. Fourthly, the school culture spreads its influence in two directions, outwards and inwards. Not only does the school culture subtly determine the nature of the staff development programmes a school or school system decides to adopt ('outward influence'), it will also influence and be influenced by teacher beliefs and practice ('inward influence').

The personal dimension or what Turbill (1993) calls 'inside out learning' and Fullan (1993) calls 'inner learning' has not always been a major component of any staff development enterprise. The importance of professionals being able to gain insights into their own thinking, beliefs and values so that they become aware of what drives their practices has been recognised (Broadfoot, 1998; Beyers, 1989). Turbill argues that all teachers have a 'personal theory' of that which they are trying to teach. For Senge, personal mastery involves spiritual growth and is a special kind of a calling: People with a high level of personal mastery live in a continual learning mode. They never arrive.

"...Personal mastery is not something you possess. It is a process"
(Senge, 1990:142).

Baritone (1990) and Argyris & Schon (1978) have argued that teachers have implicit beliefs about teaching and learning which guide both their planning and their decision-making in the classroom. Clarke (1999) has also suggested that teachers possess a rich store of knowledge yielding theories, beliefs and values about their role and about the dynamics of teaching and learning. However despite the likelihood those teachers' beliefs provide a framework, they are also likely to remain only partially articulated (Denscombe, 1982; Zeichner & Liston, 1996; Lave & Wenger, 1991). Creemers (1996) argues that the extent to which teachers' behaviours are influenced by theoretical orientations has been difficult to demonstrate.

This theory assumes that change in school culture will lead to changes in teacher beliefs and teacher practice, and this will ultimately impact on student outcomes (learning). As such, if this 'mix' is appropriate then not only will the learning of both teachers and students be 'enabled', but this 'enablement' will also spread across, and influence the culture of the whole school setting (Turbill, 1993; Elmore, 1996;

Evan, 2001). Conversely the theory would predict that if the mix is inappropriate, not only will learning be 'inhibited', but these inhibitory influences will spill over to the whole school learning culture (Turbill, 1993; Elmore 1996). Davidoff and Lazarus (1997) caution that 'culture' should therefore be seen as the central factor when considering whole school development interventions. The culture of the school comprises the values, and norms, which are seen in daily practice - it is the overall climate of the school.

The school environment is a major factor in determining whether optimal learning and development of its staff and students occur. Donald, (et al 1997) refers to the concept of a "Health promoting school", which refers to the development of a school environment that is supportive of all members of the school community. Furthermore, the elements of technical support need to be developed within the context of a comprehensive approach to development. The schools capacity to manage its resources, including finances needs to be developed.

When one reflects on one's beliefs about teaching and learning in any curriculum it becomes important for teachers to then make conscious

strategies and processes they themselves used as learners in that curriculum area. This inside out learning has significant implications for teachers' classroom practice and the focus of this study. Educators begin to see and experience and identify what the learners are feeling. If this is done many teachers can then see, for the first time, why some classroom practices are useful or meaningless exercises. This inside-out learning helps teachers to appreciate the importance of workshops as well as to understand the purpose of engaging in workshops or activities that relate to their own professional learning. Because of this inside-out learning, teachers become meta-cognitively aware; that is they become aware of their own learning strategies and are therefore consciously able to monitor their own learning experiences. This awareness will begin to spill over to the classroom practice, which should change.

Bullough & Knowles (1991) assert that by giving teachers the opportunities to focus on their own beliefs and practices, recognition is given to that which is already known. This forces them not to only identify their own personal needs as learners but ultimately to take responsibility for solving them. By allowing teachers to engage with curriculum at school level a shared meaning will exist amongst the

learners; each will begin to understand each other's perspective. This type of staff development has the potential of changing teacher's beliefs and practices, as well as, the schools overall culture.

Using this framework, this study examined the extent to which teachers in the schools had opportunities to reflect on their own beliefs about teaching and learning, and about the how those impacted on their classroom practice and student learning.

3.6 THEORISING THE FAILURE OF TEACHER LEARNING AND CHANGE IN CLASSROOM PRACTICE: SOME TENTATIVE PROPOSITIONS

Based on the above conceptual and theoretical frameworks, as well as my experience as a teacher, teacher educator and the project manager for the TTPSP, three key propositions arise and were used as lenses/frameworks to address the research questions in this study:

Proposition One: First, informed by the work of Senge, 1990 and Davidoff & Lazarus, 1997, this study argues that for classroom practice to change effectively, whole school development, and organisational learning in particular, is necessary. This means going beyond

educating the individual, but rather looking at developing the institutional context within the schools. What teachers do in the classroom is dependant on the nature and quality of the various aspects of the schools. As such, for teachers to learn, the school as an organisation (i.e. all members of the organisation) must simultaneously learn. Removing teachers from working environments in order to 'workshop' them on the desired behavioural changes will not lead to changes in the ways they teach and assess learning once they are back in the realities of their school, classroom and community contexts. This assertion is supported by Jegede (1994) who observed that the broad goals of reforms remain far removed from the everyday lives of teachers. Organisations can be seen to learn as the collective patterns of behaviour amongst organisational members change and adapt to their environments.

Proposition Two: Second, informed by Roger's (1972, 1983) theory of diffusion of educational innovation this thesis argues that external interventions like the TTPSP, which do not adequately take the contextual realities (values, norms, meaning embodied in schools, human and material resources) of the schools into consideration do not produce the desired change. The thesis argues that the design and delivery of the TTPSP, which presented a generic intervention to a

group of schools, possibly with very different contextual realities and needs, might have led to the failure of change in classroom practice among the participating teachers. Consequently, the prevailing cultures of the different schools were not conducive to supporting the demands for and of change made by the intervention.

Proposition Three: Third, informed by theories on teacher learning (Borke, 1995; Greeno et al 1996; Fullan, 1991) this thesis asserts that as important levers of intervention implementation, teachers in the participating schools needed to demonstrate actual learning of the content, skills and values necessary for them to change the ways in which they teach and assess learning. This means that if teachers have a deep understanding of the innovation and the desired behavioural change and find the change meaningful, they will change their practice accordingly. Fullan (2001) noted that teachers often make classroom decisions based on pragmatic trial and error rather than thinking through logical processes and this proposition of change supports the above. Oakes and his associates (Oakes, et al 1999) observed that teachers often rush to adopt new initiatives without considering their deeper meanings and purposes. Similarly, McLaughlin and Mitra (2001) concluded that for the achievement of deep reform

and to prevent superficial implementation, teachers needed to know why they were doing what they did. This points to the complex change that teachers need to understand in order to change their classroom practices accordingly.

3.7 CONCLUSION

Using the above propositions as lenses for examining the various reasons for the failure of the TTPSP intervention in participating schools, this study sought to understand:

- The professional and organisational development needs of the teachers and schools targeted by the TTPSP and the ways in which the project activities aim to address them;
- The extent to which the design of the intervention might lead to failure to change classroom practice in participating schools;
- The extent to which the content (skills, values and knowledge) taught in the TTPSP was reflected in the everyday classroom and school practice of the participating teachers and principals; and
- The factors within the school context as well as within the project which assist or hinder teachers' ability/willingness to implement what they have learnt from the TTPSP

Related to these, four research questions were used to focus the inquiry:

1. What are the professional and organisational development needs of the teachers and schools targeted by the TTPSP and in what ways do the project activities aim to address them?
2. To what extent might the design of the intervention lead to failure to change classroom practice in participating schools?
3. To what extent is the content (skills, values and knowledge) taught in the TTPSP reflected in the everyday classroom and school practice of the participating teachers and principals?
4. What factors within the school context as well as within the project assist or hinder teachers' ability/willingness to implement what they have learnt from the professional development programme of the TTPSP?

This chapter has located the study within three bodies of literature that might explain the failure of the TTPSP participating schools. The purpose of the next chapter will be to describe the research design and methodology used to address the above research questions.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

Available literature suggests that participation in professional development programmes does not always translate into change in classroom practice by teachers (Richert; 1998; Robbins; 1997). This seems to be true for schools and teachers participating in the Toyota Teach Primary Schools Project (TTPSP), the focus group for analysis in this study. Evidence from monitoring and evaluation reports (Peacock, 1998; 2001, Moletsane, 2002) suggest that the knowledge, skills, values and attitudes that they learn from project activities appear not to be internalised, and that teachers continue to use ineffective methods of teaching in their classrooms. This study examined the reasons for this and the factors that inhibit the desired change in classroom practice in the schools participating in the project. The study is located within three broad bodies of literature (See Chapter Three): Diffusion of educational innovations (Rogers, 1972; 1983), teacher learning (Putnam & Borke, 2000; Greeno et al, 1996; Fullan, 1991, 1993, 2003) and organisational learning (Senge, 1990; Davidoff and Lazarus, 1997).

Based on these frameworks, three propositions were advanced in relation to the reasons for the failure of the TTPSP to effectively change classroom practice. First, the study posits that in order for classroom practice to change accordingly, teachers, as important levers of the implementation of the intervention, need to demonstrate actual learning of the content, skills and values necessary for them to change the ways in which they teach and assess learning; as well as the ways in which their learners learn. The TTPSP is focused on developing these.

Second, as Moletsane (2002) concluded in her analysis, the design and implementation, of the TTPSP did not adequately take the contextual realities of the schools into consideration (e.g. the values, norms, meanings embodied in schools, resources). This impacted negatively on its capability to change classroom practice among participating teachers. This study suggests that if an intervention does not understand or recognise the culture that exists within a school, attempts at change and innovation could prove futile.

Third, this study posits that teachers in the participating schools failed to change their classroom practice because of their tendency to

privilege their own individual learning group over organisational learning and change. This is based on the notion that for classroom practice to change effectively, whole school development, and organisational learning is necessary. If individual teachers learn or even change some aspects of their practice, but tend to operate individually rather than collectively to change the school culture and environment, their efforts might prove fruitless and unsustainable.

Through a qualitative study that sought to examine the reasons for the failure of the TTPSP, this inquiry utilised these propositions to collect and analyse data addressing the following main research questions:

1. What are the professional and organisational development needs of the teachers and schools participating in the TTPSP and in what ways do the project activities aim to address them?
2. To what extent might the design of the intervention lead to failure to change classroom practice in participating schools?
3. In what ways do the participating teachers understand and enact the content (skills, values and knowledge) taught in the TTPSP in their everyday classroom practice in schools? In what ways do their different understandings (and implementation) of the project influence its success or failure?

4. What factors within the school context, as well as within the project itself, assist or hinder the teachers' ability and willingness to implement what they learn from the professional development programmes in the TTPSP?

This chapter describes the research design and methodology that was used to address the above research questions.

4.2 RESEARCH DESIGN AND METHODOLOGY

The research design used in this study was a qualitative multi-site case study involving teachers in five of the schools that have been the beneficiaries of the TTPSP. The unit analysis was the teachers. The study focused on classroom practice among the teachers in these schools, particularly those who had graduated from or were studying towards the Advanced Certificate in Education (ACE) offered by the TTPSP and accredited by the University of KwaZulu-Natal. In the inquiry, I was interested in the ways in which the teachers understood the principles, values, skills and knowledge, which the TTPSP aimed to develop among its beneficiaries, and the ways in which their understandings led to or hindered the relevant change in practice in their classrooms. In addition, I examined the various factors that

facilitated or hindered change in the classroom practice within the context of the TTPSP. In doing so, the role and impact of the school as an organisation and its impact on whether or not the teachers were able or willing to change their classroom practice was examined.

Case studies are concerned with the interaction of factors and events over a period of time. The purpose of research by case study is not to portray a specific situation, but to do so in a way that "illuminates some more general principles" (Strauss and Corbin, 1990:23). My choice of a case study design as a preferred strategy was informed by the works of Sutton (1993), Yin (1994) and Bassey (1999). To illustrate, Yin (1994:13) asserts that the "essence of case study is that it is enquiry in a real life context as opposed to a contrived context of experiments or surveys". This study focused on the role of political, social, historical as well as cultural contexts of the schools as they impact on the teachers' willingness and ability to implement the activities of the TTPSP. To this effect, the case study was chosen as it allowed for the study of a contemporary phenomenon and the use of multiple sources of data (Yin, 1994). Furthermore, it allows for the observation of an individual unit (Cohen, 1995, 1998), in this case the teacher, and to a limited extent, the school and the TTPSP.

It is also for these reasons that a qualitative (as opposed to a quantitative) methodology was used in the study. As defined by Denzin and Lincoln (1994:2):

Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meaning people bring to them... Accordingly, qualitative researchers deploy a wide range of interconnected methods, hoping always to get a better fix on the subject matter at hand.

The individuals within schools as educational organisations are heterogeneous groups with different abilities, values, aims, needs and experiences. According to Bogdan and Biklen (1982) qualitative methodology enables the researcher to consider experiences from the informant's perspective. As such, a methodology that would capture this heterogeneity from the teacher's perspective was needed. In addition, qualitative research seeks insights rather than statistical analysis. Furthermore, according to Bassey (1999), qualitative research addresses the complexities of the various aspects of the

school and schooling and takes into account the different objective experiences and subjective perspectives. As such, qualitative research methodology is capable of accommodating and accounting for the myriad of differences and complexities that are involved in social settings such as schools. Thus, this methodological stance resonated with the purpose of this study – to find out why classroom practice among teachers in the TTPSP, despite all the interventions, remained unchanged.

According to Patton (1990:40), “qualitative methods are ways of finding out what people do, think and feel by observing, interviewing and analysing documents”. He also points out that a major advantage of using the qualitative method is that it permits a researcher to study selected issues in depth. In this study the qualitative methodology was most useful, as I did not seek to test a theory through formulating a hypothesis and examining their data, but rather to give insight into what the demands of change are on professional development programs (Silverman 1993). The inquiry, due to the complexities in the educational setting, only allowed me to offer possibilities rather than certainties and absoluteness to the outcome of events in the future. This does not mean that I have approached my subjectivity

'devoid of theory' (Edwards & Brunton, 1993:8). As such, the propositions identified in the previous chapter are not fixed. Rather, they can be proved or disproved or adapted as data analysis in this inquiry as well as future inquiries unfold. The methodology allowed me to describe and interpret what I heard, read, and saw in the classrooms I observed intermittently (when time permitted and schools and teachers were available) over a period of two years (2004-2006).

Qualitative researchers also acknowledge that participants may lie, distort the truth or withhold vital information and that in such cases the researcher is misled by incomplete, inaccurate, or biased data. Ritchie et al (2001:173), in counteracting the above, argues that the researcher (as a participant observer) may at the beginning impact on the setting, but the social and organisational restrictions often "neutralise this distorting effect in participants focusing on fulfilling attention to, pleasing, or playing games with the researcher". As the manager of the project, my own subjectivity in the research did play an important role. The use of qualitative methodology addresses this, because as Lemmer (1994:255) states:

Qualitative research isn't making the research values invisible and divorcing them, but seeing the researcher in the frame of research. This perception reveals the researcher, as a 'real, historical individual' with concrete, specific desires, one who bares their souls.

I was also conscious of the danger of interpreting the context of the schools using my assumptions and beliefs, as well as the expectations of the TTPSP. I was aware of my assumption that the teachers had a three year teacher's diploma and therefore would have some knowledge of what teaching and learning would entail. This assumption also referred to their overall cognitive curriculum knowledge that the teachers had developed. As such, I constantly checked and re-checked my judgments and perceptions throughout the data analysis process. Continual interrogation of my assumptions was fundamental because as Senge (1992:243) suggests, one way to a further understanding of particular practices is "being aware of our assumptions and holding them up for examination". Hence this required me to adopt a more reflective disposition throughout the study.

4.3 DATA COLLECTION METHODS

The process of data collection involves a dynamic interaction “between the researcher and the participants and context under investigation” (Gerdes & Conn 2001:184). In line with the qualitative case study approach, in this study, various strategies were utilised to collect and analyse data to inform the inquiry. These methods were chosen to ensure methodological triangulation (Glesne & Peshkin, 1992), in which data collected from one source, can be corroborated by data from various other sources. According to Creswell (1998:11) qualitative data collection is a “series of interrelated activities aimed at gathering good information to answer emerging research questions”. Thus, methods of data collection included interviews, questionnaires, classroom observations, and document analysis.

4.3.1 Interviews

The task of the interviewer is to make contact with the respondents, explain the purpose of the research inquiry, persuade the respondents to participate and then to work through an interview schedule using standardised language (Cohen et al, 2000). According to these authors, semi-structured interviews are non-standardised, yet they enable the collection of equivalent data questionnaires and observation

amongst other things. To achieve this, the initial interviews in the study were open-ended and allowed me to clear up any misunderstandings, as well as to establish rapport with the school principals and more importantly, with the educators, who were the principal respondents. The initial interview with each teacher was used to explain the purpose of the study and to assure them that the study was not aimed at critiquing them, but that it was aimed at examining the effectiveness of the TTPSP in achieving the goals it set. These initial interviews were also recorded for analysis purposes.

At first all the respondents were nervous but gradually they began to participate and to share their perspectives and experiences of the project activities and their everyday lives as teachers in their schools. Permission to use the tape recorder was explained to all the participants including the Principals – I explained that it meant I could concentrate on how they responded and not worry about taking notes. I tested it with the participants and we laughed about how our voices sounded which seemed to break the ice. The participants seemed to find it easy to talk to me; this was probably due to my presence in the schools with regards to TTPSP activities.

The broad areas that I chose to ask were as follows:

- Background to teaching and teaching training
- Attitude to teaching and learning
- School support
- Implementation strategies in the school
- Support from the TTPSP
- Curriculum, planning, methodology

The above areas were selected based on the four main questions (as seen in chapter one) and to also ascertain what the ethos of the school consisted of. The broad areas also allowed the teachers to talk openly about issues regarding the implementation of the intervention. The interviews were conducted informally, with the intention of “feeling like a conversation with a purpose to the interviewee” (Mason, 1996:45). While I had prepared these broad questions for the interviews, (See Appendix 2, 3 and 7) the main foci was to involve the participants in “order to establish some kind of emotional connection with respondents” (Bogdan and Biklen 1982; 73). Interviews were also held with the five Principals of the site schools. On June 21, 2004 the Principals also met at TTPSP to conduct the interviews.

In total 23 teachers were interviewed:

- 4 males and 19 Females
- 10 ACE Graduates; 9 students in their first year of the ACE and 4 students in their second year.

The interviews were distributed among the five schools as follows:

SCHOOL	NUMBER OF INTERVIEWEES
Bahlebhuleke	5
Bhephimili	4
Ekhanyeni	5
Dlambolo	5
Xabahle	4

Each individual interview lasted for 30–40 minutes depending on the availability of the teachers. These were conducted in all five schools over a three-month period beginning in the third term of 2004. By this time schools had ‘settled’ and educators were comfortable with their classes. As previously stated, the purpose of the interviews was to gather information under broad categories. Ritchie & Ragano (2001:744) argue that:

Rather than an interview providing prepared questions, designed to be unbiased and neutral, we strive to engage in social

constructing of a narrative with our participants. In this way we hope to activate the respondents 'stock of knowledge'.

The interviews constituted a large proportion of my data. I used these interviews as sources of reference for ongoing discussions and reflections. The second set of interviews was conducted with the same individual educators to ensure that what was said in the initial interview could be clarified for validity purposes. (Some of these interviews were conducted at TTPSP June 28, 2004). The initial interviews with the teachers were also audio taped. It was important to ensure that all the teachers felt comfortable during this process. Extensive field notes were taken during and after the interviews to capture the views of the respondents. These field notes verified what I had seen in my interactions with the teachers but I also used them to make comments on what I actually saw and heard in the classroom. The field notes that I kept also allowed me to reflect on how I was feeling working in these schools. The interviews were planned to be more conversational or interactive (Bogdan et al 1982). In this regard, Backett-Milburn refers to "mould(ing) the interviews to our own styles, be flexible with regard to structures and [reflexively] allow interviews to cover respondent- generated topics" (1999:75). I was conscious of

the fact that for some of these teachers, being interviewed in English could limit their willingness or ability to generate the topics they would have liked to address (see limitations of the research process – Chapter Four). As such, I allowed respondents to spend as much time as they needed on each question.

To ensure the validity and trustworthiness of the data and the evidence, all subsequent interviews were audio taped and transcribed verbatim. In these interviews, while I had a list of questions (See Appendix 7: Interview Schedule with Educators and Principals), which I used as guidelines so that a dialogue could be established in order to probe for more in-depth analysis of the issues, the interviews were carried out in a semi-structured way. The purpose of the interviews was to address two of the three research questions in the enquiry:

1. In what ways do the participating teachers understand and enact the content (skills, values and knowledge) taught in the TTPSP in their everyday classroom practice in schools? In what ways do their different understandings (and implementation) of the project influence its success or failure?
2. What factors within the school context, as well as within the project itself assist or hinder the teachers' ability and willingness to

implement what they learn from the professional development programmes in the TTPSP?

The interviews were also used to gauge the respondents' understanding of the objectives of the TTPSP and to address the third research question:

3. What are the professional and organisational development needs of the teachers and schools participating in the TTPSP and in what ways do the project activities aim to address them?

This was done to gain insight into the kinds of professional and organisational development needs the respondents deemed important versus those the TTPSP had targeted in the schools. In addition, the interviews were meant to ascertain the ways in which the respondents' understandings of the TTPSP activities might influence the ways they implemented what they learnt from the project in their own classrooms.

I used the descriptive data to develop categories to test the propositions advanced in Chapter Three and to suggest relationships between teacher's understandings and experiences of project activities and their classroom practice.

4.3.2 Questionnaires

To address the three research questions (and to particularly get a wider range of responses and to complement the interviews) an open-ended questionnaire (See Appendix 2: Educator Questionnaire) was administered to all teachers in the five schools in the study. A total of 90 questionnaires were distributed. 30 questionnaires' (33.3%) were not returned due to various factors (time, lack of interest and lost questionnaires) while 60 questionnaires (66.6%) were returned. The interview interaction was very complex (Mason, 1996:41) often because of the limitations posed on second language English speakers, being interviewed in English. The questionnaire covered very similar questions to the interviews but this time it allowed the teachers to reflect on what had been asked. The questionnaire was used to build on the data that was used from the interview.

In addition, a questionnaire was also administered to the five principals of the schools in the study (see Appendix 3). Like the teachers, the principals were asked to reflect on the focus and impact of the TTPSP activities, and in particular on the ACE teacher's workshops, as well as on the nature and quality of support provided by the project.

Both sets of questionnaires were designed around three main issues:

1. School Involvement in TTPSP.
2. Personal Involvement in TTPSP.
3. Professional development within TTPSP.

The limited responses from the questionnaires and the explanations that respondents gave to the questions were disappointing. A contributing factor to this could have been the language (see also Chapter Four on limitations to the study). Perhaps I should have elaborated to the teachers concerning the questionnaire and perhaps also put the script into Zulu translation. My questions might have been too difficult for some participants. Also, fear of intimidation from other teachers in the school, or losing support from the TTPSP in answering them honestly was not explored thoroughly. However in conjunction with the interviews, the questionnaires contributed to the data used to address the research questions in the study. Data analysis is presented in Chapter Six.

Another challenge in designing a questionnaire is to ensure that it is a “user friendly research instrument as well as to avoid personal bias” (Dadds, 1995:36). Dadds (1998:62) refers to a “professional blind

spot” on the part of the researcher as well as the participants being a limitation to questionnaires. In other words what is asked and what is answered does not uncover what actually happens. However in having a questionnaire with similar questions to the interview, educators had time to reflect on their responses and to build on what they had said previously. The questionnaires were also used with the educators to confirm or elaborate on the written data that they had produced.

A third limitation in the study was the fact that the instruments were not piloted before being rolled out in the school. However, because data collection methods were triangulated, this design flaw in the study is in some ways, addressed.

4.3.3 Classroom observations

Based on the understanding that respondents might say one thing in relation to how they understand the innovation as well as the implementation of the innovation, their practice in the classroom does not reflect such understanding. Several lessons of the ACE students and graduates (N=23) were observed to address the research question:

1. In what ways are the teachers' different understandings (and implementation) of the project reflected in their classroom practice?

These observations lasted over a period of three years: Such observations were more structured and frequent in the two years, 2004 and 2005, with additional visits in 2006 when it became necessary to fill the gaps in data which were emerging during data analysis. Additional visits to classrooms were also necessary because of teacher absenteeism during scheduled visits (e.g., many had cultural activities or were absent from school).

The purpose of observing the lessons in this study was to gain a deeper understanding of whether these lessons reflected the intended outcomes by the TTPSP interventions. During these lessons, I took extensive field notes. These will be analysed in Chapter Six. At the end of the lesson I showed the teacher what I had written and discussed my observations and interpretations with him/her to ensure transparency and to add more insights.

The extensive notes reflected on the following observations during the classroom visits:

- Teacher-pupil ratio.

- Seating arrangement.
- Introduction and involvement of the learners.
- Planning of the lesson in relation to the term and school.
- Teaching aids/ strategies used to engage the learners?
- Learners' written work.
- Content/concepts that were being taught.

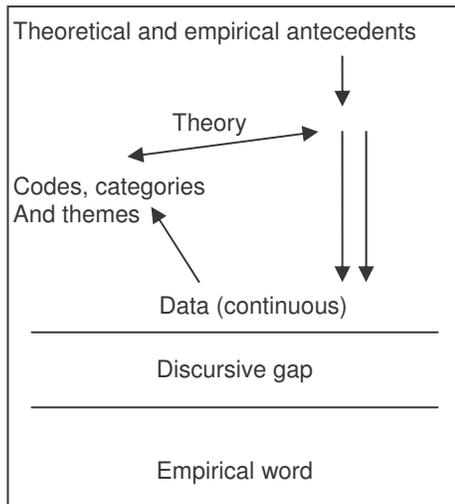
On average, three lessons per teacher were observed over a three year period (2004 - 2006).

Kemp (2001:528) argues that observations provide "an opportunity to record what people actually do in real life, rather than what people say they do. The observer might recognise features that are not recognised by participants". Creswell (1998:125) refers to the importance of "determining, initially a role of observer". To this effect, I had explained to the participants that the initial purpose of the classroom observation was to get a feel for the way they currently worked in the classroom. I had asked them not to prepare anything specific but rather I wanted to get a sense of their own way of working. In Kemp's (2001:528) words, my intention was to "identify what it is that is going on here" by watching what was happening with as open a mind as is possible. These observations allowed me to

confirm some of the evidence from the interviews. (See Appendix Seven for a sample of a Classroom Observation Schedule).

Available literature suggests two broad approaches to observing classrooms: Inductive approaches which are often described as classroom ethnography (Delamont and Hamilton, 1993) and are associated with small-scale studies involving the theory in construction. The deductive approach, which has been referred to as systematic observation (Croll, 1986) operates deductively from theory to the development of categories which are used to sample aspects of classroom life. Deductive approaches are more commonly used in large-scale studies and tend to be more concerned with the theory testing than theory development. In this study, I adopted the inductive approach (see Figure 2) as I attempted to capture a complete picture of what classroom life would be like and why some of the envisaged changes were not taking place.

(a) INDUCTIVE APPROACH



(b) DEDUCTIVE APPROACH

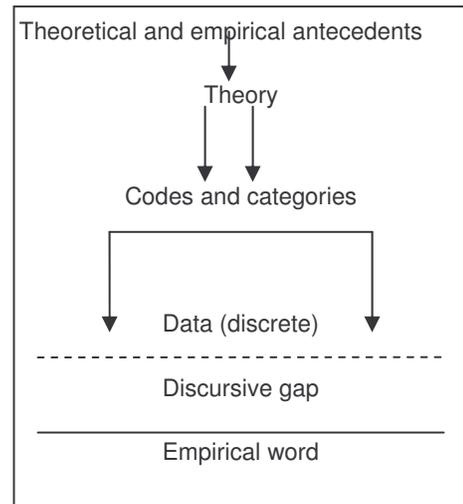


Figure 2: Ideal – Typical Approaches to Classroom Observation

(From: Ensor & Hoadley, 2004)

Delamont and Hamilton (1993) and Galton and Delamont (1985) call for the generation of the fullest possible records of classroom life from which theoretical frameworks can be inductively derived. Data analysis (see Chapter Six) is an interactive process that brings theory and data into dialogue with each other in order to generate some claims and learning's for future reference.

