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TEACHER DEVELOPMENT CENTRES AS A SUPPORT STRATEGY FOR THE PROFESSIONAL DEVELOPMENT OF PRIMARY SCHOOL TEACHERS IN MALAWI

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ABSTRACT

This thesis is about the influence of the teacher development centres (TDCs) as a support strategy for the professional development (PD) of primary school teachers in Malawi. PD of teachers is becoming an integral part of educational reforms in many countries. However, supporting and sustaining PD especially in poor countries is quite challenging. Many countries have adopted the use of teacher centres (TCs) as a support strategy for the PD of teachers and the TDCs in Malawi are an adaptation of the TCs from developed countries such as Britain where the concept of TCs was first hatched.

The aim of this study was to investigate the influence of the TDCs as a support strategy for the PD of primary school teachers in Malawi. The issues investigated included: activities which take place at the TDCs; teacher involvement in the PD activities at the TDCs; teacher changes in their professional practices as a result of their involvement in the PD activities at the TDCs; and factors which affect the sustainability of the TDCs in providing support for the PD. I develop an adult learning approach to a study of the influence of the TDCs as a support strategy for the PD of teachers and I demonstrate how the theories of adult learning can be used to investigate how teachers learn with the support of the TDCs.

The study was conducted in four TDCs in Zomba rural and Zomba urban in the South East Division in Malawi. I used both quantitative and qualitative approaches, which involved the use of questionnaire surveys and semistructured interviews to collect data. A total of 586 teachers were involved in the questionnaire surveys. A total of 16 teachers and 22 other key education personnel who were strategically linked to the establishment of the TDCs for TPD in Malawi were involved in the semi-structured interviews. To increase the validity of the data and the findings, I used both methodological and data source triangulation.

The findings of this study indicated that there were a variety of activities taking place at the TDCs and that some of them were of little relevance to TPD. The majority of teachers were involved in the TDC activities and that some teachers noted in themselves some transformation. However, the findings also revealed that teacher involvement in the TDC activities was constrained by limited access to the TDCs due to the long distances which some teachers had to travel to the TDCs; teachers' desire for workshops and monetary gains due to poverty; ineffective management of TDCs due to variations in the composition of the TDC committee members whereby some members had little formal education; limited coordination of the TDC activities due to lack of training of the TDC coordinators in TPD and the TDC coordinators had too many roles and responsibilities which were in conflict with those of the coordination of the TDCs; inadequate resources in the TDCs to support teachers in their PD; and lack of clear policy guidelines in the operations of the TDCs.

In light of the findings of this study, it was concluded that the TDCs as a support strategy for the PD of teachers were implicit because they did not exert much influence on TPD. However, to have an explicit support strategy there was the need for a clear policy that would guide the operations of the TDCs in Malawi.

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DEDICATION

To my late Dad, Landson Yotamu Mkandawire and my mum, Eliteck Nyamu Nyirenda who are the genesis of the career path I have taken this far. Yewo a Dada na a Mama.

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ABBREVIATIONS

AIDS	=	Acquired Immune Deficiency Syndrome
AIEMS	=	Action to Improve English, Mathematics and Science
APPEP	=	Andhra Pradesh Primary Project
AU	=	African Union
CDSS	=	Community Day Secondary School
CIDA	=	Canadian International Development Agency
CPD	=	Continuing Professional Development
DANIDA	=	Danish International Development Agency
DEM	=	District Education Manager
DEO	=	District Education Officer
DfID	=	Department for International Development
DMO	=	District Monitoring Officer
DPED	=	District Primary Education Project
DRC	=	Dutch Reformed Church
DSS	=	District Secondary School
DTED	=	Department of Teacher Education and Development
EC	=	Evangelical Church
ECOWAS	=	Economic Community for West Africa States
EDM	=	Education Division Manager
EDP	=	Education Development Plan
EFA	=	Education for All
EU	=	European Union
GTZ	=	Gesellschaft fur Technische Zusammenarbeit
HIV	=	Human Immunodeficiency Virus
IMF	=	International Monetary Fund
INSET	=	In-Service Education and Training
IPTE	=	Initial Primary Teacher Education
JCE	=	Junior Certificate of Education
JICA	=	Japan International Cooperation Agency
MANEB	=	Malawi National Examinations Board
MASTEP	=	Malawi Special Teacher Education Programme
MDGs	=	Millennium Development Goals
MGDS	=	Malawi Growth and Development Strategy
		XVI

MIE	=	Malawi Institute of Education
MIE-BU	=	Malawi Institute of Education - Brandon University (of
		Canada)
MIITEP	=	Malawi Integrated In-service Teacher Education
		Programme
MSCE	=	Malawi School Certificate of Education
MSSSP	=	Malawi Schools Support Systems Project
MTTA	=	Malawi Teacher Training Activities
NCTT	=	National core training team
NESP	=	National Education Sector Plan
NGO	=	Non-Governmental Organisation
NSS	=	National Secondary School
OAU	=	Organisation of African Union
ODA	=	Overseas Development Agency
OECD	=	Organisation for Economic Co-operation and
Development		
PCAR	=	Primary Curriculum and Assessment Review
PD	=	Professional Development
PEA	=	Primary Education Advisor
PIF	=	Policy and Investment Framework
РТА	=	Preferential Trade Area
PTTC	=	Primary Teacher Training College
RC	=	Roman Catholic
SADC	=	Southern Africa Development Community
SAEC	=	Southern Africa Economic Community
SEN	=	Special educational needs
SHAPE	=	Self-Help Action Plan for Education
SIDA	=	Swedish International Development Agency
SNE	=	Special Needs Education
SNESP	=	Statement of National Education Sector Plan
SPSS	=	Statistical Package for Social Science
SSA	=	Sub-Saharan Africa
TAC	=	Teacher Advisory Centre

TALULAR	=	Teaching and Learning Using Locally Available		
Resources				
TC	=	Teacher Centre		
TDC	=	Teacher Development Centre		
TDMS	=	Teacher Development and Management System		
TPD	=	Teacher Professional Development		
TRC	=	Teacher Resource Centre		
UN	=	United Nations		
UNESCO	=	United Nations Educational, Scientific and Cultural		
Organisation	Organisation			
UPE	=	Universal primary education		
USA	=	United States of America		
USAID	=	United States Agency for International Development		
ZEO	=	Zonal Educational Officer		

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The aim of this study was to investigate the influence of teacher development centres (TDCs) in supporting teacher professional development (TPD) in Malawi. My assumption was that the TDCs would provide support for TPD, which in turn would improve teacher classroom practices and hence improve the quality of teaching and learning. This study is unique and worthwhile because it is addressing a very crucial issue of how to enhance TPD in order to improve the quality of education. Teachers are becoming more accountable for the quality of education. Consequently, TPD is being recognised as one way of improving quality of education (Commonwealth Secretariat, 1980).

Issues of education quality are high on the education agenda in both developed and developing countries because education is regarded as a catalyst of economic development (Little, Hoppers and Gardner, 1994). There is a strong link between education quality and professional development (PD), especially between changing teacher beliefs and practices and improving students' learning (Asgedom, *et al.*, 2006). As such, many resources are being poured into various initiatives and reforms in an effort to improve the quality of education (O'Sullivan, 2005; Dembele and Miaro-II, 2003). Unfortunately, so far success has been limited and the quality of education especially in developing countries remains poor (InWent-Internationale Weiterbildung und Entwicklung, 2008; O'Sullivan, 2005; Voluntary Service Overseas, 2002). One of the reasons is that a lot of initiatives and interventions worldwide have demonstrated that TPD is a very complex and difficult effort. Consequently, efforts to explore the reasons for limited success tend to focus on the implementation process rather than on outcomes and long-term impact, no matter how small they may be (O'Sullivan, 2005).

Nevertheless, in recognising the role of teachers in improving the quality of education, many countries are integrating TPD in their education reforms (UNESCO, 2003; Knamiller, 1999). For the same reason, in its efforts to address issues of quality of education, Malawi established the TDCs as a support strategy for TPD (Section 3.7).

Although the use of the TDCs in providing support for TPD in Malawi dates back to the mid 1990s, many countries have been using teacher centres (TCs) for the same purpose since the1960s (Gough,1989). TDCs in Malawi are cluster centres for TPD. The concept of the TDCs in Malawi was part of the implementation of the government policy of decentralisation in education and was established on the principles of school and teacher support. As a focal point for zonal based PD, the TDC was supposed to provide outreach to the cluster schools (Ministry of Education, Science and Technology, 1999). However, since the TDCs were established in Malawi in 1998, no systematic and independent studies have explored the influence of the TDCs in providing support for TPD. Therefore, the aim of this study is to investigate the influence of the TDCs in providing support for TPD in Malawi. In this chapter, I provide the background to the research problem, statement of the problem, significance of the study and an outline of the contents of the chapters of the thesis.

1.2 Presenting myself

My awareness that all research studies reflect a relationship derived from the social identity and values of the researcher encourages me to begin my thesis by introducing myself to the reader of my thesis. I was born, grew up, was educated and trained as a primary school teacher and worked in Malawi. Early in my teaching career (from 1981 to 1989), I taught at a teacher training college demonstration school where, apart from being a class teacher, I used to conduct demonstration lessons to the students of the Initial Primary Teacher Education (IPTE). Teaching at the demonstration primary school provided me with an insight into how teachers can learn good teaching practices by observing other teachers.

In 1989, I became Deputy Head teacher of one of the largest schools in the City of Lilongwe. Managing this large school was quite challenging because of high pupil-teacher ratio and inadequate teaching and learning resources. It was also difficult to encourage teachers to work hard in such conditions. However, as a Deputy Head teacher, I learnt to appreciate the enormous problems teachers experienced in their work and the need for supporting them.

From 1990 to 1992 and then 1995 to 1997, I underwent regular and advanced courses organised by the Malawi Institute of Education (MIE) in collaboration

with the Brandon University of Canada (MIE-BU Courses). The courses were designed to equip District Education Managers (DEMs), Primary Education Advisors (PEAs), Head teachers and senior teachers with skills in school administration, organisation, management, supervision and inspection. These courses rejuvenated my knowledge, skills, beliefs and attitude to manage schools better. However, the MIE-BU courses did not adequately prepare me to confidently support TPD because there was little focus on principles of TPD.

When I completed the MIE-BU regular course in 1992, I was appointed as an Inspector of Primary Schools for Lilongwe Rural District. I used to travel to schools which were far apart and with poor road infrastructure. There was inadequate public transport to facilitate travel between schools as well as between rural to urban areas. In rural areas, teachers' working and living conditions were characterised by dilapidated houses and classrooms. Teaching and learning resources were very scarce. These poor conditions had a negative impact on access to quality education. Thus, during my inspection visits to schools, it became clear that teachers were lacking support in their efforts to improve the quality of education.

Recognising that schools and teachers needed more than inspection to improve the quality of teaching and learning, the Ministry of Education, Science and Technology extended the role of Inspector of Schools to include advisory and supervisory services, hence changing the name to Primary Education Advisors (PEAs). Changing from being a School Inspector to a PEA meant that apart from inspecting, I was expected to do the role of advisor and supervisor of teachers and schools. As a PEA, I was responsible for about 21 schools in Mpingu Zone of Lilongwe Rural West as well as centre coordinator for Mpingu TDC. The added roles of advisor, supervisor and centre coordinator implied that I spend more time supporting teachers and schools.

In 1998, I was appointed as In-service Education and Training (INSET) Officer in the Department of Teacher Education and Development (DTED) of the Ministry of Education, Science and Technology. As an INSET Officer, I was involved in monitoring the Malawi Integrated In-service Teacher Education Programme (MIITEP), a model of pre-service training for teachers which had been introduced in all the primary teacher colleges in January, 1997 in response to the introduction of free primary education which had resulted in high enrolments and teacher shortages (Ministry of Education, Science and Technology, 2003). I was also involved in the sensitisation of senior education managers and training of PEAs and school staff in undertaking TPD, school improvement and the establishment of the TDCs (Ministry of Education, Science and Technology, 1999). At all the stages of my work experience, PD was simplified to in-service courses but a complex venture. Yet in undergraduate and postgraduate courses I undertook at university level, I learnt that TPD was not as simple as conducting in-service courses. Although my work experience gave me more questions than answers in how to provide support for TPD in Malawi, my research focus is to explore the influence of the TDCs as a support strategy for TPD and not just in-service courses.

What follows is an account of my research journey - written in the first person in recognition of my 'active role' - that has left a strong and permanent mark on me. Not only has this journey, which is basically an insider study that draws on multiple methods of data collection and analysis, challenged and changed my belief system but it has also brought me closer to understanding myself. I have found that by exploring those with whom I shared my professional life, I also learned about myself. My research is an honest quest for knowledge based on long hours of work, dedication and respect for the key participants, the reader and myself. Still as my resulting knowledge is partial and contextual, I present it as tentative, consciously selective and written for a purpose, which can be challenged on the grounds of interpretation and meaning rather than on the basis of falsification of a fixed truth (Punch, 2005). Much as my embedded perspectives are admittedly partial and thus open to criticism, they have been honestly assumed. They are products of the interrelationship between me, my place in the social structure, the cultural milieu and the historical period in which I live. It is against the background of professional experience and academic knowledge that I identify the research problem.

1.3 Malawi: a brief background

Malawi is one of the least developed countries in the world. It is landlocked and lies to the south of the equator in Sub-Saharan Africa (SSA). It shares boundaries with Tanzania to the north, Zambia to the west and Mozambique to the south-west, south, and east. It lies in the southern part of the Great Rift Valley of Africa, containing the third largest lake in Africa. Malawi has a total surface area of about 112,140 square kilometres of which about 24,208 square kilometres are taken up by lakes and 23,760 square kilometres are arable land. By 2008, the population of Malawi had risen over 13. 5 million (Ministry of Economic Planning and Development, 2008).

Malawi is also one of the most densely populated countries in SSA. Nearly 90% of the rural population derives its livelihood from agriculture (Ministry of Education, Science and Technology, 1998). With its economic reliance on the export of agricultural commodities, Malawi is vulnerable to global changes such as decline of international economy, trade and also climatic changes. Despite manufacturing some of the materials, Malawi imports most other commodities. Being a landlocked country, it experiences high transport costs which seriously impede its economic development. Furthermore, the ravaging HIV/AIDS crisis is putting further pressure on economic development of Malawi.

Although Malawi was part of the British Empire for about eighty years, it has maintained its own culture and traditions. In fact Malawi got its independence from Britain in 1964 and became a Republic in 1966. Since then, it has enjoyed membership of continental organisations such as the African Unity (AU), Preferential Trade Area (PTA), Southern Africa Economic Community (SAEC) and European Union (EU). It has formed bilateral cooperation with bodies such as the Department for International Development (DfID) of the United Kingdom (UK), United States Agency for International Development (USAID), Gesellschaft fur Technische Zusammenarbeit (GTZ) of Germany, and global bodies such as the United Nations (UN) and its subordinate bodies, which have had a great impact on socio-economic and educational development in the present-day Malawi.

The national language of Malawi is Chichewa, but there are more than 15 other languages, which are closely related (Kaphesi, 2000; Kishindo, 1986). English is the official language. Both Chichewa and English are studied from primary school up to university. Although educational success depends on proficiency in both languages, it is the student's ability to receive instruction through English that really counts. The Government's policy on medium of instruction is, however, to encourage the use of local languages as medium of instruction in the first four years of primary and English the rest of the time, including in textbooks and examinations (Ministry of Education, Science and Technology and the Malawi National Commission for UNESCO, 2004).

1.4 Identifying the research problem

During the post-independence era, most countries in Africa recognised education as a tool for reinforcing nationalism (Rose, 2006; Smith, 2001). As for Malawi, when it attained political independence in 1964, education was regarded as a means by which freedom could be consolidated to achieve developmental goals (Rose, 2006). Education reforms have been initiated to align the education system with the aspirations of the nation. Realising that there was limited access to quality education in Malawi, many reform efforts have been aimed at increasing access to quality education (Ministry of Education, Science and Technology, 2008b).

Later, most developing countries realised that education was not just a tool for reinforcing nationalism but also for enhancing national and global socioeconomic development because there was evidence that quality and relevant education resulted in increased global and national economy, knowledge explosion, social and cultural changes, and technological development (Pinch, 1996). It is commonly held that relevant and quality education is associated with quality teaching and learning (Pinch, 1996). Yet, a great deal of knowledge, skills and attitudes dealt with in education are becoming outdated and new ones are emerging everyday, calling for continuous teacher learning (Coulby, 2005; Guskey, 2000; OECD, 1998).

As a result, education in Malawi has been experiencing unprecedented changes. The rate of changes and the explosion of knowledge require that teachers learn afresh throughout their lives (Guskey, 2000). This has implications for reforms in education, in that TPD must be an integral part of any educational reform (Blandford, 2000; Guskey, 2000; Calderhead, 1988) because teachers are crucial to educational change and school improvement (Hargreaves, 1994; Huberman, 1992). Teachers are essential players in promoting quality education, whether in schools or in more flexible community-based programmes (UNESCO, 2003), they are advocates for and

catalysts of change (Vongalis-Macrow, 2005). No education reform is likely to succeed without the active participation and ownership of teachers (Day and Sachs, 2004; Villegas-Reimers, 2003; Fullan, 1995) and this problem is aggravated by the missing link between education reforms and TPD (Daniels, 1999). As such, many countries have recognised that not only well-trained teachers but also teachers who continuously learn new ways of improving quality of education are fundamental to the implementation of education reforms (Guskey, 2000; OECD, 1998). It is the recognition of the importance of continuous teacher learning at the workplace which necessitated the integration of appropriate TPD programmes in educational reforms (Guskey, 2000).

In the 1990s, as part of implementing the Jomtien, Thailand Declaration of *Education For All* (EFA) many developing countries especially those in Africa embarked on various educational reforms (UNESCO, 2003; Little, *et al.*, 1994) with the aim of increasing access to education especially at primary level. Ten years later, it was discovered that in spite of increased access to primary school, the quality of education was dismal, especially in SSA, forcing countries to new goal for EFA at the Dakar summit in the year 2000 (Dembele and Miaro-II, 2003). Problems in implementing EFA continued due to the decline of pupil enrolments in many countries and teacher shortages partly due to the devastating HIV/AIDS (Christie, Harley and Penny, 2004). With regard to teacher shortage, Lewin (1999:19) cited by Christie *et al.* (2004) argued that "the shorter the professional lifetime of teachers in the system, the higher are

the costs of providing an adequate number of trained teachers" which encourages countries to focus more on pre-service education training than on TPD.

Poverty was seen as a major obstacle in the implementation of EFA (Robertson, *et al.*, 2007). Hence, the UN held a Millennium Summit at which all the member states agreed to work towards the elimination of poverty and bring about sustainable development as the highest priority. During the Summit and subsequent meetings, the Millennium Development Goals (MDGs) were developed with the aim of eliminating poverty by 2015 (Robertson, *et al.*, 2007). The MDGs are a set of eight goals, 18 targets and 48 performance indicators that relate to poverty reduction by 2015. The MDGs range from halving extreme poverty to halting the spread of HIV/AIDS as well as providing universal primary education (UPE). The MDGs form a framework through which the efforts of the developed and developing countries and international agencies might be channelled and implemented in order to achieve significant and measurable improvements in people's lives by the year 2015.

Two MDGs are related to this study. These are:

• MGD 2, achieve universal primary education (UPE) to ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling;

 MGD 3, promote gender equality and empower women by eliminating gender disparity in primary and secondary education at all levels of education, preferably by 2015 (Robertson, *et al.*, 2007:88-89).

Thus, the government of Malawi has included education as one of the nine priority areas in the Malawi Growth and Development Strategy (MGDS). The primary focus is to improve access and quality of education. To this extent, the government has over the years initiated programmes aiming at improving access to and quality of education (Ministry of Development Planning and Cooperation, 2003).

Although Malawi is committed to achieving the MDGs by 2015 through the implementation of her own national development strategy, the (MGDS), the challenge is to achieve UPE and promote gender equality and empower women by 2015 as the government is not on track (Ministry of Development Planning and Cooperation, 2009:ix). In relation to UPE, the challenges reported are:

- shortage of qualified primary school teachers;
- inadequate physical infrastructure;
- poor retention of girls mainly from standard five to eight as a result of high disease burden due to HIV and AIDS which leads to absenteeism especially among girls who take care of the sick; and,
- poor participation of school committees and their communities in school management (Ministry of Development Planning and Cooperation, 2009:12).

Perhaps one other reason is that:

... in the majority of SSA countries there are not yet enough school places to enrol all school age children at primary level, and that many more are excluded from lower secondary schooling than primary (Lewin, 2007:8).

These challenges of achieving UPE are not unique to Malawi but the entire SSA region and other developing countries. According to Kunje and Chiwaula (2010), SSA requires 1.6 million additional teachers to achieve UPE, which doesn't seem attainable by 2015. Kunje and Chiwaula (2010) further argued that it is not just increased access to education but also quality of education that should be desired, and this directly links to TPD.

As for the MDG 3, some of the challenges faced in promoting gender equality and women empowerment in Malawi are:

- limited capacity in terms of human and material resources to facilitate adult literacy and continuing education;
- socio-cultural factors that make people believe that men should be leaders while women are followers; and
- poor learning environment which affects girls in primary and secondary schools e.g. sanitary facilities, long distances to education facilities, extra burden from domestic chores especially for adolescent girls resulting in high drop out rate (Ministry of Development Planning and Cooperation, 2009:17).

Since teachers are arguably agents of educational change, it is essential that Malawi puts TPD as one of its priority areas in achieving UPE and gender equality. TPD should penetrate every aspect of education reform as a process of 'recharging' teachers with the aim of improving education quality (Borko, *et al.*, 2002; Guskey and Huberman, 1995; Smylie, 1995). To this effect, Hargreaves and Goodson (2002: x) wrote:

Teachers are the midwives of that knowledge society. Without them, or their competence, the future will be malformed and stillborn.

By comparing teachers to midwives, Hargreaves and Goodson (2002) are emphasising that the role of teachers is to help in the transmission of knowledge from one generation to another in a society. To achieve this, the society requires not just teachers but importantly competent teachers who would prepare children to acquire relevant and quality education for transforming society. Just as midwives require resources to help mothers to deliver, so teachers need resources to help in their career. However, in most developing countries, including Malawi, teachers teach without basic resources (InWent-Internationale Weiterbildung und Entwicklung, 2008; O'Sullivan, 2005; Lockheed and Verspoor, 1991). Indeed if teachers are midwives of the knowledge society, they need to not only be abreast with new knowledge but also to provide the knowledge to society. For teachers to achieve all this, they need to be involved in continuous professional learning.

One argument about the establishment of the TDCs as a support strategy for TPD in Malawi is that it was an educational reform. Bishop (1986) pointed out

that the planning stage of educational reform involves carefully conceptualising the implementation of reform. He described reform as the process of implementing planned activities, which operate with some elements such as a person or group of people who initiate reform, a reform itself, the user, and time. The reform agent should acknowledge first that reform is complex, and cannot be solved by mere intuitional judgment or educated guess. A reform agent has to go through some systematic planning and implementation steps (Bishop, 1986).

Adams and Chem, cited in Bishop (1986), enumerated eleven elements, which must be considered at each stage of any reform process, as *with who does what*, *with what, to whom, where, in what manner and why, and with what effect.* These elements include the personnel, the actual task, the method or the strategy or procedure, equipment, environment, cost, social context, time, scheduling, sequencing and coordination of activities, the rationale for the reform and the evaluation of the results. Adams and Chem's elements are helpful in focusing this study because they link to the rationale for setting up the TDCs as a support strategy for TPD in Malawi (Section 3.7) as interpreted below:

- the personnel: adequacy and appropriateness of the staff at the TDC;
- the actual task: roles and responsibilities of all key stakeholders;
- the method/strategy/procedure: how teachers are engaged in PD;
- equipment: resources and materials to support TPD at the TDC;
- environment: enabling factors for TPD to take place at the TDC;

- the cost: funding for TPD activities;
- social context: interaction among stakeholders in promoting TPD;
- time: provision of time for teachers to engage in TPD activities as well as the TDC personnel;
- scheduling: plan of activities for TPD;
- sequencing and coordinating of activities: organisation and management of TPD activities;
- rationale for the reform and evaluation of the results: justification for engaging teachers in TPD programmes and mechanism for monitoring and evaluating TPD activities.

Additionally, the TDC as a support strategy for TPD also needed to seriously consider the social context for effective implementation (McLeod and Golby, 2003). Bishop (1986) pointed out that the reform process involves problem identification, possible solution, particular solution (reform), and optimum solution which are then trialed and evaluated, implemented and institutionalised. Whether a reform process will succeed or not depends on related factors such as dissatisfaction, vision, action and resistance to reform, as factors influencing the success of any reform in a system (Bishop, 1986). This implies that effective planning and processes may lead to successful reform as these two are closely related and they determine the level of dissatisfaction, vision and action and resistance to reform. On the other hand, reform, which is not well planned, results in waste of scarce resources, stress and disenchantment and ultimately failure of the reform.

Another argument in support of TPD is that no education reforms will succeed if teachers are left out of the reform process. Spilliane (1999:970) explained that:

Although [education] policy makers certainly are crucial to [education] reform, 'teachers are the key agents when it comes to changing classroom practice. They are the policy brokers.'