In the inductive approach, careful attention to sampling from classroom life is of concern to many. Researchers are required to decide in advance what aspects of the classroom life they will record, about what and with whom and how often this will occur.

Whichever style of participant observation is selected, a researcher should always aim to be as insignificant as possible. Kemp (2001:532) suggests that this may be facilitated by "trust, acceptance, unobtrusiveness and an adequately negotiated position". As the researcher I was aware of these positions and tried to make every attempt to meet these criteria. It was a novelty for the learners that I was in the classroom and for some teachers there was a sense of 'window dressing'. For example, in some cases worksheets were only photocopied for the learners when the TTPSP facilitators visited the schools. Because of the limits of using observation as a data collection strategy, the collaboration and sharing with the educators was important to arrive at shared understandings. Gerdes and Conn (2001:183-191) suggest 'member checking' to be carried out. They argue that:

...the researcher allows the participants an opportunity to clarify their comments, checking for understanding, as if the researcher is asking, 'Did I get this right when you said...?' Or 'What I think I heard you say was...'

All of the respondents were given a copy of my answers to their questions. It allowed for transparency as well as giving the teachers a sense of ownership to the research process.

4.3.4 Document analysis

To further understand whether and how teachers understood the objectives of the TTPSP interventions and how this translated into their teaching in their own classrooms, a number of school-based documents were analysed. These included lesson plans, assessment tasks, learners' workbooks and tests/examination scripts. I was interested in the learners' written work as an output from the TTPSP. This was based on my belief that improving teaching and learning in the classroom would be evidenced by learners who are cognitively stimulated in the class room. As such, the learners' written work would provide some indication of the extent to which these teachers were succeeding in this effort.

In addition, the way teachers plan and make decisions about what should be taught in their classroom is a good indication of the way many see themselves and their roles in the classrooms. According to researchers such as Fullan 2002, Cohen, 1999 a basic requirement for

successful teaching is to plan meaningful experiences for students. Planning for teaching and learning forms an integral part of the intervention and is central to the TTPSP focus for change and development. As such, their lessons or curriculum plans would yield data related to this issue.

Furthermore, to further understand the objectives of the TTPSP interventions and particularly in the context of emerging data from schools regarding the organisational and staff development needs, documents from the project were analysed. These included TTPSP plans, workshop plans, learning materials, and course outlines for the various modules of the ACE.

4.4 DATA ANALYSIS

Strauss and Corbin (1990:59) make the point that “data collection and data analysis are tightly interwoven processes and must occur alternately because the analysis directs the sampling of the data”. Data analysis needs to be done in relation to its collection, but also needs to be examined from a number of different perspectives, e.g. the collaboration of the analysis data that was gathered after each

observation and interview. As such, data analysis in this study was continuous throughout the research process. The data was analysed using the constant comparative method (Glaser & Strauss, 1967). This means that throughout the fieldwork, notes from classroom observations, interview transcripts and informal discussions with participants were constantly analysed and reviewed for emerging questions and issues. These emerging questions were used to develop more in depth, focused questions for subsequent interviews as the research proceeded (Glesne and Peshkin, 1992) and for verification of initial assumptions and questions.

In a study that has open questions such as this one, there is a danger of looking too rigidly at coding the data which could result in contrived findings. Strauss & Corbin's (1990:58) reference to "maintaining a balance among the attributes of creativity, rigour, persistence and theoretical sensitivity" needed to be explored. So in the case of TTPSP, I was not looking for a single definite/definitive answer but rather a better understanding of why classroom practice was not taking place in the selected TTPSP schools. Firstly, questionnaires were collected and all the responses were coded and collated. The data in this study was analysed through a process of "open coding", described by Strauss & Corbin (1990:62) as "naming and categorising of phenomena through

close examination of data". The collected data from the questionnaire were analysed both quantitatively and qualitatively, collated and integrated with information gathered from the literature. For the open-ended questions, responses were grouped together and arranged into themes. The data were arranged into confirming themes. Secondly, data from the interviews were organised into themes that addressed the main research questions. These themes will be explored in chapter six.

Thirdly, classroom observation requires selection at a number of levels: The research question; the context of the classroom; the aspects of the classroom life which is to become the focus of enquiry; the tools to record and store data; procedures for observing; the subjects or events to be observed; the analysis procedures and the method of reporting the data all form an integral part of the observation. All data were secured and managed at the TTPSP office, for easy access and to ensure confidentiality of the data and the respondents.

In concluding this section on data analysis I quote from Gerdes & Conn (2001:183-191):

Part of the uniqueness of qualitative methods is that they can serve as an impetus for cultural change as the method explores dynamic systems and process often unrevealed through traditional studies. As participants review the report from the qualitative study they are afforded an opportunity to dialogue and reflect as to their interpretations and observations, a process earlier referred to as member checking.

By using the qualitative method I was able to confirm the ACE student's answers and ensured that I was focussed on teachers' perceptions regarding the role of the TTPSP in changing their classroom practice. These perceptions are explored in Chapter Six

4.5 LIMITATIONS OF THE RESEARCH

Firstly, although there are positive claims about case study research in terms of its "uniqueness, its capacity for understanding complexity in particular contexts" (Bassegy 1999:36), disadvantages have also been identified. These include the difficulty of generalising from case studies. Schools as educational institutions, including the teachers who teach in them and with them, are heterogeneous groups made up of a

variety of different attitudes, attributes, aims, ideologies and past, lived experiences.

Secondly, according to researchers (Bassegy, 1999; Cresswell, 1998) the weaknesses of case studies are that one cannot generalise the results except where other readers or researchers see their application. If the case study has no application to a researcher he/she will not use the case study as a reference guide. They are not easily open to cross checking, hence they may be selective, biased, personal and subjective and they are prone to problems of observer bias, despite attempts made to address reflexivity.

Since the purpose of my research was to understand why classroom practice remained unchanged despite the interventions from TTPSP, the study could be identified as exploratory, with the intention of explaining and describing what was happening without making any value judgments. As such, the study cannot be used to make broad statements about in-service training. Having said this however, by making this research explicit other service providers will be able to make recommendations to their own site work.

Thirdly, the researcher was the primary instrument for the collection and analysis of the data, and research bias could be introduced in the research study. Issues such as reliability, validity and the lack of rigour could have played a part in the research. The above has been dealt with to ensure that the study is credible to the TTPSP, TSAM (Toyota South African Motors) as well as to the study itself. For example, as the then manager of the TTPSP as well as a researcher, I was aware that tensions could arise because of the power relations involved from working in the schools. To prevent confusion or tension, I always ensured that the schools knew whether the visits were for TTPSP or for my thesis and the principals and teachers interviews were conducted during the holidays so that I would not impact the school day.

Fourthly, my seeking permission from the schools/educators as well as principals who trust the TTPSP was valued. By then, confidentiality was adhered to at all times. While at times both these roles were complementary, allocating adequate time to each role (i.e. researcher and manager of the TTPSP) proved to be extremely challenging. Simons (2006) summarised general international ethical procedures and standards for evaluators. These relate to activities of design, planning, obtaining informed consent from participants, safe guarding

privacy as well as confidentiality and then reporting the evaluation fairly. The thesis conformed to these standards in that:

- The study was designed to involve participants and provide feedback to them as well as project management.
- No respondents were named in the report and none were asked to provide information or opinions that would cause them discomfort, such as personal information or criticism of specific individuals.
- All participants consented to involvement, and the findings were presented in an impartial and open manner.

Lemmer (1994:255) asserts that the researcher is not an “invisible, anonymous voice of authority, but a real, historical individual with concrete, specific desires and one who: bare their souls”. Rather, she contends that “researcher values do not constitute a limitation in qualitative inquiry; rather they are considered as essential component of this research methodology”. (Lemmer, 1994:255) However, while the researcher must immerse himself in his/her subject’s life world, he/she must still have a “certain detachment from the subjects and their perspectives so that after understanding his subject’s reality, he can go beyond it to see what the subjects do not see” (Lemmer 1994: 250).

Fifthly, the challenge in many INSET programmes is that researchers find themselves researching a phenomenon while they are trying to build it (Wilson & Berne, 1999). In the case of TTPSP, I was generally asking questions about teacher's practice that they had acquired from the project, while the project was ongoing.

Sixthly, another limitation was experience while conducting research in transitional contexts such as South Africa as there are continuous ongoing changes within the educational field. Given the very nature that education is currently in, there is constant pressure to ensure that what we do as researchers has meaning and is impactful to communities and organisations. In such contexts Tobin (1990:9) suggests, "disruptions to carefully conceived plans may take on more dramatic alterations". For example: researchers may be unable to gain access to schools within which the researcher was intended. This may be due to class boycotts, students or teacher strikes. In this respect, the school context is a microcosm of wider social changes and therefore a variety of macro and micro level factors come to be played out within the school context. Researching the subjective interpretations of research subjects may alter significantly in relation to time, place and context during the data collection process. During

the course of this study, several teacher strikes meant that I had to cancel scheduled meetings and lesson observations in the schools.

Lastly, another limitation was that I had to ask teachers to translate for me at times. Because of my inability to understand Zulu, the focus of the observations would be more on the process, so in recording the observation, I made qualitative notes categorising them into themes. These are described in Chapter Six; Creswell (1998:129) describes an observation protocol of separating descriptive notes from reflective field notes. I followed this protocol, drawing up a setting plan and noting educator procedures and learner's responses.

4.6 CONCLUSION

This chapter described the research design and methodology, including the data collection and analysis methods used to address the research questions in this study. The limitations as well as the trustworthiness of the data collected and analysed in the study are also explored. The latter involved triangulation of data collection methods as well as conducting classroom observations at different times of the day.

Chapter Five will explore the research settings and contexts of the five schools.

CHAPTER FIVE: RESEARCH SETTING

5.1 INTRODUCTION

As stated in the previous chapter, the setting for this inquiry involved five schools who took part in the TTPSP interventions and received benefits like: the Advanced Certificate in Education (ACE), school-based support, and management training (see Chapter One). The schools are located in the greater Durban area including the Durban South and Pinetown regions. At the start of data collection in 2004, three of the schools had been with the project for three years. This means that the schools had been through the project's three-year school cycle described in Chapter One. During this period, teachers enrolled in the ACE had been attending contact sessions at the Toyota Teach facilities. In addition, a facilitator from the TTPSP had been providing classroom support to the teachers enrolled in the ACE as well as management training for the School Management Teams (SMT's), with the third year seeing a reduced presence of the facilitator in the school. The remaining two schools had been participating in the project for two years. A detailed description of the five schools follows in this chapter.

For the researcher, as the project manager at TTPSP, gaining access to all the five schools was not problematic. I had worked with many of the schools as well as the teachers from 1995 when they were involved with the project as 'wave one' and 'wave two' schools (See Chapter One). This trust was inevitable in the research process; the principals did not see me as inspecting their school and teachers but rather as a way of providing feedback to their school. This was important in achieving a trusting relationship with the research participants, as it was central to the success of the research study and creates opportunities and potential for greater sharing of information (Ritchie & Rigano, 2001). My interactions with the principals suggested that they felt proud to have been selected to participate in the study.

However, it is important to acknowledge that my position as project manager and benefactor to these schools and principals and the unequal power relations that came with it might have led to a distortion of the data. Some of the principals and teachers might have felt compelled to cooperate for fear of losing the benefits they were enjoying from the TTPSP. These 'benefits' included resource materials for the student as well as school support. However, through my long standing working relationship in the schools; the level of trust and

professional relationships I had gained with both the teachers and the principals; as well as the informed consent I gained from them to conduct the study led me to conclude that these threats have been adequately addressed, and that the impact, if any, was minimal.

To gain entry, at the beginning of the second term in 2003, I had informed all the five participating principals that I was a doctoral student and would be requesting access to their schools as sites to conduct the research. Each principal was given a letter explaining the purpose of the study and requesting permission to conduct the study in the school (See Appendix 1B: Permission Letter to Principals), and a copy of the questionnaire (See Appendix 2: Educator Questionnaire). This mutual relationship, which was based on trust and respect, was meaningful. A school information data sheet was also conducted with all the principals. The purpose of this form was to find out basic information regarding the school (See Appendix 4: School Information Data).

Fullan (2003), Davidoff & Lazarus, (1997) and Senge (1994) notion that school leaders need to understand the change niche in order to effectively lead and manage change and improvement efforts, and that

they must learn to cope with the complex, naturally existing process of change in schools. Hargreaves' (1998: 213) asserts that one of the most significant events in the life of a school is change in its leadership, and that "failure to care for leadership is sometimes a result of manipulation or self centeredness".

To request that the ACE graduates and students participate in the study, an 'informed consent' letter describing the purpose of the study and the conditions for participating was distributed to potential participants in the five schools (See Appendix 1A: Informed Consent Letter to Teachers). Participation was voluntary and an individual teacher could withdraw at any time during the research without penalty, and anonymity would be ensured throughout the research and publication process. A total of 23 ACE teachers agreed to participate in the interview study. A total of 60 questionnaires were received from the schools. (See Appendix 2) The five Principals of the respective schools were interviewed and a questionnaire was also distributed to the principals (See Appendix 3). Their distribution across the five schools is described in the sections that follow.

5.2 THE SCHOOL CONTEXTS

As discussed in the preceding chapters, in order to be effective, Whole School Developmental (WSD) activities need to occur in an environment that is receptive and conducive to change and development. These include a positive school context involving high levels of parental and community involvement, effective management, teacher support, availability of human and material resources, and teacher and learner motivation amongst others. To understand how the different school contexts in the five schools might impact on teaching and learning in general, and the activities of the TTPSP in particular, a good analysis of the school contexts became necessary. To do this, five schools¹ benefiting from the activities of the TTPSP were selected for participation in the study. These are described below.

5.2.1 Ekhanyeni Primary School

Ekhanyeni Primary School² is situated in a semi-rural area south of Umlazi outside Durban. According to the principal and teachers, the surrounding community and catchment area for the school is characterised by high unemployment rates, poverty and crime. This

¹ Pseudonyms have been used to refer to the five schools to protect their anonymity.

was evidenced by an examination of the school's admission register which indicated that most of the parents were unemployed and that most of the children lived with their grandparents. School fees were charged at R50 per year. Despite this being low, even in comparison to other schools in the area, only 75 percent of the learners had paid the full amount at the time of data collection. Most of the teachers at the school sent their own children to neighbouring and sometimes far away former white and Indian schools in the Durban area, perhaps indicating their judgement of the quality of education in the school in which they taught.

The school was fenced with barbed wire, with some women from the community selling red chips and sweets to learners at break times. Most afternoon learners were found loitering and playing in the schoolyard. The medium of instruction from grade 1-3 is isiZulu and from grade 4-7, English.

Staff development (i.e. school planned activities) took place twice a term from 13:30-15:00. The principal communicated with the staff through circulars, and staff meetings were held once a month. When asked if there was a policy for staff development, I was told that, "it is

ongoing staff development”, but no evidence of these staff developments was documented. These meetings however were scheduled in the year plan. There were no minutes to reflect this. This ongoing staff development as reflected in the TTPSP’s WSD interventions is crucial if change is to occur at all levels. In addition, available literature also suggests that schools can only develop if educators individually and collectively develop (Hopkins, et al, 1994). The Principal has been at the same school for 33 years and started as a teacher.

At the start of data collection in 2004, the learner population at the school stood at 750, ranging from grade R to grade 7. There were 12 classrooms, with most of them having broken or missing windows and no doors. The average number of learners in each class was about 60, and one classroom (grade four) had 112 learners. When enquiring about the large class size, I was informed that the classes were combined because of lack of floor space. Two teachers had been assigned to the class. However, one of them, an HOD, often did not attend the class, leaving the level one teacher to cope with the large class (82 learners) and the complexities that come with it. The latter

was a graduate of the TTPSP ACE, and therefore, was one of the main respondents in the study.

The school had 17 teachers (2 male and 15 female). Teachers' qualifications at the school ranged from the old Primary Teachers Diploma, with the highest qualification being a BA (See Table One). Five of these were what I refer to in this study as the TTPSP ACE students. Of these, two had already graduated from the ACE. The teaching experience of the teachers cumulatively ranged from 5 years to 26 years. Three teachers had been teaching at the same school for over eighteen years. These teachers only had a certificate in teacher education and I was emphatically told, "Were not prepared to help with the change, as 'we are old'". The nature of the demands that the new programmes may make on teachers involves acquiring new knowledge and attitudes to learning as well as a degree of flexibility. This is often an uncomfortable process to an insecure teacher and foreign to an authoritarian culture, "more work and more thinking for everybody: and thinking in itself is hard work" (Van Manen, 1999: 119).

The table below outlines the profile of the five TTPSP ACE students in the school who participated in the study:

TABLE ONE: ACE³ Students participating in the TTPSP programme

TEACHER	AGE	SEX	QUALIFICATION	TEACHING EXPERIENCE (Years)	TEACHING SUBJECT / LEARNING AREA
Mrs Khumalo	39	F	Primary Teachers Diploma (PTD)	13	All Foundation phase
Ms Mofeki	42	F	PTD	26	Mathematics, Natural Science
Mrs Shangese	38	F	Junior Teachers Diploma (JTD)	6	Foundation Phase
Mrs Nyembi	45	F	Senior Primary Teachers Diploma (SPTD)	5	All senior phase
Mr Sethi	51	M	SPTD	25	Technology

The school also had one cleaning lady paid from School Governing Body (SGB) funds. The office had electricity and there were three toilets for boys and three for girls. This meant six toilets for a total of 750 learners. The chaos and possible distress that confront learners during break times wishing to use these toilets was unimaginable. I did not venture into this aspect of the school during this inquiry. In the above school serious leaks from cisterns and external pipes could be seen. To complicate matters, the teachers were also using the learner's toilets, as no staff toilets were available. 65% of all the

³ Pseudonyms have been used to protect the teachers' anonymity.

classroom windows were broken. The question that comes to mind is: Could interventions from the Department of Education (DoE) play a role to address the situation or should interventions like TTPSP play a role in this? Perhaps the depth of specialisation or collaboration of institutions like the DoE with interventions like the TTPSP requires further, in depth research.

The school day officially started for staff at 07:30 and for the learners at 07:45. However, on many of my visits, school did not start until 08:15. Morning assembly took place every day and lasted for about twenty-five minutes. This took place in the garden. Absenteeism and late coming for school was a problem as many learners travelled long distances to school every day. One aspect of effective teaching and learning is that of behaving professionally at the school (See Chapter Two). At the above school, no one seemed to care overly about teacher tardiness. The school had electricity though the power at the time of this research was discontinued through non-payment. The school was using an extended connection to a nearby house for basic power to the office. The school had no landline telephone and no library existed.

5.2.2 Bhephimili Primary School

The second school selected for participation in the study was Bhephimili Primary School, also situated in the township of Umlazi, south of Durban. The school's accessibility is 1 km from the district office and the road is accessible. According to school records, about 15 percent of the parents were employed as domestic workers in the Durban area, some worked as unskilled labourers in nearby factories, and yet many were unemployed. School fees were charged at R110.00 per annum, but again, only 25 percent of the learners were able to pay. A duly elected SGB was actively involved in the school, and the chairperson, who worked in the Durban city, often came to the school to visit and attend meetings.

At the time of data collection in 2004 and 2005, the learner population was 949, distributed from grade R to grade 4. Out of the 25 teachers at the school, only four had their own children in this school, the rest of the staff compliment had children at tertiary institutions. The school had 25 educators (all females), two teachers had graduated with Bachelor of Arts Degree and two were ACE graduates. There were also four Heads of departments (HODs). Of these HODs, three had BA (Honours), while one had a Primary Teaching Diploma (PTD). The rest

of the teachers had qualifications ranging from PTDs, Higher Education Diploma (HED), and Bachelor of Education (BED). Their teaching experience ranged from 7 to 43 years. An interesting point was that the principal was not permanently appointed in his post. He had been Acting Principal and “had applied for the post but was waiting to hear from the DoE”.

In this school, all five TTPSP ACE students agreed to participate in the study. Their profile is outlined in the table below:

TABLE TWO: ACE⁴ students participating in the TTPSP programme.

TEACHER	AGE	SEX	QUALIFICATION	TEACHING EXPERIENCE (Years)	TEACHING SUBJECT / LEARNING AREA
Mrs Myhana	35	F	PTD	12	Foundation
Mrs Mbense	56	F	STD	43	Foundation
Mrs Pining	43	F	HDE	18	Intermediate
Miss Mdletshi	34	F	JPTD	16	Foundation

In terms of facilities, the school only had 16 classrooms for the 949 learners, many missing doors and windows, leading to serious problems of overcrowding in many classrooms. To illustrate, the

⁴ Pseudonyms have been used to protect the teachers’ anonymity.

average class size was 56, with the largest class accommodating 102 learners. There were seven classes for grade one, five for grade two, six for grade three and five for grade four. Because of the large number of learners and the shortage of classrooms, the school was operating a 'platooning' system in Grade One and Two, in which two sessions were held each day. One group of learners attended classes from 07:30 until 10:30. The class then moved to the corridor and the other group then went into the classroom, and class began at 11:00 and ended at 14:00. Most of the afternoon's learners were found playing in the school ground. In the platooning system it becomes very difficult to expect children, when they finally get into class to learn and concentrate at school.

Ironically, in comparison to other schools in the area, the school was relatively well resourced, with 13 toilets for the learners, and one photocopier machine. This was not in use and teachers used the TTPSP premises to do all the photocopying related to school activities. In addition, the office did have electricity but was without running water. A caretaker and a cleaner were employed to maintain the premises. One of the classes has a computer room. Only one of these 25 donated computers was functioning and according to the teacher,

many were programmed only for a basic word programme. The school also had a television set which was used on 'special days' to show learners 'fun' videos. Furthermore, these special days were used as part of the fundraising scheme for the school. On these fundraising days children brought money to the school (R5.00) and then were able to watch the videos. It was noted that many of the learners did not enjoy this privilege due to the fact that no money was available from the unemployed parents. When enquired what they did with learners who did not pay I was told that they "play[ed] outside" (Educator grade three, June 13, 2004).

Classes began at 07:30 for teachers and 07:45 for learners and finished at 13:45. Punctuality seemed to be a problem for some learners but this was on a very small scale (30%). Attendance registers were marked by individual teachers and checked by management. Morning assembly took place every-day for about fifteen minutes. Extra mural activities included athletics, music and cultural activities. Graduation day, awards day and a fun day were also held. Interestingly, the school participated in the READ storytelling competition. READ is one of the participating organisations that work for the TTPSP. Each year they hold a competition for schools where

storytelling is one of the main features, by entering the above competition the school gains exposure to these events. They further benefited through exposure to other schools and learners on strengthened their English language communication skills.

Staff development activities took place fortnightly. As one teacher explained, the school had workshops on curriculum, professionalism, and "all school related matters". In addition, Science and Language learning area committees were in place. The Foundation phase teachers got together and planned for the whole year, while the HOD checked these plans and was accountable to the principal. The principal sometimes taught a Grade 7 class, but according to him, this was not always possible, as the demands of managing a big school took him away from the classroom.

The school used a dual medium of instruction: isiZulu and English, with English starting right from Grade One. Teachers often sat together in their classroom for lunch breaks, indicating some level of collegiality among them and opportunities for common time for planning together and to discuss educational issues that might arise.

5.2.3 Dlambolo Primary School

The third school participating in the study was Dlambolo. Learners came from within a 3km radius of the school. Situated in a semi-rural area outside Umlazi Township near Durban, the school was poorly resourced, with only 25 percent of the parents employed, as shown by school records. Of these, many worked as domestic workers in Durban, so the majority of children were left with grandparents. School fees were charged at R80.00 per annum, and in contrast to the first two schools, 80 percent of the learners had paid the fee in the third term of 2003 when data collection for the study began. All financial records were kept at the school.

Compared to the first two schools, this was a small school, with a learner population of 300 hundred, distributed from Grade One to Grade Seven. The community in which the school is located had a history of political faction fighting in the 1980s and 90s. I learnt that before the faction fighting, the school had up to 500 learners. When I enquired where the learners had gone, I was informed that most parents had taken their children to former white schools in the greater Durban area.

There were seven teachers at the school (five female and two male). Of these, five were students in the ACE programme. The highest qualification among the teachers was a Higher Diploma in Education, while a few teachers still held the old Further Diploma in Education (later replaced by the ACE). The principal had also completed an ACE qualification through UNISA. Teaching experience among teachers ranged from 7 to 27 years. Five of the teachers had been teaching at the same schools for 18 years and one for 23 years. The following table (table Three) shows the profile of the three TTPSP ACE students:

TABLE THREE: ACE⁵ students participating in the TTPSP programme

TEACHER	AGE	SEX	QUALIFICATION	TEACHING EXPERIENCE (Years)	TEACHING SUBJECT / LEARNING AREA
Miss Wela	45	F	PTD	21	All Subjects – Grade 5
Mrs Bulose	34	F	PTD	26	All Foundation
Miss Mgobhozi	29	F	PTD	27	All Foundation
Mrs Xalahle	32	F	PTD	12	All Foundation
Miss Tshanya	25	F	PTD	13	All subjects

⁵ Pseudonyms have been used to protect the teachers' anonymity.

The school had seven classrooms as well as one office in the administration block. There were several other small buildings within the premises of the school, which the cook used as a kitchen when preparing daily meals for the learner's (the school had a feeding scheme). Class sizes ranged from 11-24 pupils depending on the grade. English was used as the medium of instruction from Grade Two (IsiZulu was used in the lower grades). As indicated above, the school was poorly resourced, lacking basic resources such as a telephone, fax, library, computer, photocopy machines and others. When principals were asked about their needs and challenges for the school, material items were mentioned frequently. This lack of resources was continually mentioned throughout the period of data collection in the school. The principal said that they did not have funds to pay for basic needs, (repairs, textbooks and learner materials) because the school fees were so poorly paid in previous years they continually ran at a deficit. The general condition of the building was liveable although on reflection this could mean different things to different people.

School started at 08:00 in the morning for learners and at 07:30 for staff and finished at 13:30 in the afternoon. Morning assembly took place every-day and usually lasted for ten minutes. I was informed

that staff development took place from 13:45 to 14:30 each day. However, during data collection in 2003-4 and again for a short period in 2005, I only saw this occur twice. The principal communicated with staff through an instruction book, staff meetings and sometimes directly. The principal did inform me that that because he had completed an ACE through UNISA he would 'have a lot to offer' and would be happy to join in with the research. He also mentioned that the older staff members did not like people coming into their schools. The principal, when not at the DoE offices taught Life Orientation to Grade 7s. The school regularly participated in cultural activities such as soccer and netball.

5.2.4. Xabahle Primary School

Xabahle, the fourth school selected for the study, is situated in a semi-rural area in the Pinetown district, just outside Durban. According to school records, 75 percent of the learners lived with their grandparents and relied on the social grant to pay for the school fees, charged at R50 per year. Consequently, at the start of data collection in 2003, about 75 percent of the learners could not pay this amount. As one indicator of the poverty in the area, one teacher in the school explained that parents tended to be very critical of expenditure by the

school and often accused the school of mismanaging funds (e.g. taking the learners on an excursion was considered not appropriate).