There has been a consensus amongst educationists that improving the quality of education depends partly on improving the quality of teachers (Blandford, 2000; Day, 1994; Bell, 1991; Blackman, 1989). It has also been argued that if schools are to provide meaningful pupil learning, there is a need to offer learning opportunities to teachers (Darling-Hammond, *et al.*, 1999; Farrell and Oliveira, 1993; Dean, 1991; Greenland, 1983). The implication then is that:

... unless teachers have access to serious and sustained learning opportunities at every stage in their career, they are unlikely to teach in ways that meet new standards for pupil learning, or to participate in the solution of education problems (Feiman-Nemser, 2001:1014)

Therefore, providing learning opportunities for teachers entails creating an environment that will motivate teachers towards self-development (Hoppers, 1996). In the past decade or so, one of the efforts has been to create an enabling environment for TPD by developing a learning community of teachers through networks (Bell, 1991). In this vein, Moon (2000:5) argued that:

Most PD activities have been focused through individuals. And yet the focus on networks and knowledge creating education communities points to the importance of more collective approaches to improvement. Providing support for TPD through networks is still challenging because in most developing countries teachers are too overloaded with classroom work to attend to TPD (Kadzamira, 2006). Furthermore, the organisation and management of education systems might make it difficult for TPD to thrive among teachers (Bell, 1991) partly because of inadequate support for TPD. Nonetheless, however, inadequate the support might be what is crucial is that any amount of support must aim at removing the barriers to TPD.

Different support strategies for TPD have been developed since the 1960s (Blackman, 1989) and since then, some of these support strategies have been exported from developed countries to developing countries (Gough, 1997; Hoppers, 1996; Blackwell, 1977; Howes, 1977). For example, Kenya (Wiegand and Jain, 1999; Lilly, 1990); Tanzania (Kapinga, 1996); Uganda (Ministry of Education, Uganda, 1996); Zambia (Nair, 1996; Chelu and Mbulwe, 1994) and Zimbabwe (Ministry of Education, Zimbabwe, 1996) adapted TCs as a support strategy for TPD, which was originally developed in Britain. However, such strategies differ mainly in the area of emphasis. For example, some of them emphasise the place where the support takes place (Guskey, 2000) whereas others focus on the needs and aspirations of the teachers, the schools and the pupils (Bell, 1991).

Although the use of TCs in providing support for TPD in Africa is increasing, their influence on TPD is minimal because most African countries are too poor to sustain the TCs and teacher motivation and performance in TPD remain low (Hopper, 1996; Blackwell, 1977; Hawes, 1977). The implication is that, "Despite its essential role in educational reform, PD typically does not receive adequate support in systems reform efforts" (Borko, et al., 2002:969). This situation has been detrimental to the quality of education in these countries (MacNeil, 2004). Nevertheless, in most countries, the success of the strategies for TPD depends on how teachers acquire and use the knowledge, skills and attitudes gained through PD in improving quality of education (Knamiller, 1999). Gough (1997) reported that in Britain where the idea of TCs originated, a disparity existed between what the TCs were felt to do and what teachers actually got out of them. There was little systematic TPD and only small groups of teachers engaged in such activities. It must be noted that in developing countries, there are limited resources for providing support for education reforms such as the TCs and that developing countries continually rely on material, technical and financial support from developed countries in education reforms (Christie et al., 2004). If teachers in developed countries with abundant resources found it difficult to influence TPD through the TCs, it is likely that TCs in developing countries such as Malawi would find it even more difficult to provide support for TPD.

1.5 Statement of the problem

Teachers are regarded as a very important human resource in education (Hargreaves and Goodson, 1996; Hargreaves, 1994). Teachers are strategically placed for effective implementation of any educational change (Day, 1993). They are a gateway to the classroom for most educational changes and

responsible for what students can know and do. They can also be regarded as the image of their own learning through teaching.

Day (1993) further stated that PD helps teachers to make teaching more active and meaningful and encourages sharing of knowledge and skills. It is an important mechanism through which teachers interact, share solutions to common problems affecting teaching and develop skills to evaluate their own teaching. However, Guskey (1995) suggested that teachers may not be good enough to conduct their own PD activities without support from outside, partly due to limited knowledge about PD and inadequate resources. Furthermore, teachers may not be aware of what is expected of them from PD activities (Huberman, 1993).

Additionally, Clarke and Hollingsworth (2002) claimed that PD does not occur naturally; it has to be planned, implemented and evaluated to assess the impact on the learners. Guskey and Sparks (1996) also contended that PD which lacks clear purpose and is not fully supported cannot achieve the intended goals. Kelchtermans (2004) added that when addressing issues of PD, one should not limit the relevant moral and political context in which teachers work because PD does not occur in a 'vacuum'.

It is in this regard that Henderson (1978) also argued that the effectiveness of PD programmes may be questionable if the activities do not address the needs of the learners in the classroom because, as Villegas-Reimers (2003) pointed

out, TPD opportunities have a substantial positive effect on students' performance and learning. TPD is also a key factor in making sure that reforms at all levels are effective (Villegas-Reimers, 2003).

Some studies have suggested that there are some problems of TPD which are associated with teachers and managers. For example, in a study conducted in Lesotho, Iheanachor (2007) found that many teachers were not comfortable when asked to conduct PD in their schools because of lack of knowledge in organising and executing PD activities. Teachers avoided being involved in PD for fear of exposing their ignorance and being laughed at by fellow teachers. Other teachers thought that it was the responsibility of the managers to plan and conduct PD for teachers because the managers controlled the resources. Furthermore, some teachers felt that conducting PD activities was difficult as they would not be objective enough to point out weaknesses in their fellow teachers. These findings suggest that teacher knowledge, beliefs and attitudes are crucial in PD programmes.

The preceding discussion suggests that there are challenges associated with TPD and that careful planning is important to achieve the intended goals. Nevertheless, Malawi established the TDCs to provide support for TPD in the late 1990s. However, since then, little is known about the influence of the TDCs in supporting TPD in Malawi. Although research has been carried out on TCs in some SSA countries (Sunal, *et al.*, 2001; Knamiller, 1999; Lilly, 1990; Ayot, 1983) little research has been done in Malawi. Therefore, there is a need

for such research in Malawi to build a complete mosaic of SSA TCs in providing support for TPD. Specifically, there is need to determine the influence of the TDCs in enhancing teacher involvement in TPD activities; to assess if the establishment of the TDCs has brought about changes in teachers; and to find out if there are any barriers to the teacher use of the TDCs for TPD.

1.6 Research questions

In order to explore the influence of the TDCs in supporting TPD, the following general research question was formulated: To what extent do the TDCs provide support for TPD in Malawi? The following specific questions defined the research problem:

- What PD activities take place at the TDC?
- To what extent are teachers involved in the PD activities?
- What changes are there in the teachers as a result of their involvement in the PD activities at the TDCs?
- What factors affect the sustainability of the TDCs in providing support for TPD?

1.7 Significance of the study

The significance of my study stems from the fact that it is the first study to investigate the influence of the TDCs as a strategy in providing support for TPD in Malawi. Despite increased and frequently inconclusive knowledge of the impact of TPD on student achievement, little is known about the ways in which specific support strategies influence TPD (O'Sullivan, 2002). As English (1995) pointed out, many studies on the impact of INSET on classroom practices have failed to unearth the features of INSET and classroom practices; conceptual frameworks for such studies are based on theories of classroom practices with little relevance to theories of teacher learning and the research methods used do not capture valid data on which to base the conclusions.

It is my hope that this study will address these concerns and that the findings will contribute towards the understanding of the nature and process of a support strategy for TPD that is based on a network model to develop professional learning community. My study is also significant because it addresses the value of the TDCs in providing support for TPD, taking into account that the Government of Malawi, with the support of the donor community, spent a lot of resources in implementing the programme which was aimed at contributing to the socio-economic development of the country. Ultimately, the findings of the study may lead to recommendations for providing sustainable and long-lasting support for a TPD programme. In addition, the findings will also be of particular relevance to practitioners such as teachers, education advisors, curriculum planners and other educationists interested in teacher support and development, as well as researchers in teacher education and development. At global level, answers to these research questions will be of significance as they will illuminate the theory and practices embedded in TPD efforts in developing countries such as Malawi.

1.8 Structure of the thesis

In Chapter Two, I set out the global context of the study, including the role of education in the global economy, with a focus on human capital theory and the knowledge-based economy in various parts of the world. In Chapter Three, I set out the national context of the study, including the education setting in Malawi, with the focus on supporting TPD. I also discuss the origin and the establishment of the TDCs in Malawi.

Chapter Four concerns the theories and practices of TPD. I present in the chapter the arguments for and against the need for TPD, what it involves, why certain strategies and models have been used, and how TPD influences the quality of teaching and learning in schools. I also provide a review of TCs in developed and developing countries. I discuss the origin, development and demise of the concept of TCs in the UK, and the exportation of the concept of TCs to North America, Asia and Africa. I present the arguments for and against the need for TPD in developing countries, where donors export the concepts amidst limited resources. In reviewing TPD programmes in Africa, prospects and challenges have been identified and compared to those in developed countries.

In Chapter Five, I present the conceptual framework of the study, which is a guiding theory for the study. I use aspects of the literature reviewed so far as a basis for developing the conceptual framework, as a way of conceptualising TPD as teacher learning. I draw on theories of adult learning to develop a framework for exploring how the TDCs are providing support for TPD. In this chapter, I also discuss variables of TPD likely to be supported through the TDCs, which were explored in the study.

In Chapter Six, I develop the methodology of the study by discussing the philosophical framework and the justification for choosing to use both qualitative and quantitative research approaches, data collection methods and sampling techniques. I also describe methodological considerations that include validity and reliability, triangulation, generalisability and ethical considerations. In this chapter, I have also presented the implementation of the research study, which includes a pilot study. Data analysis procedures are also presented in the same chapter. I conclude with a description of how the findings were reported.

I present the findings of the study in Chapter Seven. Chapter Eight is where I develop the theory of the TDCs in supporting TPD, by reviewing the results and relating them to the theoretical and conceptual framework of the study. This stage of the research process involves comparing the findings, categorising them and forming themes for interpretation. This is a process of synthesising and making meaning from the findings in order to construct a theory which demonstrates further understanding of the TDCs in supporting TPD.

In Chapter Nine, the conclusion, I provide an overview of the study; reflect on the major findings of the study; relate the results to the original research problem; and consider the contribution of the study first to the practice and second to the theory of TPD. Then, I discuss the strengths and limitations of the study. Finally, I identify the need for further research and make recommendations for the direction, which this research might take.

In the next chapter, I explore the global context of TPD; why TPD is a global concern and how it is approached at global level.

CHAPTER TWO

THE GLOBAL CONTEXT OF THE STUDY

2.1 Introduction

It is imperative to present a global context to an academic study of this type because, Day and Sachs (2004) argued, the context for teacher professional development (TPD) is a global issue. Similarly, in order to have a global approach to some of the challenges in improving quality of education, many countries have adopted the use of teacher centres (TCs) as a support strategy for TPD. This chapter explores some of the global factors which have led to the establishment of the teacher development centres (TDCs) as a support strategy for TPD in Malawi. Specifically, I discuss the meaning of globalisation, its origin and the economic forces behind globalisation. I then explore the links between education and globalisation. Finally, I map out the global efforts in supporting TPD in developing countries.

2.2 The concept of globalisation

Globalisation is defined differently by different writers largely because of the theories these writers hold and the practices in which they are engaged (Robertson, *et al.*, 2007; Paul and Raspman, 2004; Smith, 2002). For example, economists define it as expansion of the economic activities beyond the nation's border (Robertson, *et al.*, 2007); politicians define globalisation in terms of state policy actions to embrace global issues (Paul and Raspman, 2004); the social definition of globalisation focuses on social impact at local, national and international levels in terms of equity, justice and economic gains

and dominance; and finally, the cultural definition focuses on cultural identities and values (Smith, 2002). The forgoing definitions imply that Malawi needs to embrace this concept of globalisation if it is to become part of the global village.

Furthermore, many authors have used Giddens' (1990:64) definition to describe globalisation as an:

... intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa.

This statement has immense implications for de-localisation, technological innovation, multinational corporations and a move towards free markets (Smith, 2001; Kiely, 1998). Kiely (1998:3) further defined globalisation as "a world in which societies, cultural, politics and economies have in some sense come closer together". Prominent in these definitions is the importance of recognising what some people are doing and experiencing to solve their problems. Globalisation as learning from each other, according to Smith and Doyle (2002), entails a knowledge economy which suggests that those nations committed to lifelong learning and to creating a learning society will thrive.

Globalisation is also about the interconnections between people in different parts of the world (Scholte, 2007) which is facilitated by information flow that induces changes in the pre-existing socio-cultural, political, economic structures and education systems of nations (Kwame, 2007; Willis, 2005). Interconnecting people from different parts of the world implies a reduction of barriers to trans-world contacts so that through it people become more able to engage with each other in a single world. Malawi is definitely part of the global network whereby people of Malawi are interconnected to people from different parts of the world.

Cogburn and Adeya (1999) described globalisation as an ongoing experience symbolised by the connection of the social events and social relations at a distance shaped by local contexts. In essence, globalisation is associated with a set of social, economic, political, and cultural processes in which experiences and activities in different parts of the world influence each other. It is made possible by a variety of interconnections which are characterised by unfixed institutions linking local practices with world social relations (Coulby, 2005). Thus, according to Cogburn and Adeya (1999), globalisation is facilitated by organisations and/or institutions such as those under the United Nations (UN) as well as the bilateral organisations and non-governmental organisations which are specially designed to address global issues (Coulby, 2005). This concept of globalisation implies that the establishment of the TDCs in Malawi is a result of the influence by such global organisations and/or institutions as the World Bank, the Department for International Development (DfID) and Gesellschaft für Technische Zusammenarbeit (GTZ) through their financial and technical assistance, which in most cases set preconditions for funding such reforms in their favour.

According to Smith and Doyle (2002), globalisation involves not only the connectedness of people but also the spread of production, communication and technologies throughout the world. This way of defining globalisation emphasises the diffusion of ideas, practices and technologies, in a broad focus of cross-border relations between countries. Generally, globalisation is about the spread of modern social structures worldwide, the process of spreading various objects and experiences to people in different parts of the world, the reconfiguration of geography, and not liberalisation (encouraging borderless world economy) as other people's definitions have alluded to (Smith, 2002). Here, liberalisation may be perceived as a precondition for sustainable globalisation. It is possible that the establishment of the TDCs in Malawi was a result of liberalisation of the knowledge economy in education systems.

However, understanding the concept of globalisation is difficult (Smith, 2002) partly because globalisation is a value-laden process with a marked difference between its theory and practice (Kwame, 2007). For example, whereas global interdependence may assume social equity, globalisation may create hierarchy, unevenness and exploitation (Tonna, 2007). Similarly, whereas global integration may imply unification and a sense of community, according to Kwame (2007) and Davies (1999), globalisation may not produce a single global village. Such a dichotomy between the theory and practice of globalisation has made it difficult to have a common working definition of globalisation and relate it to TPD in Malawi.

According to Willis (2005), the aim of globalisation is to promote economic growth and eradicate poverty (Robertson, et al., 2007) and consequently bring about sustainable development. In this way, globalisation is not just about economic development but a whole range of aspects of human development including education (Bhola, 2000), as discussed in Section 1.4 on some of the objectives of the Millennium Development Goals (MDGs). On the other hand, Omolewa (2005) argued that globalisation is not the sole cause for development but to some extent it ensures mobilisation of resources to combat economic crisis. According to Omolewa (2005), regional and global cooperation have emerged as a way of joining hands in solving economic problems. Thus, globalisation is associated with sustainable activities across national boundaries (Smith and Doyle, 2002). Malawi, as one of the poorest countries in the world (Ministry of Education, Science and Technology, 2008b), requires global approaches to its economic development through a range of human development activities including TPD which would ensure quality education.

2.3 The origin and spread of globalisation

Historically, globalisation is both old and new (Kwame, 2007; Willis, 2005; Bhola, 2000). It is old because it began with the early European explorers who travelled worldwide setting up their own colonies, sometimes ignoring the existence of the indigenous people (Tonna, 2007; Kennedy, 1999). These early explorers spread not only trade, agriculture and technology but also culture, which included education and religion (Kwame, 2007). For Africa, the

unpopular colonial rule and slave trade emerged from the globalisation of trade, market and labour (Omelowa, 2000). For Malawi, globalisation brought colonisation, slave trade, trade, market and labour, together with western culture and education.

Meanwhile, globalisation became popular in the 1990s to describe the increasingly integrated and interdependent world economy (Obstfield and Taylor, 2003; Tomlinson, 2003) partly due to the collapse of the market values of some natural resources such as minerals on the one hand, and changes in systems of government such as communism and technological developments such as use of computers, phones, radio, television and aeroplanes, which have increased global awareness (Willis, 2005; Pinch, 1996), on the other hand. However, the concern here is not how old globalisation is, but how radical it is in addressing local issues. In fact, globalisation has been described as less new and less radical than is imagined in that innovation has had little effect on development in Africa (Kwame, 2007). In this vein, I believe that the TDCs in Malawi were born out of globalisation of education as a viable way of improving the quality of education.

Although many authors have expressed difficulties in explaining the forces behind globalisation, they seem to agree on some which are rather theoretical (Coulby, 2005; Tomlinson, 2003; Smith and Doyle, 2002; Kennedy, 1999; Pinch, 1996). First, for many economists, the role of market forces within the context of technological changes, the dynamics of the international capitalist system, a product of modern rationalism and/or a combination of all these are the possible causes of globalisation (Pinch, 1996). Second, with the unprecedented development of technology (Tomlinson, 2003), such as jet travel, radio, television, facsimiles, computers, internet and credit cards, society is more of a global village than ever before (Scholte, 2007). Third, the establishment of regional and international bodies has also played an enabling role for globalisation through supra-territorial links by facilitating rules, procedures, norms, and institutions (Coulby, 2005; Smith and Doyle, 2002). It would be interesting to find out how globalisation is influencing education reforms in Malawi.

In essence, the major force behind globalisation is perhaps that people are sharing knowledge, skills and experiences in solving local, national and international problems in more efficient and faster ways (Kennedy, 1999). Thus, the forces behind globalisation are so strong that global processes have become inevitable and largely irresistible as they are associated with economic integration into national, regional and global markets underpinned by new technologies (Kiely, 1998). This might be the reason why, as part of the global village, Malawi embraces globalisation efforts in addressing the issues of quality of education through the establishment of the TDCs in providing support for TPD.

On the other hand, globalisation is a threat as it encourages dominant global institutions to replace local communities and nation states (Coulby, 2005;

Tomlinson, 2003). Globalisation tends to eliminate traditional boundaries among nations, regions and ethnic groups, and instead the whole world has become a 'global village' (Omolewa, 2005). It has changed social borders, causing some communities to disintegrate while leaving others intact and establishing new ones (Kiely, 1998). In terms of economics, globalisation alters the organisation of production, exchange and consumption. In relation to politics, globalisation has some implications for the conduct of governance. National laws are being affected by international declarations on human rights (Omolewa, 2005). The resultant situation raises far-reaching questions about the nature of sovereignty and democracy in a globalised world. With regard to culture, globalisation disturbs territorial identity, resulting in some people reacting against globalisation with protective nationalism (Zambeta, 2005).

In supporting the arguments by Coulby (2005), Omolewa (2005), Tomlinson (2003) and Kiely (1998), globalisation is also a threat to developing countries including Malawi in that such countries continue to lose well trained and qualified personnel in various fields such as education and health. Some of these personnel migrate to developed countries such as the United States of America (USA), Canada, the United Kingdom (UK), and South Africa for well paying jobs, leaving their countries with an acute shortage of skilled personnel such as teachers and nurses (brain drain) (Section 2.4) (Gorman, 2008).

Globalisation is also a threat to Malawians because of cross-border migrations which encourage the spread of deadly diseases such as HIV/AIDS and

tuberculosis. As many people travel in and out of Malawi, they help the spread of such diseases which deplete the limited health resources in Malawi, thereby inhibiting national growth and development (Ministry of Development Planning and Cooperation, 2009). For example, HIV/AIDS has impacted on education development partly because of loss of teachers through teacher absenteeism and deaths as well as numerous pupils who are orphans and/or experience long ill health (Kadzamira, 2006; Christie, *et al.*, 2004).

Another global threat to education in most developing countries including Malawi are the conditions and agendas set by donors and lending institutions in the establishment of educational priorities (Section 2.4) in particular Africa as it is more aid dependent than other regions (Christie, *et al.*, 2004). For instance, in Nigeria, the impact of austerity budgets on primary education led to a reduction in enrolments for the poor and more especially the girls (Obasi, 2000).

Furthermore, national governments have failed to sustain donor-driven education reform programmes when the donor pulls out. The reforms are introduced by the donor with little regard to the ability of the national governments to sustain them. As a result, poor countries become poorer than before as they continue borrowing money to sustain the programmes. There are reports of some African countries that have failed to sustain education projects/programmes after the life of the donor aid. For example, Crossley *et* *al.* (2005) reported a failure to sustain an education project in Kenya after the donor stopped supporting it.

It can be inferred from the above discussion that globalisation has both positive and negative effects on education. Many authors have recognised the importance of education in national development and donor aid especially in Africa (Christie, *et al.*, 2004). TPD is one of the education reforms that have benefited from such institutions although, according to Christie *et al.* (2004), in countries where there is financial austerity, TPD is rarely considered a priority. If it does, it only occurs when there is need to orient teachers to new curriculum (Kunje and Chimombo, 1999). Thus, it would be interesting to know if the TDCs in Malawi that were donor funded are sustainable after the life of the donor support.

2.4 Global economy and education

The relationship between globalisation and economic development seems to be more complex than presented in the literature. Robertson *et al.* (2007) described globalisation as geographical reorganisation of capitalism, in turn causing changes in the territoriality of state power and the ways in which states regulate the conditions for production and accumulation of wealth. Furthermore, it is "a driving force behind the rapid social, political and economic changes that are reshaping societies" (Robertson, *et al.*, 2007:11). They viewed it as a process which embodies a transformation in the organisation of social relations and transactions. Robertson et al. (2007) also described some global organisations and institutions through which economic development processes are carried out as multilateral and bilateral. Multilateral institutions such as the UN, through its constituent organisations such as the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the World Bank and the International Monetary Fund (IMF), and also bilateral cooperation between developed and developing countries such as the DfID), the United States Agency for International Development (USAID), GTZ, Japan International Cooperation Agency (JICA) and Canadian International Development Agency (CIDA), which have exerted influence on educational policies and practices through funding and technical assistance (Coulby, 2005). The institutions define what counts as development and how economic activities should proceed. They develop the programmes, set the conditions under which they are to be financed, finance them and also lay down the terms of partnership with other agencies and evaluate the activities. The non-governmental organisations (NGOs) mediate the relationship between globalisation and economic development especially in response to the failure of states and new social movements to initiate sustainable economic development and also because of the increasing reliance on NGOs by UN agencies to create new space for national action for economic development. Regional institutions and organisations such as the European Union (EU), the African Union (AU), and the Economic Community for West African States (ECOWAS), and Southern Africa Development Community (SADC) which each consist of at least three

states are actively involved in economic development processes in member states. The relationship between regionalism and globalisation is one of *parts* and a *whole* (Coulby, 2005). Malawi is a beneficiary of financial and technical support from almost all the multilateral and bilateral institutions, and NGOs, some of which have been mentioned above, in its effort to achieve social economic development, including the establishment of the TDCs as one of the strategies for improving the quality of education through systematic TPD.

Robertson *et al.* (2007) further discussed theories which have been developed to explain how global economic development is achieved. The first is modernisation theory-improving the living conditions of poor people by following regulatory policies to encourage economic take-off. It does not consider the local culture and social context. The second theory is dependency theory. It raises the question of the relationship between national state development and the international capital economy, focuses on the unbalanced power relations within the world economy which force low-income societies and peoples into particular and passive roles and keep them there. In fact, educational structures and content are the means by which developed countries exercise control over the less developed countries, reproducing conditions for the survival and advancement of themselves. As regards Malawi, there might be a need to distinguish between a modernisation and dependency approach when addressing issues of national development as they relate to improving quality of education. Modernisation without human development is likely to lead to continued dependency on those who bring modernisation to the countries, raising questions of the sustainability of such programmes as TDCs.

In discussing how globalisation is related to economic development, Robertson *et al.* (2007) mentioned human capital as part of modern theory. Consistently with Robertson *et al.*, (2007), Becker (2006), who was awarded a Nobel Prize in Economics for his contribution to human capital theory, compared technology to the *driver* of the modern economy and human capital to its *fuel*. Human capital economic theory puts education at the centre of economic development. The issue here is that education plays a central role in developing the knowledge and skills needed for economic development and that mass education is one of the pillars of a developed society. Robertson *et al.* (2007) pointed out that human capital theory is about investment in education, which is a key promoter of economic growth.

Becker (2006) stated that human capital or knowledge-based capital economy is related to education. Becker (2006:292) referred to education as human capital in the global economy which is based on the "knowledge, information, ideas, skills and health of individuals". He argued that in this era of the global economy, human capital is by far the most important form of capital investment in modern economies and that economic development depends on how extensively and effectively people are involved.

Becker (2006) further argued that the economic value of education increases over time. He supported this claim with evidence from western countries which 39 shows that the difference in income between school leavers and university graduates doubled during the 1980s. However, what he failed to show is whether this was due to a decline in the earnings of school leavers, which would perhaps lead to an increase in the value of university degrees. Furthermore, te Velde (2005) pointed out that the effects of education appear to be larger for low-income countries, and this might be consistent with the hypothesis that education is important for catch-up. Nevertheless, Becker (2006) pointed out that there is need for education policy to support the development of the knowledge economy including issues of how to build a culture of lifelong learning.