All learners travelled to the school on foot and had to cross a bridge to get to the school. During data collection in 2004, a learner was killed as she crossed the bridge during a rainstorm and the bridge collapsed. I was also informed that on rainy days the attendance of both teachers and learners was very poor. Absence had also 'become a habit' for about 45 percent of the educators. The teachers travelled by public transport to Pinetown (a bus or taxi) and were sometimes late for school due to un-reliable transport facilities in the town.

At the start of data collection in 2004, there were 632 learners in the school. There were 17 teachers, with teaching experience spanning a period of 10 years. Of these, four were students in the ACE programme. The highest qualification was a BA degree, with most of the teachers having qualified with the three-year PTD. The class size ranged from 35 to 62 learners in a class. The ACE students at the school comprised of the following:

TABLE FOUR: ACE⁶ students participating in the TTPSP Programme

TEACHER	AGE	SEX	QUALIFICATION	TEACHING EXPERIENCE (Years)	TEACHING SUBJECT / LEARNING AREA
Mrs Menini	45	F	PTD	14	LLC, NS
Mrs Ngobese	39	F	PTD	20	All subjects
Mrs Makhungo	48	F	SPTD	10	All subjects
Miss Cele	30	F	JPTD	7	All subjects

In terms of physical facilities, there were insufficient toilets at the school, three for the boys and three for the girls. The school did not have sufficient desks; most of the learners sat three to a desk. The outside of the building was painted in places, when asked if this was going to be completed the response of 'having no money' was given. The school had been burgled on numerous occasions as seen from the broken windows and the Principal's door. During the school holidays the school hired a security guard for the school and was applying for a permanent security guard through the DoE. In all five schools, security for the staff and learners was prevalent. This is a clear indication that security was of great concern for the five site schools.

The principal communicated with the staff through circulars and staff meetings were held once a month after 13:30. According to one of the

⁶ Pseudonyms have been used to protect the teachers' anonymity.

teachers interviewed in the study, the principal 'made all the decisions', (Educator grade 7, June 21, 2004) and then shared these with the staff. In addition, there was a policy of ongoing staff development (not written), but meetings were scheduled in the school's year plan. Staff meetings were meant to happen twice a month however I was informed this did not occur. The SGB chairperson had a shop across the road and was therefore a regular visitor to the school. There was no evidence of records being kept of the SGB meetings as well as the staff meetings. Parents meetings were held twice a year. In the first meeting only 47% of the parents attended. The principal did not teach, while the deputy taught natural science and economics, the other three teachers taught full time.

5.2.5 Bahlebhuleke Primary School

The last school in the study is situated just outside Umlazi Township near Durban. The school is about 15 km from the district Education Department office and the condition of the road is adequate. At the time of data collection in 2003, the school fees were charged as follows: Grade 4, 5 and 7 were charged R220, while Grade 6, who at the time was "not doing O.B.E" was charged R200 per year. 60-70% of the parents were employed however only 30% of these parents paid

their children's fees. The school records are kept by the financial committee of the school. 75% of the learners were orphans and many of the learners were living with their grandparents. It was also reported at the above school, that 80% of the learners come to school hungry and the feeding scheme was of much help to the school. HIV/AIDS and unemployment was rife in the area. The medium of instruction was English and this was from grade one onwards. When asked about this, the principal responded that this was the "Departments rule" and the parents "want their children to speak English". (Principal, June 22, 2004)

The learner population totalled at 976 learners, ranging from the reception class to grade seven. There were 22 classrooms, including a library. Class sizes ranged from 41 to 65 students per class. In terms of staffing, there were 24 teachers (4 Males, 20 females) and many of the teachers had over 22 years experience at the school. In 2003, the school lost four educators through to redeployment. Five teachers were registered for the ACE programme, and agreed to be participants in the research. They were enthusiastic and motivated about the research and wanted to know if their names would appear in the research. The ACE teachers were committed both in their studies (they

were in the top student list and two received the Deans commendation) and in the classroom.

The biographical details of the ACE students at the school were as follows:

TABLE FIVE: ACE⁷ students participating in the TTPSP Programme:

TEACHER	AGE	SEX	QUALIFICATION	TEACHING EXPERIENCE (Years)	TEACHING SUBJECT / LEARNING AREA
Mrs Zamo	43	F	SPTD	9	Natural Science, Technology
Mrs Ngcobe	34	F	HDE	11	All subjects
Mrs Nxumalo	37	F	SPTD	12	All subjects
Mrs Majolie	38	F	SPTD	13	MLMMS
Mrs Zungu	54	F	SPTD	10	All subjects

One security employee had been appointed through the SGB’s but this proved futile as the school was unable to pay him. The School Governing body did not have sufficient funds to pay his salary and had requested assistance for the DoE and were awaiting a response. The school has running water as well as electricity. 10 toilets are provided for the girls and 8 toilets for the boys.

⁷ Pseudonyms have been used to protect the teachers’ anonymity.

The school is resourced to a certain degree as they have 3 computers, a telephone and a fax machine. One computer is used for the administration lady who only had experience in Word Perfect. Other resources like library books and technological equipment had been given to the school from the TTPSP. These were locked up in the principal's office. The principal was often away from school "attending to the circuit office" (Teachers comment).

Staff development took place "through circulars and personal interaction" (Educator, grade 4, 2004). The principal did not teach as his "commitment does not allow it [and it is] disruptive to the learning at school" (Principal, June 21 2004). These commitments included being away at regular, out-of-school meetings at the DoE. The HoD's do teach but also have free time allocated to their timetable to coordinate and manage their departments. Final decisions about the school regarding functions and appointments were made by the SGB and the SMT. The staff met weekly for meetings but issues were discussed randomly. The total hours of the co-curricular activities were approximately 6 hours per week.

At the time of this research, the profiled schools had no legal recourse from the state to recover unpaid schools fees and in all five cases were often forced to economise to make ends meet. This was done by not purchasing sufficient text books or materials and not replacing broken items such as windows. Douglas (2006) in her evaluation report of TTPSP was told by one principal, "I tried to shame parents into paying fees by asking them to collect their child's report personally from me, I want to look them in the eye".

In all of the five schools fund raising activities appeared. The income generated from these activities ranged from R500.00 to R 10000.00. The table below indicates some of the activities and the use of the funds. In three of the five schools, money from fund raising was often used to subsidise disadvantaged learners for transport to sporting events or to pay for schools general needs such as the electricity bill.

TABLE SIX: Fund Utilisation

FUND RAISING ACTIVITY	FUND UTILISATION	NAME OF SCHOOL
Civvies, film show	Workshop catering	Bhemphili

Soccer, netball, indlawu dance	Electricity, seeds, first aid kits	Ekhanyeni, Dlambo
Civvies, valentines day	Telkom, electricity, sports gear	Xabahle

6. CONCLUSION

This chapter looked at the school contexts in which the teachers operated, and in which teaching and learning was meant to survive. In summary, the financial state of all five schools was dire. Concerns about the basic needs overshadowed the business of teaching and learning and assistance from TTPSP regarding fund-raising was given as an urgent need. In all schools, crime and violence was extremely high and learners and their families were described as poor, with a high incidence of orphans and grandmother headed families. In all five schools the teacher-learner ratio was considerably higher than the publicised departmental norm of one educator to 32 learners. The social contexts for all schools seemed characterised by poverty with many learners living with headless families, unemployment and HIV/AIDS prevailing alongside this. Chapter Six will look at the data analysis of the above schools and explore the themes that emerge.

CHAPTER SIX: ANALYSIS OF THE RESEARCH FINDINGS

6.1 INTRODUCTION

In spite of the TTPSP interventions, as reported in previous chapters, my observations as the then Project Manager, as well as evidence from monitoring and evaluation reports suggested that classroom practice among these participants, particularly participating teachers, remained largely unchanged. What they learned in the various project activities, particularly in the ACE, was seldom translated into classroom practice. Thus, this study aimed to identify and analyse the reasons for this discrepancy. Following on the work of Whitmore et al (2006), this thesis specifically aimed to understand participants' lived experiences of the project, in order to add insight into the complexities of teacher professional development and learning in the context of an educational innovation such as the TTPSP.

In this chapter, findings from the study are presented. While data was collected across five schools, the findings are collated across these five sites to form a single case study. The decision to analyse and discuss the data in this way was informed by the findings that no significant or

major differences in responses were found from the five schools. The following sections present findings from the study.

6.2. PROFESSIONAL AND ORGANISATIONAL DEVELOPMENT NEEDS OF TEACHERS AND SCHOOLS

The first research question in the research project asked: What are the professional and organisational development needs of the teachers and schools participating in the TTPSP and in what ways did the project activities attempt to address them? To address this question, data from interviews, questionnaires and observations in schools and classrooms were analysed. Findings are presented in the sections below.

6.2.1 Teachers' views of their development needs

Hopkins et al (1994) and Christie and Potterton (1997) suggest that the success of any school interventions (e.g. the TTPSP) should be measured by their ability to transform dysfunctional institutions into 'resilient' schools that succeed against all odds. As stated in Chapter One, the Advanced Certificate in Education (ACE), in which teachers from participating schools enrolled, aimed to ensure that classroom

practice changed to one where teachers used a more learner centred approach as well as challenging the common teaching strategy of regarding learners as 'empty vessels'. This section examines the views of the teachers about their professional development requirements for achieving the ACE outcomes as stipulated above.

Generally, a huge need for many of the teachers in the KwaZulu-Natal (KZN) province was to upgrade their qualifications, especially for those who only completed a teaching diploma at the then teachers training colleges (see Chapter One). This explained their enrolment in the ACE programme. In the questionnaires (N=60) and interviews (N=23) with teachers in the five schools, all prioritised higher education qualifications as their most important need as teachers. Specifically, 20 out of the 23 teachers' interviewed responded that obtaining the ACE qualification was of major importance to them. While they acknowledged the importance of the process they went through in all the aspects of the TTPSP, achieving the qualification (the ACE) was their main driving force.

Unfortunately, contrary to the intentions of the TTPSP, most teachers did not associate wanting higher education qualifications with

improving their classroom practice. In the interviews with educators, the following question was posed: Why are you studying and why did you join Toyota Teach to study further? The following three interview responses epitomise the views that the end product of the qualification was the ultimate goal:

I need to get out of teaching; I have three children who are at tertiary institutes and I need money for them to continue their studies so by doing this course I will earn more money (Educator One, Dlambo Primary School; May 21, 2004);

I am not married and need some form of education besides my three year diploma; the course is very cheap compared to other places like the university (Educator Two, Ekhanyeni Primary School; May 17 2004);

I wanted to do a course that adjust[ed] my salary scale, my friend was also promoted after she did the course with you at Toyota so I thought I would do it as well and see if this would benefit me especially when I have so many debts to pay (Educator Three, Xabahle Primary School, May 17, 2004).

Only three out of the 23 teachers interviewed reported wanting an additional qualification in order to change their own classroom practice and results, make a difference in the children's lives, and to learn more about Mathematics and Science. Examples of this are from two teachers who responded thus:

I wanted to learn more about mathematics as I have to teach it to my learners (Educator, Bhephimili Primary School; June 1, 2004);

I only have a matric science and I now need to teach it to the grade seven's, so I heard that Toyota gives these lessons and I thought it would be a good idea to join as I am not sure of all the outcomes that I need to teach (Educator, Bahlebhuleke Primary School; June 5 , 2004).

Other professional needs were also explored through the teacher interviews and questionnaires. To illustrate, 10 of the teacher's questionnaire responses identified assessment criteria in their classrooms as an area that required more training. One educator from Xabahle Primary School explained:

I am not sure how to use the assessment criteria that the department has shown us when we went to their workshops. In fact we were so many at the library that I don't know if what I am doing is correct, I need your help. (May 28, 2004)

Furthermore, 45 (out of 60) teacher questionnaires responses indicated that teachers required more training in technology. One response for example, asked:

Show us how to implement technology in such big classes, how do you teach technology to the lower grades, how Technology works when we have no equipment (Educator, Bahlebhuleke Primary School).

In addition, eight teachers felt they needed resources, especially library books, to teach more effectively. This was explored further in an interview with one of them, to which she responded:

We need dictionaries to assist the learners to look up words, their language is poor and they need help with English, many of our children come from poor homes so we must help (Educator, Ekhanyeni Primary School; July 2, 2004I).

Thus, evidence from this study suggests that the teachers' needs and reasons for studying with the TTPSP were very different from the project's rationale for the interventions. On the one hand, the TTPSP aimed to improve teaching and learning in the classroom and ultimately bring about holistic school improvements. On the other, the teachers were mainly interested in improving their qualifications, and to a lesser extent, in obtaining more/better resources for their schools and classrooms. They viewed the need for the qualification as personal rather than a professional development necessity. Teacher responses in interviews indicated that the interest of the teacher in being enrolled for his/her own qualification and personal development prevailed more significantly than the recognition of the need to change practice and develop schools. This might explain why their classroom practice did not show any change throughout the intervention and beyond (I return to this issue later in the chapter).

The study also examined the views of the principals in the five schools regarding their professional development needs as well as the organisational development needs of their schools. In the following section, these are explored.

6.2.2. Principals' views of their Professional and Organisational Development needs

The TTPSP intervention was premised on the notion that leadership, including curriculum leadership and management, is an important aspect of successful change in classroom practice. To achieve this, Davidoff and Lazarus (1997) have argued that such leadership, as well as the management of a school should not only rest on the principal, but should rather be diversified and shared across the institution and the school community. In this study, questionnaires were distributed to all five principals in the participating schools. In addition all five were interviewed to establish their experiences of the schools and of the interventions therein.

Unfortunately, the principals' responses tended to focus mainly on the needs for material resources such as libraries, electricity, and money to pay the electricity bill, strong rooms for cleaning material, and new buildings/classrooms. The principals noted that resources received from Toyota through the TTPSP were often vandalised and that security was needed to protect them. Expanding on this, in one school the principal asserted:

We believe that the TTPSP can offer us a lot in terms of giving us a car and making sure that our learners are getting the right education, and that our learners enter your science expo (Principal, Xabahle Primary School; June 21, 2004).

Another commented:

My one teacher did the course with you, she was very good and we got lots of language books and we also got a science resource kit, but we need more resources, my school is very big and the learners are very poor. (Principal, Ekhanyeni Primary School; June 21, 2004).

Once again, contrary to the intentions of the TTPSP, the principals believed the project would assist with material needs for the school. The need to improve teaching and learning in the classroom was not seen as the driving force behind professional and organisational development projects. Principals were, however, proud that they were a 'Toyota School' and felt that their learners were more actively involved in the school. So, although they viewed the TTPSP as important and beneficial in terms of material benefits, its potential

impact on the actual teaching and learning was peripheral. Chapter Seven will explore the possible reasons for this discrepancy.

6.2.3 Participants' experiences of the TTPSP

A sub-question in the study investigated the nature of the TTPSP intervention, and particularly what activities the project implemented in schools to address identified needs. This question was intended to establish the extent to which the TTPSP interventions were informed by actual needs of participants in schools as opposed to those pre-determined by the project in isolation from the participants' input. In essence, the study aimed to identify whether there was a fit between the intervention and the professional and organisational development needs identified by participants in schools. To address this question, first, through a questionnaire, teachers in the participating schools (N=60) were asked to rank on a scale of 1-10 a set of professional development and support activities provided by the TTPSP intervention. On this scale, 1 representing the least useful and 10 the most useful tool to address their personal, professional and organisational (school) development needs. Responses from the 60

questionnaires across the five schools are summarised in the table below.

TABLE 6.1: Teachers’ rankings of the usefulness of the TTPSP Activities

TTPSP SUPPORT ACTIVITIES	Teachers’ Average Rankings From 1-10
Good relationships	8.5
Policy implementation	8
Curriculum Support	7.5
Curriculum implementation(OBE)	7.5
Classroom support	7.5
Professionalism	7.5
Classroom change	7.2
Teaching/learning resources	6.5

As the table illustrates, the 60 teachers who responded to the questionnaire ranked the development of good relations as the most important professional development activity provided by the TTPSP, followed by support for policy implementation and curriculum support.

Classroom change was among the lowest ranked at 7.2. Worth noting in these rankings is the fact that the teachers' views are contrary to those they expressed in interviews, in which they prioritised getting a higher qualification. Most importantly, these teacher-identified priorities differed from those identified by the TTPSP: The improvement of teaching and learning or classroom practice among the participating teachers. It was this discrepancy that this study attempts to explain.

In the questionnaires administered to the five principals of the participating schools, they were asked to identify the kinds of support they had received from the TTPSP. Their responses' confirmed the teachers' responses. For example, one of the questions asked: What support did you get from TTPSP. Like the teachers, all five reported that the TTPSP had been successful in establishing relationships, while two felt that the project had been helpful to the School Governing Bodies, and one referred to the financial assistance given to the school. None of the principals referred to teaching and learning as a focus of the intervention.

In addition, both the principals and teachers felt that as a result of their schools' participation in TTPSP, their school management teams (SMTs) were able to deal more easily with issues such as conflict between educators. This was evidenced in informal interviews with the principals, in which the principal of Xabahle Primary, for example, stated that, "the workshops on personal empowerment helped me to understand my staff" (May 25, 2004). A comment by a teacher in another school seemed to elaborate on this:

You need to understand the team we work in... Toyota helped us with this (Ekhanyeni Primary School; July 2, 2004).

While improved relationships, school governance, financial management and understanding government policies can be argued as essential for effective teaching and learning, that the latter was not directly seen as the central role of the TTPSP in the schools is problematic. The perceptions by most principals and teachers of their own participation in the TTPSP, and their failure to prioritise improvement of teaching and learning, might have rendered the intervention difficult to implement and could have inhibited the anticipated change in classroom practice. The over-arching question generated by these positions, therefore, is whether and why the

project has been able or unable to bring these different positions together in ways that ultimately support teaching, learning and a change in classroom practice.

This is not to say that teaching and learning were completely ignored by the participating teachers or their principals. For example, in the interviews, the teachers were asked to identify the kinds of improvements they had seen since the implementation of the TTPSP in general and from enrolling in the ACE in particular. While responses referring to the improvement of teaching and learning were few among the participants, a number of them discussed their changing roles as change agents, particularly after participating in the ACE programme. To illustrate, one teacher responded:

My teachers in my grade are much better now that I have done the course and I feel more confident about lesson planning and assessment criteria. By having this qualification I have more experience and I will help my school to get better with getting more resources and winning more competitions (Educator, Dlabolo Primary School, May 12, 2004).

Another asserted:

I am more confident in my ability of assessment, I know what to do and my learners get good marks and we as teachers try and work together, we never used to do this before (Educator, Bhephimili Primary School, May 13, 2004).

As seen from the above responses, these participants viewed themselves as successful in implementing what they had learnt in the TTPSP. For them their success involved improved confidence in certain areas of their work, such as lesson planning and assessment. In addition, for them, relationships amongst the staff were viewed as an important indicator of success. In addition, the five school principals also identified some indicators of success and change among their participating teachers (These are explored in the sections below). However, while it can be argued that improved relationships are an important factor for facilitating classroom and school change, as I will illustrate later in this chapter, the actual teaching and learning as observed during classroom visits at the time of this study remained largely unchanged, a paradox the study aimed to understand and explain.

6.3 PARTICIPANTS' UNDERSTANDINGS AND ENACTMENT OF THE TTPSP INTERVENTION

The second research question in this study was: In what ways do the participating teachers as well as their principals understand the content (skills, values and knowledge) espoused by and taught in the TTPSP? A related sub-question asked: In what ways do their different understandings translate into what they do in the schools and classrooms? The following section addresses these questions.

6.3.1 Teachers understandings of the TTPSP

According to Rogers (1983), to ensure sustainable change in organisations (schools), individuals and groups need to understand and buy into the rationale and content of the proposed change. In this context, all role players must see the value of the process, and be committed to the innovation. Also, the school must be structured in ways that facilitate effective teaching and learning. Thus, the research question which enquired into participants' understanding of the TTPSP involved the extent to which they understood change in classroom practice and improvement in teaching and learning as a priority envisaged by the project.

To address the question, both in the questionnaire and interviews, the respondents were asked: What do you understand as the objectives and intended outcomes of the TTPSP in your school? Surprisingly, out of the 23 teachers interviewed, 44% identified improving and developing the school as the main objectives, while 33% identified improving and upgrading education in general as a key factor and only 7% identified community involvement. To elaborate on this aspect, one interviewed teacher stated that:

The Toyota Teach programme for me, it took out the pain, frustration and confusion in lesson preparation, facilitation and assessment. It created in me the passion, the desire to know more, to learn more. I was prepared for transformation so I am fearless to confront it now (Educator, Bhephimili Primary School; June 24, 2004).

In this particular question, participants' responses seemed to contradict their earlier comments that obtaining the qualification was the main basis for joining the TTPSP. Confirming the interview responses, 68% of the teachers who responded to the questionnaire believed that the project aimed to improve and develop the school. For this reason, it seems plausible that their understandings included

improving and/changing their classroom practice for the better. If this is the case and the participants had an accurate understanding of the aims of the project, the question remains: Why, in spite of the various TTPSP activities in these schools, and this understanding, has classroom practice remained unchanged? Could it be because the intentions of the project (improving classroom practice) were different from the teachers' own professional development needs (getting a higher qualification)? The challenge therefore is how best to ensure that teachers use these professional development activities to make them both purposeful in their own lives and appropriately within the schools. I return to this question later in the chapter.

6.3.2 Principals' understandings of the TTPSP

Continuing with the broad topic of participants' understandings and enactment of the TTPSP, this section focuses on the views of principals. The question posed to all five principals during individual interviews was: What do you think the focus of the TTPSP is? All five principals were in consensus that the general focus of the TTPSP was to help the schools and their educators. Three regarded the TTPSP as aiming to help educators by equipping them with knowledge and understanding and helping with their qualifications. One added that

the focus of the project was to send children to science expos. Another answered that the focus was to help his/her school get new classrooms. Elaborating on these, the principal from Bhephimili Primary School commented:

I think that the project is a good one, I have a few teachers who have enrolled with you and I can see that their classroom is brighter with more pictures, I know that you focus on giving the teachers more information about mathematics and science and I think that this is very good, you also gave my science teacher resource kits which was good. (June 21, 2004)

The principal from Bahlebhuleke Primary School stated:

My school is with the Toyota project and I know what the vision is, I can see my teachers getting the qualification and I am scared that they might leave to another school. They are good; you have helped them with this OBE in the classroom. You also helped me gain more library books. (June 21, 2004)

A third from Dlambo Primary further stated that:

Before they (teachers) enrolled with Toyota Teach (ACE) they were very shy and now they have developed confidence in such a way that they are even invited to the neighbouring schools for help and now the school is [in] the limelight as far as teaching and learning is concerned. Their behaviour has changed from negative to positive in almost all of the activities. (June 21, 2004)

Like the teachers, overall, the principals seemed to recognise the project aim as the pursuit of improved education generally and teacher qualifications and teaching in particular. As anticipated, these principals believed that the TTPSP was offering staff development to the teachers involved in the ACE and that this was sufficient in terms of growth for the school. The interview responses suggested that principals understood the TTPSP's focus as improving education through direct involvement with schools and educators. However, for most of them, the need for resources was still paramount and they looked to the TTPSP to provide them with material resources. This could suggest that a prevailing need for resources overwhelmed curriculum needs, despite the latter being the intended focus of TTPSP.

Again, for these principals, change or improvement in classroom practice was peripheral to their interest in the project, and whole school development as a strategy for achieving such improvement was largely ignored by this group.

The next section examines the participants' experiences of the implementation of the TTPSP in their schools and their views regarding the factors within the school context, as well as within the project that assisted or hindered the teachers' ability and willingness to implement what they learnt from the TTPSP.

6.4 Implementation of the Intervention

The third main research question in this study was: What factors within the school context, as well as within the project assisted or hindered the teachers' ability and willingness to implement what they learnt from the professional development programmes in the TTPSP? As discussed in Chapter Two, it is commonly accepted that any change in classroom practice tends to be slow, complex and influenced by a variety of socio-political factors (Fullan, 1992; Russel, 1992; Senge, 1990). Before examining the factors which facilitated the desired change in classroom practice and those which tended to inhibit it, it is

necessary to identify what professional activities were implemented in the schools and the project. In order to establish the nature of the activities experienced by teachers in the project, as well as their implementation in the schools, the questionnaires and interviews first asked the participating teachers the following question: What kinds of activities have you been involved in at the TTPSP?

Backett - Millburn (1999: 45) wrote: A teacher's career should be seen as a continuous process of development, adjustment, progress and adaptation, an ongoing process of reflection and growth. This view of professional development implies the active involvement of the educators themselves in an ongoing process of learning and development. The section below will examine and explore the kinds of activities the teachers in the participating schools were involved in through the TTPSP and how they understood such activities. Following this, the second section will address the question: In what ways have you used what you learn in these to inform your classroom practice or what you do in your lessons? The section will examine how the teachers actually implemented the TTPSP activities in their schools, and in particular, the actual classrooms practice of a selected group of teachers whose lessons were observed in this study.

The third and last section addresses the question: What factors have facilitated or hindered the implementation of the TTPSP programmes in your school? The various factors participants identified as either facilitating or inhibiting the implementation of the TTPSP activities in their schools will be explored.

6.4.1 Participants' experiences of the TTPSP activities

As stated in preceding chapters, the TTPSP-ACE, firstly intended to develop the use of learner-centred teaching methodologies among participating teachers so as to foster interactive learning. Secondly, it aimed to develop a better understanding of Language, Mathematics, Science and Technology among them. Bearing that in mind and to assess whether teachers believed that they were actually implementing what they learnt in the ACE, they were asked to comment on the question: What kinds of activities have you been involved in at the TTPSP? Responses varied in that some teachers felt they had used the following activities in their schools. The following is a cluster of the teacher's main responses to the questionnaire - Group work (10), technology (15), lesson plans (12) and classroom organisation (10).

In response to the question, 15 teachers felt they were able to contribute to discussions regarding technology (a new learning area).

One interviewee from Bahlebhuleko stated:

I felt in charge as I knew more than my HOD regarding technology, I knew what the learner's outcomes were in technology and I could contribute positively to the staff discussion which made me feel very proud (grade 4 educator, May 3, 2004).

Another teacher from Xabahle wrote the following in her questionnaire response:

Toyota Teach is helpful, they show us how to teach and to use the different skills in the classrooms, and I have been trying to do them in the classroom (Educator, Xabahle Primary School).

As seen from these comments the ACE graduates felt that they had been actively involved in their schools in implementing what they had been taught. However, as seen in the lesson observations, many of the activities such as the concept of group work were misunderstood by the majority of the teachers. For example learners sat in groups of twelve but no real cognitive activities or topics for discussions were given to the learners in the groups. In addition to these activities

many teachers also faced a variety of issues that negatively impacted on their teaching activities.

To illustrate, the project engaged teachers in drawing up lesson plans, and this seems to have hindered rather than facilitated the implementation of certain activities in the school. In one of the interviews, for example, a teacher declared:

I always plan on what the TTPSP lady wants. It is different for each subject which is sometimes confusing, but I want to get finish [sic] with the course so I do it, they are happy anyway (Educator One, Dlambolo Primary School, May 23, 2004).

Another stated:

I do two different lesson plans-one for Toyota and one for the school, I am sometimes confused but we do it like this for the maths lady, she is strict with this, she wants us to use real live objects [objects not provided by or sponsored by the school] in the classroom which are sometimes difficult to get. (Educator Two, Bhephimili Primary School, May 17, 2004).

Yet another announced:

I never used to do lesson plans, I know I have three different ways but I do what my lecturer requires. I also teach what I have learnt at Toyota (Educator Three, Bhephimili Primary School, May 17, 2004).