Waters (1995) pointed out that lifelong learning ensures a change in the interpretation of the world, a change of action and indeed professional development (PD). People are expected to renew their skills regularly in order to ensure their professional employability-continuing professional development (CPD). Lifelong learning would be appropriate for a knowledge based economy because, as Robertson *et al.*, (2007) and Guskey (2000) pointed out, knowledge becomes obsolete very quickly and there is the need for constantly replenishing new knowledge. Lifelong learning is appropriate especially in low-income countries such as Malawi where access to formal quality education is limited for the majority of people. Among other things, in such countries, opportunities for learning must be expanded beyond the classroom to include out-of-school as well as informal learning. Teacher training programmes should address real issues affecting the preparation of human capital resource.

Therefore, there is the need for coordinated activities and effective resource utilisation including information and communication technology. Quality assurance systems are required to frequently and effectively monitor the quality of education, creating a system for lifelong learning for the workforce so as to embrace change with the increased participation of adults (Robertson, *et al.*, 2007).

At the local level, evidence tends to show that economic efficiency is more important than the quality of education (Cogburn and Adeya, 1999). This cannot be explained by traditional trade theory in that economic factors are also important determinants of the ability to export. Economic competitiveness depends on how effectively a country supports its education in accessing the mastery of the new knowledge, skills and attitudes. At this point, there is little doubt that education is linked to globalisation and that it is important to keep upgrading and acquiring new knowledge and skills to enable people from different parts of the world to interact and participate in global events. Furthermore, if people are able to upgrade knowledge and skills to be able to perform other functions, this may lead to an expansion of marketing operations. It is from this perspective that I argue that Malawi must recognise that improving the quality of education is the surest way of expanding marketing provess at global level.

Similarly, global technological development is a result of highly skilled labour that education systems produce (Morgan, *et al.*, 2006). According to Pinch

(1996), it is envisaged that the global network of foreign educated people facilitates the export of technology to other countries. Educated people might be able to adjust to social, economic and political changes and operate effectively in global activities. Thus, while local education is vital, cross border education may also be important because it is a source of investment back into the home country as well as in global industry.

However, while the number of talented and skilled people has increased over the years, Robertson *et al.* (2007) lamented that globalisation has brought about a 'brain drain' which is the loss of talented and skilled people from around the world who would generate ideas that would in turn lead to development in their home countries. Brain drain is critical especially for developing countries which lose skilled workers to foreign countries (Morgan, *et al.*, 2006). According to Robertson *et al.* (2007), the cause of brain drain is differential in economy, global migration and technology between rich and poor countries.

While poor countries are constantly deprived of skilled people (brain drain), many developed countries are benefiting from foreign students (brain gains) (Morgan, *et al.*, 2006). Although many developed countries where university education is an economic activity, have a policy that requires that foreign students must return to their home countries upon completing their studies, there is a dilemma whether foreign students who are highly skilled should return to their home countries or remain in the developed countries to contribute to development. For the low income countries to counter brain drain, they have to develop education beyond being a tool for economic development to the level where it becomes an economic activity (Morgan, *et al.*, 2006). The implication is that the low-income countries need to increase funding not only of basic education but also tertiary and higher education to attract both local and foreign talented and skilled people (Omolewa, 2005). Thus, the divide between the developed and the poor countries is the pursuit of a knowledgebased economy in which education becomes not just a means but an economic end (Coulby, 2005).

2.5 Globalisation and education in Africa

Globalisation is increasingly making an impact on educational reforms worldwide. The impact is explicit in Africa more than anywhere else in the world. Conferences on education in Africa were held in Addis Ababa (1961), Paris (1962), Tananarive (1962), Abidjan (1964), Lagos (1964) and Nairobi (1968) where delegates from African countries discussed issues concerning education in the post colonial era (Dembele and Miaro-II, 2003). During these conferences, it was noted that although there was increased school enrolment, some targets set were not met due to inadequate funding resulting from economic crises in the countries. There was also a decrease in enrolment with high dropouts, massive grade repetition and low outputs of the educational systems coupled with unemployment for university graduates. Consequently, the next agenda was set to train African human power to modernise and boost the post-colonial economy. As expected, the cost of schooling rose beyond what the national governments could afford and this adversely affected the quality of education (Rose, 2006).

In most development initiatives, economic development and poverty eradication have been at the centre. In some regions, the practice is more explicitly related to education's role in supporting regional economic development efforts through equality, coordination and consistency of education. However, while the regionalisms have influence on national education, the education policies remain the responsibility of the national governments (Robertson, *et al.*, 2007). Malawi, which is a member of regional and global organisations, incorporates global issues in the national policies on education.

Adelabu (2006) pointed out that globalisation has brought changes in all aspects of education in Africa. In a global context, a reform in education entails the adoption of a new educational paradigm at all levels of education and the reformulation of educational objectives which enhance the ability of each learner to generate, access, assess, adopt and apply knowledge to solve complex problems and recognition of adult learners to engage in lifelong learning (Jarvis, 2004; Bhola, 2000). One of the recent education innovations in Africa is on-line learning which is proving to be the greatest asset in adult lifelong learning (Power, 2004; Dladla and Moon, 2002). Yet, the majority of people have limited access to on-line learning facilities (Bhola, 2000).

One of the current challenges of globalising education in Africa is educational financing and funding (te Velde, 2005). Recognising that education is an expensive social service that requires adequate financial provision for the successful implementation of the educational programmes, the private and international donor communities need to join hands with the governments in funding education services at all levels (Adelabu, 2006). Education indeed must be a cost-intensive enterprise as the dictates of globalisation appear to have placed additional burdens on education systems (Cogburn and Adeya, 1999).

For example, information and communication technology is being used to increase access to education on a global scale and a global view is being used to enhance TPD through provision of stimulating and rich contexts for critical reflection on education (Davies, 1999). At local level, there is an increase in technology for communication such as internet and mobile phones, even in the rural areas of Malawi. The use of mobile phones and internet is potentially a resource for TPD especially in rural areas where travel is a problem. However, the impact of technology on TPD may not be immediate because most teachers are too poor to acquire and access phones and other telecom technologies. The few that may have phones experience high costs for buying airtime coupled with persistent power disruption which affects recharging of phones as well as transmission network. Thus, the relevance of the findings of this study may be affected by the ever increasing technological development especially in telecommunications such as mobile phones, internet and websites.

2.6 Globalisation of professional development in Malawi

Consistent with the arguments by Robertson, *et al.* (2007) and Becker (2006) on the role of education in economic development, Malawi is committed to education reforms. Malawi's socio-economic development efforts require that there should be high quality education in order to ensure human capital economy. As one of the countries which follow the human capital economy, Malawi has to prioritise improving the quality of education through among others, PD of teachers, as a way of ensuring human capital economy. This argument is significant for Malawi because through appropriate and effective TPD programmes, Malawi might improve its human capital economy.

In its quest for improving the quality of education, Malawi adopted the use of TCs from the global community to provide support for TPD. There are a number of global practices and experiences on TPD that emerge from the literature which will be used as benchmarks in this study. Some of the practices and experiences are:

- TPD must be thought of as ongoing and long-term process, which begins with initial preparation and only ends when the teacher retires from the profession (Day, 2000; Guskey, 2000; Huberman, 1993). This new approach to education and development of teachers requires a transformation of processes and policies that support teachers, their education, their work and their growth in the profession;
- TPD has a significant impact on the success of educational reforms and on students' learning as it increases teacher knowledge and skills, and brings

about changes in classroom practice (Villegas-Reimer, 2003; Guskey, 2000). Therefore, TPD should be considered as a key factor in any educational reform and instructional practices (Villegas-Reimer, 2003);

- TPD programmes must be well coordinated, monitored and evaluated to inform different practitioners about the effectiveness of the PD practices and steer the content, form, and structure of the future endeavors (Guskey, 2000). This means that an effective TPD must be based on clear management and organisational structure with clear roles and responsibilities to achieve its goals;
- TPD must be systematically planned, supported, funded and researched to guarantee the effectiveness of its process (Guskey, 2000). This suggests that an effective PD programme should be based on a clear model and with enough resources;
- TPD must aim at improving teachers' deep knowledge of the subjects they teach: not only the content but how to signify the content for learners of all kinds (Grossman, Schoenfeld and Lee, 2005). In addition, TPD should be guided by principles that require qualitative transformation of aspects of all the subjects which teachers teach (Schifter, 2005; Sparks and Hirsh, 1997).

Thus, my study uses some of these global practices and experiences as a benchmark for shaping the direction of my research project. For example, I will use the benchmarks in deciding on what data is to be collected and how it should be analysed.

2.7 Conclusion

The chapter has looked at the concept, origin, spread and impact of globalisation. It has also explained how globalisation has affected national economies and the quality of education reforms through international donors and lending institutions especially in developing countries. Despite global efforts to improve the quality of education through the international donor and lending institutions, the quality of education is still poor, especially in developing countries, because in most cases, donors and lending institutions set agendas for education reforms which are incompatible with the national economies. Thus, the national governments fail to sustain the education reforms set up through donor support after the donors have stopped supporting the reforms. As regards Malawi, the TDCs were established through donor support. Therefore, it would be fascinating to find out how the TDCs are being sustained years after the donors stopped supporting them and to ascertain whether the forces of globalisation have indeed improved the quality of education in Malawi.

CHAPTER THREE

THE LOCAL CONTEXT OF THE STUDY

3.1 Introduction

In this chapter, I discuss the local context of teacher professional development (TPD) in Malawi, in which the present study is conducted. To understand the influence of the teacher development centres (TDCs) as a support strategy for TPD in Malawi, it is important to examine the Malawi education development plans and the Malawi education system focusing on primary education and development and finally, the establishment of the TDCs as a support strategy for TPD in Malawi.

3.2 The Malawi education development plans since

independence

In line with the demands for a knowledge-based global economy (Section 2.4), the broad policy on education in Malawi is to develop an efficient and high quality system of education of a type and size appropriate both to the available resources and to the political, social and economic aspirations of the nation (Ministry of Education, Science and Technology, 2001). Although the emphasis of education in Malawi is to equip the students with skills and desire for self-employment and entrepreneurship rather than conventional wage employment, this has failed to take root in Malawi. In Malawi, while the Ministry of Education, Science and Technology is the main provider of education at all levels, the private sector is currently active in the provision of pre-primary, primary, secondary and tertiary (technical and vocational) education including primary teacher education and higher education. Private education providers are helping in addressing the shortage of trained teachers by opening private teacher training colleges. They also make a substantial contribution to increased access to education by opening private schools (Ministry of Education, Science and Technology, 2008b). However, the ever-increasing numbers of private schools deprive the public schools and colleges of some quality teaching staff by offering them better conditions of work such as higher salary and better accommodation among others. On the other hand, there are also reports that some private schools employ unqualified or untrained teachers, thereby lowering the standards of education (Ministry of Education, Science and Technology, 2008b).

As regards TPD, it is mainly the responsibility of the government with the support of the multilateral and bilateral institutions and Non-Governmental Organisations (NGOs). However, private schools are not included in the government programme for TPD (Ministry of Education, Science and Technology, 1998). Thus, they have to find their own means of providing professional development (PD) for their teachers. This is a threat to TPD because, considering that most private schools use unqualified teachers, PD would help in improving the professional skills of such teachers.

So far the Government of Malawi has been guided by four Education Development Plans (EDPs), which have succeeded each other. The first EDP was formulated for the period 1973 to 1980 (Ministry of Education, Science and Technology, 2008b:2). It had the following major objectives:

- Fulfilment of the specific needs of the labour market;
- The development of a school curriculum with relevance to the socioeconomic and environmental needs of the country;
- The improvement of efficiency in the utilisation of existing facilities and resources;
- The achievement of a more equitable distribution of educational facilities and resources.

These policy statements were formulated against the background of nationalism which characterised the dawn of political independence from Britain in 1964. The first EDP was formulated at the time when Malawi was in dire need of human resources in both government and private sectors. The economy was also so poor that education was without basic teaching and learning resources.

The second EDP covered the period from 1985 to 1995 (Ministry of Education and Culture, 2008b:2). It intended to address four overall objectives:

• The equalisation of educational opportunity through increased access to education and elimination of gender disparity;

- The promotion of efficiency in the educational system through continued training and retraining of education staff especially teachers;
- The improvement of physical and human resources through constant repair and construction of classrooms and other facilities as well as supply of qualified teachers to schools;
- The judicious use of limited resources by encouraging teachers to share limited resources for teaching as well as being resourceful in using locally available materials and resources for teaching.

Implementation of these policy guidelines was met with numerous challenges such as continued cultural beliefs which favour boys' against girls' education. Promotion of efficiency in education systems was also challenged by increase in demand for education through increase in national population. Teacher shortage and insufficient classrooms and other structures continue to haunt the education sector in Malawi. The resources are not only limited but scarce and teachers are ill-prepared to be resourceful. Thus, the second EDP maintained to address the issues of human resources amidst emerging issues such as gender. However, studies suggest that little progress has been made not only in Malawi but SSA and other developing countries (Tembon and Fort, 2008).

The third EDP, which was named the Policy and Investment Framework (PIF) for Education in Malawi from 1995 to 2005 (Ministry of Education, Science and Technology, 2008b:3), was much more elaborate. It aimed at:

• Eliminating illiteracy by emphasising the teaching of language skills;

- Making primary education compulsory and free to all citizens through among other things abolishing fees for primary education. However, making education compulsory remains contentious;
- Offering greater access to higher learning and continuing education. To this effect, a second public university was opened in the north of Malawi in addition to several private universities. However, very little was done to increase the range of tertiary education, such as teacher training colleges;
- Promoting national goals such as unity and elimination of political, religious, racial and ethnic intolerance. This was achieved through the review of school curriculum to include social studies, moral and religious education which carried messages of ethnic tolerance.

The PIF focused on promoting literacy and access to education. Politics was added perhaps because the dawn of multiparty politics in early 1990s was dominated by political, religious, racial and ethnic intolerance. Education was conceived as one way of bringing about tolerance among different groups of people and through TPD, teachers would be the agents for achieving this. While the first EDP and the PIF seem to be silent in supporting TPD, the second EDP alluded to TPD in terms of wanting to promote efficiency in the education system and improve human resources. For example, teachers were encouraged to use limited resources judiciously. This led to the establishment of the TDCs. Despite some education reforms during the last two decades aiming at reorganising the educational system in order to cope with the current educational challenges, the Malawi Education System has not yet reached the desired level of development by any standards (Ministry of Education, Science and Technology, 2008b). Constitutionally, education in Malawi is the responsibility of the government through the Ministry of Education, Science and Technology which is the largest of all the government ministries in terms of financial, human and material resources demand. It takes more than 70 per cent of the total civil servants (Kayuni and Tambulasi, 2007:90). As big as it is, the Malawi Education System, however, remains predominantly centralised and bureaucratically organised. The funding is basically provided by the central government, with very little for TPD, making it difficult to implement reforms.

In an attempt to increase the judicious and efficient use of limited resources, there has been a gradual process towards the decentralisation of education. Many decisions are taken by local authorities and representatives of social organisations in several educational committees which exist both at school and at regional levels (Ministry of Education, Science and Technology, 2008b). Funds are managed at the administrative departments or divisional or district levels. In spite of the introduction of various committees, the central education authorities continue to take all fundamental decisions regarding education, including TPD. Thus, teachers have little autonomy regarding their PD. In the fourth education policy, called Statement of National Education Sector Plan (SNESP) for 2008-2017 (Ministry of Education, Science and Technology, 2008b:4), the Malawi Government noted that the rapid expansion of primary education has drastically increased the demand for trained primary teachers. First, there was a shortage of trained primary teachers as well as lack of coherent policies and strategies for addressing teacher demand. There was also no mention of teacher retention or how to improve teacher efficacy in the plan. Second, there was inadequate funding for facilitating effective and efficient training of teachers. TPD was not included on the list of areas requiring funding. Third, qualified teachers rarely attended PD courses (Ministry of Education, Science and Technology, 2008b). Fourth, there was lack of TPD coordinating and management bodies mandated to link the Ministry and other institutions and colleges despite having a Department of Teacher Education and Development (DTED) within the Ministry of Education, Science and Technology responsible for teacher education and development. Lastly, there was poor inspection, supervision and management of schools leading to poor quality of teaching and learning. The numerous challenges that were brought in by the introduction of free primary education were a cause for recharging teachers through PD. However, with limited data on the quality of teaching and learning, there was a weak case for instituting PD in Malawi.

No wonder, therefore, the government of Malawi not only intended to increase teacher supply through diversification of modes of training programmes but also to strengthen TPD through the construction of TDCs (Ministry of Education, Science and Technology, 2008b; 2001). It also endeavoured to strengthen inspection and supervision of schools and teachers as one way of ensuring education quality. It is for these reasons that I consider the SNESP for 2008-2017 as the first step towards recognising the importance of TPD although the government has failed to emphasise TPD as part of teacher development but, in the plan, the Ministry of Education, Science and Technology has singled out in-service education and training (INSET) courses as the only way of supporting teachers to improve their profession and yet INSET is just one aspect of TPD. Perhaps this explains the argument by Christie *et al.* (2004:175-176) that:

... the state in Africa and its relationship to education have historically specific dynamics, and models and expectations of CPD need to be understood in a context which often differs from CPD in states in the West/North. A broad and generalised view of CPD in a range of countries does not readily yield a view of 'best practice.'

Thus, TPD in Malawi is mostly considered in relation to INSET where some teachers would be invited to attend and not to participate in curriculum related issues which at the end do not benefit all the teachers.

3.3 The Malawi education system

Education in Malawi is administratively decentralised into six divisions, namely: Northern, Central East, Central West, South East, South West, and Shire Highlands. Each of these divisions has a number of educational districts within its jurisdiction. The educational system is formally structured on an 8-4-4 basis: 8 years at primary level, 4 years at secondary, and 4 years at university (National Statistics Office, 2003). Primary school education lasts for eight years and caters for children aged 6 to 13, although it is common to find pupils older than 13 still in primary schools. Junior Secondary lasts for two years, while Senior Secondary lasts for two years, making it 4 years at secondary level (Ministry of Education, Science and Technology, 2008b).

Children start attending primary school from the age of approximately six years, and there is no age limit when pupils can stop primary schooling. Nursery and adult education are considered to be part of non-formal education (National Statistical Office, 2003). Nursery (pre-school) education is provided mostly by private agencies and confined to urban areas. However, current efforts point towards the formalisation of pre-schooling to become part of the government education system in Malawi (Ministry of Education, Science and Technology, 2008b; 2001).

The majority of primary school teachers are graduates of secondary schools in Malawi. According to the Ministry of Education, Science and Technology, 2008a), there are administratively seven types of secondary schools in Malawi: Government Boarding Schools (BSs); Government Day schools (DSs); Government Community Day Secondary Schools (CDSSs) (Approved); CDSSs (Not Approved); Open Secondary Schools; Grant-aided Schools; and Private Schools. The government and the grant-aided secondary schools are grouped further into national boarding schools, district secondary schools (boarding or day), approved CDSSs and unapproved CDSSs. As regards resource allocation in these secondary schools, the national boarding schools are adequately resourced whereas the unapproved CDSSs are poorly resourced (MacJessie-Mbewe and Kholowa, 2010).

Public examinations determine how individual students progress from primary to secondary. A student has to pass with high grades in all subjects to compete with others for the limited places in the government and grant-aided secondary schools. According to MacJessie-Mbewe and Kholowa (2010), only about 30% of the standard eight students (primary graduates) are selected to government and grant-aided secondary schools in Malawi. Thus, public examinations put pressure on teachers since their performance is judged by how many students are selected to secondary schools from their classes. Communities are not happy with primary schools which do not send students to secondary school. Consequently, teachers teach for examinations rather than for active learning.

The different types of secondary schools cater for pupils of different abilities and consequently produce graduates of different quality. Pupils who score high grades in the primary school leaving certificate examinations (PSLCE) are selected to national secondary schools (NSS); average performers are selected to district secondary schools (DSSs), while low performers are selected to Approved (CDSS). Furthermore, those students who are not selected to these schools may voluntarily seek places in the Not Approved CDSS (MacJessie-Mbewe and Kholowa, 2010). The graduates who become primary school teachers are those who fail to make it to higher education (Section 3.5). Thus, most teachers who are graduates of disadvantaged secondary schools do not have the appropriate level of academic qualifications to teach competently and effectively and TPD seems to be a solution to this problem.

As for children with special educational needs (SEN), Malawi embarked on Special Needs Education (SNE) in the early 1950s under the guidance of faithbased organisations such as the Dutch Reformed Church (DRC), the Evangelical Church (EC) and the Roman Catholic Church (RC) (Ministry of Education, Science and Technology, 2009a; 2009b). The Malawi Government officially began to provide funding for SNE programmes in 1967 (Ministry of Education, Science and Technology, 2009a; 2009b). Currently, Malawi is a signatory to a number of universal agreements that advocate for the provision of adequate education opportunities for learners with SEN. Guided by the universal protocols; Malawi has developed strategies to respond to SEN. The National Policy on SNE focuses on priority areas as stipulated in the Educational Sector Plan which include: early identification; assessment and intervention; advocacy; care and support; management; planning and financing; access; quality; equity and relevance (Ministry of Education, Science and Technology, 2009a:1).

The implementation guidelines for SNE reflect the views of various stakeholders and ideas from the literature with special reference to *Education For All* (EFA), the Millennium Development Goals (MDGs), the UN Standard Rules for Equalisation of Opportunity for Persons with Disabilities, the Salamanca Statement on Special Needs Education, the Malawi Growth and

Development Strategy (MGDS), the Policy Investment Framework (PIF) and the National Education Sector Plan (NESP) (Ministry of Education, Science and Technology, 2009a:1).

Again, with regard to children with SEN, Malawi has adopted an inclusive education policy whereby children with SEN and those without impairments learn together in the same school or classroom with appropriate support (Malawi Institute of Education, 2008:94). However, depending on the gravity of the impairment, some SEN children are referred to special schools.

Malawi more likely has promised to provide SNE services to the following types of SEN children: visual impairment, hearing impairment, special learning disabilities, intellectual disabilities, physical and health problems, emotional and behavioural difficulties and gifted and talented (Ministry of Education, Science and Technology, 2009a; 2009b; Malawi Institute of Education, 2008). Table 3.1 shows the number and type of special schools and resource centres. Unfortunately there is no school for children with learning difficulties in Malawi and virtually no attention to gifted and talented (Table 3.1).

Table 3.1: Number of special schools and resource centres

Type of impairment	Special schools	Resource centres
Visual	2	5
Hearing	4	3
Learning difficulties	-	6

Source: Malawi Institute of Education, 2008:98

Although Malawi is providing SNE services to a number of SEN children, there are many challenges, including inadequate specialist teachers and also inadequate teaching and learning resources (Ministry of Education, Science and Technology, 2009a; 2009b). The country is struggling to meet the great demand for specialist teachers, because there is only one teacher training college for SNE at Montfort.

According to Ministry of Education, Science and Technology (2009b), by the year 2009, the education system had only 612 specialist teachers against about 70,000 learners with SEN in the primary education sector. Consequently, many children with SEN in the mainstreams are taught by teachers who are not specialists in SNE. In order to achieve SNE, teachers need to modify materials, curriculum, instruction and delivery of services to meet individual learning needs. Therefore, there is a need for Malawi to intensify its effort to address issues of SNE not only through initial teacher training but also through TPD so that newly qualified teachers are equipped with knowledge and skills relevant to SNE. As for the old teachers who graduated before the SNE policy was in place, there is a need for regular PD for teachers handling classes with various SEN learners.

Furthermore, Malawi education system has some semi-autonomous education institutions that serve to implement government education policies with financial support from the government budget. One such institution is the Malawi Institute of Education (MIE), which is responsible for implementing policies on school and teacher development apart from curriculum issues (Ministry of Education and Culture, 1985). However, Malawi continues to send people abroad to study for CPD because it is not taught as a subject in all local institutions.

The Malawi National Examinations Board (MANEB) is another semiautonomous education institution closely linked with teacher education and development. It is responsible for administering all public examinations for schools and teachers colleges. However, MANEB plays very little role in TPD. It is mostly involved in preparing teachers for supervising and marking national examinations.

Thus, the education context described here provides a strong argument for establishing a strong TPD policy in Malawi. Teachers of various schools and also those involved in national examinations require to constantly update their knowledge and skills. The shortage of specialised teachers for SEN children coupled with increasing number of SEN children being integrated into conventional schools requires that all teachers be retrained in SNE and TPD is suitable for this training.

3.4 Malawi primary education

Malawi Primary Education dates back to the colonial days and indeed to the days the missionaries first came to Malawi. According to Banda (1982), the first primary school was founded in 1875 with the arrival of the Free Church of

Scotland of the Livingstonia Mission at Cape Maclear. By 1910, the country had about 1051 schools. Most of these schools were elementary or village schools under the charge of African teachers with support from Europeans based at the headquarters of the Missions. The emphasis was on literacy, numeracy and science, with health education. Literacy focused on local languages (Banda, 1982) whereas tertiary and higher education were neglected.

Since independence in 1964, there have been wide-reaching education organisation and curriculum. With regard to primary education, the first major reforms took place in the 1980s when the government reviewed the national goals of education, the primary school goals and curriculum and the teacher training curriculum (Kaperemera, 1992; Banda, 1982).

However, attempts to improve the quality of education were marred by overdue education reforms and inadequate resources. According to Rose (2006), the education reforms were also overtaken by socio-economic changes which adversely affected education services. One of the reforms was the introduction of free primary education in 1994. This led to the rapid increase in pupil enrolment with very large classes, the proliferation of schools with high numbers of untrained teachers and inadequate resources to cater for the expanded enrolments.

The recent curriculum review saw the introduction of Social and Environmental Science, Life Skills and Expressive Arts in addition to the traditional subjects such as Chichewa (local language), English, Mathematics, Science, Agriculture, and Bible Knowledge in primary schools (Malawi Institute of Education, 2008). Each subject on the curriculum was given a new weighting, with English, Chichewa and Mathematics receiving relatively high weighting to show an emphasis on numeracy and literacy. Second in emphasis were Agriculture and Science. Furthermore, the medium of instruction is the local language in all the school subjects except English during the first four years. English is the medium of instruction from year 5 through to university in all the subjects except in the local languages.

Such education reforms, according to Little (2001), cited in Villegas-Reimers (2003:28-29), have implications for the teachers' work, because in most cases education reforms have the potential to:

- enhance or threaten classroom teaching as they may impose additional responsibilities;
- create or break colleagues and other bonds of professional community;
- encroach on teachers' private lives and damage family relationships as there is an increased personal commitment of time, emotional and intellectual energy.

Thus, for teachers to manage the reforms better, they require regular, effective and well-supported TPD through such institutions as TDCs.

3.5 Malawi primary teacher education

In order to respond to some of the challenges of primary education, Malawi has been implementing different primary teacher education programmes since it gained political independence in 1964. Before independence, primary teachers were mostly trained in colleges run by church missions. However, in the 1970s, Malawi took over the training of primary teachers, closed some colleges, renovated others and constructed new colleges which came to a total of eight (Hauya, 1993). However, Domasi Teachers College was converted into a secondary teachers college in 1993; Mzuzu Teachers College and Montfort Teachers College were turned into universities in 1998 and 2004 respectively. This means that the remaining colleges were five only. In recent years, four private primary teacher training colleges have been established making a total of nine (Ministry of Education, Science and Technology, 2008a; 2008b). The lack of sufficient teacher training colleges has resulted in reduced output of trained and qualified teachers and consequently an increase in the recruitment of untrained teachers.

Up until 2004, primary teacher trainees in Malawi were being recruited through interviews of secondary graduates with Junior Certificate of Education (JCE) and Malawi School Certificate of Education (MSCE), which is equivalent to the GCSE qualification of the United Kingdom (UK), without any previous teaching experience. However, in order to improve the quality of teaching, only secondary school graduates with MSCE certificates are now recruited for teacher training (Pfaffe, 1999). At independence in 1964, Malawi inherited a two-year teacher training programme. It dedicated about two-thirds of the curriculum to methodology and one third to content. The training required that trainees spend one and a half years in college and three months in schools doing supervised teaching practice. The curriculum for those with MSCE and with JCE was the same for methodology but different for subject content. Although the course was characterised by college-based classroom teaching practices, both JCE and MSCE student teachers went to schools for a six week teaching practice which marked the end of the course. At the end of the course, trainees sat for national examinations and successful candidates were certified as primary school teachers with T2 grade if they were holders of MSCE and T3 grade if they were holders of JCE certificates (Kunje, Lewin, and Stuart, 2000).

From the mid 1980s, Malawi saw three modes of training running concurrently. While the two-year course continued in seven colleges, the government introduced a Special One-Year Teacher Programme in 1987 which ended in 1993. The aim was to train all the untrained teachers in the system in the shortest period possible. The enrolment was therefore restricted to the untrained teachers already teaching in schools. First, the training course was introduced in two colleges and later it was confined to the newly constructed Domasi Teachers College only (Kunje and Chimombo, 1999). Although the massive problems that characterised the implementation of the special one-year teacher programme created doubts on the efficacy of the training course, it was

seen as a useful means of certifying untrained teachers (Kunje and Stuart, 1996).

In 1990, a new teacher training programme, the Malawi Special Teacher Education Programme (MASTEP) was launched (Ministry of Education, Science and Technology, 1997; Kunje and Stuart, 1996), supplementary to the normal two-year programme, as there was a projection of high school enrolment growth rates between 1985 and 1988, with a shortfall of 4,000 teachers. The objective of the MASTEP was to train 4,000 primary school teachers in three years. It was decided that the most cost-effective method for producing teachers could be through a distance mode of teacher training, in addition to a normal two year programme (Kunje and Stuart, 1996). Evaluations of the MASTEP indicated that there were too many written projects and assignments for students to carry out considering that they were expected to teach as well. It was noted that the various modes of assessment required support from college lecturers. With regard to the cost of the programme, it was noted that much more of the project funds were spent on students' allowances and salaries more than on operational costs. The programme was discontinued because of lack of capacity to supervise students. The course period was also too long, resulting in wastage of limited resources. Additionally, many inappropriate candidates were recruited. MASTEP came to a halt in 1993 (Neumann, 1994).

Despite MASTEP and the two-year programme running concurrently, teacher shortfall increased due to ever-increasing pupil enrolments in schools. As a 67

result, a modified normal teacher programme was designed in which recruits were to teach for a year before undergoing a one-year of college-based training. This programme was an integration of the one-year programme with the two-year normal programme. The normal two-year programme was completely abandoned. The modified normal teacher programme, which was operational between 1993 and 1996, was similar to the one-year programme in many ways, except that the work was reduced. However, the teacher training programme was found to be irrelevant for the primary curriculum. The teacher training curriculum was also overloaded with no time for teaching practice. This made internal assessment very difficult (Kunje and Chimombo, 1999). Nevertheless, the one-year modified course was kept running because it was thought that since the students were mature with previous teaching experience, they would have few problems in coping. Furthermore, it was believed that since the candidates for the one-year programme had already made up their minds to become teachers, they would not drop out easily. However, it is not clear whether the one-year course produced teachers of any better quality than the normal two-year programme (Kunje and Stuart, 1996).

When the government of Malawi declared primary education free for all, the pupil enrolment went up by 70% in the 1994/95 academic year. With its policy of securing a pupil-teacher ratio of 60:1, the government projected a shortfall of teachers and recruited 22,000 paraprofessional teachers, of whom 18,000 (42%) were untrained (Kunje and Stuart, 1996). Such a recruitment procedure was unprecedented in education and fears were rife for the already poor quality

of education in Malawi to get poorer. To arrest this problem, one option was to train these untrained teachers in the shortest period possible. Hence, some *ad hoc* measures were put in place, such as a two-week orientation course where untrained teachers were equipped with survival skills in the classroom. Eventually, the Malawi In-Service Integrated Teacher Education Programme (MIITEP) was designed to train all the untrained teachers by the year 2000 (Ministry of Education, Science and Technology, 1999). Thus, all other forms of teacher training were suspended (Pfaffe, 1999). The interim report on findings noted some serious problems with the procedures for recruiting students, the curriculum, the course delivery, assessment procedures, the management structure, the funding procedure, and the relationship between MIITEP and other stakeholders (Ministry of Education, Science and Technology, 2000).

In her study, Kadzamira (2006) noted that the quality of teachers produced under MIITEP was poor and consequently a new teacher training programme, known as the One-plus-One teacher training model, was introduced in 2004 and is still operational. The recruits must be holders of the MSCE. This mode, which is a replica of the two-year course, has two phases. The first year of the programme is college-based training, during which student teachers are introduced to classroom pedagogy and internal teaching practice at a demonstration school. During the second phase, student teachers are attached to primary schools where they are expected to put into practice what they have learnt in college. Student teachers in their various schools get professional support from their mentors, head teachers, and experienced teachers. The trainees are placed in rural schools where there is an acute shortage of teachers (Malawi Institute Education, 2006).

It is evident from the discussion above that primary school teachers in Malawi have been trained using different modes. These training modes vary in curricula, mode of delivery, assessment procedures and duration of training. They tend to emphasise different aspects of teaching. The education background of the teacher trainees also varies greatly (Section 3.3). OECD (2009:49) argued that no matter how good initial teacher education is, it cannot be expected to prepare teachers for all the challenges they will face throughout their career. Therefore, these variations in teacher education in Malawi suggest that teachers need continuous professional support throughout their career.

3.6 The primary school teachers in Malawi

There is an increase in the roles, accountability and responsibilities of teachers, which is creating new demands and challenges in Malawi. Currently, the role of primary school teachers is defined by social expectations, which come from different sources such as documents and advisory reports, summed up in the National Goals of Education. For example, a teacher is required to be devoted to teaching by preparing thoroughly for teaching, show respect for pupils (Hauya, 1993), be competent and be adaptable in their profession (Malawi Institute of Education, 2008).

However, teaching in Malawi primary schools is challenging in a number of ways. First, according to Malawi Education Statistics 2008, pupil/teacher ratio was 78:1 and pupil/qualified teacher ratio was 90:1 at national level against the national standard pupil/teacher ratio of 60:1 (Ministry of Education, Science and Technology, 2008a). These ratios show that there is an acute shortage of teachers. There is also higher pupil/teacher ratio in the rural than in the urban schools. For example, in 2008, pupil/teacher ratio was 83:1 in the rural and 49:1 in the urban schools. Table 3.2 shows that in all types of schools, pupil/teacher ratio was higher than the government standard.

Besides, the table shows that the pupil/qualified teacher ratio was even higher, especially in religious agency schools. The disparity of pupil/teacher ratios between rural and urban areas is unfortunate because students in both areas sit for the same national examinations after the eight-year cycle and are expected to perform equally for them to be selected to various secondary schools in Malawi (Section 3.3).

Proprietor of schools	Pupil/teacher	Pupil/qualified
	ratio	teacher ratio
Ratio at National level	78:1	90:1
Ratio in Government schools	76:1	83:1
Ratio in Religious agency schools	85:1	95:1
Ratio in Private schools	23:1	92:1

Table 3.2: Pupil/teacher ratios in primary schools in Malawi in 2008

Another challenge in Malawi primary schools is teacher distribution by sex. For example, Table 3.3 shows that urban schools had far more female teachers than male teachers between 2004 and 2008 (Ministry of Education, Science and Technology, 2008a).

The unequal distribution of teachers by sex between rural and urban schools is also common in other sub-Saharan African countries. According to Mulkeen (2005), female teachers are less willing to accept posting to rural schools than male counterparts partly because female teachers feel unsafe in rural schools. Mulkeen (2005) also found that posting female teachers to rural schools would limit their marriage prospects. There are actually more female teachers who follow their spouses to urban areas (Kadzamira, 2006).

 Table 3.3: Gender distribution of teachers between rural and urban at national level in percentages

Year	Rural		Urban	
	Male	Female	Male	Female
2004	69.20	30.80	17.66	82.34
2005	69.73	30.27	18.21	81.79
2006	69.40	30.60	19.81	80.19
2007	69.27	30.73	21.64	78.36
2008	68.34	31.66	22.58	77.42

Source: Malawi Education Statistics Ministry of Education,

Science and Technology (2004; 2005; 2006; 2007;

2008)

The shortage of female teachers in the rural schools is unfortunate because female teachers would act as role models to girls in these areas. The fewer female teachers in rural areas mean that girls are less protected from sexual abuse and exploitation from male teachers as well as boys and consequently, most girls drop out of schools (UNESCO, 2006; Mulkeen, 2005). Their presence in the rural areas would in a way help in promoting girls' education in the country (Milner and MacJessie-Mbewe, 2010).

Retention of teachers in the education system is another challenge. Kayuni and Tambulasi (2007) pointed that one of the most serious problems in the teaching profession is teacher turnover and that the government is finding it difficult to retain teachers in schools. They acknowledged that the problem of teacher turnover is not limited to Malawi only but it is a global problem. For example, they cited reports which indicated that some developed countries, such as the United States of America, the UK, Scotland, and Portugal, are also having problems of teacher turnover. They further pointed that in developing countries the problem is comparatively serious. On this point, Kayuni and Tambulasi (2007) cited South Africa, Zambia, Papua New Guinea and Malawi as countries where the problem had almost reached a tragic stage.

Kayuni and Tambulasi (2007) further pointed that in Malawi, the problem is acute, even by Sub-Saharan standards. They argued that the problem in Malawi can be largely attributed to general poor working conditions such as salaries and incentives; loss of status of teachers; stress; high death rate due to illness; poor recruitment and training programmes and retention strategies among 73 others. In order to curb the problem of teacher turnover, the Government introduced measures such as: (a) decentralising education management so as to monitor teachers effectively; (b) introducing distance learning for unqualified teachers; (c) increasing budget allocation to the education sector; (d) encouraging programmes that strengthen the link between teachers and communities around them; (e) pressing for more NGOs as well as donor community involvement in the provision of teaching facilities and teacher development (Kayuni and Tambulasi, 2007:9). However, they further argued that retention measures adopted by the Malawi government may take time to have an impact because they do not address the basic immediate needs of the teachers. In their paper, they concluded with a call for drastic intervention.

Furthermore, teaching is challenging in Malawi partly due to ineffective curriculum planning for primary schools. According to Kunje and Chimombo (1999), the curriculum lacks differentiation for children with different abilities. Instead, it favours the average child whereas very able children do not benefit much and the least able find it difficult. Pupils are taught using the same materials, at the same pace, as a group and everyone in the class is expected to complete the same task. The use of the prescribed syllabus, the pupils' textbooks and the teachers' guides deny teachers any freedom in choosing their materials and planning lessons in their own style; thus, leading to a passive teaching approach associated with ineffective learning.

Lack of basic teaching and learning resources is yet another problem in Malawi (Milner and MacJessie-Mbewe, 2010). Textbooks and teachers' guides are inadequate and in some schools not available at all. Wall charts and worksheets are unheard of in most schools and parents buy most of the writing materials such as exercise books, pens and pencils. Classrooms, especially in the infant and sometimes junior classes, are without desks, tables or basic equipment. The role of teachers, therefore, is to improvise most of the materials where possible. Worse still, because of a lack of storage facilities in schools, teachers keep losing materials and consequently, the making of teaching and learning materials is an ongoing activity.

According to Kunje and Chimombo (1999), classroom instruction in Malawi Primary schools is challenging because it is class-based, as a teacher is required to teach all the subjects in a given class. A teacher is expected to monitor learning, assess pupils and discuss with parents and other concerned people about pupils' learning progress. Although Malawi advocates for learnercentred approaches, teaching is still teacher-centred.

Another challenge is that there is low morale in teachers (Kadzamira, 2006). As one of the 12 country case studies for an international research project on teacher motivation and incentives in Sub-Saharan Africa and South Asia, Kadzamira (2006) conducted a study on teacher motivation and incentives in Malawi. She found that some factors that affected teacher motivation and job satisfaction included: levels of remuneration, location and type of school, availability of appropriate housing, opportunities for further training, 75 conditions of service, workload, promotion, career path, student behaviour, relationship with community, school quality factors such as the availability of teaching and learning resources. She also found that lack of continuous PD, especially opportunities for training and seminars which, on the other hand, afforded one to receive allowances, was a critical factor that affected teacher motivation.

Kadzamira's (2006) findings are similar to those of the earlier studies, which concluded that the levels of teacher job satisfaction and motivation in Malawi primary schools were low. First, in a study commissioned by Department for International Development (DfID), Moleni and Ndalama (2004) found out that teacher motivational factors such as low salaries and poor working conditions contributed to high absenteeism and attrition. Second, Kadzamira (2003) and the National Economic Council (2002) found that poor incentives and conditions of service resulted in low morale and consequently poor performance among teachers. Third, Chimwenje (2003), Tudor-Craig (2002), Kadzamira et al. (2001) and Kadzamira and Chibwana (2000) found that teachers were also highly dissatisfied with their remuneration and other conditions of service. Urwick et al. (2005) reported similar findings from teachers in the Lesotho Education system. On the other hand, in their study entitled 'Is there a teacher motivation crisis in Tanzania?' Bennell and Mukyanuzi (2005) found that job satisfaction and motivation levels among primary school teachers were not as low as was commonly suggested. They were just below the level which was required in order to ensure that there was

quality teaching and learning in schools. However, in their study, it was found that living conditions for most teachers were unsatisfactory.

Kadzamira's (2006) study mentioned control of students' behaviour as one of the challenges in primary schools. Until the 1980s, corporal punishment was a common means for controlling students' negative behaviour in schools in Malawi. With the emergence of children's rights thereafter, the use of corporal punishment to control students' negative behaviour became unlawful in schools under Article 19 of the Constitution of Malawi. The Teachers' Code of Conduct also prohibits the use of corporal punishment in schools. However, according to the Malawi Human Rights Commission (2007), there is no clear prohibition in the laws of Malawi. In a study conducted by the National Statistics Office in 2005, it was found that one fifth of 4,500 students experienced violence at school, including corporal punishment (10.9%) and illtreatment by the head or teachers (20.9%). It was also found that teachers were using corporal punishment (including manual labour) as the most common form of managing negative behaviour (36.3%), despite its prohibition (The National Statistics Office, 2005). On the other hand, in a study by the Centre for Human Rights and Rehabilitation (2011), it was found that there was increased recognition of corporal punishment as a rights issue in schools and that some teachers were abandoning the use of corporal punishment as a discipline measure and were instead applying alternative measures to manage negative behaviour. Students who experience corporal punishment are more likely to drop out of school and/or become violent in adulthood. Thus, it is imperative that teachers learn better ways of managing negative behaviour of students to align teachers' practice with educational policies (Day and Sachs, 2004).

TPD is another issue in primary education in Malawi (Kadzamira, 2006). Before the 1990s, in Malawi, self-development among teachers was unheard of, as teachers did not seem to interact often to share knowledge, skills and other information necessary for improving classroom practices. It appears that very little is done to prepare teachers for self-development during pre-service training because PD is not included in the initial primary teacher education courses (Ministry of Education, Science and Technology, 2007). Although the provision of in-service training for teachers remains an option for keeping teaching momentum, opportunities for in-service training tend to appear when there is a need to orient teachers to new curricula. The provision of the ad-hoc in-service training to teachers (Kunje and Chimombo, 1999) seems to be short lived and without much impact in supporting TPD. Therefore, there is a need to put in place a strategy that would ensure a sustainable programme of TPD hence the establishment of the TDCs in Malawi.

3.7 The teacher development centres in Malawi

TDCs in Malawi are part of a support strategy for TPD. The idea of TDCs was raised when Malawi was faced with a number of challenges (Ministry of Education, Science and Technology, 1999; Chona, 1996). First, there was an urgent need for the orientation of newly recruited and untrained teachers who

were given survival skills to enable them to begin teaching. There was also a need for a strategy for training untrained teachers through the integrated teacher education programme (MIITEP). Finally, there was need for the coordination of support for TPD activities for all teachers at school and zonal levels through the established network of trained staff with skills in TPD (Malawi/GTZ, 1996).

As I discuss in Section 4.7 below, Malawi is not the first country to use the idea of TDCs as a support strategy for TPD. It has been used in both developed and developing countries. However, different names were used to describe the same idea. The initiative of the TDCs in Malawi came about because of the need to promote TPD especially at primary level (Ministry of Education, Sports and Culture, 1998). The concept of a TDC is that of a purpose-built structure where teachers from a cluster of schools come together to discuss issues affecting their profession and learn to make room for change in schools for the benefit of pupils.

The establishment of the TDCs was aimed at promoting TPD by bringing resources close to schools. This was seen as an economical option for a poor country such as Malawi. The TDCs were also expected to provide INSET. The TDCs were further expected to provide an opportunity to develop and demonstrate teaching and learning strategies; and materials that meet the real needs of local children. As demonstration centre, the TDCs were conceived to be 'institutions of excellence'. It was anticipated that the TDCs would provide

an opportunity for teachers to create stronger links with their local communities and with teachers from other schools. Links with the stakeholders were thought to be a means of increased community ownership and empowerment, which would bring about sustainability of the TDCs (Ministry of Education, Science and Technology, 1998).

The concept of the TDCs in Malawi is similar to that of teacher resource centres (TRCs) in other countries (Knamiller, 1999) (Section 4.7) in that the TDCs would have all the resources, which teachers and other key people need to initiate, organise, coordinate, conduct and evaluate TPD. However, Malawi opted for broad-based TDCs because they were seen to be more encompassing in terms of teacher support services as well as centres of networking not just between the schools and the TDC but also among the schools and between the schools and the local people as seen in Figure 3.1. This is the model which was desired in the Malawi Schools Support Systems Project (MSSSP) during the life of the project which funded the establishment and development of the TDCs.

In this model, the TDC is an 'open system' (Banda, *et al.*, 1999) which is responsive to its context, with exchange and feedback occurring between itself and the rest of the zone. The schools should make a direct contribution to the TDC and support each other in TPD activities. In this model teachers are expected to share the limited resources in addressing problems relevant to their needs and also develop a culture where impact on the classroom could become a central concern. It is also the model which is the most resource intensive to set up and difficult to implement (Dembele and Miaro-II, 2003). Thus, the success of the TDCs depends on other school support systems in the district, division and national levels.

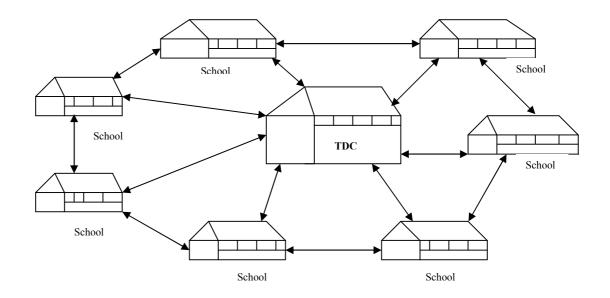


Figure 3.1: The 'Network' model of TDCs in Malawi

To achieve the objectives of the TDCs, the Ministry of Education, Science and Technology clustered about 4000 primary schools into 315 zones (Ministry of Education, Science and Technology, 1999a). Each zone has a primary education advisor (PEA) who works in and with schools offering support, inspecting and supervising teachers and also coordinating PD for teachers in the zone. Each zone has a centre (TDC) close to one school where teachers come together to discuss professional issues and share ideas and expertise. The TDC as a structure comprises of a library, storeroom, meeting room (a hall), office and house for the PEA. With these structures in place, it was hoped that the PEA would be brought closer to the schools to assist teachers in their $\frac{81}{2}$

professional needs by visiting the schools regularly and conducting INSET activities for the teachers. Each centre also was provided with a motorcycle for the PEA to use in the work (Ministry of Education, Science and Technology, 1998).

To set up the network model through the TDCs, one of the challenges was to group primary schools into manageable zones without losing sight of the social, economic, political and geographical factors (Ministry of Education, Sports and Culture, 1998). Another challenge was to identify personnel to manage the TDCs. The Ministry of Education, Science and Technology opted to use existing staff in the education system, PEAs, to be coordinators of the TDCs in their respective zones. The PEAs are basically primary school teachers who are promoted to work in and with schools in supporting, inspecting, advising and supervising teachers (Ministry of Education, Sports and Culture, 1998).

TDCs in Malawi operated on a number of principles (Ministry of Education, Science and Technology, 1999a). The first principle was to make teachers feel that the TDCs belonged to them and that teachers should have control over their functions. It was believed that a TDC would serve the teachers in the zones just like a hospital serves the community in their area. The second principle was to involve teachers in the planning of the activities of the TDCs which would be relevant to their needs. The third principle was to include in the TDC management team representatives from the Parents-Teachers Association (PTA), the school committees, head teachers, teachers and the local community. The fourth principle was that a TDC should encourage decentralisation of decision-making by involving schools and their communities. Finally, roles and functions of the TDC personnel led by the TDC coordinator were to serve the goals of the centre. These principles were to make TDCs that were to be for teachers, of teachers and by teachers, but with community involvement.

The aims and objectives of the TDCs were to promote TPD in terms of identifying needs, planning, developing, executing and monitoring TPD activities. The TDCs were expected to support curriculum development through the exploration of new ways of teaching and learning and act as a focal point for information exchange between all stakeholders in identifying, sharing and exchanging expertise (networking). Besides, TDCs were to function as resource centres for teachers (Ministry of Education, Science and Technology, 1998). The aims and objectives of the TDCs were therefore broadly based, implying that supporting TPD was a complex venture. To achieve these aims and objectives, TPD activities were to include workshops, seminars, production of teaching and learning materials, use of teaching and learning materials, model lessons, and dissemination of information and feedback. As a resource centre, TDCs were expected to attract teachers, pupils and the community, management teams, school communities, subject panels to carry out curriculum development activities and community-initiated cultural activities such as sports, drama, and dances.

The major responsibility of the TDC management team was to help establish ownership of the TDC by drawing up the aims of the centre and implementing a development plan. The TDC management team would plan and provide a programme of activities for teachers; raise awareness and mobilise teachers and the community to use the TDC; monitor the work of the TDC and evaluate its effectiveness in relation to the development plan; and finally recommend future development activities and strategies for fundraising (Ministry of Education, Sports and Culture, 1998). Thus, the management of the TDC was broadbased, involving community members, some of whom might have very little idea about principles of educational development. Such broad-based management might have limitations due to conflicts of interests typical in teamwork (Crawford, *et al.*, 1997).

According to the Ministry of Education, Sports and Culture, (1998), the coordination of the TDC activities was also critical in the development of the TDCs. The coordinator of the TDC had clearly defined roles to be performed which included the dissemination of knowledge, skills and information; to collect, keep and transmit information from schools and other institutions; to develop a system for the communication of new teaching approaches and skills and for the production of teaching and learning materials to share with others; to encourage school-based TPD. While the coordinator was responsible for the daily running of the TDC, the involvement of teachers, head teachers, and the community were seen to be key to the sustainability of the TDC (Ministry of

Education, Sports and Culture, 1998). There was a need for the management team to include representatives from teachers, head teachers and the community in the zone. The TDC management team was to be composed of Chairperson, Vice Chairperson, Secretary (TDC coordinator), Treasurer, and representatives from each of the head teachers, teachers (Senior, Junior and Infant classes), pupils and the community. All these members were to be drawn from within the cluster.