Once again, although the TTPSP wanted teachers to plan their lessons to encourage teaching and learning in the classrooms; the above comments indicate that confusion reigned amongst the ACE graduates, with some seeming to deliberately misinterpret the intentions of the project. The above duplication of lessons plans, (i.e. one being for the ACE module and the other for the school), indicates that there was possibly a flaw in the design of the TTPSP lesson plans. The TTPSP lesson plans might have been received better had they been adapted from what the teachers were already using. The teachers actively chose to go back to their old plans and the way they were used to planning. Interestingly, they reported doing the TTPSP lesson plans to satisfy the requirements for the ACE rather than to improve their classroom practice and learning - a mismatch between the projects rationale of improving teaching and learning and the teachers rationale

of gaining a qualification. These sentiments are echoed in their professional needs and requirements discussed earlier in this chapter.

Second, the principals in the participating schools were also asked to comment on their experiences of TTPSP activities. The SMI was intended to develop the management capacity amongst the principals so that they could support the TTPSP; as well as teaching and learning in their schools. Thus, a similar question was posed to the five principals in an interview: What kinds of activities have you been involved in at the TTPSP? For the five principals the answers ranged from attending a workshop on the Law, to attending a School Governing Body workshop; to learning about what their roles and responsibilities should be in a school. The principal from Xabahle stated the following:

I was sent to Cape Town when I first joined the project; the conference was on school governing bodies and how they could assist. Toyota paid for this, [and] I enjoyed [the experience] (July 2, 2004).

The principal from Dlambolo echoed:

I was taught how to ensure that professionalism exists amongst the teachers (June 22, 2004).

When I posed the question what his understanding of professionalism was I was given the following explanation: "I was shown how to ensure that the teachers arrive on time, lessons are planned, and examinations are handed in on time" (June 22, 2004).

The interview responses suggested that once again the principals saw the activities from TTPSP as benefitting them personally with very little intervention into the whole school developmental process. The activities that they were involved in did not create opportunities for shared learning experiences with the ACE students and graduates and this dissonance between what was taught in the intervention and what happened in the classroom may have contributed to the failure of the project to result in classroom change. The principals did not seem to understand their responsibility for supporting the innovation in general, and for curriculum management and supporting teachers in their teaching. Contrary to Elmore's et al (1996) notion that leaders are key to enhancing learning in schools, the above sentiments

suggest that the principals saw the intervention as a nice resource bonus but not crucial to improving their school environments and learning outcomes.

6.4.2 Participants' views of their school and classroom practice

From the experiences they identified above, the participants, in particular, the teachers, were asked: In what ways have you used what you learn in the TTPSP to inform what you do in your lessons? In their responses to the interviews, the majority of teachers interviewed (19 of the 23) seemed to genuinely believe that they were doing a good job in the implementation of the TTPSP activities and lessons in their classrooms. To illustrate, one teacher commented that those who had done the ACE were much better than their colleagues and teachers in other schools due to the fact they were given resources and support in the classroom by the TTPSP. This view was reflected in interviews with other teachers as well, where, for example, one commented that:

...the other teachers don't know much about science, they think they are teaching well but they are not, I have their learners in my class now and I am teaching last year's work to try and catch up. ...I know my learners are stronger than the other teachers in

my grade, you can give them a test and I will show you (Teacher, Dlambolo Primary School; June 09, 2004).

A teacher from Dlambolo commented in an interview:

I am more confident in my teaching abilities and believe that the parents can see this. My Learners get homework and we take them to shows, this Toyota has helped me with (Teacher, Dlambolo Primary School, May 24, 2004).

However, as I will illustrate in the sections that follow, from my classroom observations of a selected number of teachers, having additional resources, giving learners more homework did not necessarily translate into the kind of change in classroom practice the TTPSP desired.

Furthermore, as evidence of change in their teaching and that they were doing what was taught in the ACE, during interviews and in questionnaire responses, the teachers cited displaying more learners' work and giving more homework. The following are some of the comments from three teacher interviews conducted at the school Bahlebhuleke Primary School:

I give my learners homework on a Monday and then I check it on Friday. I never gave them homework before but I know I must do it for them (Grade, 5 Educator; June 08, 2004);

My learners know what is expected of them when they get in the class, they take their books out and they are ready for the lessons (Grade four Educator; June 08, 2004); and

My children are happy when they see I have tried to display their work on the walls... I do try in my classroom. My Head of Department is also happy with this... (Grade three Educator; June 08, 2004).

The participating teachers genuinely believed they were implementing meaningful teaching and learning by ensuring that homework was being done and learners work being displayed. However as evidenced by my observations during class visits in the five selected schools in this study, this did not translate into changing teaching and learning for the whole school (I return to this in the section that follows).

The principals' views of the extent to, and ways in which their schools were implementing what they were taught in the TTPSP were also sought. In order to establish this, first, they were asked: In what ways has your school changed since the inception of the TTPSP? In response, the principal from Bhephimili Primary School stated:

We are a Toyota school. Learners know what they must learn and all learners are active in the classroom. We get more resources than other schools so we are very privileged to join the project (June 12, 2004).

If one had to look at the context of the above school where a shortage of classrooms existed and 'platooning' (two class sessions a day serving two different groups of learners due to overcrowding) was still used, it becomes understandable that the principal saw resources as the primary focus of the TTPSP and not teaching and learning.

The principal from Ekhanyeni Primary School asserted that:

Toyota is good, they come and visit the teachers and also help us with the policies that we need to implement. As I am old in the school I do not know all the policies and Sta [Facilitator]

helps us with this especially with the governing bodies (July 2, 2004).

Furthermore, the principal from Dlambolo Primary School declared:

It is very good, my teachers are involved and we have entered many expos. My ACE teachers' hand in their preparation when the Toyota lady comes to our school (May 9, 2004).

The above responses further indicated that the principals saw the TTPSP as a resource tool and not as a tool for supporting teaching and learning in their schools. These comments are in line with their stated professional and organisational development needs addressed earlier in this chapter. Once again the importance of teaching and learning was marginalised in favour of resources and other needs.

To assess the role of the ACE in changing teaching and learning in the schools, the principals were also asked the following question: Has the participating teacher made a difference to your school? In response, the principal from Dlambolo commented:

We are principals of the school... these teachers who want to study must finish it quickly as some of them bring difficulty to our school with their new ideas (June 21, 2004).

This question was further probed with the principal and he explained because many of the older teachers felt that the project was too "much work and they did not like people coming to see them in their classroom". The notion of classroom support was negatively perceived by the school. The principal had also studied for an ACE qualification from the University of South Africa (UNISA) a distance learning institution, and had told me that his "qualification did not involve as much work as the TTPSP ACE" and that he did not require support from his institute. The idea that the TTPSP ACE was too much work was in direct contrast with the project's view that the teachers needed this support to get through the ACE, and to reinforce the skills they learn by practicing in their own classrooms with the support of a project facilitator.

Commenting on the impact of the ACE on the school, the principal of Bahlebhuleko Primary observed that the teacher who participated had tried to share her expertise with the rest of the school:

...but she was overruled as teachers wanted to leave early when she did a workshop and they were not interested (May 19, 2004).

One explanation for the teachers' reluctance to cooperate may lie in the fact that many of them had been in the same school for over 22 years. Hall & Hord (2001), point out that people are not natural resistors of change, and that for the teachers in schools change should have been seen as a continuous process, interpreted through perceptions and as well as interactions with people (i.e. the other teachers). Felkins & Chakiris (1993) says that this change is a dynamic process based on information, conversation, relationships and activities in changing the boundaries of the organisation.

Contrary to the intention of the TTPSP, the principals felt that the main change witnessed since the TTPSP had commenced was that of resources. As indicated above, on the one hand, it is possible that the availability of resources may contribute towards improving teaching and learning. On the other, it was worrying that in their views of the TTPSP and its impact, the principals (and the teachers) did not make a

direct link between these and improved teaching and learning in the classrooms.

Second, the principals in the five participating schools were also asked to comment on their perceptions of the extent to which their schools were successfully implementing the project activities, particularly in the classroom. The question was: How do you support the teachers in implementing what they have learnt from the TTPSP in your school? Two of the five principals stated that the teachers involved in the ACE supported the school by implementing new knowledge and helping with technology. The Principal from Dlambolo Primary commented:

She [the participating teacher] did a workshop for the science and technology teachers one afternoon. Everyone enjoyed it but we need more (June 11, 2004).

The principal from Ekhanyeni stated that the ACE graduate brought new ideas but pointed out how it was "difficult to work with all educators since some are lazy" (June 21, 2004). Two other principals confirmed this in their questionnaire responses, writing that the ACE graduates tried to support their schools but had no support from the

rest of the staff for their efforts. Confirming this, one teacher not involved in the ACE was asked about the workshops and made the comment:

We don't have time to do all the work the Toyota Teach facilitator wants us to do, we have other work to do so I can't do it, our classes are very big and we have a lot of work to get through (Educator, Ekhanyeni, May 2, 2004).

This is similar to earlier findings by Moletsane as outlined in her article, 'Swimming against the Tide' (2002), in which the respondents who were not involved in the ACE felt alienated as they perceived the project as showing favouritism towards the teachers involved. Many felt it advantaged certain individuals, especially concerning future promotion posts in their current school and others. This was the case particularly with educators involved in the SMI as it focused on management and was perceived to 'open doors' for the participants "to apply and get promoted to management posts in other schools" (2002:130). Moletsane's research indicated that non-participants simply withdrew from all developmental activities or actively blocked them when they were initiated. This impacted negatively on the

success of the project as the notion of whole school development was not implemented or supported.

As evidenced in their responses given during interviews, the five principals were extremely positive about their role of managing and organising teaching and learning in their schools. However this was in contrast with the teachers' perspectives. Evidence of this from one educator at Dlambolo was in her comment:

I am alone, my principal says I must try but how can you... when he does not support me with the rest of his staff (June 11, 2004).

The principals saw the ACE intervention as a success for the teacher who was involved as well as for their learners who were stimulated with the 'new' learning. However their comments and evidence from observations suggested that the principals failed to reach other teachers in order to bring about whole school development. According to the principal of Xabahle with regards to managing the teaching and learning in the school:

I ensure that the teacher meets with the HOD and explains what she has learnt; we have also used the Toyota people to do a workshop on assessments (June 22, 2004).

As stated in Chapter Four the above principal did not teach and merely communicated through circulars. The participating teachers had never seen him in their own classrooms. The contradiction between what I learned from the principal and then from the participating teachers suggest that the former were concerned that a poor reflection of them would result in the TTPSP support and resources being removed from the school. This reflects one of the limitations of conducting research in the institutions that benefit from organisations such as the TTPSP; and the power relationships which lead the beneficiaries to tell me what I thought I wanted to hear rather than the true experiences of the project.

Similarly, the principal from Bahlebhuleke claimed that:

I try and visit her in the class but this is not always possible, we as principals are very busy but the HOD says she is working very well (May 23, 2004).

Evidence once again depicts that these comments are contradictory with many of the participating teachers' views which suggested that they had no support from their principals to initiate workshops or to get the whole school involved. This study is premised on the notion that it takes commitment from all teachers in the school as well as support from management, and ongoing workshops to effectively implement the innovation and bring about change in classroom practice. Unfortunately, findings from the study suggest that because of the lack of the required support for the TTPSP activities, no whole school development took place, and no change in classroom practice occurred.

6.4.3 A Look at the Actual Classroom Practice

A sub-question in this section of the study asked: In what ways did the teachers' different understandings of the content (skills, values and knowledge) taught in the TTPSP translate into what they do in their schools and classrooms? To address this question, classroom observations were conducted in the five schools selected for this study. The lesson observations were conducted in 10 (33.3%) of the 23 teachers' classrooms intermittently over the three year period (2004-2006). Each of these teachers were each visited three times. The main

focus of analysis during these observations was the teachers' skills, values and knowledge in four aspects of the ACE: Mathematics, Language, Science and Principles of Teaching Competence. I observed classes from the foundation to the intermediate phase (Grades 1-4). Thus, a total of 30 lessons were observed. Creswell (1998:17) states that "observations like interviews are to be initial forays into the topic to describe what is going on". However, in this study, I have used them to either confirm or refute claims made by interview and questionnaire data as reported by participants. As I will illustrate in the section below, in spite of participation in the professional development activities in the project, particularly through the ACE, teachers' classroom practice remained largely unchanged.

To begin the section, a brief overview of the lessons I observed is presented. This is followed by a spotlight on two of the lessons observed as case scenarios, capturing content, methodologies and resources used. This is to provide some 'thick descriptions' of what was happening in some of the classrooms of the teachers who were either participating in or had graduated from the ACE offered by the TTPSP. This will then be used to analyse the extent to which classroom practice was changing in line with the vision of the TTPSP and the

reasons for the change or no-change. As set out in Chapter One, the learning outcomes for the ACE as described in the template for the Internal Approval of Programmes at the University of KwaZulu-Natal stated that, by the end of the programme students would be able to:

- Encourage primary educators to develop teaching methodologies which will ensure meaningful learning and thinking,
- Have a quality understanding of Language, Mathematics, Science and Technology,
- Move from an authoritarian teaching style to a mediative teaching practice that fosters interactive learning

First, contrary to the teaching espoused in the ACE and the TTPSP, eight of the 10 teachers whose lessons were observed (80%) relied heavily on teacher talk during their lessons. For example, it was common for them to introduce the lessons through a 'chanting' like method. In many instances this introduction continued for about 15 minutes with no active involvement from learners, who were merely passive listeners with the teacher 'in charge'. Lesson plans were not available and 'would be done later on'. My analysis was that the absence of lesson plans played a pivotal role in what and how the teachers taught their lessons. Lesson plans contribute significantly towards effective teaching and learning, and might have facilitated the

implementation of the TTPSP activities in the classrooms. Instead, in many of the classrooms, lessons were not prepared and often learners were found doing meaningless work (e.g. copying notes from the black board) and the learners sat in the classrooms like passive, empty vessels (Freire, 1970, 1998), not cognitively stimulated.

A lack of consistency in lesson plans was also observed. Prior to observation of the 10 teachers' classrooms, I examined 16 teacher preparation files across the five schools. On examining these, I found that six teachers copied the lesson preparation formats used from TTPSP, while 10 had used their particular school format, namely a very basic lesson plan showing aim, method, resources and learners activities. No indication was given about how these lesson plans integrated into other learning areas, a requirement in the outcomes-based curriculum framework followed in South African schools. A look through a particular educator's planning at one school (see figure 3) showed the following weekly planning sheet for each of the four subjects that she was teaching. These were compiled under the five headings as shown below and provided very limited information for the daily plan. As seen from this lesson plan there was no indication that learners' were being cognitively challenged or that the teaching and

learning would improve in the classroom. The lesson plan simply indicated what would be taught. This in itself did not impact teaching and learning as the lesson plan showed no clear outcome of how the lesson would ensure that learning would be achieved.

Figure 3: Educator’s planning

DAY	TOPIC	CONTENT IN SUBTOPIC AND POINTS	PUPIL ACTIVITY	TASK HOMEWORK
27/7/04	Expansion	Liquids expand when heated and cooled. Water also expands when heated and cooled	They will do the activity and write the results	

In one school I observed, no planning had been done for the term’s work. In 10 of the 30 observed lessons (33%), lesson plans did not marry with lesson outcomes. When I investigated this with the teacher from Xabahle I was told that for most of the teachers “it has to be done between the time the learners leave and the time teachers are allowed to leave, we don’t have time”. (June 22, 2004)

Firstly, according to Peacock (1994) in one of his monitoring reports of the TTPSP intervention, subject teachers were simply repeating the same lesson with no real cognitive, challenging work to the learners. This was contradictory to what the ACE set out to do.

Second, the lessons I observed were conducted mostly in isiZulu. While that might have been informed by the school's language policy, the TTPSP (particularly the ACE) taught and expected teachers to use English as a language of teaching and learning in their classrooms. Although this might have been a design flaw of the intervention, from the TTPSP perspective, these schools should have been preparing learners for entry into high schools, where the language of teaching and learning is English, and the ACE was supposedly training the teachers for this role.

Third, in all of the observed classrooms, learners sat in groups ranging in size from eight to 15. The perception amongst teachers was that this was in accordance with the outcomes-based education system and with the TTPSP which encouraged interaction and cooperative learning. However, in these classrooms, first, very little meaningful interaction among the learners and between the learners and the teachers took place. Second, the arrangement of the classrooms seemed to present problems as the groups were often too large (up to 15) and so it was common to see them climbing over one another, and leaning on desks. This became a problem for teachers, since many were not sure how to handle what they perceived as disruptive learners and often gave

verbal threats when learners became noisy or did not listen. As a result, utter silence would prevail when the teacher eventually did ask a question. The concept of group work did not seem to have been fully understood by all teachers as no interaction was evident within these groups and instead learners sat passively.

Fourth, in 65% of the 30 lessons observed, teachers used the resources provided by the TTPSP such as mathematics kits, reading books and science kits. It was only in two classrooms where teachers used the science kits for inappropriate age groups. For example, a science flask and crystals were used to purify water at grade three levels which was not included in the current curriculum statement, signalling a lack of appropriate curriculum content knowledge among these teachers.

To shed more light on this phenomenon and to illustrate and exemplify the content, pedagogy and resources the teachers used, the following sections describe and analyse snapshots of two lessons observed in course of the study. The first observed lesson was a Grade 4 (Intermediate phase) Mathematics class and the second a Grade 6 (Intermediate Phase) a natural Science class; where the module Principle of Teaching Competence was observed. This module provided

the Foundation course for the ACE Qualification. Mathematics was selected due to the fact that the TTPSP believed that an improvement in the areas of Mathematics and Science would enable learners to become more prepared in the vocational and technical fields.

6.4.3.1 A snapshot of a Mathematics Lesson

One of the lessons I observed was in a one hour Grade Four Mathematics classroom (May 26, 2005) at Bahlebhuleke Primary School. The teacher in this lesson qualified in 1978 with a Senior Primary Teachers Diploma (SPTD) and has been teaching since. At the time of the study, she was enrolled in the TTPSP ACE, from which she had completed several modules one being: Senior Primary Mathematics Education 1. Three of the specific learning outcomes for this module stated that the students would be able to:

- Involve learners in activities when teaching mathematics while developing learners' creative skills;
- Use formative and summative assessment results to diagnose and assist in improving understanding of mathematics
- Demonstrate a wider perspective of the curriculum being taught; and an extension and improvement in their understanding of

concepts and processes; growth in their own confidence in the classroom

Furthermore, the National Curriculum Statement for Mathematics has the following learning outcomes for Grade 4 (Department of Education, South Africa (2002) Revised National Curriculum Statement grade R-9 Mathematics, Pretoria.):

Learning Outcome 1: Number, Operations and Relationships: The learner will be able to recognise, describe and represent numbers and their relationships, and to count, estimate, calculate and check with competence and confidence in solving problems.

Learning Outcome 2: Patterns, Functions and Algebra: The learner will be able to recognise, describe and represent patterns and their relationships, as well as to solve problems using algebraic language and skills.

Learning Outcome 3: Space and Shape: The learner will be able to describe and represent characteristics and relationships between two dimensional shapes and three dimensional objects in a variety of orientations and positions.

Learning Outcome 4: Measurement: The learner will be able to use appropriate measuring units, instruments and formulae in a variety of contexts.

Learning outcome 5: The learner will be able to collect, summarise, display and critically analyse data in order to draw conclusions and make predictions, and to interpret and determine chance variation.

The school I visited (with a TTPSP facilitator who was responsible for the Mathematics module) was a peri-urban school located near the Umlazi Township outside Durban. When we arrived in the teacher's classroom, we were met with 53 learners all sitting in groups of ten with one group having 12. The reason was that on this particular day, one of the teachers had not turned up for school and the teacher was asked to combine the two groups of learners.

The walls were bare and the cement floors were cracked in numerous places. It had been raining the previous day and so the floors were muddy. Many learners had colds and so there was a lot of sniffing and coughing in the classrooms.

When we entered the classroom the children were reciting the multiplication tables of three's and then four's. The teacher stopped the lesson and we sat near the front of the classroom in a desk that

had been provided. I had asked the teacher for permission to record the lesson and she was happy with this arrangement. The teacher then started the lesson by asking learners about the previous lesson. First, while the school's language policy is that the medium of instruction is English from Grade One, the teacher spoke mostly in isiZulu, interspersed with English terminology such as 'multiplier' and 'long multiplication'. She gave the learners a few minutes to discuss what they had done the previous week and then asked one learner to explain in isiZulu. The rest of the class applauded this explanation.

The lesson content for the day was long multiplication. The teacher asked the learners to take out their 'jotters' (notebooks) and tear a page out and answer the questions she had put on the black board: 43×11 and 32×42 . At this stage the learners started to talk and she threatened to hit them when they got noisy. Whether or not this was an idle threat remains unclear. She and the learners then solved the problems, chorusing each step. For example, she would say: "We write down zero under the 10's and carry the 100's" and the learners would chorus with her along the way. The teacher then read one more example and learners tried to solve in their own jotters. She then gave learners a list of problems (written on the board) to do in their jotters.

As I walked around, I noted that many learners did not understand what to do, evident in that most of them could not get the correct answers. Many learners simply multiplied the vertical row. The teacher then stopped the lesson and tried to re-explain by using another example 54×29 . I recorded her attempts as follows:

What do we do first?

Four multiplied by nine is equal to...?

What do we do next?

The learners chorused their responses as she wrote the correct answers on the board. Once again the learners tried the question in their jotters. At this point in the lesson, there was a lot of interaction among the learners in their groups as they went through the process with the teacher. Some learners I observed did not talk in their groups. Some merely sat and stared out of the windows.

Once the groups, or at least those members who were engaged, had completed the task, the teacher asked the class to identify the 'multiplicand', the 'multiplier' and the 'product'. Again, there was chanting and choring, with the teacher writing the chorused

responses on the black board. The lesson lasted 35 minutes with about half the class completing the tasks before hand and waiting for the teacher to hand out new work. The lesson ended with the teacher saying: "Class, we are moving on to English. Who likes English? Put up your hand".

6.4.3.2 Reflections on the observed lesson

At the end of the lesson, I asked the teacher what she thought of her lesson. This was to establish whether she would relate it to what she had been taught in the ACE senior mathematics modules. Firstly, the teacher felt that children in groups of 10 worked effectively because there was a leader in each group, this even though the class size of 53 was too large. This was contrary to my observations which suggested that the learners did not know what to do in the groups and that no specific leaders were visible in any of the groups. This suggested that the teacher's notion of group work and co-operative learning involved seating learners in groups rather than facilitating groups of learners learning together and from each other. In fact, her comment to this effect was that since they sat in groups they should "all be quick to understand and learn".

When asked if she thought the lesson had involved enough challenging exercises for learners, her response was that she had actively involved them and given them challenging tasks, as evidenced by the fact that they could do long multiplication. The 'jotters' or notebooks were merely to copy down what she had written on the blackboard. However, for me, the fact that the learners had chorused their responses suggested that some (many even), might not have learnt anything new from this lesson, and that the failure of the teacher to check and ensure individual learning was problematic. For example, she did not walk around the classroom to check group or individual understanding, or to assist the learners who were not coping with the tasks. Instead, I saw a typical teacher in an authoritarian role who did not allow for active group discussions, because she regarded these as disruptive behaviour.

Furthermore, on the one hand, the ACE encouraged teachers to allow learners to write problems in their jotters and to show all the details of how they worked out the Mathematics problems, as this allowed for cognitive thinking on the part of the learners. The thinking was that this also gave the teacher a reason to look closely at learners who were not coping with what had been taught. On the other hand, this

learner centred approach to teaching was not evident in this lesson. For example, this could have enabled the teacher to notice the more able learners and to then provide more challenging questions to them so that they did not sit idle while waiting for their classmates to complete the tasks. From where I sat, and while I was walking around the classroom, I noticed that some children quickly grasped what was said, but no form of extension was provided for these brighter learners. They merely waited for the next instruction while sitting in their groups of ten. I anticipated that the teacher would look at involving the learners as the module specifically looked at "Involve learners in activities when teaching mathematics". Evidence of this was not observed.

Our discussion moved to her lesson planning, for which she showed me a piece of paper on which she had planned her lesson (In retrospect, I should have asked to make a copy of this for further analysis). My analysis of this lesson plan was that it was done in isolation, with no integration of the content (skills, knowledge and values) the ACE modules taught or encouraged. For example, based on what the ACE module intended to achieve, I expected to see lesson plans for at least a term (three months). No file was produced to show

that this was common practice. The teacher's explanation was that planning was difficult as she was the only teacher in the school enrolled in the ACE and the others were hesitant to work with her. This was within the context of the TTPSP doctrine of whole school development, which attempted to involve the entire school in the implementation of the intervention. The absence of long-term planning also meant that the teacher had not attempted to make links with other parts of the curriculum. This would need to be done to ensure extension and improvement in learners' understanding of concepts and processes, as required by the OBE curriculum and the specific ACE module, which intends to develop the ability to "demonstrate a wider perspective of the curriculum being taught".

From this lesson, my conclusion was that, in spite of her participation in the ACE as well as other activities in the project, this teacher had still not managed to change her classroom practice, and that she was still using the very authoritarian methods the TTPSP intervention had targeted.

6.4.3.3 A snapshot of a Grade 6 Natural Science lesson

The second lesson selected for analysis came from a school I visited, this time on my own, on June 14, 2004. Ekhanyeni Primary School is located in a semi rural area outside Durban. From the principal's interview, it emerged that the area is characterised by crime, unemployment and poverty. The school is fenced as vandalism is a concern for teachers who stated that "they lived in fear all the time, they rob them of their cell phones and jewellery" (Educator, Ekhanyeni June 21, 2004). Like many of the schools in the area, the school was poorly resourced, one evidence of this being the absence of running water and poor sanitation facilities.

I arrived at the school at 07:45 as I knew the official starting time for teachers was 07:30. My first observation was that the teacher I was to observe arrived late for morning assembly as well as for her class. With the learners (and me) already waiting, when she finally arrived, she got herself some tea, explaining to me: "I was late this morning so did not have breakfast". The learners were left to play outside in the fenced school yard until she called them. By this time the time was 08:20. She began the class by speaking to the learners in IsiZulu, which I speak and understand very little of. However, from her

gestures and facial expression (she tended to raise her voice and to point a stick at students, which she described to me as a 'pointing stick') I gathered she was angry with them for something.

When the lesson was finished we went to discuss her lesson she had done for me. I asked to look at her lesson preparation book and she informed me that, because she was late, she had left it at home. I did not question this as I felt it was not my place to do so. However, as stated in the previous section, the ACE had specifically taught these teachers to prepare lessons at least a term in advance, and I suspected that like most of the others in the schools I visited, this teacher had also not done her lesson preparation.

In this case, the observed lesson was a Grade 6 Natural Science lesson on frogs. I critique the lesson according to the intent and content of the ACE in general and specifically the learning outcomes from the ACE module: Principles of Teaching Competence. In particular, for this lesson, I selected four outcomes to use for a critique of the lesson. The four outcomes were specified as: At the end of this module, students will be able to:

- Develop own ideas about teaching relevant cognitive strategies in preferred learning area(s).
- Demonstrate an understanding of how working co-operatively can facilitate the achievement of outcomes.
- Develop and apply appropriate instruments and methodology to assess cognitive development in learners and to ascertain whether cognitive outcomes have been achieved; and to
- Use strategies to incorporate writing activities in the daily programme; be able to reflect on own teaching in relation to knowledge about the nature of reading, how learners develop reading competence and language skills.

Furthermore, the National Curriculum Statement for Natural Science has the following outcomes for Grade 6 (Department of Education South Africa (2003) Revised National Curriculum Statement Grades R-9 (Schools: Teachers guide for the Development of Learning Programmes, Natural Science, Pretoria).

Learning outcome 1: Learners act confidently on their curiosity about natural phenomena as they investigate relationships and solve problems in science, technology and environmental contexts.

Learning outcome 2: Learners know, categorise, interpret and apply scientific, technological and environmental knowledge.

Learning outcome 3: The learner is able to demonstrate an understanding of the interrelationships between science and technology, society and the environment.

The lesson commenced after the teacher had finished her tea and once the class was settled. Once again bare walls were seen; the learners, 60 in number, sat in straight rows. In some instances four learners sat at one desk. The 18 desks I counted in the room were clearly not enough for the 60 learners, and there was insufficient space for the learners to work on. I was asked to sit at the back of the classroom, and had a desk to myself, which made me feel awkward seeing the learners crammed at their own desks.

The lesson began with the teacher stating, "Today class I am going to teach about frogs. Say after me class: "Frogs". This was echoed by the 60 grade six learners who were sitting in rows. This chorus lasted for three minutes with some learners looking out of the window. Many of the learners looked bored, while others became more interested in my

tape recorder or playing with other learners than in the lesson itself, and the teacher often had to quieten them with verbal threats spoken in isiZulu. The lesson continued in English with some code-switching to isiZulu about what a frog was and why frogs were so important, namely because, according to the teacher, "they eat insects; some people cook them, like the French and they have four legs".

The teacher moved on by making the learners croak like frogs. Each learner per row had to croak causing much laughter and hilarity. The teacher became annoyed with one young girl who did not want to croak. She shouted, "Do it now and don't be embarrassed". This croaking went on for four minutes. She settled the learners again and instructed them to take out their science books. She then drew a picture of the frog, taken from a resource book (Sutton, F Volume 1V, 1960) on the board and labelled it. During this process the children chatted with their peers. Once again they were told to keep quiet and copy the drawing with the labels into their jotters. The actual teaching time, during which the teacher actually talked to the learners directly, was ten minutes. Another ten minutes was spent with the teacher and the learners drawing pictures of frogs – a total of 20 minutes. The bell indicating the end of the lesson period rang and the teacher told the

learners that they would finish the lesson the next day. I looked at the timetable and Natural science was only scheduled for the following week.

I asked the teacher if we could talk about her lesson, and while she agreed, she also informed me that she would have to leave soon as she had an appointment to see someone at the Department of Education (DoE) offices.

6.4.3.4 Reflections of the observed lesson

At the end of the lesson I interviewed the teacher with the intention of establishing how she would relate the lesson to what had been taught in the ACE in general, and in the module Principles of Teaching Competence. Using the four specific outcomes from the module identified above, I wanted to see whether the teacher would base her reflection on her lesson and teaching on what she had been taught in the ACE module Principles of Teaching Competence. I had discussed these outcomes with the teacher the week before I observed her and she had indicated that I would see more than these in her lesson and had felt confident about her lesson and looked forward to my visit.

Once again I asked the teacher what she thought of her lesson and contrary to my observations, she replied:

It was excellent, as the learners sat and listened, and they were quiet while drawing the picture.

I had hoped that she would have been aware that the lesson did not work and that she would have used what she had learnt in the project to reflect on what she could have done to improve the lesson and to involve the learners more and keep them engaged in the lesson. When asked why the children had to repeat the word several times, I was told that the repeating of the word frog was:

So the weak children can hear what we are saying, I think then everyone knows what the lesson was about.

On the contrary, my observations suggested that many of the children merely shouted the word 'frog' without really engaging with the lesson (many were more interested in me and my tape recorder). This indicated that the learners were bored and that no cognitive extension was provided. However it becomes important to note the distracting effect of having an extra person present in the classroom, on the learners. The teacher's reflections suggested that she had no understanding of how to assess the learners' cognitive development as

she believed that rote learning would help the 'weak ones' learn better. No time was given for the learners to engage with the concepts at hand. On a few occasions the teacher would challenge a learner by saying "why are you just sitting there?", "Why are you blank?" or "Have you got nothing to offer?" This appeal focused on rote recitation of the words and did not extend to any deep cognitive learning.

My assessment is that, for many of the Grade 6 learners the word "frog" was readily available in their vocabulary, and that, in line with the National Curriculum Statement (NCS), at this level that the teacher should have been introducing more scientific vocabulary (such as Amphibians, web feet, and others). The lesson was therefore, not appropriate for this age level, leading me to conclude that these Grade 6 children were not cognitively challenged or even engaged with the lesson. It also indicates that she might not have known and therefore communicated why frogs are important enough to study. The TTPSP encouraged teachers to ask open-ended questions and facilitate these group discussions. In this lesson, the teacher primarily used the question and answer method to solicit rote learning. Most of the questions were lower order questions like 'what is this?' When learners gave an answer that was not correct, the teacher passed the question

on till she got the answer she wanted from a learner. Her explanation for this suggested she had very low expectations of the learners in her class, asserting that:

These learners come from poor backgrounds and we cannot teach them things that are too difficult, we must remember that language is another issue.

I had witnessed these low expectations of the learners' abilities in most of the classes I visited during this study as well as in my role as the then Project Manager of the TTPSP. This is contrary to the principles outlined in the NCS which state that all learners have the cognitive capacity to grow and develop, principles which the TTPSP aimed to develop among the teachers and the schools participating in the project. However, based on my analysis, for this teacher, it is still business as usual, as she continues to have low expectations for her learners, and based on these, to provide low level teaching and learning opportunities for them. Thus, for her, in spite of participating in the various TTPSP activities and in ACE in particular, classroom practice had not changed at all.

Thus, based on these two snapshots, as well as the other 28 lessons I observed during the course of this study, in spite of the TTPSP intervention in participating schools, classroom practice remained largely unchanged. On the one hand, physical changes were noted in classrooms of participating teachers such as more pictures, charts, and alphabets on the walls as well as a growth in confidence amongst teachers themselves. Before the intervention classroom walls were bare and teachers did not display learners work or posters to encourage learning. In some cases no wall displays were set up because of theft, or the classroom being used by community members who tore down displays.

So, how did the participants explain this discrepancy? The next section explores participants' views about factors that facilitated and hindered the successful implementation of the intervention and why classroom practice has been difficult to change.

6.5 FACTORS INFLUENCING THE IMPLEMENTATION OF THE TTPSP ACTIVITIES IN SCHOOLS

The third research question in this thesis aimed to explore factors that facilitated or hindered the implementation of the intervention in the schools. In particular, the study aimed to find why, despite the various interventions, classroom practice among the teachers who participated in the ACE remained largely unchanged.

From the data, three main themes emerged as having an impact on practice in the school and in the classrooms specifically: Institutional culture (including isolation, professional jealousy, lack of support and commitment to the teaching profession); project-related factors (including the design and delivery model); and contextual factors (such as class size, resources and physical conditions in the schools). The following section will explore the three main themes.

6.5.1 Institutional Culture

As stated by Fullan (2000) and Rogers (1983) the ultimate goal of any restructuring process is to enhance teaching and learning in the schools. To achieve this, one of the important pre-conditions is that

the organisational (school) culture needs to change to accommodate and support the intervention (Fullan et Al 1991, 1991; Dalin, 1994; Dalin et al 1993 Fullan et al, 1992). Using the cascade model of diffusion of the innovation, the design of the TTPSP expected those who participated directly in the project activities (in the ACE for teachers, and the SMI for principals) to go back and 'share' the skills, knowledge, and values they had learnt and to influence change in practice in the whole school. To assess the extent to which this had happened, first, the questionnaire administered to the 60 teachers asked: "How have you managed to share your learning with others in your school?". Their responses included: "They don't want to listen to me when I want to share"; "I was told not to talk about my studies as it was not relevant to the school"; and "I tried to do it in my phase, they did listen initially but then we all got too busy and so I have not done anything". In the interviews, the teachers expanded further on these reasons, with one from Xabahle Primary School explaining:

Only the HOD can do this sharing of information as she is the HOD... what worries me is that I'm not sure if change is going to take place in the whole school. A person cannot make change alone (May 18, 2004).

A second from Dlambolo Primary School declared:

I am alone but everybody needs to be involved. A person cannot make change alone. Views of other people are needed so that we can change the way our school is run (Educator, Dlambolo Primary School; May 19, 2004).

A third commented that only the principal and the HOD were allowed to share information as:

They plan the curriculum for us and they bring the change, I was told they would do the change as they are the SMT's (Educator, Ekhanyeni Primary School; June 4, 2004).

During the interview the teacher from Xabahle Primary School elaborated on this by asking a rhetorical question "Why change if others are not?" She further went on to say:

Change is painful. It is very difficult to change when everyone and everything around you is static so sometimes when the lecturer (TTPSP Facilitator) goes back I sometimes do what I used to do, my school is old and the other teachers don't like the change (Grade 4 educator, June 3, 2004).

Fullan (1991: 56) recognises this point when he states that schools are expected to engage in continuous renewal, but that:

the way schools are organised, the way teachers are trained, the way the educational hierarchy operates and the way the political decision makers treat educators results in a system that is more likely to [retain] the status quo

In an attempt to ascertain why change had not occurred in these schools, the following question was posed to the educators in their interviews: What kinds of support do you get in your classroom from your principal and management team? In their responses, 18 of the 23 teachers felt they had no support from the principal which left them feeling isolated and frustrated. Comments by two teachers illustrate:

My lessons are good, and I feel empowered, but I can't get the other teachers to do the same, many say they are too busy and it is my course and I must just do it. I am unable to share with the others; my principal is often at the Department offices (Educator, Bhephimili Primary School; June 3, 2004).

A second teacher from the same school added:

My principal is happy with my work. He always tells me I am the only one who hands in preparation and whose examinations look challenging for the learners. This is because the science facilitators gave us some questionnaires and exams to copy, however he says I must carry on and not disturb the other teachers (June 3, 2004).

The participating teachers all felt that their experiences were enlightening, but that there was a lack of support both from the school and the principal. According to them, this contributed to poor relationships between them and the rest of the teachers, as well as poor understanding of the innovation in the schools. Data from the study also indicated the school culture did not allow for the participation of the teachers in curriculum decision-making. Considering the fact that teachers are important levers for curriculum implementation, responses from teacher questionnaires suggested that only 25 of 60 teachers were involved in making curriculum decisions in their schools. More light was shed on the issue of curriculum decision-making in focus group interviews with teachers. One teacher commented that: "only the SMT (school management team) do this

(curriculum)... we are only seen as Toyota students". (Educator Grade 3, Ekhanyeni, June 28, 2004)

Those who enrolled for the ACE seemed to share a sense of hope for an opportunity to gain exposure to further studies and to improve their classroom practice. From the researcher's perception, this soon changes into a sense of a struggle to survive, as one teacher commented. This struggle to survive consists of keeping what they have acquired and to transfer it to the whole school. One ACE student at Ekhanyeni Primary was asked by an older staff member, "who are you to tell us what methods to use?" This was not unique to this teacher. Most of the others I interviewed, all ACE students or graduates shared this need for survival which Davidoff & Lazarus (1997: 136) identify as professional jealousy. The authors write:

where a teacher is particularly innovative and trying out new and exciting things in the classroom, other teachers might well try to undermine her efforts by dismissing her as being 'ambitious', 'naive' or 'wanting to show other staff as being lazy'.

Data emerging from the questionnaires and interviews with the teachers in the schools suggest that teachers felt that they did not

have the 'authority' to organise themselves or to promote change within the school. Once again contrary to the intention of the TTPSP, participating teachers, without support from the school and other teachers saw limited growth in their own schools. This confirms Peter Senge's (1992) suggestion that even though people have the capacity to learn, the structures in which they function are often not conducive to reflection and engagement and this often hinders the change process. This lack of openness to change was evident in all five participating schools (and others beyond this study) and participating teachers became reticent to make suggestions or to express an opinion on curriculum and other issues in the school, this makes a rather inefficient environment for TTPSP ideas to take root in.

The discussion in this chapter suggests that schools are made up of different groups with dissimilar interests and that inadequate dialogue among the different groups may not only yield a barrier to successful classroom change, but may also be a source of potential conflict (Fullan, 2003). The findings suggest that part of this change process, brings about frustration and alienation and is found in the very nature of exposure to this discourse. If more teachers had been involved in decisions about the curriculum with the support of the school there

might have been an improved teaching and learning process in the classroom.

From the classroom observations described in the section above, it is apparent that many teachers returned to their traditional teaching style during and after completing the ACE. This study investigated reasons for this.

The next section examines the various contextual factors that affected the teachers in trying to change classroom practice.

6.5.2 Contextual Factors

Available literature (e.g. Evans, 2001; Fink and Stoll, 1998; Fullan, 2003) as well as data emerging from this study, suggests that a set of conditions or the social and physical environment in which teachers operate (i.e., the school context) could be a factor in the successful or unsuccessful implementation of change. For example, for teachers working in impoverished schools without textbooks and supportive infrastructure the notion of changing classroom practice must be daunting. Thus, as McLaughlin (1998:79) explains: To ignore context

is to ignore the very elements that make policy implementation a problem. To this effect, school contexts (including ethos, resources, management styles, and the nature and level of community involvement) have been identified as inhibitors of change.

Chapter Two in this thesis reviewed literature focusing on these factors. Of particular relevance is Moletsane's (2002) case study of one of the TTPSP schools, in which she identified one reasons for the failure of the intervention as context related factors. For example, her research into the school suggested that the basic lack of physical resources such as photocopiers made it difficult to implement the strategies learnt in the ACE. Outside of the TTPSP, Enslin & Pendlebury (1998:262) also point out that, formal changes cannot guarantee better practice, and where the policy makers take little account of the context and agents of implementation, policy may impede rather than enable transformation.

In the five schools participating in this study, poverty, unemployment and crime characterised the social context with many learners living in informal settlements, and some in child-headed households. Specifically, the principals at Xabahle and Bahlebhuleke Primary

Schools reported that 80% of their learners could not pay school fees (a mere R50 in Xabahle and Bahlebhuleke it was R220) and that HIV and AIDS were rife in the area. This was supported by teachers I interviewed in the two schools, with one stating:

I always try to bring lunch as I know in my class five learners live by themselves and have no food, they have no parents, the mother died of AIDS and the father was killed in an accident (Educator, Grade 3, Xabahle Primary School; June 29, 2004).

How can these learners concentrate if they have no food in the stomachs? I cannot concentrate when I come to Toyota straight from school, I need to eat first (Educator, Grade 4, Bahlebhuleke Primary school; July 2, 2004).

Although Maslow's (1950) hierarchy of needs is somewhat dated, his pyramid might still be applicable to many South African schools with severe material and or basic needs shortages. It is important to state that while it is not the mission of the TTPSP to cater for material needs in schools, the project facilitators are challenged with the social contexts that teachers face in their daily lives. As stated earlier, these

include crime (from theft, to assaults and vandalism), unemployment, disease and others. For example, during data collection for this study, four of the five schools were vandalised several times. Many teachers mentioned theft as well as fears for their own safety and of the learners. The stress of trying to cope with these contexts impacted negatively on the teachers and so changing their classroom practice was often not a priority for them. Thus, it is no surprise that more than 75% of the 60 teachers who responded to the questionnaire identified the context in which they worked as hindering their and schools' ability to successfully implement the TTPSP activities.

In addition to the social context described above, the school context also contributes to the success or failure of an innovation. To illustrate, as described in Chapter Four, the schools in the TTPSP were poorly resourced. Shortage of classrooms and overcrowding, often with 60-70 learners in one room (one grade three class had 80 learners in one class) were the order of the day.

In addition, teacher absenteeism often meant that other staff members, whose classes were already overcrowded, had to double up their class numbers and stand in for their colleagues. The warning by

Chisholm et al (2005) that "...class size is significant... the requirements for teaching and administration are simply overwhelming for educators with large classes", is of particular relevance here. Based on this context, the chances for the TTPSP intervention to be successfully implemented in these schools were minimal.

Furthermore, data emerging from the study suggests that the physical conditions in many of the schools made it difficult for teachers to implement new ideas. For example, in one school where the average number of learners in a class was 60, in my interviews with participating teachers one reported:

There is no electricity at school. Pupils have to sit 4 in a desk. All the windows are broken. I have 132 pupils. It is very difficult to do group work effectively (Educator Grade 3, Ekhanyeni Primary; May 22, 2004)

Another from a different school explained:

I teach grade three, we use the hall which is divided between me and the other teacher. When she shouts we can all hear her, it is not fair for my learners (Educator Grade 3, Xabahle Primary School; June 22, 2004).

At Ekhanyeni Primary there were only 12 classrooms for 750 learners and teachers often had to share classrooms between the grades. Furthermore, in many of the schools in the project, the only available resources were those provided by the TTPSP, and, contrary to the TTPSP idea of whole school development, only the ACE students (or graduate) were accessing them. One of the teachers' acknowledged, "Resources are important, without them we cannot teach effectively" (Educator Grade 7, Ekhanyeni Primary, June 3, 2004). A teacher's assertion illustrates:

I enjoyed working with the language books but they are not enough, the other teachers want to use them, we need more books (Dlambolo Primary school, June 3, 2004).

Also, concerns about the safety and vandalism was rife in the schools, leading those entrusted with these scarce resources to guard them jealously, even if it meant not using them for the purpose they were put in the school for. One teacher confessed:

I only use the resources when the ladies (from TTPSP) come to visit, otherwise I have to ask the principal for the stuff all the time. He has it locked up as we often have thieves here (Bhephimili primary school, June 6, 2004).

Of course, there were more selfish reasons for why some of the ACE students did not share these resources with others in the schools. An interview comment by one of them was telling:

It looks like we are better than them when we use this expensive equipment (Ekhanyeni Primary School, June 6, 2004).

In this context, one has to wonder: How can innovation implementation be a success under these circumstances?

So, that it was business as usual in these schools where teachers taught without the use of resources was evident throughout the study. For example, in one of the schools I visited (Dlambolo Primary) the teacher did not want the lesson to be observed because she had not brought the appropriate teaching aids with her, an indication that these were only used when the TTPSP facilitators came to visit and other special occasions. Obviously, this works against classroom change.

Even when the resources were available, some of the teachers I observed in the study seemed to struggle to use the additional

resources effectively. For example, some would sometimes use age-inappropriate resources in their lessons, which sowed confusion rather than facilitate learning amongst the learners.

Thus, from the above discussion, explanations for the poor or total lack of implementation of the TTPSP activities in participating schools included social factors (poverty, crime, vandalism, disease, unemployment and others), poor infrastructure (poor teaching resources, shortage of classrooms, and other infrastructure) and inability (and sometimes unwillingness) to use the available resources. Chapter 7 will address some of the implications of these factors on policy and practice in the schools, the TTPSP and the educational system.

The next section focuses on project related factors that negatively impact on the successful implementation of the TTPSP activities in schools.

6.5.3 Project related factors

As discussed earlier in this chapter, one of the explanations for the failure of the TTPSP intervention to take root in the schools might have

been in the design of the project itself. This section seeks to address the extent and ways in which the design of the TTPSP intervention might have aggravated the lack of change in classroom practice amongst participating teachers and the lack of institutionalisation of the project in schools in general.

According to Day (1999:67), educational change fails partly “because some problems are inherently unsolvable”, and because of the assumptions of planners. Findings in this study indicate that assumptions made by TTPSP programme designers about needs of the schools and teachers were not always synchronous with needs stated by teachers and principals. This means that what was anticipated from teachers did not materialise in the schools. Project assumptions of what teachers could do differed from what actually took place in the schools.

One of the design factors in the project involved the contact sessions for the ACE, the SMI and other aspects of the project. These were all held at the Toyota Teach facility in Prospecton, Durban. Travelling distances from some of the schools meant that some teachers had to catch three taxis to get to the facility, often arriving late for the session or having to leave their schools early to arrive on time. The

timing and frequency of workshops, coupled with these travel difficulties for teachers had a negative impact not only on the schools, but also on the 'implement ability' of the project activities in the schools. To illustrate, the schedule below shows ACE meetings at TTPSP for September 2004 alone:

September 2004	Workshops at TTPSP
9 th	Integrated sessions
10 th	Contact session Junior Mathematics and Science
13 th	Language
15 th	Environmental (test)
22 nd	Cognitive course
25 th	Principals' meeting
28 th	Exam- Language
30 th – 1 st Oct	Residential weekend- Umgeni Valley

As shown above, teachers attended the TTPSP facilities nine times in September. Obviously, this would have been detrimental to teaching and learning at schools, since teachers would have left schools early to get to the venue on time.

A related factor was concerned with the cascade model of innovation diffusion, which selected a few teachers (often one) from each school and expected that teacher to 'cascade' the lessons from the project to the rest of the school. As has already been illustrated above, for a variety of reasons, this proved difficult, if not impossible for many of

the teachers. As Moletsane (2002) observed, selecting a few teachers to attend sessions away from the school and expecting them to disseminate the information amongst their colleagues, made it even more difficult to gain trust and co-operation from the rest of the staff and reduced the chances for the intervention to take root. Instead, the interventions, by its own design, tended to target and benefit the individual (e.g. the one enrolled in the ACE) rather than the whole school community and context. Consequently, professional jealousy and/or feelings of alienation by those who did not directly benefit from the project meant that they became resentful at best and refused to cooperate in the implementation process.

Illustrating the impact of this complex interaction, in an interview, two of the participating teachers asserted that:

There is a need to make the principal and the other teachers aware of what we do, so we can go back to schools and share what we have learnt. This is good information. I go to the session and then I want to share but I am unable to do so in my school" (Educator Grade 4, Ekhanyeni Primary School, June 14, 2004);

and:

The TTPSP is a good project but we need to get the buy-in from the Principals, I can't do it by myself. He won't listen to me, and I want to show the other teachers what I have learnt (Educator, Bahlebhuleke Primary School; May 8, 2004).

As a result, while individuals might have benefited in terms of improved knowledge, their schools remain unchanged, making it difficult to implement new strategies learnt in the project.

A second design factor involved the fact that Mathematics and Science were compulsory modules for the ACE qualification. However, in the schools participating in the project, many of the teachers had never taught and/or studied these subjects. So in order to meet the competency requirement for the ACE, those who had enrolled had to arrange to teach classes they normally did not teach. That this was a recipe for the non-institutionalisation of the project in the school is self-evident, as upon completion of the ACE, these teachers who benefited from the intervention, would go back to teaching their own classes and subjects and never share or implement what they learnt in the project. In fact, the arrangements often impacted negatively on the whole school's project. A science lesson for example would extend

beyond the one period allocated on the timetable, so the teacher would have to use someone else's period, leaving that teacher with an outstanding lesson. This happened on most of my visits to the schools and often created resentment among the non-participating teachers and feelings of isolation among the participants. Two interview responses from the participating teachers illustrate:

They (TTPSP) take too long in the classroom, I have to talk about my lesson and then demonstrate, and in the meantime some teachers are waiting for their classes. The learners do enjoy the lessons but the other teacher gets cross when she is supposed to be teaching (Educator, Xabahle Primary, June 19, 2004).

I have to ask the science lady two weeks in advance if I can use her class, I know she does not mind but it does disrupt the school and the learners are sometimes confused (Educator, Xabahle Primary, June 14, 2004).

The design of the project called for TTPSP facilitators to visit ACE students' classrooms not only to assess the extent to which they were implementing what they were learning, but also to provide support

where necessary. Findings from this thesis suggest that while the teachers appreciated these visits and the support provided, the visits tended to impact negatively on the school. As stated previously educators had to arrange classrooms to teach specific lessons and these visits often confused teachers as well as schools.

Emerging from the above discussion is the fact that, on the one hand; teachers tend to view principals and Heads of Departments (HoD's) as key to decision-making and by implication, to the success of the project. Without support from the leadership, the teachers believed that their efforts would be futile. To this effect, as discussed in Chapter Three, the design of the TTPSP intervention relied heavily on school leadership. Leadership was seen as key to building and enhancing the relationship amongst the participating teacher, the TTPSP and the rest of the school. As data in this study has shown, such a relationship in the schools participating in the TTPSP was non-existent. Instead, the ACE students and or graduates were often resented and isolated by the rest of the teachers, and unsupported by the leaders they looked up to. Moreover, management problems in the schools tended to impact negatively even on the efforts of those principals who were willing to give support. For example, during data collection for this

study, two of the five principals were not secure in their posts, and, were being challenged by others in the schools. This ultimately made it difficult for them to provide the needed support for the implementation of the project. For example, in one case, the principals felt unable to provide support because he felt he was not in full control of the school. He explained:

I am trying but I need to know from the DoE if I will be permanent so I can begin with good teaching (Principal of Dlambolo, 21 June, 2004).

Explaining the failure to provide support for the implementation of the intervention, the principal from Xabahle Primary school asserted:

We as principals see one another at DoE meetings but I don't really discuss how teaching and learning can improve my school. I don't want to bring too much change as the SGB (School Governing Body) have not made a final decision about the post (June 26, 2004).

Of course some of the principals were reported to have been deliberately unsupportive, as evidenced in a teacher's comment:

It is a very sensitive area. To some principals it looks like we are a threat to them. Because we know more than them [principal] with this qualification [ACE] there seems to be some suspicion amongst our staff (Educator, Xabahle Primary School; June 4, 2004).

The teachers felt that their leaders did not actively get involved and they were left on their own to try and manage innovation.

6.5.4 Individual Factors

Other reasons for the failure of the TTPSP in these schools seemed to lie in the participating teachers themselves. For example, as suggested in earlier sections of this chapter, the teachers enrolled in the ACE mostly for personal reasons (e.g. to obtain a higher qualification so as to open doors to other and better job prospects). So, to further try to establish why the teachers reverted back to their old ways of teaching (namely teacher centred and authoritarian teaching) in spite of the TTPSP principles, in the interviews as well as the questionnaire they were asked: Why did you take up teaching? In response, their reasons ranged from: their mothers were teachers (7 responses); they were not accepted at the university and so a teaching diploma was the next

on the list (5 responses); and the availability of teaching bursaries from Government and the private sector (2 responses). One interviewee from Ekhanyeni Primary explained:

I was not accepted at the university but had a bursary from my father's work so I went to the teachers college, I don't know why I went, my father was very proud of me as this was the first time someone had in my family gone to a college (June 28, 2004).

Another reported that she was, "waiting to get a qualification and look for another position in the working world. I will earn more money" (Educator, Bahlebhuleke Primary School; June 28, 2004).

Fullan (1995) posits that teaching at its core is a moral profession and that professional development programmes must help teachers to link this moral purpose with tools that will help them engage in the change process. According to him (see Chapter Two) change and moral purposes are natural alliances which bring about improvements. The above reasons for teachers not wanting to be in the profession could have contributed to their inability or unwillingness to change the ways they taught according to what they were learning in the TTPSP.

6.6 SUMMARY AND CONCLUSIONS

This chapter has presented findings from the study that addressed the question: How and why does classroom practice among participating teachers remain unchanged despite the various inputs of the TTPSP? First, on the one hand, the teachers and their principals regarded the intervention as somewhat successful. For them, indicators of success included the provision of resources by the TTPSP, improved teacher qualifications, improved confidence among the teachers, including in their lesson and assessment planning, as well as changes in the classroom environment (e.g. seating arrangements, colourful classrooms, etcetera). On the other hand, data from the study, particularly from classroom observations suggest that the most important indicator of success for the TTPSP and the focus of this study: significant change in classroom practice, was not evident among the teachers in the five schools in this study. Several factors were identified as hindering this change. For example, first, while the TTPSP aimed to improve teaching and learning in the classroom and ultimately improve student learning, data from the study suggest that teachers were more concerned about improving their professional own qualifications, while their principals focused on getting more resources for their schools.

Second, findings from the study indicate that the ways in which participating teachers understood the content (skills, values and knowledge) taught in the TTPSP, influenced the extent to which and ways in which they implemented it in their everyday classroom practice in schools. Their different understandings translated into what they did in the schools and classrooms. For example, teachers believed that the TTPSP aimed to develop and improve the schools, however the own intentions of gaining a higher qualification remained their primary motive which as a result did not impact on classroom practice. Their principals felt that resources were paramount and looked to TTPSP for these resources.