It should be noted that the TDCs were developed when there were already other institutions such as the MIE and the University of Malawi which were doing similar work of professional development of teachers. However, it appeared that the TDC was conceived not as an alternative institution but as one made up of teachers, for the benefit of teachers and run by teachers, with its own vision, aim and development plans (Ministry of Education, Science and Technology, 1999a). The TDC was to be run autonomously by its management team. While the daily running of the TDC was the responsibility of the centre coordinator, the management would decide the future of the TDC in consultation with the head teachers, teachers and community members.

While the concept of the TDC would recognise that different teachers and schools have different needs (Ministry of Education, Science and Technology, 1998) and that sharing these different needs among teachers and schools would help to develop teachers, schools and zones, the centre coordinator was expected to prioritise the needs, decide where to conduct TPD activities and the

target group. S/he was also expected to develop the programme of activities meant to meet the needs of the teachers by developing a coherent plan of activities. While the management team was expected to ensure that the TDC achieved its objectives, the centre coordinator was to provide professional guidance to the management team, the school and teachers.

The resources needed for the TDC were grouped into two categories; those related to TPD activities, such as books, classrooms, teaching and learning materials and those related to administrative purposes such as furniture and equipment (Ministry of Education, Science and Technology, 1998). The appropriate, sufficient and relevant resources were required to be in place and accessible to teachers. The TDC coordinator was required to make available to teachers all the necessary resources and to train the teachers how to use the resources.

The success of the support strategy partly depended on the people who played a central role in the implementation of the TDCs. The key participants were teachers, head teachers, PEAs, District Education Managers (DEMs), Education Division Managers (EDMs), Coordinator of the MSSSP and the Inservice Training Officer in the DTED in the Ministry of Education, Science and Technology. The MIE was to provide professional and technical support to the TDCs (Russell, *et al.*, 1999).

As part of the implementation of the TDCs, a training programme for the key participants was organised (Ministry of Education, Science and Technology, 86

1999a). The aim of the training was to provide them with the knowledge, skills and attitudes they needed to support TPD. The training strategy was based on a cascading model. First, the national core training team (NCTT), which also developed the training materials, was trained at the MIE. Second, each PEA and two head teachers (male and female) from each zone were trained to become the zonal training team by the NCTT at the MIE. The PEA and the two head teachers in turn trained other head teachers and two senior teachers (male and female) from each school in their zones at a TDC. Finally, the trained head teachers and senior teachers were in turn expected to train teachers in their respective schools from each school in their zone at a TDC. The NCTT provided professional support during the zonal training. The trainers and the trainees at zonal level were expected to receive certificates (Ministry of Education, Science and Technology, 1999a). However, Banda (2002) found that the training course was not effective partly because of the incompetence of the facilitators at zonal level and also lack of content in the training materials.

3.8 The key participants in the teacher professional development

It is important to decide on whose perceptions are useful in understanding the influence of the TDC on the PD of teachers in Malawi. Key participants are important people who made a significant contribution to the implementation of the concept of the TDC as a support strategy for PD of teachers. As already pointed out in Section 3.7, there were many participants in the implementation of the MSSSP through the TDC. However, for the purpose of this study, the

focus is on the teachers, head teachers, PEAs, DEMs, EDMs, Coordinator of the MSSSP and In-service Training officer in the DTED in the Ministry of Education, Science and Technology. Figure 3.2 shows how the key participants described above were linked to each other in hierarchical order during the life of the project which set up the TDCs in Malawi (Ministry of Education, Science and Technology, 1999a).

The hierarchical relationship of the key participants is important because their perceptions have to be interpreted in the context of the hierarchical authority that linked the key participants. Although most of the key participants in the implementation of the TDCs as a support strategy for PD of teachers were linked in hierarchical order, the MIE was not linked to them in a hierarchical order because the MIE is a parastatal organisation which provides professional support to all the educational institutions and organisations on curriculum, preservice and in-service teacher education, production of educational materials and other educational development activities. In this way, the coordinator of the MSSSP who was a member of the professional staff at MIE was a key participant to the implementation of the TDC (Ministry of Education, Science and Technology, 1999b).

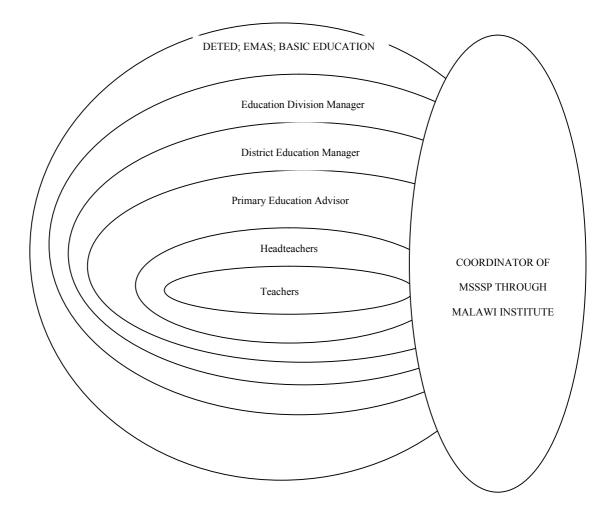


Figure 3.2: Concept Mapping of the Key Participants

The key participants I selected for my study played various roles in the implementation of the PD activities through the TDC. For example, the role of teachers was to initiate, plan, develop and conduct their own PD activities typical of self-directed learning in adult learning as I discuss in Section 5.2. All head teachers were equipped with knowledge and skills to better initiate, plan, develop and conduct PD activities for themselves and their staff; the PEAs were to coordinate the PD activities in the zone through the TDC; the DEM was meant to provide support in the implementation of the PD activities in the district through the TDCs; and the EDM was meant to provide support for the

implementation of the PD activities in the division through the TDC (Ministry of Education, Science and Technology, 1999b).

The coordinator for MSSSP at MIE coordinated the implementation and monitoring of the PD activities through the TDC. This was in line with the legal instrument, which set up the MIE that among other things, the Institute shall assist with the training of teachers and also provide professional services for all professional personnel in promoting the quality of education (Malawi Institute of Education, 1996:1-2). In addition, one of the policy statements stipulated in the PIF of the Education Sector clearly stated that MIE shall mount programmes for the CPD of teachers and other educational personnel (Ministry of Education, Science and Technology, 2008b; 2001).

The role of the In-Service Officer at DTED was to liaise with key participants in the implementation of the PD activities of teachers through the TDC. In fact, DTED was responsible for planning and management of the national programmes of teacher education and development, which included TPD in Malawi (Ministry of Education, Science and Technology, 1999b). The perceptions of the teachers and other key participants in the use of the TDCs for TPD are important in exploring the influence of the TDC in supporting TPD.

3.9 Conclusion

This chapter has analysed the local context of education in Malawi, in which the present study is conducted. In understanding the local context, the Malawi education development plans that have guided education reforms have been discussed. The chapter has also looked at the primary teacher education in order to appreciate the various training backgrounds of primary school teachers in Malawi. Teachers' working conditions in primary schools have been analysed. The chapter has also examined the establishment of the TDCs as a support strategy for TPD with a focus on concept, functions, management and resources. Finally, the key participants in the PD of teachers who hold information on teacher perceptions on the influence of the TDC as a support strategy have been identified. It is evident from the chapter that the establishment of the TDCs is one of the many education reforms which have characterised the education system with the aim of improving the quality of education. Given the social and economic challenges in which education services are provided, the establishment of a well supported and sustainable TPD is imperative. However, attempts to use the TDCs as a support strategy for TPD have revealed its challenges worth studying. Therefore, this chapter has clearly shown how the local context of education in Malawi relates directly to the research on the influence of the TDCs on TPD

CHAPTER FOUR

TEACHER PROFESSIONAL DEVELOPMENT

4.1 Introduction

Having discussed the national context of education in Malawi, this chapter reviews literature related to teacher professional development (TPD) and the practices in order to position this study in the larger context of TPD and support. Specifically, the chapter focuses on the concept and purposes of TPD; models of teacher change; approaches to TPD; some examples of the impact of professional development (PD) on teachers' work; some issues in PD; and the global views on teacher centre (TC) as a support strategy for TPD.

4.2 The concept and purpose of teacher professional

development

There are several definitions and purposes of TPD in the literature (Villegas-Reimers, 2003) that affect its design and impact, including skills training and professional growth. In most cases the definitions and purposes of PD emphasise the development of an individual teacher, the entire school and/or the whole organisation. However, in discussing TPD, it is important to understand what a profession is and teaching as a profession, because the teacher is central to this study.

4.2.1 Definition of a profession

A study of TPD requires that the researcher has developed a clear understanding of whether teachers are professionals. The term 'profession' has 92

many meanings and is used in a variety of contexts (Knight and Morledge,

2005:1). While there is no agreed definition of a profession, many scholars and

organisations have come up with various ways of defining a profession.

For example, in an analytical view, The Australian Council of Professions (2004:20) defined a profession as:

A disciplined group of individuals who adhere to ethical standards and uphold themselves to, and are accepted by, the public as possessing special knowledge and skills in a widely recognised body of learning derived from education and training at a high level, and who are prepared to exercise this knowledge and these skills in the interest of others.

This definition emphasises the code of ethics that regulates the activities of a profession and demands behaviour and practice beyond the individuals' ethical obligations.

The term profession is also defined by Speck and Knipe (2005) as a calling based on expert education and training with the purpose of providing impartial advice and service to others. This definition emphasises that a profession is a vocation that is built upon sound knowledge and skills which an individual or a community of members use to serve others. In addition, in defining a profession, some people have identified essential features of a profession.

For example, Millerson (1964) cited by Knight and Morledge (2005) stated that:

A profession involves a skill based on theoretical knowledge - the skill requires training and knowledge - the professional must

demonstrate competence by passing test - integrity is maintained by adherence to a code of conduct - The service is for the public good - the profession is organised (Millerson, 1964:4).

Again, Shulman (1998:516) cited in Bransford, Darling-Hammond and LePage (2005) identified six characteristics that are shared by all professions as:

- service to society, implying an ethical and moral commitment to clients;
- a body of scholarly knowledge that forms the basis of the entitlement to practice;
- engagement in practical action, hence the need to enact knowledge in practice;
- uncertainty caused by the different needs of clients and the non-routine nature of problems, hence the need to develop judgement in applying knowledge;
- the importance of experience in developing practice, hence the need to learn by reflecting on one's practice and its outcomes; and
- the development of a professional community that aggregates and shares knowledge and develops professional standards.

These definitions and the characteristics of a profession entail that a profession is more than just doing a paid job; it is a vocation. In addition, the characteristics of a profession are generally based on training, knowledge and skill a person possesses (Bredeson, 2003) and uses to provide services to others. Therefore, the challenge is to consider whether teaching falls within these definitions and characteristics of a profession. The concept of profession has implications for the conceptualisation of this study as it set the grounds for

justifying why there should be PD.

4.2.2 Teaching as a profession

Being a teacher has been described as the ability to:

understand not only the subject matter to be taught, but also how to teach that subject matter, how to modify and adapt instructional practice to individual student needs, and how to diagnose those needs (Darling-Hammond and Hudson 1990:241).

However, the question frequently asked is whether teaching is a profession or not (Villegas-Reimers, 2003; Bezeau, 1989). If teaching is a profession, it should share the same characteristics as those of other professions (Section 4.2.1). Day (2000:114) described professionalism in teaching as:

...having a technical culture (knowledge base); service ethic (commitment to serving clients' needs); professional commitment (strong collective identity); and professional autonomy (control over classroom practice).

Similarly, Hoyle (1995) came up with five criteria to define a profession: social function, knowledge, practitioner autonomy, collective autonomy and professional values. When considering teaching against these criteria, Hoyle (1995) pointed out that teaching does not match all the criteria necessary to be treated as a profession. For example, from the social function point of view, teaching is important to the society and the individual (Hoyle, 1995). Yet, the knowledge base of the teacher is questionable because of what is emphasised in the teaching profession, whether content or pedagogy (Jackson, 1996); and how teachers are prepared with skills for effective teaching and learning (OECD, 1990).

As regards practitioner autonomy, Villegas-Reimers (2003) argued that teachers have little autonomy in their jobs as compared to other professions such as medicine and law. Teacher autonomy is limited by governments and local communities, although not all countries have the same problem of lack of autonomy (Villegas-Reimers and Reimers, 1996). For example, in developed countries such as France, the United Kingdom (UK) and the United States of America (USA), teachers are reported to have autonomy to define their jobs and practices and they see their jobs as a profession (Hoyle, 1995) whereas in less developed countries, teachers have little or no autonomy regarding their job. Regarding collective autonomy, teaching has less governing status and independence from government because in most countries teachers are civil servants expected to implement government educational policies. In addition, the government controls teacher training and teaching practices. Finally, in relation to professional values, teaching has less value than other professions such medicine because teachers have many clients to whom they are accountable and teaching lacks code of ethics that direct their practices (Villegas-Reimers, 2003). The control of teaching by government may affect the teacher involvement in PD.

Therefore, with these criteria for defining a profession, it is doubtful whether teaching is a profession and whether teachers can improve their status in society (Burbules and Densmore, 1991). However, regarding these concerns on teaching as a profession, Hargreaves (2000:176) argued that to reclaim its professionalism:

...teachers need to become more proactive rather than reactive, more outward-looking than being defensively introspective, to embrace the 'paradoxical challenge' of becoming 'professionally stronger'.

These arguments on teaching as a profession indicate that knowledge is a key to overcoming such doubts and ongoing TPD would be one way of providing teachers with the knowledge and skills they need to better match other professions.

4.2.3 Concept of teacher professional development

The elusiveness of teaching as a profession raises the question of the concept of TPD being offered in Malawi. The practice of PD has changed over the years (Villegas-Reimers, 2003) because of the concern by educators on narrow views of PD as in-service education and training (INSET) (Craft, 2000; Guskey, 2000). As a result, there are numerous concepts of PD. For example, in emphasising that teaching needs ongoing learning, Fullan (1991:326) defined PD as "the sum total of formal and informal learning experiences throughout one's career from pre-service teacher education to retirement". In view of teacher competence, Duke and Stiggins (1990) described PD as the processes by which minimally competent teachers achieve higher levels of teacher competence and expand their understanding of self, role, context, and profession. For the purpose of improving student learning, Guskey (2000:16) defined PD as "those processes and activities designed to enhance teacher knowledge, skills and attitudes that they might, in turn, improve the learning of students". In addition, in emphasising teacher change in beliefs and attitudes, Guskey (1986:5) defined PD further as a "systematic attempt to bring about change - change in the classroom practices of teachers, change in their beliefs and attitudes, and change in the learning outcomes of students".

Furthermore, Clement and Vandenberghe (2000:87) argued that PD is "a continuous process determined by the interplay between the individual and the organisation, leading to a combination of craftsmanship and mastery". This view of PD emphasises the importance of individual and institutional factors. On the other hand, Evans (2002:131) provided the definition of TPD as "the process whereby teachers' professionality and/or professionalism may be considered to be enhanced". She stated that two constituent elements of teacher development are attitudinal development and functional development. Attitudinal development is where the teacher's attitudes are modified, whereas functional development is the process of improving a teacher's professional performance (Evans, 2002). However, there are other terms which are used synonymously with PD.

Taylor (1975) identified staff development and further teacher study as two terms which are used synonymously within TPD. He distinguishes between the two aspects in that teacher study focuses on individual needs whereas staff development focuses on institutional needs. The distinction between the two aspects is based on the fundamental role of individuals within the institution (Bell, 1991). The implication of this concept of TPD is that there is a need to devise TPD that meets teacher growth and improves the performance of both teachers and institutions (Guskey, 2000). This concept stresses the importance of recognising the interdependence between teachers and institutions. No wonder that Guskey (2000:20) argued that:

Without a systematic approach, organisational variables can hinder or prevent the success of improvement efforts, even when the individual aspects of TPD are done right.

The implication of Guskey's (2000) argument is that teachers cannot develop if the institutions do not and conversely the institutions cannot improve their performance if teachers do not develop. Furthermore, Bell (1991) acknowledged that there are likely to be some tensions between individual teacher needs and institutional needs that are inherent in a TPD programme. For example, the individual teachers may want a programme that meets their personal self-improvement, based on the difficulties and complexities of the job. On the other hand, the institution may base the programme on the needs and aspirations of the parents and other stakeholders for whom the performance of the institution is assessed. Therefore, there is the need for TPD to harmonise individual needs and the needs of the institutions.

The forgoing discussion shows that different scholars share a common view of the concept that teachers must be given an opportunity for PD to upgrade, explore and apply their knowledge and skills obtained through experience. In other words, the term TPD goes beyond the meaning of staff development or INSET (Villegas-Reimers, 2003) which is a one-time event rather than ongoing learning experience (Christie, *et al.*, 2004; Borko, *et al.*, 2002; Guskey, 2000)

which tend to be "intellectually superficial, disconnected from deep issues of curriculum and learning, fragmented, and non-cumulative" (Cohen and Ball, 1999:15); not productive, not efficient, unrelated to practice, and lacking intensity and follow-up (Corcoran, 1995; Bull, *et al.*, 1994). Thus, TPD needs to include both formal and informal ways of acquiring skills, broadening knowledge and insights into pedagogical knowledge, skills and practices, as well as individual development (Ganser, 2000).

4.2.4 Purposes of teacher professional development

The purposes of TPD will guide the course of this study. Educators have offered numerous purposes of TPD. For example, Blandford (2000) mentioned upgrading the competence of the teacher, extending teachers' education and enhancing qualifications as some of the purposes of TPD. Bolam (1993) identified five purposes of PD along a continuum of needs of the system to the needs of the individual staff performance, individual job performance, career development, professional knowledge, and personal education. Day and Sachs (2004) identified the purposes of PD in a broader view to align teachers' practice with educational policies; to improve the learning outcomes; and to enhance the status and profile of the teaching profession. According to Guskey (1986), teachers engage in PD so that they can gain specific, concrete, and practical ideas which relate directly to everyday operations of their classrooms. Thus, PD can promote teacher growth through learner-centred and job-embedded processes which may lead to the acquisition of skills, abilities, and understandings necessary for the teachers' own improvement as well as for

student achievement (Speck and Knipe, 2005). However, Wideen (1987) argued that these purposes are interrelated and that they influence the design of the PD programmes.

Different countries put emphasis on different purposes (Day and Sachs, 2004; Villegas-Reimers, 2003; Craft, 2000; Henderson, 1978), perhaps because of differences in the context of the problems being addressed by TPD in those countries. For example, in developing countries, emphasis is on upgrading general education of teachers rather than improving their teaching skills. On the other hand, in developed countries, TPD is used for the extension of the professional knowledge, skills and abilities which enable teachers to develop and adapt their range of practices through reflecting on experience, research and practice in order to meet pupils' needs collectively and individually. Despite these differences, TPD contributes to the life of the school as the teacher interacts with the school community and external agencies. TPD also helps teachers to keep in touch with current educational thinking in order to maintain and develop good practices; to give critical consideration to educational policy on how to raise standards; and to widen their understanding of society (Blandford, 2000).

Although different countries differ in the emphasis of the purposes of TPD, the ultimate goal of TPD is to improve practices in the classroom (Bell, 1991). In this regard, Blandford (2000) argued that TPD involves providing learning opportunities for all teachers and supporting schools to implement TPD programmes. It also serves to create a context in which teachers are enabled to develop their potential. However, for this to happen, there is a need to fulfil the individual, social and academic potential of the teachers and the people in the community because TPD includes personal development, team development and school development. Perhaps what should be added to the list is development of the system in which the teacher is a member and also promoting shared values and equality of opportunity in education.

Furthermore, Clarke and Hollingsworth (2002) concluded that the purpose of TPD is to provide an opportunity for teachers to change through training, adaptation, personal development, local reform, systematic restructuring and learning. Although these change processes are not mutually exclusive but interrelated, the main focus for TPD is on transformative learning. Clarke and Hollingsworth (2002) seem to associate teacher change (Section 5.3) with learning, which is a natural and expected component of teaching. From this perception of TPD, it can be argued further that support strategies for TPD tend to include training, local reform and systematic restructuring on one hand and the actual teacher change that includes adaptation, personal development, and growth or learning on the other hand, as I illustrate in Figure 4.1. I also derive some understanding of the purposes of TPD from a historical perspective that TPD programmes have been based on the deficit mastery training model, implying that TPD has been used to alleviate shortfalls in teacher skills and knowledge mostly through a one-shot workshop (Christie, et al., 2004; Borko, et al., 2002; Knight, 2002; Guskey, 2000).

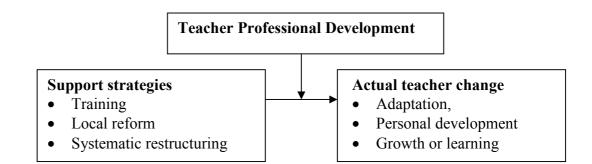


Figure 4.1: The support strategies enhance professional development processes

However, the major criticisms about the deficit model led to a new thinking on TPD that focused on the teacher growth continuum, with emphasis on lifelong learning. The fundamental purpose of TPD is learning more about teaching, not repairing a personal inadequacy as a teacher but seeking greater fulfilment as a practitioner of the art. TPD becomes never-ending, like a religious struggle to escape sin (Knight, 2002:230). In other words, TPD serves to encourage teachers to see themselves as reflective practitioners, as an opportunity for learning situated in real contexts.

4.2.5 Types of teacher professional development

In addition to the purposes, there have been numerous types of PD identified in the literature which may shape this study. For example, in the study titled "Creating Effective Teaching and Learning Environment", OECD (2009:50) described the following types of PD:

- courses/workshops;
- education conferences or seminars;
- qualification programme;

- observation visits to other schools;
- participation in a network of PD of teachers;
- individual or collaborative research on a topic of professional interest;
- mentoring and/or peer observation and coaching;
- reading professional literature; and
- engaging in informal dialogue with peers on how to improve teaching.

In a broader view, Day and Sachs (2004) described two types of PD: deficit and aspirational. In a deficit type, it is assumed that teachers need to be provided with knowledge and skills they don't have. The aspirational type includes an acknowledgement that teachers are already effective, but can improve. Regarding these types, Day and Sachs (2004) argued that they do not contradict but they complement each other. Thus, it is important in this study to consider whether TPD in Malawi is based on deficit or aspirational or indeed both types.

In addition, Bolam (1993) discussed different types of PD: practitioner development, professional education, professional training, and professional support. Practitioner development is essentially school-based and may include observations, induction, and team teaching. Professional education involves further and higher education. Workshops and conferences focus on practical skills and are characterised by training. Professional support includes career development, mentoring, and coaching. However, this grouping of PD tends to limit the focus of PD. For example PD that focuses on workshops and conferences only would not be sufficient for teacher development. Essentially, the study will explore if teachers experience most of these types of PD so as to develop their potential.

4.2.6 Teaching as a profession in Malawi

In this section, I explore the status of teaching as a profession in Malawi by comparing characteristics of a profession described in Section 4.2.2 with issues affecting the teaching profession in order to establish whether teachers are enjoying the status of professionals in Malawi.

In the last decade, there has been a continuous erosion of professional autonomy of teachers in Malawi in a number of ways. The Malawi education system is predominantly centralised and bureaucratically organised. Central education authorities continue to take all fundamental decisions regarding education, including TPD. Thus, teachers have little autonomy regarding their PD (Section 3.2).

Second, emphasis on teacher accountability is one of the major causes of deprofessionalisation of teachers (Kadzombe, 1992). Teachers in Malawi are often deceived into accepting reforms which take away the few privileges they have traditionally enjoyed. For example, teachers in Malawi use centralised and prescribed curriculum which in most cases limits their professional choices of teaching what they feel would be appropriate for children. Teachers have little power to manage and organise activities related to teaching. In addition, teaching has become routine and mechanical, which does not take into account the knowledge and skills required (Kunje and Chimombo, 1999).

Third, most primary school teachers have low professional status partly because they are perceived as having a weak academic background. Most teachers are graduates of disadvantaged secondary schools which lack basic resources and graduates from such schools do not have the appropriate level of academic qualifications to teach competently and effectively (Section 3.3).

Fourth, teaching as a profession in Malawi has suffered from numerous and uncoordinated reforms in initial teacher training (Kunje and Chimombo, 1999). Since the 1980s, Malawi has witnessed various modes of initial training programmes (Section 3.6) which have negatively impacted teaching as a profession. Different modes of teacher training have had different durations ranging from one to three years. These variations came about in order to address teacher shortages, at the expense of improving the status of the teaching profession (Section 3.5).

Finally, working conditions for teachers in Malawi have been consistently unsuitable for professional practice. High workloads, large class sizes, inadequate teaching and learning resources, poor accommodation for teachers, low wages, limited teacher career path, challenging pupil behavior are some of the factors which challenge the status of teaching as a profession in Malawi (Sections 3.5; 3.6). Therefore, with these numerous problems affecting teachers in Malawi, it is questionable whether teaching is a profession and whether there is a way in which teachers would improve their professional status. For teachers to reclaim their professional status in Malawi, they need to be proactive and more outward looking in order to embrace the challenges of becoming professionally stronger (Hargreaves, 2000) by engaging in ongoing and well supported 'teacher learning' which would provide them with the knowledge and skills they need to better match other professions as I elaborate in Section 5.2.4.