In addition, for the teachers and their principals, the TTPSP taught them to change the classroom environment, and to them, making their classrooms colourful was one of the indicators of success. In terms of the curriculum, for teachers, confidence in their lesson planning and assessment was another indicator of success. For the TTPSP, success for the intervention, and the ACE in particular, would involve much more: actual change in the teachers' classroom practice.

Third, as discussed above, four main themes emerged from the data as impacting on practice in the school and in the classrooms: Institutional culture (including isolation, professional jealousy, lack of support and commitment to the teaching profession); project-related factors (including the design and delivery model); contextual factors (such as class size, resources and physical conditions in the schools) and individual factors. These factors hindered whole school development which in turn impacted negatively on change in classroom practice.

Chapter Seven will present a further analysis of the data in relation to the theory reviewed in Chapter Three and conclude with a set of implications for policy and practice.

CHAPTER SEVEN

WHY IS CLASSROOM PRACTICE SO DIFFICULT TO CHANGE? LESSONS FROM THE TOYOTA TEACH PRIMARY SCHOOL PROJECT

7.1 INTRODUCTION

As discussed throughout this thesis, in spite of the various interventions implemented by the TTPSP in selected primary schools in the Durban South region, monitoring and evaluation reports as well as my observations as the then Project Manager suggested that classroom practice among participating teachers remained largely unchanged. Thus, using a qualitative case study approach, the primary purpose of this thesis was to examine the reasons for this discrepancy. The study attempts to identify the factors that facilitated or hindered change in classroom practice amongst the participating teachers.

Findings from the study seem to suggest that teacher learning was either not taking place or that if it was; it did not translate into change in classroom practice. In this concluding chapter I juxtapose my findings from the previous chapter with the tentative propositions that I suggested in Chapter Three's literature review. In light of these, I

explore why classroom practice among participating teachers did not change. The chapter concludes with some policy and practice lessons for the TTPSP in particular, as well as the projected implications for professional development policy and practice more generally.

The next section summarises the key findings connected to the above research questions and discusses these in relation to the main discrepancy of why anticipated classroom change did not take place.

7.2 SUMMARY OF KEY FINDINGS

As stated above, the overall aim of this study was to examine the reasons for the above-mentioned discrepancy and to identify the factors that facilitated or hindered change in classroom practice amongst the participating teachers. As such, the overarching research question was: How and why does classroom practice among participating teachers remain unchanged despite the various inputs of the TTPSP? Specifically, to address this question, the first two research questions asked: What are the professional and organisational development needs of the teachers and schools participating in the TTPSP and in what ways do the project activities aim to address them? Data from interviews with teachers, questionnaires administered with

teachers and principals, and analyses of documents from the TTPSP suggest that contrary to the intentions of the project, obtaining the qualification (the ACE) was a far more important personal need for the participating teachers. Congruent to the teachers' beliefs and needs were the principals' perceptions that the resources their schools were getting from the TTPSP were paramount and that the project should provide more of them. Although improved relationships and financial management did improve in the site schools it was not the direct and central role of the TTPSP. As a result of the perceptions and understandings of the principals and teachers this seems to have translated into poor implementation of the intervention and the resulting failure to change classroom practice.

Rogers (1983:2) points out that tensions between teachers beliefs and their classroom behaviour exist and that this "represents a critical interface between beliefs and actions" and a "space of contention". As such, the third research question was: In what ways do the participating teachers understand and enact the content (skills, values and knowledge) taught in the TTPSP in their everyday classroom practice in schools? In essence, this question intended to explore the extent to which beliefs amongst teachers changed, and the ways in

which their classroom practice had changed. Analysis of data from interviews with the teachers and classroom observations, suggests that overall, in spite of the various TTPSP interventions, classroom practice remained largely unchanged amongst the participating teachers. Even when they believed that the TTPSP aimed to develop and improve the schools (including classroom practice), their own needs of gaining a higher qualification remained paramount, and changing their practice was largely secondary to this. Furthermore, as seen from the findings in this study, exposure to a course such as the ACE gives teachers another discourse, but it tends to be a parallel one that does not move back into the classroom. In summary all five principals believed that the main focus of the TTPSP was to help their schools with the need for resources. This was paramount for their schools to survive.

The fourth research question asked: What factors within the school context, as well as within the project, assist or hinder the teachers' ability and willingness to implement what they learn from the professional development programmes in the TTPSP? Analysis of data from interviews, questionnaires, and classroom observations suggests that several themes emerged from the data as reasons for the lack of

change in classroom practice: Teachers' personal needs; stakeholders' understandings and experiences of the intervention; institutional culture; project design and implementation; and contextual factors. The study has identified a variety of factors which tended to hinder the teachers' ability and willingness to implement what they learnt from the professional development programmes in the TTPSP. As discussed in the previous chapter, three main factors emerged from the data as impacting on practice in the school and in the classrooms specifically. These included institutional culture (including isolation, professional jealousy against participating teachers, lack of support from the school, and a general lack of commitment to the teaching profession); project-related factors (including the design and delivery model of the TTPSP); and contextual factors (such as class size, resources and physical conditions in the schools). Farber (1991:36) illustrates this by saying that many teachers begin their careers:

...with a sense that their work is socially meaningful and will yield great personal satisfactions. However this sense dissipates, as the inevitable difficulties of teaching... interact with personal issues and vulnerabilities, as well as social pressure and values, to engender a sense of frustration and force a reassessment of the possibilities of the job and the investment one makes.

In relation to the design and delivery of the project, as Moletsane stated (2002), removing teachers from their school context to develop in a specific area often fails as teachers learn best within their own context and not away from where they are to implement the innovation.

The next section analyses the findings listed above in relation to the theoretical literature reviewed earlier in this thesis.

7.3 EXPLAINING THE FAILURE OF CHANGE IN CLASSROOM PRACTICE

As stated previously, to explain why, in spite of the TTPSP intervention, teaching strategies remained largely unchanged, this thesis is located within three broad bodies of literature namely: Diffusion of educational innovations (Rogers, 1972, 1983), teacher learning (Borke, 1995; Greeno et al 1996; Fullan 1991) and organisational learning (Senge, 1990; Davidoff and Lazarus, 1997). The first theory informing analysis in this study is Rogers' theory of *Diffusion of educational innovations* Rogers (1972; 1983), which defines an innovation as a kind of social change in which some form of alteration can occur in the functions and structures of a social system.

Rogers defines diffusion of innovation as a process of communicating new ideas to stakeholders in an organisation (e.g. a school) so that they reach a common understanding of the innovation. According to the author, for an innovation to be successful change agents need to “sell” the innovation to the schools and the schools need to scrutinise the innovation by looking at both the advantages and disadvantages before it can be adopted into a process. Rogers states that in order for the innovation to be adopted and implemented it must be compatible with the existing values of the schools and the teachers themselves. Informed by this theory, as discussed in Chapter Two, I posit that the TTPSP intervention did not adequately take the contextual realities of the schools into consideration and this impacted negatively on its capability to change classroom practice. This led to the failure of the TTPSP innovation in the participating schools. Evidence of this is seen when teachers from the ACE wanted to implement some of their learning’s and the rest of the staff did not want to listen or participate in the activities. Participating teachers felt alone as no formal communication was set up for them to share their ideas.

The second theory that has informed analysis in this study is Peter Senge’s (1990) *Theory of the school as a learning organisation*, which

suggests that in order for an innovation to succeed, not only do all people in the organisation have to have the capacity to learn, the structures in which they have to function should also be conducive to collective reflection and engagement (learning). Furthermore, people in the organisation must have the tools and guiding ideas to make sense of the various situations they face. Thus, the instructional environment (what is taught), the social environment (relationships) and the physical environment (resources etc) need to be in place so that the various aspects of the innovation can be effectively managed. Informed by this theory, in Chapter Three I suggested that for classroom practice to change effectively, whole school development, and organisational learning is necessary. This means going beyond educating the individual, but rather looking at the institutional context within the schools. As such, an explanation on the failure of the TTPSP innovation in the participating schools is the fact that the innovation tended to target a few individuals (those teachers who enrolled in the ACE) and members of the management team, and expected these to educate the rest of the members of the school. Moreover, training for the selected participants took place away from the school contexts at the TTPSP facilities, further removing the innovation from the contextual and local realities of each school.

The third theory used as a framework for analysis in this thesis is that of *teacher learning* (Borke, 1995; Greeno et al 1996; Fullan, 1991). Teacher learning involves long-term changes in which participants (e.g. teachers) learn not only about the innovation and the changes they are making, but also learn to reflect on the reasons for the desired changes (Fullan, 1991). Fullan (1993) refers to this as “deep change”, which involves the teachers thinking differently about the way they construct new meaning and solve problems. Without this deep change a reform like the TTPSP cannot expect the desired changes (i.e. improving teaching and learning). This thesis posits that as important levers of the implementation of the intervention, teachers need to demonstrate actual learning of the content, skills and values necessary for them to change the ways in which they teach and assess learning, as well as the ways in which their learners learn.

So, why is classroom practice so difficult to change? Informed by these theories and propositions, analysis of data from the five schools participating in this study suggests that classroom practice did remain unchanged in spite of the TTPSP intervention because of three broad factors: Lack of organisational learning, de-contextualised programme

design and implementation, and lack of, or superficial teacher learning. These are discussed further in the next sub-sections.

7.3.1 Poor or inappropriate diffusion of innovation and lack of organisational learning

As stated above, for any innovation to be diffused and implemented effectively and for change to occur because of it, the whole organisation (in this case, the school), and not just selected individuals, must be involved in development activities. Findings from this study suggest that the design of the TTPSP intervention was such that it targeted only selected teachers (those who enrolled in the ACE), and members of the management teams for professional development activities. This meant that only a small percentage of the staff at each school were adequately informed about the innovation, its goals and principles, and what was expected of them. The rest of the teachers had to rely on this important innovation being 'cascaded down' to them, which in most cases reportedly did not happen. This resulted in feelings of isolation among the participants and of being discriminated against by the non-participants.

Additionally, participating teachers enrolled in the ACE in particular, for their individual benefit rather than to benefit the whole school. This was contrary to the objectives of the TTPSP intervention (which aimed for the adoption and implementation of the innovation by all teachers and management, resulting in change in school culture and whole school development). In addition, these participants (particularly the ACE students and graduates) did not have the authority, support or the mechanisms to share their knowledge with the other staff members and as a result could not educate the rest of the school as anticipated and desired. They worked in isolation, with the rest of the staff members continuing with business as usual or, in some cases, actively opposing the project activities. This might explain why they tended to revert back to their old ways of teaching in their classrooms and why, in spite of the innovation, classroom practice did not change. This is similar to findings from Kirtman's (2002:18) study, which reports that in the absence of sufficient support, teachers reverted "back to the norm" and to the ways they had always done things. Trying to involve the other teachers as well as introduce new methodologies into the schools led to scenarios of 'us and them'. For the non-participants, to cope with feelings of discrimination and neglect, and perhaps to retaliate against the perceived injustice of

their non-inclusion, they resorted to non-cooperation and/or sabotage of the project activities. At best, the intervention only resulted in individual benefits for the former, and organisational benefits were not realised.

Thus, this thesis concludes that as suggested by Rogers' (1983) theory of diffusion of innovation, in order for the innovation to be successful, it needs to be communicated effectively to all members of the organisation and to be accepted and adopted by them. For this to happen, it would be necessary for the project to go beyond educating the individual (for example, the teachers who enrolled in the ACE), and to focus instead on changing the culture of the whole institution. While this has huge resource implications, particularly in a context where these are scarce, involving the whole school in the activities from the start would work better to address these issues and the innovation would stand a better chance of acceptance, adoption and implementation. A learning culture where all members of the organisation are involved moves towards what Barth (1990) calls a 'community of learners'. In this 'community' new learning is shared amongst all, while beliefs/practices and thereby the overall school culture (Turbill 1993, Broadfoot 1998) are potentially changed (I

return to a fuller discussion of the notion of teacher learning later in this section).

The next section discusses the second emerging reason for the failure of the TTPSP intervention in these schools: De-contextualised programme design.

7.3.2 Decontextualised Programme Design and Implementation

In line with Peter Senge's (1990) *theory of the school as a learning organisation*, and similar to Moletsane's (2002) findings, this study argues that the second explanation for the failure of the TTPSP intervention may lie in the fact that its design did not adequately take the contextual realities of the schools (e.g. lack of resources, community, and institutional culture) into consideration. Senge's theory argues that in order for an innovation to succeed, not only do all people in the organisation have to have the capacity to learn, the structures (context) in which they have to function should also be conducive to collective reflection and engagement. As seen in Chapter Five, the five schools participating in this study had very different contextual realities and as a result the generic intervention designed and implemented did not address the needs of individual teachers and

of the schools. As such, the intervention did not result in the desired change. Firstly, that the contact sessions designed to educate teachers and the schools about the innovation and the expected changes in their practice occurred away from the schools at the TTPSP facilities, meant that only the few who attended these benefited. The rest relied on the participating members to educate them, and in turn became hostile and unsupportive of the innovation and their colleagues' efforts.

Secondly, in order to address the needs of teachers and principals from different school contexts, the professional development activities in these sessions had to be generic, and therefore, were largely de-contextualised. Participants were then expected to go back to their own, often poorly resourced, unsupportive and hostile contexts not only to implement what they had learnt in the project in their own classrooms, but also to educate their colleagues about the innovation. This was obviously a tall order, as the former tended to have no authority and were often resented by their non-participating colleagues who felt discriminated against or disadvantaged by their non-involvement. Furthermore, the resource contexts of the schools (overcrowding, shortage of teaching and learning resources) tended to

militate against efforts to innovate at school and classroom levels. Instead, it became easier for the participants to revert to their old ways of doing (teaching) rather than to swim against the strong tide of opposition from colleagues, lack of support and shortage of resources. Baxens & Green (2001) reported similar findings which suggested that in the implementation of outcomes-based education in schools, most teachers, white and black, were having difficulty with the new policies. Reasons for these included the fact that most black teachers' training was very much teacher-centered, and that contextual factors such as large class sizes and lack of resources hampered the successful implementation.

Thirdly, an aspect of the intervention, which was meant to support the implementation of the innovation in schools and involved classroom support in the form of visits by TTPSP facilitators, also turned out to militate against its successful implementation. For example, contrary to the principles of Rogers' (1983) theory of diffusion of innovations, on one hand, the TTPSP ACE focused mainly on Mathematics and Science for primary grades. On the other, those who enrolled did not necessarily teach these subjects in their own schools (another design flaw) and when they were visited by the TTPSP, they had to request

one of the other teachers, often a non-participating one, to let them 'teach' their class during the observation lesson. Obviously, the classroom situation became 'staged' for the benefit of the visitor, and was not a part of the teacher's day-to-day routine and therefore did not really benefit him/her (in terms of practicing what was learnt in the project). For the learners, suddenly being taught by a different teacher might have been exciting and novel, but it did not necessarily work, particularly if their regular teacher used the usual teacher-talk in the lessons. Therefore, in this context, learners could not internalise the active learning as desired by the TTPSP. As reported in Chapter Six, this caused 'disruptions' for the schools and a sense of 'us and them' between the participants and the non-participants. As a result, there was dissonance between what was taught in the TTPSP professional development activities and what happened in the schools and individual classrooms.

Furthermore, Rogers (1983:15) states that "the adoption of a new compatible innovation often requires the prior adoption of a new value system", otherwise members of the organisation will remain disinterested in the intervention. Brodie's study (2002) attributes this disinterest to the disabling contexts in which teachers are working,

contexts which do not value, support or encourage learning-centered teaching and learning, but are more constraining and less empowering for many teachers. Similarly, findings in this study suggest that the contexts in which the participating teachers were working did not fully support the TTPSP intervention and as a result classroom practice did not change.

Since each change effort is undoubtedly fraught with problems such as these, it is crucial that teachers have a myriad of coping skills and mechanisms. These will be discussed in the next section in this chapter.

7.3.3 Poor Teacher Learning

Informed by the various theories on teacher learning (e.g. Borke, 1995; Greeno et al 1996; Fullan, 1991) and deep change (e.g. Fullan, 1991), this thesis posits that participants' (teacher) learning in professional development programmes is difficult. In addition, the transfer of the newly acquired knowledge to those who do not participate directly is even more difficult to achieve, as it involves far more than simply sharing information. Findings from classroom observations in this study suggest that on the one hand, in interviews

and questionnaire responses, participating teachers were very positive about the methodologies they were taught and claimed to be using them in their classrooms. On the other, in spite of these claims, and the various learner-centred teaching strategies they were actually taught in the ACE, during lesson observations in this study, teachers mostly used the usual teacher-centred methods in their lessons. This is particularly telling since they were aware that I was looking for evidence that they were actually applying what they had learnt in the ACE and the project generally.

One explanation for this may lie in the fact that teachers are significant stakeholders in curriculum development and implementation. As such, this thesis posits that as important levers for the implementation of the intervention, for teachers to really change the ways in which they teach and assess learning, as well as the ways in which their learners learn, they need to learn, at a deep level, the content, skills and values necessary for this change to occur. This is based on the assumption that if teachers have a deep understanding of the change and find it meaningful, they will change their practice accordingly. In this regard, McLaughlin et al (2001) concluded that for the achievement of deep reform and to avoid superficial learning and

implementation, teachers need to know why they are engaged in an activity (how they are to benefit from it). For Fullan (1991) and others, in order for interventions to lead to successful change, teacher learning and deep change in teacher knowledge, values and practice become essential. As illustrated in Chapter Six, findings from this study suggest that the teachers' understandings of the innovation was largely influenced by their desire to acquire higher degree qualifications, rather than by a desire to change their classroom practice and impact on student learning. For this to occur, curriculum planning and innovation efforts (such as the TTPSP intervention) must involve them in all the stages of the diffusion of the innovation. This suggests that a more collaborative stance to curriculum planning, development and implementation that involves teachers, principals and other stakeholders must characterise change efforts in schools.

The values and content of the professional development activities significantly differed from those of their teaching contexts and that the communication thereof does not seem to have been effective, teacher learning, even among those who benefited directly from these interventions, remained at a superficial level. To address this, Fullan (1991) goes on to state that teacher education programs must help

teaching candidates to link the moral purposes that influence them with the tools that will prepare them to engage in the productive change- “scratch a good teacher and you will find a moral purpose”. The teachers in this study do not seem to have made these links; hence their classroom practice remained largely unchanged. Other scholars have linked this failure among teachers to make the necessary links to school and teacher culture, with Hoadley (2002: 48), for example, explaining that “teacher repertoires are the result of forms of consciousness, knowledge, sentiments and values that are socially constituted in the school”. Thus, without changing the school culture, deep learning among teachers becomes difficult and change in their classroom practice remains an unrealised dream.

Other scholars have linked this superficial teacher learning to their use of survival teaching instincts to defend themselves against contextual realities (mostly resource constraints) and the challenges of coping with an innovation. McNeil (1983) termed this *defensive teaching*, in which, as a coping strategy, teachers tend to oversimplify the content and structure because they are pre-occupied with the need for survival. When this happens, within the confines of the classroom and the schools, broader policy implementation becomes second rate, and

superficial engagement with the curriculum, including “settle[ing] for mental rehearsals of lessons” (Tobin, 1990: 34) becomes common place. Findings from this study suggest that the ACE students and graduates found it difficult to see a correlation between what they were doing in the course and their work in the school.

Furthermore, available literature suggests that innovations that are “simpler to understand will be adopted more rapidly than innovations that require the adopter to develop new skills and understandings” (Rogers, 1983: 17). Cohen & Ball (1999:339) captures this notion of teachers as historical beings when he concludes that teachers,

... cannot simply shed their old ideas and practices like a shabby coat, and slip on something new... As they reach out to embrace or invent a new instruction, they reach out with their old professional selves, including all the ideas and practices therein.

Added to this is the fact that the TTPSP training cannot be said to have been comprehensive, nor was the support provided continuous to help teachers deal with pressures of classroom implementation (Brodie & Purdon, 1997; Chisholm, 2000). So, within this context, it seems unrealistic to expect the participants not only to have mastered the

innovation themselves and to have changed their practice accordingly, but to have communicated and cascaded their understandings to the rest of their colleagues so that they could do the same. Hence the failure of the intervention to change classroom practice among participating teachers

The next section will examine some of the lessons emerging from the findings from this study.

7.4 TOWARDS EFFECTIVE TEACHER LEARNING: A DISCUSSION

Similar to my observations as the then TTPSP Project Manager, as well as to findings from monitoring and evaluation reports and articles from previous years (e.g. Raubenheimer, 1999; Moletsane, 2002; Reddy, 2006; Douglas, 2006), this study confirms that in spite of the TTPSP intervention, classroom practice among participating teachers in schools remained largely unchanged. Reasons for this are varied and complex, and include lack of institutionalisation of the innovation (organisational learning), de-contextualised project design and implementation; and superficial individual learning.

Predictably, the findings suggest that, firstly, for change to take root, the cascade model of implementation, in which only a few members of the organisation are trained and are expected to educate the others at school level, simply does not work. The review of Curriculum 2005 commissioned in 2000 by South Africa's Minister of Education found that this 'cascade model' of information and transfer of knowledge that is often used for in service training under the previous systems of education was and is inadequate in many ways (Chisholm, 2000). The 'once off' training schedules which are associated with the model are not acceptable for initiating "deep change" (Fullan, 2000) and transformation within the education system. Secondly, removing participants from their teaching contexts in order to train them in the innovation results in the de-contextualisation of the intervention and the lessons it teaches, and in poor or no implementation at school level.

To address these, first, there is a need for whole school development, rather than individual professional development. In such an approach, all members of the school are involved, and training occurs within the schools so that training is relevant to the contextual realities of the institutions. Alternatively, or in addition, such development activities

must occur close enough to the schools (for example, in another school with a similar context through school clustering) where a number of schools can be clustered together for training purposes. This is particularly relevant in resource- and infrastructure-constrained contexts, because while the ideal would be for such training to be school-based (i.e. for each school to have its own professional and organisational development programme), school clustering may allow teachers in similar contexts to compare experiences, learn from each other and together, identify common solutions to common problems.

Furthermore, effective diffusion, communication and training of the innovation to members of the organisation, and opportunities for all to question and debate the nature of the innovation, would go a long way in facilitating such deep learning. Furthermore, professional development agencies like the TTPSP should be designed from ideas that build on teachers prior knowledges and will provide opportunities for teachers to grow according to their own pace and needs. As Rogers (1983) points out, unless the innovation is effectively communicated and the stakeholders acquire a common understanding of it, its implementation will fail. Dialogue needs to be encouraged amongst the schools around relevant educational issues. This allows teachers to

wrestle with classroom practice, the new curriculum knowledge as well as professional issues. By having these teachers participate and debate their own individual learning and their own professional development would ultimately lead to an increase in the teaching and learning at schools.

Thirdly, findings from this study indicate that attempting to change teachers' classroom practice without addressing the contextual realities of their working environments is futile. Interventions such as the TTPSP must take into account the social, educational and environmental contexts in which they occur. This is echoed by Reddy (2006) who concludes that the poor performance in mathematics, science and technology is symptomatic of an underlying crisis that needs to be addressed first. This underlying crisis includes basic needs for safety and well being, overcrowding in classrooms, lack of resources, poor school culture and teacher morale, lack of community and organisational belonging amongst teachers, and others. However, while it was not the TTPSP's intention to develop infrastructure in the participating schools, the lack of change in the schools and classrooms was related to the project's failure to take these into consideration, either in the preparation stage and in selecting the schools, or during

implementation by ensuring that the professional development activities were relevant and attempted to address these factors. For example, why attempt to implement an intervention that requires deep learning and commitment in a school that demonstrates a poor culture of teaching and learning or in a school that is characterised by classroom overcrowding and poor resources when these represent a systemic problem that demands large scale solution from the state? If you do, the activities implemented must directly address this problem, otherwise they remain futile.

Fourthly, this thesis submits that the failure of participating teachers to achieve deep learning from the intervention was related to the design of the TTPSP and its basic assumptions about the participating schools and teachers. One such assumption was that the participating teachers would have some level of content understanding and prior experience of mathematics, science and language. However, the findings from lesson observations in this study suggest that the content knowledge of the participating teachers in mathematics, science and language was considerably low. In addition, some were not even teaching these subjects in their schools, instead, borrowing Maths and Science classes from colleagues to teach during TTPSP

facilitators visits. Obviously, this impacted negatively on their classroom practice and on student learning. For the TTPSP, a strategy for addressing this could have been to include a basic content for these teaching areas. This would ensure the intervention builds from the participants' current level of experience and will enable them to achieve the goals of the intervention by first remedying the shortfalls of their initial training. This includes building teachers' skills, competencies and attitudes and not merely providing curriculum information which the ACE seemed to have done. In addition, criteria for selection of students into the ACE that focused on Maths and Science should have included involvement in teaching these subjects at school level. This is particularly important since the design of the intervention included school visits meant to provide support for participants to translate what they were learning into practice in their own classroom. On one hand, one might argue that the lessons these participants got from the TTPSP could have been transferred to the teaching of any other subject. On the other, that these school-based support visits focused on Maths and Science may have meant that the participating teachers' intentions to implement these were linked to their desire to succeed in the ACE rather than real aspirations to change their classroom practice.

The next section explores some of the implications for policy and practice from the findings in this study.

7.5 IMPLICATIONS

This study has examined the role of a professional development intervention (the TTPSP) in changing classroom practice among participating teachers and the reasons for its failure. As outlined above, the findings suggest that poor or superficial teacher learning, influenced by factors such as a lack of organisational learning, contextual factors and project design, resulted in poor implementation of the TTPSP activities and in teachers not changing their classroom practice as expected. Based on the above findings, several implications for policy and practice for the TTPSP, as well as for other professional development projects and for the provincial national departments of education emerge. The study also raises some implications for further research. These are discussed below.

7.5.1 Professional Development Policy and Practice

Firstly, based on the findings which suggest a flawed project design as one of the reason for the failure of the TTPSP in these schools, the TTPSP needs to develop a policy for professional development activities in schools. For example, the policy could require a thorough situational and contextual analysis in the schools targeted for participation to establish their functionality and readiness for an outside intervention. Such readiness would be characterised by effective management structures and a positive school culture. This is based on the understanding that an innovation can only succeed if the organisation is functional and is ready to receive it (Fullan, 1993; Morrow, 2007; Day, 1993, 1995) and that the intervention that addresses particular problems and actual contextual realities of the beneficiary schools is developed.

Simultaneous with this policy should be a contract developed, in collaboration with each school, which outlines the roles and responsibilities of the TTPSP and those of the schools. This would clarify what the TTPSP is to offer schools, and what the schools are expected to do in return (in order to participate in the professional and organisational activities provided by the TPSP). Such involvement

must require commitment, at the heart of which must lie the interest of all partners, and the sharing of a common vision and a genuine desire to achieve a shared goal. Darling-Hammond et al (1995: 602) remind us that "...instructional reforms have fallen short partly because reforms failed to account for the decision making processes of the teachers implementing the programs".

Secondly, based on the finding that cascading the learning (that the selected participants train their colleagues) failed to work, suggest that all members of the organisation must be part of the project for success to occur. This is in line with evidence from literature which suggests that in order for schools to change, organisational (rather than individual) learning is required. Hargreaves et al (1996: 230) states: "the seeds of professional knowledge creation lie within the school system, ready to germinate if the right conditions can be provided". Logistically, involving all teachers from all schools in the professional development activities might be difficult, costly and even disruptive. However, creative planning and delivery (in terms of time and venue) would go a long way to address these. For example, school clustering and flexible scheduling of such activities may address these concerns.

That the TTPSP took the participating teachers out of their school contexts in order to 'train' them for a generic intervention was found to have contributed to its failure in the schools. This is premised on the understanding that teacher knowledge is often situated in the contexts of their classrooms and the activities of teaching that occur (Davidoff & Lazarus; 1997; Darling-Hammond; 1997, 1998). Much of this teacher's knowledge is stored in classrooms events, teachers cannot merely apply a set of predefined rules, they need to plan and teach to fit their unique circumstances and devise strategies to deal with the nuances that crop up in the social context. As such, ideally, much of the intervention must be school-based, or at least context-based through school clustering.

Thirdly, research has shown that the most successful teacher professional activities are those that extend over time and encourage the development of teachers' learning communities, which create opportunities for shared experiences and discourse around materials and learners (Reddy, 2006; Simkins, et al 2007). Thus, policy regarding delivery of such projects needs to be developed. Such a policy would also take into consideration issues of cost, infrastructure and logistics. While as indicated above, it would be ideal to have

professional development activities that are context-specific and school-based; this thesis acknowledges that poor resources (human and material) may impact negatively on such a programme. This is informed by Christie's (1998) prediction that "better resourced, historically privileged schools are more likely to manage the new policies than historically disadvantaged mainly black schools." To illustrate, because of poor infrastructure in the area and the schools themselves (e.g. poor transport system, poor roads, lack of electricity and other resources, etcetera), alternatives could be developed and implemented. For example, a number of similar and neighbouring schools could be clustered and serviced together. This would help in several ways: Among others, teachers from various schools with similar contexts may share common experiences and solutions to challenges, distances to delivery and participation sites would be reduced and the activities would take place in familiar surroundings.

The creation of professional communities at school and/or cluster would ensure greater collaboration, interactive professionalism and continuous feedback among teachers within a school and among participating schools. Such interaction, intellectual exchange and peer support amongst the teachers would be valuable in spreading pockets

of excellence across the various schools. Having the professional development activity occurring at the school would enable the teachers to see how the knowledge could fit into the school context and not just do the activity for the sake of doing it.

7.5.2 Implications for the Provincial and National Departments of Education

To support the above, first, the national and provincial education authorities need to develop and institute policies that would facilitate teachers' and schools' participation in professional and organisational activities. Such a policy should not only aim to encourage teachers to participate in such activities, but should also support and reward their involvement. At a provincial and or national level, teachers that are engaged in some form of professional developmental activities should be rewarded through a monetary value system or a promotion to a more senior level. This latter point would be especially helpful to the TTPSP's goals if the promotion ensured these teachers became responsible for curricular improvement in their respective schools. Professional and staff development is only effective when it is:

embedded in the school improvement process and aligned with curricular, instructional, and assessment decisions that result in improved achievement for all student. (CPTD, 2006)

In an attempt to institute the above, the South African National Department of Education has introduced a policy for continuing professional training and development (The National Policy Framework for Teacher Education and Development in South Africa- Pretoria 2006). The purpose, as stated in the document, is “to develop a teaching profession ready and able to meet the needs of a democratic South Africa in the 21st Century” (DoE 2006; 4).The aim of the policy is to equip teachers so that they can continually enhance their professional competence and performance in the classroom. The policy also seeks to develop teachers to meet the social and economic needs of the country. The continuing professional training and development (CPTD) will ensure that the initiatives that are devoted to professional development of teachers contributes more effectively to the quality of teaching. It also aims to provide teachers with clear guidance on which professional development (PD) activities will contribute to their professional growth as a whole. In the case of the TTPSP, teachers could be awarded points for their participation (this clause was written

into the National Policy Framework – see point 53 in the framework document). However, the CPTD policy needs to go further than just requiring and rewarding attendance but as stated in the document it needs to focus on a learning area or subject knowledge. So in order to improve teaching and learning in our present schools professional developmental activities that focus on improving subject knowledge must be made compulsory for teachers to attend.

Second, the findings from this study suggest that for professional development initiatives to work, they need to occur together with, as well as within a whole-school development project. Findings from this thesis suggest that unless the innovation is understood and adopted by the whole school (rather than a select few as was the case in the TTPSP project investigated in this study), efforts to institutionalise change in practice are bound to fail. As such, not only should the professional development policy reflect this, but the Department of Education needs to provide the support and resources necessary for implementing such a project. As stated earlier, such a school-based project would have huge resource implications, suggesting that creative ways of meeting these requirements or finding alternative ways of addressing the needs of schools and teachers are found.

Again, policy and guidelines which outline such alternatives for individual schools and school clusters are needed.

7.5.3 Implications for further research

A key finding from this study is that changing classroom practice in schools is a complex undertaking and is difficult to achieve. From this study, reasons for this include contextual realities of schools (lack of resources, overcrowding, negative school culture); design features of the innovation (e.g. the generic nature of the innovation which did not take the specific contexts of school into consideration; the site of delivery), and teachers' personal and professional characteristics and uptake of the innovation. However, one of the limitations of the study is that due to the small size of the sample of schools included in the study, these findings cannot be generalised to all schools and school contexts. As such, further research involving, on a very basic level, a larger sample and a longer period of study is needed to really understand the phenomenon.

Second, while the findings of the study are useful in alerting us to the complexity of schools as locations of organisational change, a deeper understanding of the reasons for the failure of the TTPSP remains

elusive and several questions linger. For example, to what extent do the language competencies of a teacher hinder his/her understanding of an innovation? The TTPSP was premised on the assumption that teachers were already qualified to teach and that they would cognitively understand the content of the innovation and be able to translate that understanding into practice in their own classrooms. This proved to be a flawed assumption as many of them only exhibited a surface understanding of what was taught and failed to transform their own classroom practice.

A second research question is related to the overwhelming perceptions of teachers and other school-based staff (as evidenced from the findings of this study as well as existing literature in South Africa) that poor teaching and learning in schools is due to lack of or poor resources. Part of the TTPSP innovation was the provision of resources (teaching and learning materials) to participating teachers. Yet, from classroom observations, these were either not used at all, or were used incorrectly by participating teachers. So, from this observation emerges the question: To what extent and in what ways do improved resources contribute to positive change in classroom practice?

For the TTPSP and other professional development agencies, an action research project that aims to implement a school-based intervention targeting the whole school (whole-school development) would be useful. Such a project would suggest lessons for these agencies in relation to the nature, costs (resources), and pedagogies necessary for mounting such a project, as well as the extent to which such a project may or may not contribute to positive change in classroom practice among teachers.

Until we know how teachers learn best and what factors and conditions facilitate the internalisation of such learning and lead to positive change in classroom practice, our efforts to change the nature and quality of schooling in South Africa will remain costly but futile.

7.6 CONCLUSION

The main research question this study addressed was: Why is classroom practice so difficult to change? In particular, why does classroom practice amongst the teachers participating in the TTPSP remain unchanged despite the intervention? In addition, the study examined how the TTPSP shaped (or failed to shape) the practices of teachers who participated in the intervention, particularly those who

registered for the ACE. The study utilised a multi-site case study design, involving the use of multiple methods of data collection such as interviews and questionnaires (with teachers and principals), as well as classroom observations and analysis of documents. What was significant about this design was that it allowed me to approach the research from multiple angles. For example, the interviews with the teachers allowed me to hear from them, how they saw and conceptualised their teaching, and how they see success in teaching. The interviews with principals contributed data for comparison with the teachers' views, but also provided a window into the context in which teaching and learning occur in the different schools. Most importantly, it was the classroom observations which provided me with answers to the main research question: How does/did the TTPSP intervention shape the teachers' practice? In this regard, the observations provided glimpses into the actual teaching practices and classroom decision-making of the teachers. Here differences between what teachers articulated as improvements in their practice and what their actual practices were in the classrooms emerged. The latter indicated that it was business as usual, and that the teachers' practices had not changed significantly since the implementation of the TTPSP intervention in the schools.

In particular, the key findings suggests that while teachers and their principals view the intervention as successful, from the TTPSP's perspective, its main objective of improving actual teacher practice and student learning is not realised. For example, for the teachers and principals, indicators of the intervention's success included teacher confidence in lesson planning and assessment, as well as making classrooms more colourful and attractive. While these are important factors towards developing a teaching and learning environment that is conducive to success, for the TTPSP, it may not necessarily result in more effective teaching and in improved student learning in the classroom. For the project, indicators of success would include effective use of resources, improved content knowledge among teachers, improved pedagogical knowledge and application, resulting, ultimately, in improved student learning.

Thus, for the TTPSP, the intervention has not been successful in achieving its main objectives. Instead, poor teacher learning, influenced by such factors as lack of organisational learning (for example, due to negative institutional culture), project design and delivery, and the school and community context, negatively impacted

on the intervention and the teachers' ability and/or willingness to effectively implement.

As discussed in Chapter Four, the study had several limitations. Key among these was the fact that as the TTPSP project manager, I was primarily responsible for all the schools where the TTPSP intervention was taking place. One factor that was complex to manage was the different roles that I played (i.e. that of being the Project Manager as well as the researcher). Although these roles were complementary in nature one had to allocate different times to these roles and at times these were challenging. As one Principal from Bhephimili queried, "is this for your research or is this for TTPSP?" (June 22, 2004). Balancing the two roles was also difficult because of the unequal power relations between me and the schools and the participants. I was their benefactor in school contexts that are resource-strapped. So, the extent to which their participation was really based on informed consent (rather than pressure, anxiety, fear, etcetera) is an important consideration.

Notwithstanding the limitations of the research design (See Chapter Four), the qualitative methodology used in the study enabled me to

address the three research questions informing this investigation. As Patton (1990:40) suggests, “qualitative methods are ways of finding out what people do, think and feel by observing, interviewing and analysing documents”. For example, the various methods of data collection enabled me to investigate the ways in which these teachers understood the principles (through questionnaires and interviews), knowledge value and skills of the TTPSP and the ways in which they translated (or not) that understanding to their own practice in their classrooms (through classroom observations of their teaching).

The main significance of this study lies in the findings which suggest that professional development organisations or interventions like the TTPSP must pay particular attention to how they design and deliver the innovations meant to improve teaching and learning in schools. For example, what seems to have led to the failure of the TTPSP project in these schools included the fact that the design did not take the contextual realities of schools into consideration. Instead, a generic intervention was designed for all teachers from different schools. A second reason for the failure of the project may lie in the fact that the design and implementation of the intervention failed to involve the teacher as an important stakeholder in the various stages of the

project. This means that the notion of the teacher as an important lever from curriculum planning to implementation was ignored and may have contributed to the failure of the innovation.

A third consideration is related to the site for the delivery of such interventions. In the TTPSP intervention, the site for the delivery of the various interventions that made part of the project was the Toyota Teach facilities, away from the schools. A few teachers were removed from their contexts for training and were expected to return to their schools to cascade the lessons they 'learnt' to the rest of the school. This of course proved to be a tall order. Those who remained in the schools were either resentful or too busy to take part in such cascading efforts. On their part, the participating teachers felt unempowered and unable to perform this task. This could be addressed by implementing school-based or cluster-based projects that involve all members of the school.

Ideally, schools and teachers must become self-reliant and take charge of their own ongoing professional and organisational development in response to the changing local and broader contexts. Until then, those charged with providing professional and

organisational development interventions must ensure that the projects they develop and implement are geared towards effectively addressing the professional and personal developmental needs of teachers, the organisational development needs of schools, as well as the contextual realities in which schooling occurs.

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APPENDIX 1: A

CONSENT LETTER TO TEACHERS

Dear Educators,

I am currently a PhD student at the University of Natal. My research topic for the degree is: "Why is classroom practice so difficult to implement: Examining the role of professional developmental projects within selected Durban schools".

I seek permission from you as the participating teachers of the TTPSP to interview you and to share some of your thoughts about the TTPSP. All interviews will be taped and the information that we share will be used anonymously for research purposes.

I am interested in various factors that impact on the success or failure of the TTPSP and hope to come up with some recommendations to improve their design and implementation of the intervention.

If you are not sure of anything or feel uncomfortable about the process please do not hesitate to contact me. My numbers are below.

Thanking you in advance.

Lesley Lee

083 302 3229

TTPSP (031)910-6047

APPENDIX 1: B

PERMISSION LETTER TO PRINCIPAL

Dear Principals

I am currently a PhD student at the University of Natal. My research topic for the degree is: "Why is classroom practice so difficult to implement: Examining the role of professional developmental projects within selected Durban schools".

I am interested in various factors that impact on the success or failure of these projects and hope to come up with some recommendations to improve their design and implementation in schools

I am requesting your permission to distribute these questionnaires to the teachers in your schools. The data will be collected and analysed for the above research. All names and schools will be treated with the utmost confidence.

Once they have been completed I will come to your school to collect them. Should you have any queries please do not hesitate to contact the writer.

Thanking you in advance.

Lesley Lee

083 302 3229.

TTPSP Office: 031-910-6067

PhD research student

Student number: 961097998

University Of KwaZulu-Natal

APPENDIX 2

QUESTIONNAIRE TO EDUCATORS IN DURBAN SCHOOLS

Dear Educators,

I am currently a PhD student at the University of Natal. My research topic for the degree is: "Why is classroom practice so difficult to implement: Examining the role of professional developmental projects within selected Durban schools".

I am interested in various factors that impact on the success or failure of these projects and hope to come up with some recommendations to improve their design and implementation in schools

I would appreciate your assistance in filling out this questionnaire as fully as you can. All responses will be treated as confidential and your names and the name of your schools will not be used in the research or final report.

Thank-you for your continued support.

PLEASE DO NOT WRITE YOUR NAME ON THE FORM

BIOGRAPHICAL DATA

AGE

SEX

MALE

FEMALE

MAIN HOME LANGUAGE

ENGLISH

ZULU

AFRIKAANS

XHOSA

OTHER (*please specify*)

HIGHEST QUALIFICATION

STD 10

M4

M2

M5

M3

M6

POST LEVEL CURRENTLY HELD AT THE SCHOOL

NO. OF YEARS IN THE CURRENT POST

HOW MANY YEARS HAVE YOU BEEN TEACHING AT THIS PARTICULAR SCHOOL?

WHAT SUBJECTS / LEARNING AREAS ARE YOU PRESENTLY TEACHING?

WHAT QUALIFICATIONS DO YOU HAVE FOR THE ABOVE TEACHING SUBJECTS?

SCHOOL LOCATION : (RURAL / URBAN)

**TOYOTA TEACH PRIMARY SCHOOL PROJECT (TTPSP)
ACTIVITY / IMPLEMENTATION IN THE SCHOOL**

A: SCHOOL INVOLVEMENT IN TTPSP

A.1 WHEN DID YOUR SCHOOL FIRST BECOME INVOLVED IN TTPSP?

A.2 HOW/WHY WAS YOUR SCHOOL CHOSEN TO BE INVOLVED IN TTPSP?

A.3 WHAT DO YOU UNDERSTAND AS THE OBJECTIVES AND INTENDED OUTCOMES OF THE TTPSP IN YOUR SCHOOL?

A.4 HOW WERE THESE COMMUNICATED TO THE SCHOOL? HOW DID YOU COME TO KNOW THESE?

A.5 WHAT ACTIVITIES OF THE TTPSP HAVE BEEN IMPLEMENTED IN YOUR SCHOOL SO FAR TO ACHIEVE THE ABOVE?

A.6 TO WHAT EXTENT HAS THE TTPSP BEEN SUCCESSFUL IN ACHIEVING ITS GOALS IN YOUR SCHOOL?

A.7 TO WHAT EXTENT HAS THE PROJECT BEEN SUCCESSFUL IN ASSISTING YOUR SCHOOL TO ACHIEVE ITS PROFESSIONAL AND SCHOOL DEVELOPMENT GOALS AND PLANS?

A.8 WHAT FACTORS HAVE IMPACTED ON NO.'S 6 AND 7 ABOVE?

B: PERSONAL INVOLVEMENT IN TTPSP

B.1 WHEN AND HOW DID YOU FIRST BECOME INVOLVED IN THE TTPSP ACTIVITIES?

B.2 WHAT PROJECT OF THE TTPSP DID YOU PERSONALLY BECOME INVOLVED IN? WHAT EXACTLY HAS BEEN YOUR INVOLVEMENT IN THESE?

B.3 IN WHAT WAYS HAVE YOU BENEFITTED PROFESSIONALLY FROM YOUR INVOLVEMENT IN TTPSP ACTIVITIES? WHAT HAVE YOU LEARNT FROM THE PROJECT AND HOW DOES YOUR OWN SCHOOL RECEIVE AND RESPOND TO CHANGE?

B.4 HOW HAS YOUR CLASSROOM PRACTICE CHANGED AS A RESULT OF YOUR INVOLVEMENT IN TTPSP ACTIVITIES? WHAT HAVE YOU LEARNT FROM THE PROJECT?

B.5 HOW HAS YOUR CLASSROOM PRACTICE CHANGED AS A RESULT OF YOUR INVOLVEMENT IN THE TTPSP?

B.6 HOW HAVE YOUR LEARNERS BENEFITTED FROM THE IMPLEMENTATION OF TTPSP ACTIVITIES IN YOUR SCHOOL?

B.7 WHAT CHALLENGES HAVE YOU ENCOURAGED WITHIN YOUR SCHOOL AND CLASSROOM IN YOUR ATTEMPTS TO IMPLEMENT WHAT YOU HAVE LEARNT FROM THE TTPSP?

B.8 WHAT STRATEGIES HAVE YOU USED TO ADDRESS THE PREVIOUS QUESTION?

B.9 WHAT ADDITIONAL SUPPORT (TRAINING AND RESOURCES) DO YOU FEEL STILL NEED TO IMPLEMENT TTPSP LESSONS EFFECTIVELY IN YOUR CLASSROOM?

C: PROFESSIONAL DEVELOPMENT WITHIN THE TTPSP

C.1 WHAT TRAINING HAS THE TTPSP PROVIDED FOR YOU AND OTHER TEACHERS AT YOUR SCHOOL TO ASSIST YOU IN IMPLEMENTING ITS ACTIVITIES/TEACHINGS EFFECTIVELY?

C.2 IN YOUR OPINION, HOW SUCCESSFULLY HAS THE TRAINING BEEN IN ADEQUATELY PREPARING YOU FOR IMPLEMENTING THE OBJECTIVES OF THE TTPSP AND FOR IMPROVING TEACHING AND LEARNING?

C.3 WHAT FACTORS HAVE IMPACTED ON THE SUCCESS OR FAILURE OF THESE PROFESSIONAL DEVELOPMENTAL ACTIVITIES?

APPENDIX 3

QUESTIONNAIRE FOR PRINCIPALS

Dear Principals,

Thank-you once again for your valuable time.

As you are aware I am currently a PhD student at the University of Natal. My research topic for the degree is: "Why is classroom practice so difficult to implement: Examining the role of professional developmental projects within selected Durban schools".

I seek permission from you as the participating principals of the TTPSP to interview you and to share some of your thoughts about the TTPSP as well as your participating teachers who have completed the ACE qualification. I am interested in various factors that impact on the success or failure of the TTPSP and hope to come up with some recommendations to improve their design and implementation of the intervention.

Please complete the questionnaire, giving me your comments to each questionnaire. I will collect them in two weeks time, (July 24th). If you are not able to complete the questionnaire in due course please contact me so we can make alternative arrangements.

Thanking you in advance
Lesley Lee
083 302 3229.
TTPSP Office: 031-910-6067
PhD research student
Student number: 961097998
University Of KwaZulu-Natal

**TOYOTA TEACH PRIMARY SCHOOL PROJECT (TTPSP)
PRINCIPALS QUESTIONNAIRE**

Name of School:

Principal:

QUESTION ONE

What do you think the focus of the TTPSP is?
Please comment and expand if necessary.

.....
.....
.....
.....
.....

QUESTION TWO

How has the ACE educator supported your school?

.....
.....
.....
.....
.....

QUESTION THREE

How often has the ACE educator done workshops?
Please tick the appropriate box

- | | | | | | |
|--------------|--------------------------|------------------------|--------------------------|-------------|--------------------------|
| Once a Week | <input type="checkbox"/> | Monthly | <input type="checkbox"/> | Once a Term | <input type="checkbox"/> |
| No Workshops | <input type="checkbox"/> | Other (please specify) | <input type="checkbox"/> | | |

QUESTION FOUR

What support did you get from the TTPSP?
Please tick the appropriate box

- | | | | | | |
|-----------------|--------------------------|-----------------------|--------------------------|-----------------|--------------------------|
| Subject Support | <input type="checkbox"/> | Communication | <input type="checkbox"/> | Problem Solving | <input type="checkbox"/> |
| Policy Planning | <input type="checkbox"/> | Financial Planning | <input type="checkbox"/> | General Support | <input type="checkbox"/> |
| SGB Support | <input type="checkbox"/> | Helping Relationships | <input type="checkbox"/> | | |

QUESTION FIVE

What workshops have been completed by the ACE educator?
Please tick the appropriate box

- | | | | | | |
|---------------|--------------------------|------------|--------------------------|------------------------|--------------------------|
| Policy | <input type="checkbox"/> | Technology | <input type="checkbox"/> | Mathematics | <input type="checkbox"/> |
| SGB Workshops | <input type="checkbox"/> | Science | <input type="checkbox"/> | Language | <input type="checkbox"/> |
| | <input type="checkbox"/> | | <input type="checkbox"/> | Other (please specify) | <input type="checkbox"/> |

QUESTION SIX

How long where the workshops held at your school?
Please tick the appropriate box

- | | | | | | |
|-----------|--------------------------|-----------|--------------------------|------------------------|--------------------------|
| One hour | <input type="checkbox"/> | Two hours | <input type="checkbox"/> | Four hours | <input type="checkbox"/> |
| Six hours | <input type="checkbox"/> | Not Held | <input type="checkbox"/> | After school | <input type="checkbox"/> |
| | <input type="checkbox"/> | | <input type="checkbox"/> | Other (please specify) | <input type="checkbox"/> |

QUESTION SEVEN

How many educators attended the workshops held (in relation to question 5)?

.....

.....

.....

.....

.....

QUESTION EIGHT

What further workshops would you like in your school?

.....
.....
.....
.....
.....

GENERAL

Please comment where appropriate

In what areas does your school most need assistance?

.....
.....
.....
.....

How could your school assist other schools in you area?

.....
.....
.....
.....

THANK YOU

APPENDIX 4

SCHOOL INFORMATION DATA

DATE OF VISIT: _____

1. GENERAL INFORMATION

THE PURPOSE OF THIS SECTION IS TO OBTAIN INFORMATION AND DATA ABOUT THE SCHOOL (INTERVIEW)

1.1 School Name: _____

Phone No.: _____ Fax No. : _____

Postal Address: _____

_____ Postal Code: _____

Physical Address: _____

EMIS No.: _____

1.2 **SCHOOL MANAGEMENT TEAM MEMBERS**

Principal: _____ Home tel/cell no.: _____

Deputy Principal: _____ Home tel/cell no.: _____

H.O.D.'s	DATE APPOINTED	HOME TEL / CELL NO.

S.G.B. Chairperson	DATE APPOINTED	HOME TEL / CELL NO.

1.3 EDUCATION DISTRICT

Which District/Circuit is your school in? _____

S.E.M. of the area: _____ Tel No. _____

1.4 LANGUAGES

Languages spoken in your school: _____

Predominant home language of learners: _____

Medium of instruction: _____

From which grade: _____

Grade in which English is started as a school subject: _____

1.1 LEARNER INFORMATION

1.5 **ENROLMENT STATISTICS**

Total number of learners in school: Girls _____ Boys _____

N.B. PLEASE INDICATE CLEARLY IF ANY CLASSES ARE COMBINED

GRADE	NO. OF CLASSES	NO. OF BOYS	NO. OF GIRLS
Grade 1			
Grade 2			
Grade 3			
Grade 4			
Grade 5			
Grade 6			
Grade 7			
Grade 8			
Grade 9			
Grade 10			
Grade 11			
Grade 12			
Totals			

Total no. of learners for 2003 : _____

Total no. of learners for 2004 : _____

1.6 **PLATOONING SYSTEM**

NO. OF CLASSES THAT PLATOON	NO. OF CLASSROOMS	NO. OF TEACHERS	GRADES WHICH PLATOON

1.2 STAFF INFORMATION

1.7 ADMINISTRATIVE / NON-TEACHING STAFF

POSITION	Y/N	NAME	DATE APPT.	COMMENTS
Secretary/Clerk				
Caretaker (state whether living on the property)				
Security				
Cleaners				
Other				

1.8 EDUCATOR MOBILITY

	Y/N	2005	2006
How many new educators joined the staff?			
Are the redeployed educators still at your school?			
Have any of the ACE educators been redeployed?			

1.3 EDUCATOR INFORMATION

	TITLE (MR / MRS / MISS)	FIRST NAME	SURNAME	WHICH SCHOOL DO YOUR OWN CHILDREN ATTEND?	GRADE/S YOU TEACH	SUBJECT/S YOU ARE TEACHING	IF STUDYING, NAME OF COURSE	PRESENT QUALIFICATION	EXP. IN YEARS	EXP. AT CURRENT SCHOOL
1										
2										
3										
4										
5										
6										
7										
8										
9										

10										
11										
12										
13										
14										
15										

2. EDUCATOR & LEARNER ATTENDANCE

(Interview or Observation)

EDUCATORS

2.1 Is educator absenteeism or late coming a problem in your school?
Comments: _____

LEARNERS

2.2 Is learner absenteeism or late coming a problem in your school?
Comments: _____

2.3 Where do the majority of learners come from in this school?

2.4 Where do the majority of educators come from in this school?

2.5 A.C.E. Educators: _____

_____	_____	_____
_____	_____	_____

3. INFRASTRUCTURE

(INTERVIEW)

3.1 School facilities: Please indicate appropriate statement.

STATEMENT	Y	N	COMMENTS
1. The school has electricity			
2. The school has running water			
3. Are there sufficient learner toilets in place? How many?			
4. Are there staff toilets which are in working order and clean? If so, how many?			
5. The school has sufficient furniture, chalkboards, etc.			
6. The school has an administration block (Principal's office, staff room, etc.)			
7. Does your school have a computer? How many?			
8. Does your school have a telephone?			
9. Does your school have a fax machine?			
10. Does your school have a library or resource centre?			
11. Does your school have technology equipment? If so, please specify			
12. Do your school grounds have a secure fence?			
13. Do your school grounds have a garden?			
14. Does your school have a security guard/caretaker on gate duty?			
15. Does your school have a designated safe parking area for staff?			

16. Are signs of vandalism evident on the school grounds or on the building (broken windows, doors)			
---	--	--	--

3.2 Accessibility: How far is your school from the District/Circuit Office?

3.2 Describe condition of roads, etc.



5. PROFESSIONAL DEVELOPMENT

(INTERVIEW – FACILITATION SKILLS / OBSERVATION)

5.1 When does staff development take place?

5.2 How does the Principal communicate with staff?

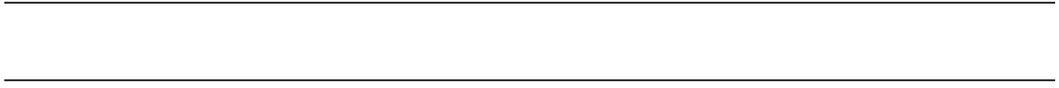
5.3 How do Staff communicate with the Principal?