4.3 Models of teacher change

Although one of the purposes of TPD is for teachers to change their knowledge, skills and attitudes so as to improve performance (Villegas-Reimers, 2003), it has been difficult to illustrate how change occurs in teachers. Most of the models which have been used to explain teacher change have been linear (Figure 4.2).

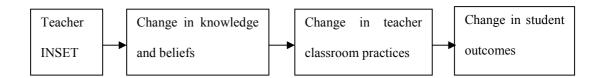


Figure 4.2: An implicit model of teacher change

For example, models of teacher change were previously presented as change in the teachers, which implied change in learning outcomes. These linear models were criticised for being simplistic as no single factor was responsible for teacher change. One of the major criticisms came from Guskey (1995) who argued that teacher change could result from even the changes in the learning outcomes suggesting that there is interrelatedness among the elements that bring about teacher change, as I illustrate in Figure 4.3.

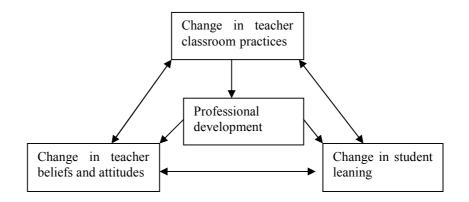


Figure 4.3: Guskey's model of the process of teacher change

However, in seeking a better explanation of teacher change, (Clarke and Hollingworth, 2002) reconstructed the model of teacher change based on the understanding that teacher change involves mediating factors such as reflecting, resulting in an interconnected model of teacher change (Figure 4.4).

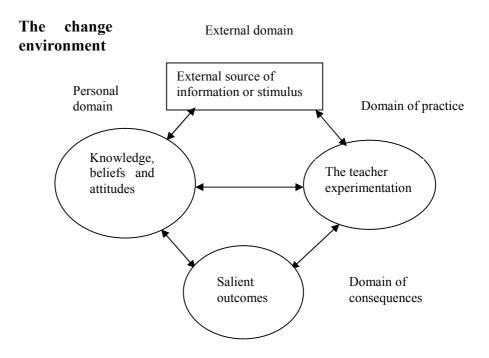


Figure: 4.4. The interconnected model of teacher change

It appears that models of teacher change are so complex that for such changes to be effected in teachers there will be the need for an equally carefully conceptualised TPD programme.

4.4 Approaches to teacher professional development

An approach is perceived as merely resource mobilisation and use for a plan to be implemented. A clear approach is crucial in achieving the aims of PD and can influence the kind of support which is required. Different countries appear to employ different approaches to TPD in some details which are dictated by contextual developments, such as changes in economic situation, distribution of resources, and nature of the initial teacher training programmes, proper coordination and control of the TPD programme (InWent-Internationale Weiterbildung und Entwicklung, 2008; Shimahara, 1998). The approaches include classroom-based; school-based; school-focused; radio/television and their classification may be based on a different focus depending on the concept, purpose, function, importance and also activities involved in the TPD (Thiessen, 2001). In this thesis, my focus is on classroom-based TPD; school-based; cluster-based; course-based and network and networking.

4.4.1 Classroom-based teacher professional development

Classroom-based TPD takes place in the classroom usually by the teacher concerned. According to Thiessen (2001), three modes of classroom-based TPD are teachers on their own, teachers with other teachers and teachers and students. Thiessen (2001) pointed that for a larger part of the teaching profession, teachers work alone both inside and outside the classroom as they individually plan, implement and evaluate their work. They look for content and methods for delivering the content. This makes their life easy and at the same time enables to interact with pupils. In some cases, teachers are involved in the trial and error activities, which are self-directed. In this way, teachers bring about classroom routines by organising the curriculum and managing the environment. Teachers also document their actions by maintaining journals and engaging in self-evaluation. Lastly, they adapt teaching and learning approaches by being self-directed. Such activities lead teachers to develop new ways of teaching that benefit pupils. Reflective teaching is also another classroom-based approach for TPD in which teachers may individually engage in self evaluation and planning for the next action in order to improve their teaching (Carter and Dearmum, 1995). Although Day (1993) argued that reflection is not a sufficient condition for TPD, its impact on teachers' lives is well documented (Hargreaves and Goodson, 1996). Pollard and Tann (1987) pointed out that effective TPD should enhance reflective practice in their work in order to renew and invigorate their knowledge and skills.

It is a fact that teachers learn from fellow teachers (Thiessen, 2001), as they identify effective as well as ineffective teachers (Day, 1994). The effective teachers become their models. They sometimes talk to the effective ones, observe them and imitate their ways of teaching. For example, teachers may learn from each other by working together in the school or classroom. By doing so, they exchange expertise and plan co-operatively in probing meaning, which helps them to research into each others' practices and compare notes and learn through participation. Teachers may be involved in promoting collaborative development to change their classroom practices through their evolving relationship. They achieve this by elaborating practical theories and enhancing teacher dialogue (Thiessen, 2001). Research on learning from others offers guidance about the many decisions involved in designing a productive discussion, including determining sources of evidence, collaborative structures, and negotiation goals (Lam, 2001). Observing a fellow teacher teaching has been recognised as a useful tool in that teachers help one another to develop

(Lam, 2001). During lesson observation, a teacher who observes another teacher may write notes on things s/he may like or dislike and then discuss them.

TPD may take place through learning by imitation, which is learning through copying from other teachers' effective teaching skills. Imitative learning is the quickest and most cost effective way of learning behaviours, beliefs, values, habits, skills and attitudes related to the teaching profession. However, imitation weakens teachers' critical thinking because of the high chances of copying things without understanding. If there are no good teachers to learn from in the school, the danger is that there will be recycling and reinforcing ignorance to teaching (Malawi Institute of Education, 2008).

The teacher-and-student approach is the most important of the three modes of the classroom-based TPD, despite being the least considered in TPD (Thiessen, 2001). Teachers and pupils are the most important characters in the classroom because they constantly interact to evoke teaching and learning. Because of the dynamics of the classroom, every lesson produces unique experiences, which makes the teacher change the approach in relation to teaching and learning. In short, the interaction of teachers and pupils becomes a powerful tool for TPD in a number of ways (Figure 4.5).

For instance, teachers share with students the teaching and learning process by negotiating the curriculum, forming teams and posing problems. Teachers and

students may also examine classroom phenomena by creating investigative clubs, inquiring into students' learning and evaluating teaching. TPD occurs by improving what happens between teachers and students in the classroom. Teachers transform teacher-student interaction; alter the curriculum in use, and make a culture (Thiessen, 2001).

		Attending to ongoing	Studying areas of importance	Implementing new practices
		experience		
Μ	Teacher-	Sharing teaching	Examining	Improving what
0	student	and learning	classroom	happens
D			phenomena	
E	Teacher-	Building joint	Probing for	Promoting
	Teachers	endeavours	meaning	collaborative
			U	development
	Teacher alone	Constructing	Documenting	Adapting
		classroom	one's actions	teaching and
		routines		learning
				approaches

EMPHASIS

It is important to emphasise that there is a constant interaction among these modes of classroom-based TPD as they all operate on a single teacher at any one particular time. One advantage of classroom based TPD is that it has a direct application in solving problems affecting classroom practices. However, a classroom-based approach to TPD could be challenging especially in developing countries such as Malawi where, for example, there are large class sizes against limited resources (Ministry of Education, 2008b).

Figure 4.5: Interaction of modes and emphasis (Adapted from Thiessen, 2001)

4.4.2 School-based teacher professional development

One of the most popular approaches for TPD is school-based programmes (Bell, 1991). As the name suggests, this is the approach that is based on the notion that schools must meet to discuss problems facing them as individual schools. The fundamental principle of school-based TPD is that a school is a learning community and that there is expertise enough to plan and implement TPD programmes that are responsive to the schools needs (Bell, 1991). Schools have everything that can support TPD activities. The meetings must take place at the school for every teacher to attend with ease.

According to Craft (2000:20), the school-based approach to TPD aims at achieving a better match of PD course to the needs and culture of professionals at a school as well as at having a direct impact on practice. The advantages for the school-based TPD include low cost, relevance to the needs and aspirations of the school and responsiveness to the problems (Guskey, 2000). However, it is argued that school-based TPD may circulate ignorance (Banda, 2001). It is important that the schools interact with the outside world to enrich their knowledge and skills to avoid circulation of ignorance. Craft (2000) also observed that the school-based approach to TPD can become limited, whether it is facilitated by someone within the school or from outside the school. However, the narrowness would be reduced with an external facilitator. Similarly, OECD (1998:41) argued that:

...conducted in isolation, school-based development is in danger of becoming introspective and replicating weaknesses that already exist in the school as an organisation. Therefore, external resource persons should be used to increase the effectiveness of school-based PD.

4.4.3 Cluster-based teacher professional development

The cluster-based TPD approach was developed as an alternative to a schoolbased approach in order to reduce some of the problems that school-based approach was facing. One of the problems of the school-based approach was lack of relevance of the focus of TPD activities to a cluster of school needs. Unlike school-based TPD, which emphasises the place where TPD activities should take place, cluster-based TPD emphasises that, regardless of where it takes place, TPD must address the real problems affecting cluster schools (Bell, 1991).

In Britain, cluster-based TPD was perceived as a viable alternative to schoolbased TPD and became popular in developed countries (MacBride, 1989). Schools had their own coordinators who met at the zonal committee and liaised with TCs. Furthermore, Morant (1978) suggested that cluster-based TPD should:

- Serve the cluster's institutional needs and therefore educational needs;
- Be intended for teachers actually serving at the cluster schools;
- Be initiated, planned, led and executed by members of the school staff in the cluster;
- Utilise the cluster school's physical resources and take place on the cluster school premises.

This view of the cluster-based TPD is rather restrictive. For example, cluster schools may decide to use resources other than what they have or conduct their activity at a place outside the school premises without changing the focus of the TPD. What is crucial with cluster-based TPD is that TPD must be conducted in accordance with the cluster aims and philosophy, and that it must meet the needs of the individual teachers and the aspirations of the cluster schools in which they teach (Bell, 1991).

4.4.4 Course-based teacher professional development

This is an approach whereby a national TPD programme is coordinated by one institution and has the notion of taking teachers out of school and instructing them in groups. According to Bell (1991), course-based TPD falls into three groups. First, it is for upgrading for certification and higher qualifications. Such courses tended to be theoretical and located in institutions of higher education and based on what the staff of these institutions could offer with little relevance to the needs of teachers and schools. The assumption is that when teachers improve their qualification, they improve their teaching practice and also become motivated.

The second type of course-based TPD is top-up courses, which are intended to further develop teacher skills. The third type, remedial courses help teachers in areas in which they are perceived to be experiencing difficulties. Bell (1991) argued that the provision of courses is popular even today because they are perceived as a solution for improving the quality of education. The intention of the courses is that the teachers, upon returning from the courses, are able to identify those elements of the course work that are relevant to their classroom practice and then be able to apply such expertise in the context of their day-today work (Bell, 1991). This in turn would have an impact on other teachers and the school as a whole. For example, up to 1997, the Malawi Institute of Education was responsible for all TPD activities in Malawi. The institute could get funding from the government or from the donors to run TPD programmes. Some of the programmes were run in conjunction with universities or colleges from outside Malawi such as the Brandon University of Canada (Mzumara, 1995). However, many teachers do not implement or apply the knowledge and skills learnt from the courses.

Course-based TPD has advantages in that it ensures uniformity in the quality of TPD and the use of highly qualified experts is ensured (Bell, 1991). However, the quality is achieved at the expense of quantity in that it is difficult to reach out to many teachers in a short period. Courses developed centrally tend to compromise relevance to the needs and aspirations of individual schools and teachers (Bell, 1991).

4.4.5 Networks and networking

Networks have found a place in TPD for a number of reasons. One of them is technological evolution in communication systems. Other reasons include constraints on resources, product differentiation and diversification, strategic alliances, an innovative culture, and need for functional information. Although a network is not easy to define, Alter and Hage (1993) described a network as constituting the basic social form that permits inter-organisational interaction of exchange, connected action, and joint production. Networks can be formed by either bounded or unbounded clusters of people or institutions, working non-hierarchically but collectively while maintaining legally separate units. On the other hand, networking is the art of creating and/or maintaining a cluster of organisations for the purpose of exchanging expertise among member organisations (Lipnack and Stamp, 1986). This view of networks and networking embraces individuals and informal with emphasis on services which facilitate access to formal knowledge and skill exchange.

Networking is the ability to create a web of lines between individuals and across social systems. Besides, it promises to be a major area of skill development for teachers. Networking ensures that TPD is not only a top-down (experts to teachers) but also a horizontal (teachers to teachers) process and that all those involved have the opportunity to exchange relevant information. However, for networks to occur, to be maintained and to foster growth of learning communities, there must be some means by which connections of a less intimate, demanding and continuous kind can be made.

Alter and Hage (1993) argued that if well implemented, networks and networking may make a huge contribution to TPD as they can stimulate schools and individuals to open up and explore their diverse ideologies and approaches to education. They can bring more isolated skills into a new educational venture. Most of all, networks can make resources available and accessible. With networking, power may be distributed across a horizontal organisational structure, and encourage co-operative modes of interaction. Networks are highly supportive of external and internal systems and are highly significant means of enabling TPD.

In the mid 1990s, the government of Malawi introduced a TPD programme which was based on the networking model (Section 3.7). The TDCs were constructed as support strategies for the networking approach to TPD, to link schools with one another with TDCs as a hub. This has been a significant stride in the transformation of TPD in Malawi although it would be dangerous at this stage to assume that networking is a panacea for all the ills of teaching.

The literature shows that Malawi was not the first country to use the networking approach to TPD. There are reports of a network approach to TPD in Singapore (Tripp, 2004) and the Netherlands (Veugelers and Zijlstra, 1995). For example, Veugelers and Zijlstra (1995) reported that the Netherlands used networking based on the assumption that schools differ and therefore they can learn from each other. However, some schools dropped out of networking due to travelling long distances.

The study conducted in the Netherlands indicated that a networks approach to TPD demands that schools be committed to each other and responsible to the government, and promote the restructuring of education. Relationships in the networks require that teachers contribute in a network in a relaxed atmosphere and speak openly about their own school. The relationships also demand that each school should be willing both to receive and to give, and also to be careful in using information from other schools (Veugelers and Zijlstra, 1995). Therefore, the experience from the Netherlands suggests that the networking approach to TPD calls for flexibility in the way schools can form groups and organise their own education. Schools can learn from each other but not copy all solutions because while some approaches can be adapted in different contexts others cannot.

However, networking can be challenging to sustain because it is largely based on likes and interests, less diffused, weak, volatile, and based on mutual trust. Nevertheless, networking is becoming a popular alternative approach for TPD (Veugelers and Zijlstra, 1995).

4.5 Impact of professional development on teachers' work

Despite numerous challenges of assessing the impact of PD on teachers' work (O'Sullivan, 2005) (Section 1.1) the literature review shows that successful PD practices have a noticeable impact on teachers' work, both inside and outside the classroom (Villegas-Reimers, 2003), taking into account that a large number of teachers throughout the world, especially in developing countries, are under-prepared for their profession (Villegas-Reimers, 2003; Kadzamira, 1996; Farrell and Oliveira, 1993). For example, evidence has shown that PD has an impact on teachers' beliefs and behaviour although the relationship between teachers' beliefs and their practices is not straight-forward (Franke, *et al.*, 1998).

Results reported by Craig, Kraft and Du Plessis (1998) indicated that when teachers were actively involved and empowered in PD, they significantly changed their behaviour and classroom environment and also improved student achievement. Furthermore, in studies by Kettle and Sellars (1996) in Australia and also by Kallestad and Olweus (1998) in Norway, the results showed that teachers' professional preparation and development had a large impact on defining teachers' goals for their students, and the set goals in turn affected teachers' behaviour in the classroom and schools.

Other studies have also indicated that the degree of impact depends on the type of PD (4.2.5). For example, in a study by OECD (2009), 'Creating Effective Teaching and Learning Environments: First Results from Teaching and Learning International Survey (TALIS)', it was found that qualification programmes had more impact than participation programmes on teachers. Similarly, Burchell, Dyson and Rees (2002) conducted a case study of the impact of PD on teachers' practices of two Masters of Education Degree graduates in the UK. They found that their new qualifications had a positive impact on their PD practices.

In another study of PD in adult learning by the National Center for the Study of Adult learning and Literacy (2003) in the USA, one of the findings was that multiple factors influence teacher change as a result of participating in PD. One of the factors was teachers' motivation to attend PD, years of experience, venues and the level of formal education. The most important PD factors included hours of PD in which teachers attended, and the quality of PD.

Borko *et al.* (2002) also found out that learning is a slow and uncertain process for teachers, just as it is for students. Franke *et al.* (2001) and Fennema *et al.* (1996) found out that some teachers change more than others through participation in PD programmes. Furthermore, some elements of teachers' knowledge, skills and practice are changed easier than others.

In spite of the evidence of the impact of PD on teachers' work, Guskey (1995) argued that more research was needed on the specific aspects of TPD that create a significant effect on teachers' practices. Issues of the impact of TPD on teachers work are relevant to this study because one of the ultimate goals of TPD is to bring about change in teachers' professional lives (Section 5.3) through active and frequent involvement in their PD activities.

4.6 Some factors affecting teacher professional development

In this section, I discuss issues that have characterised TPD globally including context of TPD; policy for TPD; whether PD should be compulsory for all teachers and time when teachers are due for PD.

4.6.1 The context of teacher professional development

It is worth considering that TPD does not take place in a 'social vacuum' (Kelchtermans, 2004), as pointed out in Section 1.5, but in a 'social context' (Guskey, 1995). The literature suggests that the uniqueness of the individual setting is always a critical factor in education and what works in one context may not work in another (Guskey, 2000). Kelchtermans (2004:221) described context as the "social, organisational and cultural environment teachers are working in" and elaborated that context consists of:

... the multiple social interactions with colleagues, parents, students, principals; shared or contested norms and values, habits and traditions that make up the 'culture' of a particular school; the policy decisions and measures that constitute the political and structural framework schools have to operate in, etc. (Kelchtermans 2004:221)

Similarly, Guskey (2000) emphasised the importance of context in supporting TPD because PD does not occur in isolation, but in a context, which includes the school culture, social interactions, and educational changes. The school system provides the context for TPD which can be characterised by resources, which in turn provide a total support system. The management system also provides a context that determines the institutional policy and practices, whereas the community provides the sources of the TPD (Blackman, 1989).

Related to context is the creation of decentralised provision of TPD (Yehorata, 2001). For example, OECD (1998) reported that the context of TPD in Sweden included social changes and decentralisation. Decentralisation has become an

imperative innovation of providing education services in recent years because of the failure of central authority to produce quality education and the link between policy and practice that would allow schools to create their own programmes in collaboration with other stakeholders. With regard to the establishment of the TDCs in school clusters (Section 3.7), it can be assumed that Malawi adopted the decentralisation of TPD to empower teachers in their clusters.

Linked to context is also the opportunity for teachers to engage in PD. For example, Smylie (1995) identified four conditions that promote TPD in the workplace. First, the workplace should provide opportunities for teachers to work together and learn from each other on an ongoing basis. Second, the workplace should enable teachers to work together as professionals. Third, the workplace should ensure shared power, authority and decision-making. Fourth, the workplace should promote PD with some degree of autonomy and choices by individual teachers. However, Smylie (1995) noted that it may not be enough to identify the conditions of a workplace, but to understand and control the contextual factors that promote or hinder TPD. Since the concept of TDCs is operating in a context different from where the concept originated, the TDCs in Malawi might meet unique challenges worth exploring.

4.6.2 Policy for teacher professional development

Another issue closely related to context is policy, which guides the kinds of input, the process and product of TPD (Guskey, 2000; Blackman, 1989). A

policy is a statement of intent, agreed and legitimate, which an organisation intends to achieve (Locke, 1990). The policy can also be conceived as a statement of purpose and broad guidelines on how the purpose is to be achieved (Caldwell and Spinks, 1988). Thus, for TPD to be effective there is the need to have a clear policy, which represents the views of the stakeholders at all levels (Blandford, 2000). For a policy statement to guide the management and process of TPD it has to be related to the overall education policy and development plan, which are derived from the national development policies (Oldroyd and Hall, 1991). Notwithstanding its significance, policy development is a continuing process that involves wide consultation and provides a clear basis for planning who does what, where, when, how and why.

Sugrue (2004) provided an overview of a policy framework for TPD in developed countries. Policy frameworks on TPD in developed countries tend to focus on shifting teacher-centred education towards learner-centred education where teachers become facilitators and learners take full responsibility for their learning; where learning outcomes or benchmarks are paramount; and where assessment becomes part of the learning process and not a product. There is a tendency among member countries especially in Europe to adopt similar policy frameworks for TPD in order to be subjected to the same audit measures. Thus, some developed countries have a clear policy focus for TPD.

However, the literature shows that many educational policies in Africa do not reflect TPD, perhaps because TPD is not a national priority. According to Christie *et al.* (2004:170):

In a context of financial austerity and underdevelopment, competing claims for funding within education systems are inevitable. Where there is lack of funding for basic education, CPD is readily displaced as a priority area and is more likely to be narrowly targeted.

Despite the lack of prioritisation of TPD, some countries such as Kenya and South Africa have a policy framework (Christie, *et al.*, 2004) which are characterised by 'policy-borrowing' (Sugrue, 2004) from developed countries through externally donor-funded initiatives. Consequently, the policy frameworks fail to guide teacher development in developing countries and TPD has been *ad hoc*, erratic and irregular (Kunje and Chimombo, 1999). According to Ministry of Education, Science and Technology (1998:18), one of the education policy statements focusing on TPD in Malawi states:

Provision of the services will be decentralised to improve effectiveness. TDCs will be established in each district. Each centre will cater for clusters of 15 to 20 schools. A Primary Education Advisor (PEA) could coordinate the activities in the cluster.

However, the policy frameworks on TPD in developed countries seem not to provide a clear basis for planning and implementing TPD partly because of the complexity of educational policy, especially in a pluralistic society (Bernier and McClelland, 1989). In the same vein, it would be argued that a policy could be limiting in empowering teachers to undertake the PD activities, partly because there could be tension between institutional and individual requirements (Blandford, 2000). Furthermore, the policy for TPD might be affected by such factors as organisation, culture and career management as they relate to teaching and learning (Hargreaves and Goodson, 1996). The policy may also depend on context and purpose (Section 4.6.1) (Guskey, 1995). For example, depending on context, the policy may be descriptive or normative; general or specific; implicit or explicit; or targeted to a selective group of people (Hargreaves, and Goodson, 1996). Therefore, in offering guidelines for TPD, there might be a need for policy makers to consider elements that would deliberately empower teachers to plan and implement their own TPD programmes using the resources available within their reach, as theories of adult learning emphasise (Chapter Five).

4.6.3 Compulsory teacher professional development

Related to any policy on TPD (Section 4.6.2) is whether PD should be compulsory for all teachers. Compulsory TPD occurs where the frequency, level and intensity of participation in PD activities are required by all teachers (OECD, 2009). According to OECD (2009), TPD may be either compulsory or not and those who argue for compulsory PD do so because they believe that the skills and knowledge which the activities aim at enhancing are considered important for the quality of teachers. OCED (2009) further argued that in some cases, participation in PD may even be compulsory for teacher certification. On the other hand, those who do not subscribe to compulsory PD believe that it is important for teachers to use their own professional judgement in identifying and participating in the PD activities which they feel are most beneficial to them (OECD, 2009).

Sugrue (2004) discussed compulsory TPD in countries such as the UK, Australia and Germany, where specific numbers of days were set for teachers to undertake PD. The number of days for TPD ranged from one to six in an academic year. For example, in the late 1980s, England and Wales introduced five days of compulsory PD for all teachers, although this policy suffered from disparity in resources among others (Bolam and McMahon, 2004).

According to Sugrue (2004), there are some challenges regarding number of days for compulsory TPD. For example, when teachers absent themselves from school to participate in TPD, it could be misunderstood by the community as an additional school holiday. In addition, closing the school for some days could be disruptive to students' learning. However, to avoid disrupting students' learning, some countries, such as the UK, use supply teaching cover from agencies, although this attracts an additional financial cost for the school.

Similarly, in a study conducted by Sturrock and Lennie (2009), it was found that, although dietitians recognised the importance of CPD, they experienced a lot of challenges that prevented them from engaging in CPD regularly. Lack of time and heavy workloads were perceived by the dietitians as significantly hindering their participation in CPD. In other studies, professionals such as pharmacists, nurses and dentists reported having similar challenges, including shortage of staff to cover study leave, reluctance of management to allow them to attend courses, conflict of CPD with home and domestic commitments and a lack of knowledge of CPD (Gould, *et al.*, 2007; Leggate and Russell, 2002; Mottram, *et al.*, 2002).

Furthermore, in a study by OECD (2009) in some countries in Europe, it was reported that on average the non-participation rate was higher for male teachers than for female teachers. However, for the few countries in Europe in which non-participation was higher among female teachers than male teachers, only in Turkey was the difference noteworthy, suggesting that the difference in the rate of participation in TPD between male and female teachers may vary from country to country.

Regardless of the challenges associated with compulsory PD, the advantage is that all teachers have time set aside to be freed from teaching work and participate in PD. According to Sugrue (2004), the introduction of PD days across systems might be recognition by policy makers that teachers need time to learn. In addition, compulsory PD might be an indication of a well-managed PD system (OECD, 2009).

On the other hand, Guskey (2000:19) argued that:

Viewing professional development as special events that occur on 3 or 4 days of the school year severely restricts educators' opportunities to learn. But if we view professional development as an ongoing, job-embedded process, everyday presents a variety of learning opportunities. In the quotation above, Guskey (2000) highlights the shortfall of compulsory PD in that it is incompatible with the popular notion of viewing PD as an ongoing learning process. Attempts have been made to introduce compulsory TPD in some developing countries. For example, in the state of Andhra Pradesh in India, compulsory TPD meetings in the TCs were introduced as part of the Andhra Pradesh Primary Project (APPEP) strategy (Weigand and Jain, 1999), as I discuss in Section 4.7.3. All teachers were required to attend a one-day meeting six times a year. Schools were closed to allow teachers to attend the meetings at the centre and travel expenses were refunded. Sustaining the meetings was, however, challenging because of lack of funds and lack of focus during discussions, which led to increased absenteeism (Weigand and Jain, 1999). Compulsory TPD might bring about a different scenario in Africa, where TPD is not a priority (Christie, *et al.*, 2004); teachers are overloaded (Kadzamira, 2006), there is high school enrolment and very limited resources (Glewwe and Kremer, 2005; Kunje and Stuart, 1996).

4.6.4 Time for teacher professional development

Another issue affecting TPD is about the provision of time for PD. The greatest challenge to effective PD may be lack of time (Villegas-Reimers, 1998; Abdal-Haqq, 1996; Darling-Hammond, 1996). It is argued that teachers need time to make PD an ongoing part of their work on a daily basis (Bush, 1999) and see the results of their efforts (Dorph and Holtz, 2000). This means that teachers need time to plan their own PD, understand new concepts, learn new skills, develop new attitudes, do some research, reflect, assess and be able to integrate

them in their practice (Cambone, 1995; Corcoran, 1995; Troen and Bolles, 1994; Watts and Castle, 1993). Cambone (1995) further argued that teachers as adult learners need time for learning, experiencing and integrating new ideas in their work.

To gain time for TPD requires a restructuring of the school schedule of activities. According to Guskey (2000), there are different ways of structuring school schedules to make more time for TPD. Some of the strategies include:

- Adding PD days to school calendar where a number of teaching days remains the same, but more days are added to teachers' professional contacts;
- Adding PD hours to the school day where a number of teaching days remains the same, but more days are added to teachers' daily schedules;
- Adding professional staff to allow additional released time by hiring substitute teachers on a permanent basis and teachers are released for classroom observation or planning;
- Altering the weekly school schedule by adding time to some days of the week and dismissing students early on one day;
- Creating block scheduling with provision of a shared planning period in which schedules are arranged for shared planning and requires extensive planning in the primary school; and
- Altering school or class daily schedules which require flexible assignments of special subject teachers and extensive planning, coordination and team teaching.

Congruent to Guskey's suggestion on how to make time for TPD, in a study conducted in the USA, Darling-Hammond (1999) found out that when more time is given for TPD activities, teachers teach more effectively and students' learning improves. However, where education resources are limited, the school calendars may offer few opportunities for teachers to "explore the problems of teaching and learning, to plan lessons collaboratively and examine their effects, or to observe and learn from one another" (Guskey, 2000:163). Thus, when time is provided for TPD, it must be put to good use as allocating time for TPD does not guarantee effective TPD. Adding time for TPD must be accompanied with activities that are focused, purposeful and outcome-based.

Another issue related to time is the conceptualisation of TPD as a lifelong learning process (Jarvis, 2004; Knight, 2002; Waters, 1995) (Sections 2.4; 4.2.4). According to Henderson (1978), TPD may include everything that happens to a teacher from the first day of appointment to the day of retirement. TPD is not about *ad hoc* activities but more importantly, "structured activities designed, exclusively, to reflect their professional life so as to improve their performance" (Henderson 1978:12) and to offer something to the society. Thus, TPD is an active, career-long process, which requires teachers to actually work to develop, as it does not happen merely as a result of the years of teaching (Guskey, 2000). It goes beyond the pre-service and in-service courses developed to educate and train teachers and provide opportunities for teacher-learning to improve the effectiveness of the teaching-learning process (Day, 1994).

Related to time is the fact that teaching requires constant upgrading, improvement and development in the job because teachers' needs and dispositions may differ from one stage to another in their lifelong learning continuum (Day and Sachs, 2004; Huberman, 1993). There are a number of models which describe the various stages of PD. Huberman (1993) explored the relationship between teachers' professional lives and their PD and he argued that teacher motivation for PD depends on the stage and position they have reached in their career. Huberman (1989) identified five stages of TPD and their features in their career cycle as follows:

- Career entry (1-3 years): this is also referred to as launching a career. It is an easy or painful beginning, characterised by initial commitment when teachers try to survive and discover their job;
- Stabilisation (4-6 years): it is the period during which teachers show their commitment, consolidation, emancipation and integration into peer group;
- Divergent period (8-18 years): it is characterised by new challenges and concerns. Teachers explore themselves and develop new methods of teaching through experimentation and responsibility;
- Second divergent period (19-30 years): this is when a teacher reaches a professional stability. Some teachers tend to relax and assess themselves, others begin to criticise the system, administration and colleagues. This is also the period when teachers stop striving for promotion; they enjoy or stagnate;

Disengagement (up to 50 years): this is a final stage during which teachers gradually separate themselves from their profession. To some, it is a time of bitterness, disappointment and withdrawal from professional activities. There is also an increasing concern with pupil learning and search for outside interests.

Thus, it is self-evident from these career stages and features that the PD needs of newly qualified teachers are likely to be very different from those of experienced teachers in an advanced stage of their career and/or in a leadership role (Bolam and McMahon, 2004).

Lack of time to implement PD programmes has also been indicated as another challenge (Abdal-Haqq, 1996), in particular in developing countries where most schools do not allow enough time for PD (Villegas-Reimers, 1998). For example, in the state of Andhra Pradesh, teachers experienced challenges in using the TCs because of lack of time. The TCs were open at the same time as the schools. Thus, the time teachers could go to the TCs for their PD was the time they were required to be teaching in class (Wiegand and Jain, 1999). In contrast, Abdal-Haqq (1996) and Darling-Hammond (1996) reported that in developed countries such as China, Germany and Japan, teachers have enough time to engage in PD because they teach fewer classes. Darling-Hammond (1996) observed that these differences in the amount of time provided for PD are related to differences in conditions of employment between developed and developing countries.

Therefore, time is one of the major factors affecting the provision of TPD. Teachers at various stages of their career cycle need to be given time for PD so that they can revitalise their professional competence. Some studies have shown that there is a relationship between the amount time given to teachers for PD and their effectiveness in teaching and improved students' learning (Darling-Hammond, 1996). Thus, it would be appropriate to conclude that time for PD is significant.

Related to time is teacher age which can affect teacher participation in TPD. For example, in some countries in Europe, it was found that, on average, teachers under 30 had the highest non-participation rate, followed by teachers aged 50 and above, then teachers aged 30 to 39 and finally teachers aged 40 to 49, who had the lowest non-participation rate, as shown in Figure 4.6, below (OECD, 2009).

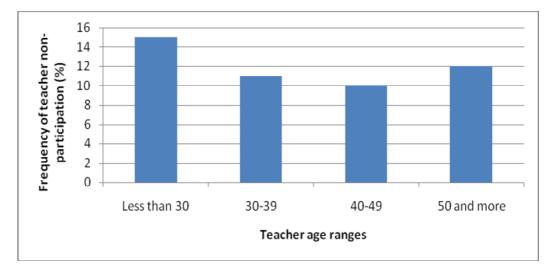


Figure 4.6: Teacher age range and their frequency of non-participation in TPD

However, there are exceptions in teacher age range and their rate of nonparticipation in TPD. For example, in Korea, teachers under 30 years had the lowest non-participation rate. On the other hand, the highest non-participation rate was among teachers aged 50 and above, in the Slovak Republic, Poland and Korea. In Denmark, the non-participation rate was high for all age categories, but it was lower among teachers aged 50 or above than for the other age categories.

4.6.5 Other factors in teacher professional development

In addition to these factors, the culture of support in PD (Lieberman 1994), stage of development of a school system (McLaughlin, 1994) and financial resources (Geiger, 1996) are also important in PD. The factors presented in this section justify the importance of supporting TPD if it is to be more effective. Figure 4.7 summarises factors that influence TPD.

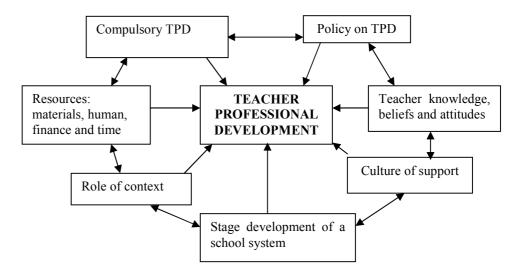


Figure 4.7: Factors which influence TPD

The diagram has effective PD at the centre which is surrounded by seven factors. It is assumed that there is relationship between the factors and TPD as well as among the factors themselves.

Issues which affect the provision of TPD are related and their magnitude is more felt in developing countries than in developed countries, perhaps because in most developing countries, TPD is not a priority (Christie, *et al.*, 2004) (Section 4.6.3). Therefore, it is important to carefully consider issues such as context, policy, whether TPD should be compulsory or not, time, and teacher age ranges when implementing any PD programmes or activities.

4.7 Teacher centres for supporting professional development

In this section, I discuss TCs in Britain, the USA, Asia and Africa from their emergence in the 1960s, with the aim of identifying major issues surrounding the intentions, organisation, activities and evaluation of TCs and comparing them with those of the TDCs in Malawi. The purpose of this section is to trace the movement of the British TCs concept to the USA and to the developing countries especially in Africa and Asia.

4.7.1 Teacher centres in Britain

TDCs in Malawi are an adaptation of the TCs which started in Britain in the 1960s (Knamiller, 1999) and emerged as one of the most prolific support strategies for PD worldwide. The need for TCs, in essence, sprang from "the idea that educational reform, or at least educational improvement, can occur through a change in teachers" (Adams, 1975:167). The aim of the TCs then was to alter the skills, knowledge and capacity of the individual teachers, thereby helping practising teachers deal with their own needs for growth, development and extension (Shostak, 1987; Redknap, 1977).

In his article, 'Teacher centres as seen through the pages of the British Journal of In-service Education', Gough (1997:1) wrote:

We, in Britain, do not have too much to shout about. Our economy is not too good; our sporting prowess is way down the league table. Teacher centres, however, were a British invention.

In short, Gough (1997) is telling us that TCs were a rare and valuable invention which they must be proud of. Indeed, today people all over the world are proud of this invention too. In Britain, the development of TCs started in about 1967 (Morant, 1978). According to Kahn (1982), the TC was both a concept and a place. As a concept, TCs are a support strategy for PD. As a place, TCs are places where teachers share knowledge, skills and innovations. To the British, the name TC implied that the centre was for the teachers, run by teachers and responding to the needs of teachers and enhancing their PD (Kahn, 1982).

TCs were seen as curriculum development centres as well as for upgrading teaching skills and knowledge (Gough, 1997). According to Adams (1975), the functions of the TCs were: access to new materials and curricula, skill-learning, renewal and rejuvenation, materials development, lateral diffusion of practice, elementary-secondary articulation, and reduction of alienation through social support, trouble- shooting, personal development, PD and

strategic empowerment. The TCs were later called PD centres in some parts of Britain, such as Kettering, with the focus changing to include teacher-focused, school-focused and needs-based PD (MacBride, 1989). Despite all these changes, TCs maintained a strong link with the schools they served (Salter, Parsons and Steadman, 1983; Weindling, Reid and Davies, 1983).

The concept of TCs became a British export because many countries became interested in using the idea to enhance TPD (Gough 1997; Shostak, 1987; Thornbury, 1977; 1973). Since then, many people have visited Britain to learn more about the TCs (Kahn, 1991). The great demand for the TCs forced the Commonwealth to develop a handbook entitled 'Teacher Resource Centres' in 1984 (Kahn, 1991). Although the book contained the basic guiding principles of the TCs, the writer cautioned that it was not a description of the best TC (Kahn, 1991). The receiving countries were encouraged to adapt the model to suit their local resources, conditions, and needs of the teachers and of the educational system. The adaptation of the TC concept has to take into consideration the political, economical, social systems as well as resources, teacher needs, school conditions and many more (Hoppers, 1996; Hawes, 1977).

While British TCs were difficult to define, being uncoordinated and developing according to local circumstances and constraints, there was an overriding philosophy which was captured and guided the establishment of TCs elsewhere (Gough, 1989). The early concept of TCs was that they were teacher-centred

and that they should quickly respond to teacher needs and wants in order to provide support to the teacher as a professional because the ultimate goal of TCs was to support teachers in their aspirations and to improve teaching and learning in the classroom (Kahn, 1982). It was also part of the belief in the British concept of the TCs that its main role was to break the teacher isolation and loneliness and instead, make teaching as a social service that works best when teachers socialise and collaborate. However, because of the differences in roles and functions of different TCs, there were no clear guidelines regarding how the centres were to be run (Kahn, 1982). Consequently, teachers would share their expertise, ideas, advice and opinions which could benefit the educational system as a whole and the classroom in particular.

To achieve this philosophy, the British TCs operated on the following principles (Kahn, 1982):

- Provide support for teachers and relevant needs to the classroom by acting as a neutral meeting ground for deliberating educational concerns that affect teachers and learners;
- Be flexible with the provision of the courses that reflect the needs and aspirations of teachers;
- Recognise teachers as providers as well as consumers through the utilisation of their expertise as well as dissemination of educational innovations;
- Serve the teachers with all the diligence and respect for their profession without fear or favour;

- Move from a solution-centred to a problem-centred focus in creating a professional atmosphere;
- Provide a background for teachers to start in small way innovative ideas that would later grow and impact on the whole educational system using the local setting of the TCs in addressing the local needs of teachers.

The functions of the TCs in Britain, which included TPD, support services for teachers, the production and distribution of teaching resources, social and recreational services and centres for community involvement in education (Kahn, 1982) were more specific and focused (Redknap, 1977). In the same vein, Newman (1981), cited in Gough (1997), suggested three main functions of the centres as providers, facilitators and initiators of PD. These functions had a distinct advantage of offering a chance for diagnosis and provision of PD activities, a quick response to needs, a secure environment and professional esteem arising from a sense of involvement (Midwinter, 1974). With the recognition of teachers as professionals, TCs as a place and a concept with the purpose of breaking down teacher isolation, bringing about teacher support and addressing the relevant needs of the teachers, TCs became accessible, acceptable, and neutral grounds without hierarchies, as is the case in other institutions (Redknap, 1977).

The TCs in Britain were run by a warden who had status and a fair level of autonomy. The success of the wardens was partly attributed to their flexible and quick response to new demands and challenges. They were responsible for coordinating PD activities whereas the Local Education Authorities (LEAs) were providing the actual courses. The wardens ensured that the centres provided a stimulating environment for teachers (Knamiller, 1999).

Such was the idea, philosophy, and functions of the TCs which led to their export to developing countries despite warning against wholesale adoption of the British concept, rather adapting to suit the local conditions (Kahn, 1982). There were also warnings against the belief that TCs were a solution to all the problems of TPD, but that they would provide a forum for addressing educational matters (Davies, 1978; Brugelmann, 1975).

Finally, Gough (1997) summarised the growth and demise of TCs in Britain, as indicated in Table 4.1. TCs in Britain were regarded as very successful in supporting TPD and to providing access to a range of educational resources. Williams (1981) cited in Gough (1997) reported that TCs made a significant impact on bringing about innovations and changes in education, and as such, got high recognition in the government machinery. The TCs, therefore, were increasingly getting absorbed in the educational system. They brought some excitement, interest and sponsorship even in the countries that were copying from them (Morant, 1978). However, the downfall of TCs in Britain is very interesting because they became "victims of their own success" (Williams, 1981:112), as they were integrated into the main education institutions, making them disappear from scene as a separate entity (Gough, 1997).

Decade	Dominant theme	Key processes	Effects on teacher centres
1960s	Curriculum development	Innovations	Initiation and growth
1970s	Staff development	Management	Consolidation
1980s	Institutional development	Accountability	Retrenchment

Table 4.1: The growth and demise of teacher centres in Britain

Source: Adapted from Gough, 1989:53

Gough (1997) summed up the success and demise of TCs in Britain in this quotation:

This, however, had become modified. Innovation had begun to become almost a routine activity. The teachers' centre leaders – who had been, by and large, innovators themselves, creating a new and different role in the educational enterprise – were being increasingly absorbed into the bureaucratic machinery of local government and hence losing much of the charisma associated with their initial activities. This was probably inevitable since the leaders had to be seen as appropriate figures within the educational hierarchy rather than 'educational gypsies' as they were perceived by some (Gough, 1997:26)

Nevertheless, with the success story of the TCs in the four decades, people wondered what would be their future. There were fears that the TCs would die; but in reality, TCs evolved, grew wings and flew to distant lands only to become one of the most popular global support strategies for TPD, as I discuss in the next sub-sections.

4.7.2 Teacher centres in the USA

With TCs in Britain taking a lead, centres were introduced in the USA in 1976 (Priselac and Priselac, 1975). In 1977 and 1978 the Federal Government of the USA boosted the development of the TCs (Edelfelt and Hruska, 1982). In line

with the principle of adaptation, the concept of TCs in the USA was slightly different from Britain in many respects. In the USA, different districts and states took up different names for TCs such as staff development centres, prestudent teaching centres, curriculum development centres, subject area specialist centres and multi-institutional centres (Priselac and Priselac, 1975). Nevertheless, unlike in Britain, the USA concept of TCs was an institution aimed at facilitating cooperation between schools, other human service agencies, universities, colleges, and communities in the improving of pre-service and in-service training of teachers (Redknap, 1977).

There were more differences than similarities in the working assumptions between the American and British TCs. The working assumptions for the American TCs included delivery, system orientations, national scope, institutional linkages and materials emphasis (Marczely, 1996). On the other hand, the British TCs were not part of the national network, locally managed, developing uniquely according to the demands of the immediate situations (Kahn, 1982).

Just like in Britain, there were different types of centres for TPD that emerged in different states in the USA, which were an adaptation of the British TCs (Marczely, 1996). For example, the Teacher Active Learning Centres, which started as pre-service mathematics workshops, were adapted from British TCs (Shaeffer, 1993). The major components of the centres included a stimulating and flexible, but structured physical environment, with a supportive, collaborative personal climate, and active learning through direct interaction of the participants with the environment (Buxton, 1976).

The American concept of the teacher active learning centres was similar to the British TCs in that they both emphasised teachers doing and becoming different, providing resources, providing peer support on the part of centre staff and emphasising the gradual, developmental nature of change in teacherbehaviour and curriculum development (Shaeffer, 1993). The strategy for implementation of the teacher active learning centres was based on the centrality of the teachers, voluntary participation, and independence of the centre from the existing structure of educational institutional on neutral ground (Buxton, 1976). Besides, it was based on lack of financial benefits, actual physical separation from school and on college environment, heterogeneity of participants and focus on curriculum (Buxton, 1976). This setting implied that the centres were like alternative institutions for the TPD.

Feiman (1977) described three types of TCs that were operational in the USA as behavioural, humanistic and developmental. The behavioural type of TCs was designed to improve teaching behaviours. The assumption was that teaching is a behaviour that can be improved and measured. The humanistic type rested on the assumption that practising teachers (Redknap, 1977) can understand teaching best. Besides, teachers can improve their skills if they are supported. The role of the centre was to create a learning environment where teachers could benefit from each other's expertise (Feiman, 1977). The

developmental type encouraged teachers to develop new understanding of their classroom through reflecting on their teaching and students' learning. The development centre is where everyone else became a listener or facilitator, providing an enabling environment for teachers to widen their professional horizon (Feiman, 1977).

The classification of the TCs in the USA is relevant to TDCs in Malawi in that all the three types of classification: behavioural, humanistic and developmental were integrated in the concept of TDCs in Malawi. As a behavioural type, the TDCs in Malawi aimed at improving teaching behaviours through the use of resource persons. As a humanistic type, the TDCs were designed to facilitate teachers networking in sharing and reflecting on teaching skills (Section 3.7). As a developmental type, the TDCs were designed to encourage teachers to develop new knowledge and skills in teaching. An integration of the three types in a single model of the TDCs in Malawi meant that the TDCs had a huge task to accomplish in enhancing TPD. However, it would be interesting to find out whether the TDCs were actually helping in improving teaching behaviours, facilitating teacher networking and encouraging teachers to develop new knowledge and skills and so on.

Such classification of the TCs in the USA provides a deeper understanding of the fundamental principles which governed their functions. In whatever way the TCs were classified, the names denoted the philosophy, which formed the basis of the kind of PD and support that was provided. The organisation of the TCs is also a source of concern, because their effectiveness may partly depend on how they are organised. Zigarmi (1978) reported some organisational types of centres identified in the USA, including: the independent, the almost independent, the professional, the single-unit, the free-partnership, the free consortium, and the legislative/political-consortium TCs. Some functional types were also identified, including facilitating, advocacy, responsive and functionally unique. However, because the major characteristics of each of these types are not provided, it is difficult to critically analyse these types. Nevertheless, the types are based on the origin and goal of the TC. As for the TDCs in Malawi, the original need was to provide a centre for orienting and training the untrained teachers and also to provide TPD (Section 3.7).

The classification of TCs into organisational and functional status (Zigarmi, 1978) is relevant to Malawi because the role of the TCs has to be understood in terms of how they are organised and also their anticipated functions because the uniqueness of the individual TCs would be a critical factor in the provision of TPD.

4.7.3 Teacher centres in Asia

TCs were also used as a support strategy for TPD in some countries in Asia (Knamiller, Maharjan and Shresh, 1999). Weigand and Jain (1999), Ravi and Rao (1994) and John (1993) reported that the State of Andhra Pradesh in India, in trying to improve the quality of education, embarked on Andhra Pradesh Primary Project (APPEP) with funding from the UK government in 1991. The

aim of APPEP was to improve human resources by enhancing the quality of teachers and supervision in primary schools. The overall goal was to improve teacher competencies, classroom practices and learning outcomes and to contribute to the attainment of universal primary education (UPE) (Section 1.4). To achieve this, the state adopted a number of strategies, one of which was the provision of professional support for teachers on a continuous basis through a network of TCs, training school supervisors to act as facilitators, constructing TCs on school sites and providing necessary materials at the TCs. In 1996, a District Primary Education Project (DPED) was initiated in five districts with the aim of supporting a variety of activities, including those of the TCs (Weigand and Jain, 1999).

According to Weigand and Jain (1999) and Ravi and Rao (1994), the project planning involved all stakeholders, including teachers and the donors who funded the project. Training materials were produced and training courses were conducted. The project development strategies included providing childcentred activities, teacher training and consumable materials; adopting a collaborative approach among stakeholders; establishing TCs to be more flexible and responsive to local circumstances; and establishing local developments to be shared with other teachers, supervisors, teacher trainers and project staff at annual national workshops. The project developed a newsletter to be used for dissemination of interesting ideas. Project implementation included the organisational structure at national level with offices of the director of school of education, project director and deputy project director, the human resources director, evaluation officer, research officer, design officer and office of the administrator and accounts in that hierarchical order.

Weigand and Jain (1999) further reported that there was a steering committee responsible for all those concerned with primary education including teacher educators. District organisational structure, which included the District Education Officer (DEO) and Zonal Educational Officer (ZEO), was responsible for the administration of the implementation of the project. The District Monitoring Officer (DMO), assistant to the DEO, was responsible for the District Institute of Education and Training, which provided the professional support for the project at the district level by conducting in-service courses for the TC staff; monitoring district and zonal level courses; providing professional support for TCs and schools; organising annual district level workshops; and providing support and collect field data for agreed evaluation studies.

According to Weigand and Jain (1999), a major element of the APPEP strategy was to establish TCs that would act as the forum for professional interaction among teachers. The TCs were expected to provide space and opportunity for teachers to exchange experiences, develop materials and enable the message of their initial APPEP training to be reinforced. Approximately 4,800 TCs were established as part of a larger primary school cluster of 7-13 schools of which the head teacher was the secretary and a teacher from the cluster as assistant

secretary. Each TC was catering for about 30 teachers and one teacher in the cluster as a resource person trained for conducting INSET.

Regarding resource provision at the centres, Weigand and Jain (1999) reported that approximately 1100 TC buildings were constructed. Apart from TC meetings, the centre building was used as staffroom or classroom and occasionally for other community committee meetings. Where the TC buildings were not constructed, any one room at the school was used as TC. Apart from material resources, all TCs were given funds for buying various items such as furniture and consumables. Teachers were also given funds for travel expenses for attending TC meetings.

In APPEP, the TC meetings were compulsory for all teachers and schools were closed on the day of meetings to allow all teachers to attend the meetings (Weigand and Jain, 1999). The activities of the day were characterised by presentation of model lessons and display of teaching and learning materials in the morning and group work in the afternoon. The meeting would end with selecting two teachers who would present model lessons during the next meeting.

Wiegand and Jain (1999) reported that the project was sustainable partly because the government continued supporting the activities after the funding from the Overseas Development Agency (ODA) had ceased. TC meetings offered opportunities for the continuing professional growth of teachers through sharing relevant experiences and developing materials for use in the classroom to enhance activity-based learning. Training played a vital role in ensuring that the school supervisors and the zonal educational officers received training in providing professional support for teachers at school level. Furthermore, a handbook of school supervision was prepared as reference material (Ravi and Rao, 1994).