5.4 Who decides what is going to be done and how?

5.5 Is there a policy for staff development?

YES/NO

Comments:



6. SCHOOL COMMUNICATION

(Interview or Observation)

6.1 How often does the school have staff meetings?

Comments: _____

6.2 How does the school communicate with the learners, S.G.B. members and parents?

6.3 Are agendas/minutes/policies distributed? Comments: _____

7. Teaching And Learning

(This could form part of your observation and/or interview)

7.1 What evidence of planning is there for learning at the school ?

7.2 How do the teachers plan for teaching and learning in the classroom?

7.3 Does the SMT play a role in managing the curriculum? YES / NO

Comments : _____

7.4 Is there a school timetable? YES / NO

Comments : _____

7.5 How often is there a school assembly?

7.6 Where do the staff sit at break times? _____

Comments : _____

7.7 Are there any Learning Area Committees in place? YES / NO

Comments :

7.8 Principal's teaching :

Comments :

7.9 H.O.D.'s teaching :

Comments :

7.10 What is going well with regards to teaching and learning in the school?

8. ADDITIONAL INFORMATION – GROUP INTERVIEW

**N.B. THIS SECTION TO BE CONDUCTED AS A GROUP INTERVIEW;
i.e. WITH THE PRINCIPAL AND SMT, 2 TEACHERS, 2 PARENT
MEMBERS OF THE SGB.**

8.1 What does the school hope to gain from participating in the Toyota Teach Primary School Project?

8.2 What other projects has the school participated in? _____

YEAR	NAME OF PROJECT	FOCUS	COMMENT

8.3 What are your "dreams" for your school? _____

8.4 Have there been any positive factors resulting from implementation of C2005 at your school? YES / NO

Comments: _____

8.5 Have there been any difficulties in implementing C2005? YES / NO

Comments: _____

COMMUNITY INVOLVEMENT

8.6 What percentage of the parents are employed: _____

Comments: _____

8.7 What is their involvement with regards to community involvement?

FINANCE

8.8 How much do the learners pay for schools fees? _____

8.9 What percentage of the learners pay the fees? _____

8.10 How are school financial records kept? _____

8.11 Any difficulties with the above system? Comments:

APPENDIX 5 A

PRINCIPALS INTERVIEWS

VENUE: TTPSP Resource Centre

TAPED: June/July 2004

L: Afternoon colleagues

Thank-you for giving up your time. I will be asking you a few questions regarding your schools as well as the Toyota Teach teachers you have that are studying with us at your school:

Please feel free to contribute, all information is confidential and we will go through this once completed

If you want tea, coffee, please help yourself. You are familiar with the kitchen here.

L: How long have you been a principal at the school?

R: too long fifteen years

R: I started as a level one teacher

R: Two years

R: Ten years

L: Mr. X?

R: Twelve years

L: A lot of experience here between the five of you.

R: I was given the position as I was a long time at the school. I am old les

L: Are you all permanent principal

R: No

L Why? Are there any reasons for this

R: no. I am waiting to be appointed, still in acting capacity

R: Yes

R: Yes I am permanent

L: Thanks for that. Do any of you principals have any qualification regarding a school management diploma, or have been on a leadership course?

R: No I don't except for the Courses/sessions when we go to Toyota or when Fanie comes into the school. If it had not been for Toyota I would have been lost especially with technology

R: I see the others at Toyota at the plenary sessions but we don't really talk about the teaching and learning at our schools

R: I have learnt to run my schools finances as well as HIV/Aids but at times am not sure what teaching should be happening in the classrooms

R: We go to Toyota and learn about the law there.

L: What are your needs and challenges for the School?

R: We need a library for our children to read

R: We need electricity,

L: I thought you had?

R: No we have no money to pay the outstanding bill

L: How much is this

R; Too much (laugh)

R: Strong room to keep all the cleaning material

R: Oh yes, new buildings

L What changes have you seen in your school in the last five years both positive and negative.

R: AIDS/HIV

R: Parent bodies, parents are involved in the schools

R: Feeding scheme at my school, is better for the school,

R: Parents are dying and some of the children are being looked after by their grandmothers.

L: What about the curriculum?

R: An improvement in time keeping for the teachers

R: Admin block for my school

L: Yes I see that is great.

L: Any other changes that have happened to the school in the last five years?

R: Vegetable garden, political fighting in my area has quieted down

R: My school has got a grade r class, the teacher is paid by the school governing body

R: School security at my school

R: Fax lines set up.

L: What where would you say that Toyota has assisted in helping with you at your school?

On other words what I am asking you is how has the project assisted you?

R: Vegetable gardens with Jean

R: Helped in getting children to the museum

L: do you have any feedback form this?

R: yes, the children enjoyed this

R: you workshopped us in planning, recording and assessment. Teaching and Learning as well as paper were very frustrating before Toyota came into our schools. It was difficult moving from transitional to OBE to RNCS. With the aid of Toyota facilitators and the Ace workshopped the frustration ahs given and they are now doing everything in a proper way

R: The Ace teacher is good at assessments, she helped our school

R: I trust the TTPSP staff, we do have a lot to do at the school, my school is poor, we need classrooms les, and can you help?

R: When there is change there is stress to people/ Toyota Teach is advanced and more knowledgeable and efficient in what they plan and do in the school. Within this period they have given my school a stress workshop and these workshops help the staff a lot in dealing with the change quite easily and get ready for action

R: Our facilitator was helpful, he has developed us psychologically

L: Tell me about your ACE teachers that are in your school. You can mention anything regarding the schools and the teacher?

R: In my school before they enrolled with Toyota teach they were shy and now they have developed confidence in such a way they are invited to the neighboring school for help and now my school is in the limelight as far as teaching and learning is concerned. Their behaviour has changed from positive to negative in almost all activities.

R: That sounds great

L: Has the ACE teacher been able to share what she has learnt with the school?

R: We get information when we attend the meeting at Toyota

R: I think so. I will check with Mrs. X, she is the Head of Department

R: Yes

L: Can you elaborate?

R: Yes, I have seen her with some of the teachers; I think this was for technology

R: As I said the teacher did an assessment exercise with our teachers

R: She did try but the other teachers were not keen. MY teachers are old, but we called in Pat to assist here, Jane was here to.

R: The problem is we are not always aware of what is going on

L: Why is this?

R: We are so busy at times and then we forget

R: The Toyota Teach is about training ACE teachers who are expected to comeback with the information. I also did a qualification and I want to share this, but I am not a Toyota Student

L: Not sure what you mean here sir?

R: Well if my student wasn't to share she must create this forum.

L: What do you think makes your school different from the others?

R: We are a Toyota school, the learners know what they must learn, and all the learners are active

R: We are given resources by Toyota, but I keep them at home, the school is vandalised to often

L: How do teacher use them then?

R: I bring the key from how when they need them.

R: My school enters expos and they are smartly dressed

R: We are given help in management, Fanie taught us about the Law and the Whole School Development, what we must do

L: Tell me more about the whole school development?

R: We all work together as one

R: All teachers and Learners are participating

R: This includes the school governing bodies which stabile is helping with.

L: What do you think the vision of the Toyota project is all about?

R: I was told if I join the project it would help us get a classroom

R: You help me with management issues in my school

R: No I think your vision is to help schools with the teaching of the teachers

R: Make our education more easier than the Department

R: I think you also do good work. You gave me some clothes last year Les

L: I must look at that again

R: I am ware that you run workshops to develop school managements, but my ACE teacher always tells me she will get the information for me

R: My teacher is with you, she is very good, she told me about the vision

R: I did a course at the University and they told us about your vision.

R; In my school we believe that the Toyota people can offer us a lot of in terms of giving us a car and making sure that our learners are getting the right education , our learners enter your science expo's.

L: How do you think the other staff members feel about your Toyota educator?

R: At my school we still have union activity so I know they feel

sometimes upset when I leave early

R: I feel sad at times because they try so hard but the teachers are not interested

R: Some of my teachers are not professional however except the three Ace teachers.

R: We have conflict in our school and the Toyota lady who is studying with you has said that pat could assist us here

R: We are all principals of the schools; these teachers who want to study must finish it quickly as some of them sometimes bring difficulty with them to our school

L: Can you explain about this as I am interested in this

R: No well they always need to do a mathematics lesson, then we change a class for the teachers and then when she is finished we change it back. Some of the teachers in my school don't like this and get cross with the teacher, I have tried to explain but they still get cross

R: The other teachers don't like it when the Toyota teaches leaves to go the lessons. My teacher catches three taxis and sometimes leaves at 12:00 to get there by half past two

R: My teachers also don't like this.

R: WE need to look at this Les

L: This is true and we are looking at this

APPENDIX 5 B
TRANSCRIPT OF ACE INTERVIEWS WITH TEACHERS

VENUE: TTPSP Resource centre

Participating and completed

JULY 2004

L: Thanks for your time once again. I will be taping this section as I cannot write quickly enough to record all answers and will use the tape to check and expand on my notes. Would any one like to operate the tape recorder?

L: Why are you studying and why did you join Toyota to study further? -

R: I need a qualification as the government were saying that if you only had a college diploma or certificate you were not going to be able to keep your job,

R: I saw it from Ruby and said it was cheaper than anywhere else

R: I need to get to M plus 4

R: I want to learn more about mathematics and science

L: tell me about this

R: Well Ruby said that is what we are going to learn?

L: Was this easy to do

R: NO.

L: I hear aloud NO, Why?

R: Too difficult, I did not do mathematics and science at college.

R: Toyota teach is helpful, you show us how to teach and to use the different skills in the classroom.

R: You take the pain and confusion out in lesson preparation, facilitation and assessment. It created in me the passion, the desire to know more. I was prepared for the transformation so I am fearless, but my school was not I don't think

L: tell me what you mean

R: No I want to change the school and the way we are taught but I am alone, and I can't do it.

R: I want to make a difference to children; I want to learn more about Mathematics and Science

R: I need to get out of teaching

L: really

R: me too

R: Me too

L: Who else feels like this?

L: Six

R: I want to earn more money so I want to study

R: I am not married and need some form of education besides my three year diploma

R: As the other lady said the course is cheap

R: My daughter is studying and so she wants some company and then I thought I would do this course to keep her company

R: I wanted a course that would adjust my category and therefore my salary

R: My friend was promoted after she did the course, so I enrolled at

Toyota

L: Are you going to study further?

R: Yes.

L: let me see, ten more teachers, that great, where you will do this,

R: Masters at UKZN

R: I am going to Fanie and IPEB.

L: Do you know him?

R: Yes he and Sta come to our school to help the school governing bodies

L: Why did you take up teaching?

R: My mother was a teacher R: yes mine too and my aunt

R: I was not accepted at university and so this was the next on the list

R: Me too

L: How many .five

R: I was given a bursary from the Department, me too

R: I was not accepted at the university but had a bursary from my father's work so I went to the teachers college

L: So then what do you not like about teaching then?

R: Well salaries, they are low and I can't make out at the end of each month

R: The government and all the new policies, every month we are learning new things

R: For me I don't like the assessments

R: Some of my friends have left teaching because they were confused and teaching the children is hard work

R: Sometimes we have to act like mothers and father, the children sometimes re not disciplined

R: Then you knew you can teach and then experts come and tell you what to do like the RNCS, then

R: Yes, teaching is not the same when we first started,

R: I agree

L: How do the others feel about this?

R: Yes... (Silence)

R: WE also have to pass one then we pass all the learners, we can't fail anymore even though we know he is not going to make the grade.

L: Anything else you want to share about your dislike for teaching?

R: Leave pay to me, I applied but now I can't go

R: My pension is so low; I don't know how I am going to survive.

L: Tell me what do you think the vision of TTPSP is about?

R: I think you help us get the qualification

R: No I think you help the schools

R: No. listen here I wasn't to get experience but also to get a qualification

L: Do you get support from you school management team in your implementation

R: No because my principal lacks the knowledge of the new dispensation

L: What do you mean by this new dispensation?

R: I mean the Outcomes Based Education

R; I feel motivated and enjoy my teaching

L: Can I ask you to say why your principal supports you?

R: HE allows me to talk to the others and to share my ideas.

R: My lessons are good and I feel empowered, but I can't get the other

teachers to do the same, many say they are too busy and it is my course and I must do it

R: No because they say they are too busy in the school to sometimes give me support.

But he does say that what I am doing is good.

R: My principal is happy with my work. He always tells me I am the only one who hands in preparation and who examinations look challenging for the learners. This is because the science facilitators gave us some questioners and exams to copy.

R: Sometimes I seem to struggle to survive

L: What does this mean?

R: I battle at my school, it is difficult I am the only one sometimes who does everything they way we have been taught.

L: Do you feel you were given support at your school in trying to implement a policy? Or if you like "how have you managed to share your leanings? Or were you allowed to initiate changes that you did learn in your school

R: I can't; I have to wait for my principal.

R: My HOD says she will do it

R: I try but the other teachers are so busy and they say they don't have time

R: did try, ask Jane, we put together a workshop but we waited for one hour before anyone arrived

R: No My principal says he will do it.

R: I am alone but everyone needs to be involved. A person cannot make the change alone. THE views of people are needed

R: No, only the principals and the HOD, they plan the curriculum for us and they bring the changes that are needed

R: Yes through my position as an HOD and as a friend to my fellow colleagues

L: Other ways you tried to implement what you had learnt?

R: We don't have paper and a photocopier; I have to come to Toyota every day to make the copies especially when I know that a facilitator is coming to visit, resources are difficult at the school

R: Toilets don't flush, there is always a stink, and this makes it sometimes difficult to teach the class, my classroom is next door.

R: The parents don't help, they don't look at the children work, and I don't give homework.

R: I am not from the area and so the community is putting pressure on me, I don't like it here

L: Sorry to hear that, have you spoken to the higher are?

R: Yes

L: And...

(Silence)

R: Well I am not sure how long I will be here, I know they wasn't a local person

R: The community says I am getting too much education from you and we should rather be getting toilets in stead.

L: Let's see what we can do together.

R: I have no electricity so in winter it is dark

R: My children sit 4 in a desk, all the windows are broken and I have 132 children in my class.

L: How many of you feel the same?

R. (silence) L: let me count (15)

R: I cannot make the changes, we must wait for learning are committees to be set up

R: I was told to wait for the DoE and then we will wait for the changes

R: I cannot do the workshop as the schools policy does not allow us to stay; I have to do them on Saturday

R: My HOD does them, I am not sure if she can do them,

R: A single person cannot make this change

R: We should all be involved in trying to implement the policies

R: My teacher did help me but she had no power over the principal

R: My school and teachers don't want to listen

R: I was told not to talk about my studies as it was not always relevant to the school

R: I struggle to share but I do it with my friends, my Toyota teacher has helped with this. We set up an afternoon to do this...

R: My principal says we must just teach

Lets move onto the next section

L: How many of you have set up Learning are committees in your school?

R: I have but we only meet once a term

L: That a good start, and the others, don't be shy, let me see show of your hands?

L: What about professionalism as a teacher?

Did TTPSP help here in anyway and can you give me some examples?

R: Yes, we know what to do in the classroom

R: Taught me how to listen to the news and the information from the department

R: Time keeping, Thami would not let us in if we came late to her mathematics class. (Laugh)...

R: I got locked out twice, but les you know how far my school is.

R: I thin that the school should know more about you and then we can assist the schools more...

WE should be thanked for helping the schools

L: If I look at your responses from your school you say that the TTPPS helped you with relationships the most? Why? Anything else why you say you like the project?

R: They helped me is setting up my classroom to teach mathematics and Science

R: My teacher who helped me was not good, so Toyota helped me sort her out

Remy hood and I get on better

R: No they didn't help me. I did it myself, because she will never listen to

me

R: Overall all of us here think Toyota is an excellent project (yes, yes background)

R: We get resources from you

R: The facilitators are kind

R: I have learnt so much

L: Can you explain more

R: I have learnt about myself, what schools should be teaching, it is very good, and all schools should do this project

R: They treat us well

L: Why then do you think that the other teachers in your school did not attend the workshops at your school:

R: I was told by two teachers they do not teach technology so it was not for them

R: Many tell me in my school they are too old

R: The teachers tell me I am doing the course and so I must tell them what to teach

R: same in my school

L: really, what is your response?

R: I sometimes don't say anything; I don't feel like moaning or fighting all the time

R: I sometimes think I am being used at my school

R: Yes me too

L: Do others feel the same... Eight of you

R: I always have to teach technology because my school has no idea about this

R: It is a sensitive issue. TO some principals it looks like we are a threat to them. Because we know more than them

L: Who are them?

R: the principal

L Thanks for this we can come back, Lets move on to curriculum? How many of you were involved in curriculum decisions at your school?

L By this I mean looking at what should be taught at the school to assist the learners

R: In my school our HOD does the entire curriculum planning, this gets done for the grades, she will tell me what is important to cover this term

R: I am only a student (Toyota) I am allowed but there is only one of me at the school

R: I sometimes think my principal does not know what the OBE curriculum is about

R: My school does get help with Finances and then we know what to do

R: Oh yes. The school governing body in my schools also sits in with the principal regarding curriculum.

L: Are there anything else that you can tell me about curriculum?

R: My principal lacks knowledge of OBE and does not know what to do in a technology lesson, he says I am studying and I must inform the school

How do you feel about the curriculum and what you have learnt at Toyota?

R: Lots we want to change but the others in my schools won't do it

R: Yes... Um you are wasting time there

R: Is very good, but change takes time

R: I like the curriculum at Toyota?

R: The Toyota Teach project is a good project but we need to get buy in from the Principals, I can't do it myself, he won't listen to me.

R: also the new learning from a teacher centered approach to learner was the biggest learning for me

R: ME too

R: yes

L: Are you agreeing with this statement?

R: Yes when we learn in groups at Toyota we learn more

R: We all at times had no resources to fully implement what we had learned at Toyota

L: Tell me about the portfolios for Jane, Remember co operative learning that you were asked to keep as a tool for Toyota?

R: I found it difficult

R: No I found it rewarding. It gave me an opportunity to reflect meaningfully on what I had learnt this semester

R: I learnt about co operative learning and that I need to create groups that are heterogeneous to enable co operative learning to take place.

L: Explain what you mean here?

R: Um... We learn new things all the time, How to do water purification, make paper

L: Have you tried this with your learners?

R: Laugh. No it is too difficult.

L: What grade are you teaching again?

R: Grade 4. I am at the moment teaching them about frogs anyway

R: I have all this knowledge but my school does not give me time to do this , at times I don't think my school appreciates me, I sometimes think of moving to a new school where I am appreciated

(Silence)

R: Our schools are vandalised often and I am sometimes afraid for my learners.

L Are you saying that you were consulted with the curriculum?

R: No, as I said before we don't help with the curriculum,

L: other responses, (silence)

L: maybe we have answered this we will come back maybe later

R: The school is not interested If I want too try

R: I am not the HOD; I do not have the official power so no-one really listens to me

L: Do you sit together to share your planning on the curriculum with your colleagues:

R: No we are not used to working together; we get into our classrooms and get on with our work

R: I have tried to but there planning is different to what we are taught at Toyota.

L: what is different?

R: They we assess and what we teach

R: Others don't want to sit with us because they feel we will expose them and know their weaknesses

L: Tell me about studying at TTPSP?

What was good and what was not great? Or should I say what can we improve on for the future?

R: The ACE is too much work

R: They forget about families

L: Who else feels like this? Show me a set of hands

R: my husband is unhappy with me studying so much

R: Too much reading

This course is very difficulty; you have to prepare for school work and then also your studies

R: I think that the lecturers need to be more lenient with us. I do an assignment every week

R: Also the contact session was at Toyota. I live in Umbumbulu, I catch three taxis there. And I am there three times a week. It is very expensive. Can you help here les?

L: Thanks for this; I will bear this in mind

R: Why can't we start later and maybe use a Saturday

R: Also we need to finish earlier, in winter it is late and then it is dark and there are no taxis to catch

L: Tell me about the lesson planning that you have been doing for

Toyota and your school?

R: I do it because we get visited six times by the Toyota staff and we need to complete these before we graduate

R: I do the same

R: Me to

R: I also do this

L: What about doing it for school?

R: Yes, I do it but not in so much detail

L: But who checks then?

R: Sometimes we hand our preparation sheet in to the school

R: I hand mine to the Head of Department

R: She visits us in the class and so we need to prepare our lessons plan

L: Who? All the Toyota people

R: No (interrupt) yes

L: Explain this, I am confused

R: Well for the one lady we send her our prep, but for the other people we give it to them when they come to visit

R: The preparation sheets re marked by the lady who visits us

R: I also plan what the Toyota lady wants. It is different for each subject who is confusing but I want to get it finished

R: I do two different lesson plans, one for Toyota and one for the school

R: I am sometimes confused but we do it like this for the math's lady, she is strict with this

L: So when do you do you're planning?

R: I do mine in the time learners are allowed to leave and when we can leave

L: So that is about 30 minutes

R: No fifteen, my taxi comes to pick me up

L: Continuing from the above question I am interested in the support visits that you received. Can you tell me about them?

R: I am happy about them because they help me

L: What do you mean help you?

R: well he always shows me what I should teach and sometimes helps me.

R: I like it sometimes but then I always have to go and arrange my classroom to suite a science classroom. I still share a classroom with a non Toyota teacher and I know she is not always happy about this.

R: Sometimes when we get resources the other teachers are not happy and it looks like we are better than them when we use the equipment

R: I have been told to put up displays for my visits but it is difficult as the walls do not hold the paper

R: I don't like it when they come UN announced, we must be told as we have things to do. This sometimes makes me cross, they must plan with us.

R: Some of the Toyota people should understand and forgive the poor facilities and conditions in the schools.

R: Sometimes my lesson goes on beyond the one hour and I am using another person's classroom and this creates resentment with my colleagues

R: I sometimes feel like I have to rush the lesson so she can support me afterwards and tell me what was wrong with the lesson

L: IS there always something wrong?

R: No not always

R: I have heard my colleagues say that I take to long when the Toyota comes to the school to see me.

L: Tell me about the other teachers in your school and why you think they are not interested in assisting the whole school to change?

R: They are old and don't want to change, my friend said they were taught the principles of education and not about putting children in groups

R: Some of my teachers say it was their initial training and now they are tired

R: Some say it is their democratic right and that nobody must tell them what to do

R: My school is o.k.... but we are to busy to do all what read wants us to do.

R: Change is painful for some of the teachers in my school. THEY are scared they will have to do more work.

R: It is very difficult to change end everything around you is not moving

R: Yes I feel the same, me too.

APPENDIX 6

CLASSROOM OBSERVATION SCHEDULE

Name of school:			
ACE History			
Date of observation:			
Teacher's name:		M <input type="checkbox"/>	F <input type="checkbox"/>
Grade:			
Total number of learners in the classroom:	(according to mark book / register)		
Subject:	English <input type="checkbox"/>	Mathematics <input type="checkbox"/>	
	Science <input type="checkbox"/>	Technology <input type="checkbox"/>	
	Principles of Teaching Competence <input type="checkbox"/>		
Lesson topic:			
Length of lesson:			
Time of lesson:			

Observed lesson no.:	
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ACKNOWLEDGMENT: Adler, J Reed, Y (2002) Challenges of Teacher Development An investigation of Take up in South Africa.(Addendum one- This has been adapted)

CHECKLIST CLASSROOM MATERIALS

				No	Yes
1. Has each learners got a desk/table to sit in?					
2. Can the learners work independently within the classroom space?					
3. Does the educator have a chalkboard to work on?					
4. Is there chalk?					
5. Is there a duster?					
6. Does the educator have a place to work from?					
7. Do textbooks exist for each learner					
8. Is there evidence that the learners have books to work in?					
9. Does each learner have an exercise book or paper to write in?					
10. Does the teacher use any additional learning/teaching aids in the class?					
<i>If yes, list</i>					
11. Is there enough light in the classroom throughout the lesson?					
12. Is there a lot of noise coming from outside the class?					
13. Are there any other constraints?					
14. How are the learners seated?					
		<input type="checkbox"/> Groups	<input type="checkbox"/> Rows individual	<input type="checkbox"/> Rows pairs	

ACKNOWLEDGMENT: Adler, J Reed, Y (2002)Challenges of Teacher

Development An investigation of Take up in South Africa.(Addendum one-
This has been adapted)

GUIDELINES USED WHILE OBSERVING THE TEACHERS

TTPSP GUIDELINES for ACE students participating in the ACE programme

1. INTRODUCTION TO THE LESSON:

- How did the educator introduce the lesson?
- Did the educator go over previous work?
- Did she arouse the learners interest and attention
- Was their evidence of the ACE methodologies being explored with the learners

COMMENTS: _____

2. LANGUAGE USED DURING THE LESSON

- Language used during the lesson
- School policy regarding English
- Mixed mode observed

COMMENTS: _____

3. LEARNERS AND THE INTERACTION WITH THE TEACHER

- Learners' did not question the teacher
- No interaction seen
- Learners freely discuss the lesson within their groups
- Co-operative learning seen
- Learners can explain what they have learnt in their own words

COMMENTS: _____

4. LEARNERS CENTERED APPROACH VERSUS AUTHORITARIAN APPROACH

- Teacher in charge
- Balance approach between learners and teachers
- Learners provide one worded answers
- Learners contribute to the lesson and engage with the educator

COMMENTS: _____

5. Knowledge Concepts explained by educator

- No/poor explanation of concepts/knowledge observed
- Some concepts explained however inaccurate information provided
- Confident in subject knowledge and can 'pollinate" within the curriculum

COMMENTS: _____

6. Questioning techniques

- Lower order versus higher order questioning
- No questions asked
- Encourages the use of questions amongst the learners

COMMENTS: _____

7. Resources used:

- TTPSP resources seen
- No resources seen in the lesson
- Teachers used the resources while learners observed

- Sharing of resources observed with the learners

COMMENTS: _____

8. Exercises set for learners

- Not applicable in terms of content, grade, etc
- Text book used
- Exercises from blackboard
- Learners given additional tasks

COMMENTS: _____

9. General Observation:

- How does the educator engage with incorrect answers from the learners
- How did the educator bring the lesson to a closure?
- What I observed has been appropriate to the TTPSP ACE modules?

APPENDIX 7

PRINCIPAL INTERVIEWS

L: How long have you been a principal at the school?

L: Do any of you principals have any qualification regarding a school management diploma, or have been on a leadership course?

L: What are your needs and challenges for the School?

L: What changes have you seen in your school in the last five years both positive and negative

L: What where would you say that Toyota has assisted in helping with you at your school?

On other words what I am asking you is how has the project assisted you?

L: Tell me about your ACE teachers that are in your school. You can mention anything regarding the schools and the teacher?

L: Has the ACE teacher been able to share what she has learnt with the school?

L: What do you think makes your school different from the others?

L: What do you think the vision of the Toyota project is all about?

L: How do you think the other staff members feel about your Toyota educator?

Appendix 8

ACE INTERVIEWS WITH TEACHERS

L: Why are you studying and why did you join Toyota to study further? -

L: Are you going to study further?

L: Why did you take up teaching?

L: So then what do you not like about teaching then?

L: Tell me what do you think the vision of TTPSP is about?

L: Do you get support from your school management team in your implementation

L: Do you feel you were given support at your school in trying to implement a policy? Or if you like "how have you managed to share your leanings? Or were you allowed to initiate changes that you did learn in your school

L: How many of you have set up Learning are committees in your school?

L: What about professionalism as a teacher?

Did TTPSP help here in anyway and can you give me some examples?

L: If I look at your responses from your school you say that the TTPPS helped you with relationships the most? Why? Anything else why you say you like the project?

L: Why then do you think that the other teachers in your school did not attend the workshops at your school:

How many of you were involved in curriculum decisions at your school?

L By this I mean looking at what should be taught at the school to assist the learners

How do you feel about the curriculum and what you have learnt at Toyota?

L: Tell me about the portfolios for Jane, Remember co operative lear L: Tell me about studying at TTPSP?

What was good and what was not great? Or should I say what can we improve on for the future?

L: Tell me about studying at TTPSP?

What was good and what was not great? Or should I say what can we improve on for the future?

L: Tell me about the lesson planning that you have been doing for Toyota and your school?

L: Tell me about studying at TTPSP?

What was good and what was not great? Or should I say what can we improve on for the future?

L: Continuing from the above question I am interested in the support visits that you received. Can you tell me about them?

L: Tell me about the other teachers in your school and why you think they are not interested in assisting the whole school to change?