Furthermore, regarding sustainability of the TCs, there was also a need for commitment and interest of the stakeholders. Considering that the donor funding provided the initial resources for the TCs, the cost of the TCs and their activities, the supply of materials and funding were not within the capacity of the government. Most of the materials held at the centres were those made by teachers. Some resources were stolen from the centres and there were no funds to replace them (Weigand and Jain, 1999).

Teacher attendance at the activities at the TCs was affected by the distances which some teachers had to travel (Weigand and Jain, 1999). Some teachers would travel for one-and half hours and would arrive at the centre tired and therefore ineffective. Travel refunds were discontinued due to logistical problems. There was no mechanism for reimbursing travel expenses other than for official meetings. Teacher use of the centres was also hampered by time. The centres were open at the same time as the schools, so teachers found it difficult to leave the classroom to attend to some activities at the centre. Nonetheless, because the schools and TCs were treated equally during the project activities, this permitted the simultaneous establishment of TCs and the immediate reinforcement of TCs activities; and thus provided immediate reinforcement of the training programmes (John, 1993).

In another scenario, Tangyong and Gardner (1994) reported that in an effort to improve the quality of education, the government of Indonesia recognised that teachers were a major resource to influence the quality of education. Consequently, Indonesia came up with a project targeting teachers. The main objective of the project was to bring about change in primary classroom practices. It was recognised that to introduce such changes, teachers would be required to be inducted into new ideas and practices. Teachers would also require sustainable long-term support. Therefore, to achieve this, schools were grouped into 6 to 8 and in each group a teachers' club was set up. The purpose of the teachers' club was to provide teachers with an opportunity to meet and share their professional experiences. In addition, TCs were established to provide more permanent venues for meetings, short courses and as a resource centre.

According to Tangyong and Gardner (1994), the two main thrusts of the project, to change classroom practices and to provide professional support, had to be fitted into the conception of support and training throughout the education system. The organisational structure to coordinate the project was put in place.

It consisted of coordinators at national, provincial, district, sub-district and school levels with their roles clearly defined.

The strategy for the project was to establish a centre for better practice (Tangyong and Gardner, 1994). The process started with the training of teachers, head teachers and school supervisors through local workshops and then international courses. The trained participants became leaders and coordinators on the ground. It was locally managed through teachers' clubs, head teachers' clubs, supervisors' clubs and the TCs. The success of the project was enhanced by deliberately incorporating good practices generated at the TC into the mainstream of education.

Nevertheless, Tangyong and Gardner (1994) reported that the project suffered from lack of continued monitoring due to insufficient funding. The project was funded through the British Council but the funds were so modest that they were limited to the provision of consultancy, training of leaders and overseas training of selected personnel but not for monitoring. The government of Indonesia provided the funds for supporting and sustaining PD activities even though the project was not directed from the central government. The activitybased professional support demanded a lot of resources, which was a challenge for sustainability. Thus, the people of Indonesia believed that the project would be suitable for rich countries (Tangyong and Gardner, 1994).

As regards clubs, the teachers' clubs proved a major thrust towards the success of the project because they brought about ownership. The teachers' clubs were 153

also successful whereas the head teachers' clubs and the supervisor clubs were not. The sustainability of the project suffered from lack of new posts created at national, provincial and district levels to continue with the activities of the programme (Tangyong and Gardner, 1994).

4.7.4 Teacher centres in Africa

As discussed in Section 1.4, TCs have also been regarded as a means of providing a viable support strategy for PD in Africa, especially after the Jomtien Declaration of Education for All in 1990 (Knamiller, 1999; Hoppers, 1996). However, it is far from the truth to say that they did not exist before, only that they were too few and far apart to be noticed (Little, *et al.*, 1994). It was difficult to develop TCs during the period of political instability and poor economic growth, coupled with the expansion of education at a time when the countries had limited resources, untrained personnel and little autonomy in decision making and action (Little, *et al.*, 1994).

Nonetheless, there is evidence that in some countries, there were TCs which served as meeting places where teachers shared problems and achievement in their respective schools (Little, *et al.*, 1994). Reports indicate that the TCs started emerging as centres for supporting professional self-development, locally and on a modest scale (Hoppers, 1996). With time and increased political and economic stability, the role of the centres changed to providing strategies for controlling the training of teachers and the implementation of the new curriculum initiatives. Where this took place, the responsibilities to TPD and support were reversed to become teachers colleges and curriculum centres (Hoppers, 1996).

There are a number of reasons for the development of TCs in Africa (Knamiller, 1999). The first reason is the issue of the quality of education in Africa (Rose, 2006) (Sections 1.1; 1.4; 2.5). TCs were seen to be a means for improving the quality of education in Africa. It was assumed that the TCs would develop PD activities that would promote good classroom practices (Zigarmi, 1978), and consequently, improve the quality of education. The quality of education has also to be considered with regard to TCs in that there was a need for minimum conditions that schools must meet if quality of education is to improve (Hopkins, 2001; Guskey, 2000). Teachers would be able to apply whatever they gain from the TCs if the school provides the enabling conditions. However, it seems that the conditions and the contexts in Africa might considerably reduce the contribution that TCs would make to the quality of education. For example, the social, economic and political conditions in which teachers' work (Sections 2.4; 4.6.1) might inhibit TCs from functioning desirably.

The second reason for the establishment of the TCs in Africa was due to educational reforms such as decentralisation of education services (Yehorata, 1983) (Section 4.6.1) and the systems of teacher training (Nzimande, 2002). The establishment of TCs was part of the decentralisation of the education services to empower teachers and give them professional autonomy in decision-making, although teacher autonomy is rare in Africa (Kelly and McDiarmid, 2002) (Section 4.2.2). For example, the 1995 World Bank Review provides evidence to show that schools in low- and middle-income countries are far less autonomous than those in the west (Shaeffer, 1993). The management structures in these countries which make schools solely accountable to central bureaucracies limit school and teacher autonomy. Resources and autonomy at the local level are virtually non-existent and initiatives cannot take place before central permission is granted (Shaeffer, 1993).

In resolutions made at the end of the Arusha Conference in 1996, the feeling was that TCs would be a major instrument for educational decentralisation (Kelly and McDiarmid, 2002). Although over the years, decentralisation of educational services has been increasing, a major area of concern has been the control of teaching activities and the costs and benefits associated with centralised versus decentralised education policies. Kelly and McDiarmid (2002) claimed that the implementation of the centralised education policies is poor, not effective and expensive. Despite concerns about decentralisation in a number of countries, the desire for it has been strong in paving the way for the development of TCs.

The third reason is that Africa needed to adopt a global system for providing support for TPD if it was to be seen as moving with the times (Chapter 2). "The pressures of globalisation have universally shaped government policies for education provision in general and CPD in particular" (Day and Sachs, 2004:4). It is through the global pressures that TCs were imported into Africa from other parts of the world, in particular from Britain (Section 4.7.1). They were introduced to Africa through donor-funded initiatives for easy global accountability through verification, auditing and standards (Day and Sachs, 2004). Having tried the TCs elsewhere, donors thought that the TCs would be a way of improving the quality of education in Africa through a systematically organised and supported TPD. TCs were established in Kenya and Zambia among other counties, as I discuss in the next part of this section.

Kenya adopted two different types of TCs: TACs for the primary school teachers and TRCs for the secondary school teachers (Lilly, 1990; Ayot, 1983). Both of them were constructed with financial support from ODA (Lilly, 1990). For the purpose of this study, my focus is on the TACs for primary school teachers.

Unlike the TRCs for secondary school teachers, TACs for primary school teachers were situated in the teacher training colleges. The TACs, which were the bases for teacher advisors and tutors, functioned as centres for curriculum development and management, in-service training, and the production of teaching and learning materials.

The purpose of TACs was to initiate, coordinate and undertake school improvement programmes (Lilly, 1990). According to Lilly (1990), the

operational strategies included coordinating schools through a zone and then several zones by a district TAC. This was possible because schools were grouped into zones and zones into districts. The teacher training college provided professional support whereas the district TAC administratively coordinated each TAC.

In Kenya, there were permanent tutors in each zone who coordinated INSET at centres, which included identifying one teacher and one head teacher in each zone to attend the INSET courses so that when they return to their respective schools, they should teach other school staff (Lilly, 1990). Workshops were also conducted during which teachers were awarded certificates of attendance (Welford and Khatete, 1999).

Although teachers were reported to value the usefulness of the workshops, there was "no direct evidence that TAC workshops impacted on the professional development" of teachers (Welford and Khatete, 1999:112). There was also very little evidence of transfer of knowledge and skills to schools from the tutors. The development of teaching and learning aids was hampered by lack of funds, as Welford and Khatete (1999:112) reported, "Money for teachers to develop teaching aids, for instance, was scarce and we saw few of these."

In Zambia, the Swedish International Development Aid (SIDA) and ODA funded the establishment of the TRCs which started in 1989 (Gibbs and Kazilimani, 1999). The TRCs were part of the Self-Help Action Plan for 158 Education (SHAPE) which was established with the support of SIDA in 1986. The focus of SHAPE was to enhance the capacity in self-help in the production of teaching and learning materials especially in practical subjects such as Agriculture and Home Economics in schools and colleges. SHAPE had an organisational structure from province, district, zone to schools/colleges. SHAPE, however, encountered problems in bringing about change in the classrooms, although reasons are not reported (Gibbs and Kazilimani, 1999).

While SHAPE was in operation, the English TRCs were established in eight secondary schools in 1989 (Gibbs and Kazilimani, 1999). The centres were secondary-based, centred on small school-based resource centres and subject specific. The work of the SHAPE and English TRCs led to the development of the Action to Improve English, Mathematics and Science (AIEMS) programme which started in 1993 (Gibbs and Kazilimani, 1999). The AIEMS approach was a cascade model of INSET, from national, provincial, district, zone to school levels. The five stages in the cascade reflected the five levels in the Zambian educational system. AIEMS established TRCs at the provincial and district levels. The SHAPE TRCs were taken by AIEMS and all the TRCs were provided with materials and equipment for use for meetings, INSET and the production of teaching and learning materials. The TRC coordinators were well integrated into the cascading model and were both effective and efficient managers of the system (Gibbs and Kazilimani, 1999).

Most teachers had positive attitude towards the resource centres and the AIEMS programme. However, there was little evidence to indicate that 159

teachers were using the centres to make teaching and learning materials (Gibbs and Kazilimani, 1999). In addition, teachers made very little use of facilities such as duplicating machines and photocopiers for professional matters. Although there was variation in the use of the centre by teachers, there was no reported evidence of teachers systematically using the centre with their pupils. The resource centres played a minimal role as training venues for the cascade model because they were too small and did not offer accommodation for participants. Resource centres made no significant contribution to improved resources in the classroom. Furthermore, the location of the TRCs had an influence on their use, in that most teachers could not use them because, as Gibbs and Kazilimani (1999:163) reported, "Distance and transport problems and costs meant that for the vast majority the TRCs were inaccessible. Even where the TRCs were on the teachers' doorsteps, teachers made little use of the resources". Finally, it was evident that Zambia could not sustain the programme without donor support because of its complexity in the cascade model, the high cost of financing the workshops at all levels of the cascade and sustaining expensive resources such as photocopiers and duplicating machines (Gibbs and Kazilimani, 1999).

4.7.5 Teacher centres in developed and developing countries compared

The review of the literature on TCs suggests that, as in Britain (Section 4.7.1) where the concept of the TCs originated, the TCs in developing countries were seen to be critical in enhancing the quality of education (Knamiller, 1999). However, in developing countries this role rarely afforded a status to the

coordinators of the TCs, who were often teachers seconded from other schools and had little autonomy (Knamiller, 1999). The centre coordinators were expected to provide INSET, but without specialised training in how to manage or where to obtain expertise (Knamiller, 1999; Ravi and Rao, 1994).

Unlike the British TCs, there were limited resources in the TCs in developing countries (Knamiller 1999; Ravi and Rao, 1994). The wide range of resources made available at the British TCs attracted teachers to visit them, whereas in Africa, resources were limited in most centres. For example, the only resources in most of the TRCs in Kenya were those that teachers produced and these materials were replicas of what teachers already met during training (Welford and Khatete, 1999), thereby inhibiting creativity. Furthermore, in Zambia, where the facilities for producing materials were underutilised, there was no culture of teachers making learning materials, understandably due to large class sizes, high costs in time and money (Gibbs and Kazilimani, 1999).

In addition, unlike the TCs in the USA, which were established as part of institutions of higher or further learning with the aim of allowing staff from the institutions to use the TCs for research and at the same time for the TCs to tap expertise from the staff of the institutions (Redknap, 1977), the TCs in developing countries such as Zambia (Gibbs and Kazilimani, 1999) and the State of Andhra Pradesh in India (Weigand and Jain, 1999; Ravi and Rao, 1994; John, 1993), were established on school grounds and relied on primary

school staff as resource persons and centre coordinators as permanent or parttime workers.

Facilities provided at the TCs in developing countries also varied greatly. For example, in Andhra Pradesh, the meetings were held in very basic facilities, usually in rooms in a school (Weigand and Jain, 1999; Ravi and Rao, 1994; John, 1993). In Zambia, the equipment was good but underutilised because it was not appropriate for training programmes (Gibbs and Kazilimani, 1999). In Kenya, meetings were held in classrooms at schools (Welford and Khatete, 1999) and this created a shortfall of classrooms.

In addition to material resources, funding of the TCs shows a bewildering level of variations. TCs in Britain received regular and reliable funding from the Local Education Authority (LEA), while in developing countries funding of the TCs largely depended on donors (Andhra Pradesh, Indonesia, Kenya and Zambia). Where donor funding stopped, the functions of the TCs were greatly affected. In Kenya, donor funding for the TRCs stopped in 1992, making the TRCs less functioning (Welford and Khatete, 1999). In Andhra Pradesh, discontinuity of funding from the government reduced the frequency of meetings of teachers (Ravi and Rao, 1994; John, 1993). Although a number of different strategies to make TCs more self-sufficient, adequate and reliable funding seemed to be necessary for TCs in order to have an impact on teaching. Lack of funding made the TCs change the focus and level of activities. Furthermore, the TCs in most African countries have been challenged on sustainability (Bennell and Mukyanuzi, 2005; Knamiller, 1999). Although sustainability was built in the establishment of most TCs, in Kenya, it was constrained by poverty (Crossley, et al 2005). In most cases it has been ensured by opening use to the community to raise money for the running of the centre (Chona, 1996). In some countries, for the teachers the centres were free, whereas the community had to pay for use. However, in Kenya, although the TAC had an impact on head teachers, it suffered from lack of sustainability and institutionalisation. The foregoing challenges in education systems in most African countries necessitated that some adaptations from the British concept of the TCs be made with an emphasis on providing resource support to teachers and schools (Knamiller, 1999).

From the literature review above, I have learnt that to explore the influence of the TDCs as a support strategy for TPD, I need to focus on the nature of the TDCs, the process of TPD and teacher change using multiple methods of data collection and analysis. Considering that TPD is a complex process (Guskey, 2000), selecting an appropriate conceptual framework which would relate to teacher learning is necessary.

4.8 Conclusion

In reviewing the literature related to TPD, the chapter has explored the concept, purposes and approaches of TPD. It began with examining teaching as a profession and justifying why PD. The literature reviewed has demonstrated that teachers are professionals and deserve a well-supported PD. I have traced the development of how TCs have been introduced in developed and developing countries as a support for TPD. Besides, I have explored the meaning, purpose and functions of TRCs and empirical evidence on the role of the TCs in TPD.

CHAPTER FIVE

CONCEPTUAL FRAMEWORK FOR THE STUDY

5.1 Introduction

This chapter presents the conceptual framework to guide the research process. Developing a conceptual framework is helpful in focusing and delimiting the study, and giving direction to the methodological decisions. There are many ways in which to analyse the same situation and individuals can perceive the same situation differently depending on the prior knowledge they have and also the power to analyse the situation. This is to say that individuals analyse situations by comparison with their own knowledge, skills and attitudes. It is for this reason that similar studies with similar approaches may produce similar conclusions but not necessarily the same. Thus, researchers are not without bias, but the validity of their studies depends on being explicit about their personal knowledge, assumptions and beliefs about the situation being studied.

Although there are many frameworks at global level for investigating the influence of the teacher development centres (TDCs) in supporting teacher professional development (TPD), the conceptual framework chosen for this study is based on theories of adult learning. These theories are rarely used in studying TPD; yet they seem to encapsulate how teachers as adults learn new knowledge and skills to enable them to change their professional decisions and actions. This chapter, therefore, justifies my choice of the conceptual framework, starting with a discussion of TPD as adult learning. Next, I discuss theories of transformative learning which emphasises learning for change,

followed by a discussion of variables used to measure the influence of the TDCs as a support strategy for TPD.

5.2 TPD as adult learning

This section discusses theories of adult learning which are relevant to TPD. It is a known fact that teachers are adults and that TPD is about adult learning (Bransford, Brown and Cocking, 2000; Brookfield, 1986). According to Mezirow (1991), adult learning can be understood as a process of transforming experience to knowledge, skills, attitudes and values. Learning in adults can also be understood as a representation of changes in perceptions and values, in which the focus is on development of meanings from one's experiences and also by harmonising, arranging, broadening and exceeding the current experience (Mezirow, 1991).

Tschannen-Moran (2010) pointed out that adult learning theory, or andragogy, emerged in the 1960s with the work of Malcolm Knowles, who, according to Conner (2007) was the founding father of andragogy. The work of Knowles and other proponents of adult learning theory provide a broad overview of an understanding of the theory of adult learning (Tschannen-Moran, 2010). Merriam and Caffarella (1999:272) described andragogy as "the art and science of helping adults learn". Andragogy is sometimes referred to as a theory of adult education, theory of adult learning, theory of technology of adult learning, methods of adult education, techniques of adult education, and a set of assumptions (Conlan, Grabowski and Smith, 2003). However, the primary focus of andragogy is on adult learning strategies and means of involving adult learners with the structure of learning experiences (Tschannen-Moran, 2010). This theory is congruent to one of the objectives of the TDCs in Malawi in that teachers were expected to be actively involved at the TDC by initiating their own PD activities with the support of the TDC coordinators and other resources (Section 3.7).

Adult learning is also explained by Dewey's model of learning, which states that learning begins with vague situations that present a dilemma. The individual locates the problem, analyses it and seeks the solution (Dewey, 1938). A dilemma is essentially a problem of trying to make a choice between two equally plausible alternatives.

This theory assumes that adults are preoccupied with making choices, some of which are harder than others due to the closeness of the alternatives, and this creates dilemmas in an individual who then seeks help or more information on which to make a final decision. It is this desire for more information that urges an individual to engage in learning. However, it would be too much to assume that all adults are experts with some basic knowledge upon which they would base their learning of new knowledge. The implication is that TDCs as a support strategy for TPD would encourage teachers to identify analyse and find solutions to their professional problems.

Furthermore, Argyris and Schon (1978) came up with a model that explains that adult learning occurs under conditions of surprise that create tension in an individual. The tension which results from personal knowledge and current experience makes individuals balance their behaviour to accommodate new experience (Smylie, 1995). Tension is, basically, the difference between what it is and is not, where an individual feels that there is a gap. People always want to fill the gap with information, which leads to learning. Tension creates an internal imbalance of thoughts. However, one criticism of this theory is that it is sometimes difficult to imagine how tensions may occur in an individual without prior knowledge to choose from or to look for. So learning has to start from more than simply tensions. The implication is that teaching brings about lots of tensions and these tensions may be eased through participation in ongoing PD activities at the TDC and in schools.

Schein (1988) described a theory of adult learning which integrates the two theories discussed above, and stated that learning occurs when an individual tries to alter an existing cognitive-psychological equilibrium that supports the present behaviour (*unfreezing*). Cognitive redefinition follows, which is an attempt to resolve the dilemma. The individual then integrates all the new information into the ongoing personality, which leads to a new equilibrium, and *freezing*. This learning process is affected by such factors as the level of discrepancy of the new and old knowledge. The implication is that TPD through the TDCs would provide teachers with adequate knowledge to be able to resolve the tension between old and new knowledge. Although the theory

explains how learning occurs in adults, it does not explain the characteristics of adult learning, as I discuss in the next sections.

5.2.1 **Characteristics of adult learning**

Knowles was known for his influence on the development of humanist learning theory and constructed several basic characteristics of adult learners which differentiate adult learning from how children learn (Merriam and Caffarella, 1999). These include self-directedness, experience, readiness to learn, orientation to learning and motivation to learn (Knowles, 1984:12).

5.2.1.1 Self-directed learning

Self-directed learning in adult learning has been described in various ways. For example, Merriam and Caffarella (1999) pointed out that self-directed learning is a process in which people take key initiative for planning, carrying out, and evaluating their own learning. McEntyre and Pahl (2006) described selfdirected learning as an informal learning process in which individuals take on the responsibility for their learning process by identifying their learning needs, setting goals, finding resources, implementing strategies, and evaluating their results. Grieve (2003) described it as a personal attribute, the psychological readiness to carry out one's own learning and a set of attitudes, behaviours and skills for self-direction. The goals of self-directed learning therefore vary, for example, the descriptions point to having individuals reach their full potential, promoting in adults a transformed perspective and finally promoting social change (Baumgartner, 2003). According to McEntyre and Pahl (2006), the goals, the process, and the learner are the three categories that are involved in self-directed learning. Thus, from an adult learning perspective, the goals are self-determined in the process and can be enhanced by means of facilitation, along with the provision of resources.

Most importantly, in self-directed learning, there is a need to recognise and respect that the learner is a self-directed, self-actualised and active participant who learns through a series of interpersonal relationships and will not learn if he/she does not want to. The concept of self-directed learning helps in regarding teachers as adults who learn better if they are allowed to exercise self-directedness in their PD.

5.2.1.2 Experience in adult learning

Adults have a reservour of experience that is a resource for learning and they have a greater depth, breadth, and variation in the quality of previous life experiences than younger people (O'Brien, 2004). Experience refers to the nature of the events someone has undergone the subjective nature of one's current existence or accumulated product of past experiences. It comprises knowledge of, skill in or observation of something or event gained through involvement or exposure. Thus, it generally refers to know-how or procedural knowledge, rather than propositional knowledge: on-the job training rather than book-learning.

Lindeman (1926) emphasised that experience is a defining feature of adult learning. There is a belief that TPD should be grounded in adults' experiences, and that these experiences represent a valuable resource. This emphasis on the role of experience in adult learning is central to TPD. Teachers as adults draw upon their experiences to aid their professional learning. Thus, during adult learning, there is a need to link new knowledge to the prior experiences of the learner in order to move from the known to unknown. By sharing and reflecting on their experiences, all teachers get the opportunity to act as a rich resource for learning. In addition, valuing teacher experiences means representing their long-term investment in their self-image.

5.2.1.3 Readiness to learn in adults

Readiness to learn is another characteristic feature in adult learning. As a person matures his readiness to learn is oriented increasingly to the developmental tasks of his social roles. Ingalls (1984:7) acknowledged that:

It is well known that educational development occurs best through sequencing of learning activities into developmental tasks so that the learner is presented with opportunities for learning certain topics or activities when ready to assimilate them but not before.

In the context of PD, this means that teachers feel the readiness to learn something or experience a teachable moment (Knowles, 1980) depending on where their needs and interests are during a particular developmental stage. Thus, PD providers need to be aware that teachers' learning needs and interests differ; not all teachers would experience readiness to learn at the same time. It is important to help teachers to diagnose their learning needs, group them according to their needs and interests so as to give them opportunities to share the common ones (Knowles, 1980).

5.2.1.4 Orientation to learning in adults

Adult learning is influenced by adults' orientation to learning what is immediately applicable to problem-solving. As Knowles (1980) explained, adults are goal-oriented. To adults, education is "a process of improving their ability to cope with life problems they face now" Knowles (1980:53). When this perspective is considered, TPD becomes not a subject-oriented activity, but a performance- or problem- centred learning process. Ingalls (1984:9) described this process as an "orientation to the discovery of improved situation, a desired goal, a corrective experience or developmental possibility in relation to the reality of the present situation."

Related to adult learning orientation is relevancy-orientation (Merriam, 2001). Teachers as adult learners not only appreciate the reason for learning something, but most importantly the learning that is applicable to their work or other responsibilities valued by them. This can be fulfilled by letting teachers choose PD activities that reflect their own interests. Related to adult learning orientation is also the immediate practical application of what is learnt, focusing on the aspects of the PD activities most useful to them in their work (Trotter, 2006). Adult learners may not be interested in knowledge for its own sake. As adults, teachers learn new knowledge which they would want to apply immediately in problem-solving. Thus, PD providers need to notify teachers explicitly how the PD activities might be useful to them regarding their own job. In addition, adults need to be shown respect; acknowledge the wealth of

experiences which they bring into the PD and avoid discrimination. In this way, teachers as adult learners become encouraged to participate in activities with free minds.

5.2.1.5. Motivation to learn in adults

Motivation is one of the characteristics of adult learning (Merriam and Caffarella, 1999). Everard and Morris (1996:20) defined motivation as "getting results through people or getting the best out of people". They further said that motivation in professional learning refers to getting the best learning out of teachers. Adult learners are motivated by their immediate needs and interests, or actual problems that need to be solved (Merriam, 2001; Knowles, 1990). Adult learners can be motivated by informing them of the reason for engaging in learning. For example, adults can be motivated by establishing a friendly, open atmosphere of helpfulness and by setting the degree of difficulty of the learning experience high enough to challenge them but not so high that they become frustrated by information overload.

Knowles (1980) observed that adults were motivated to learn as they experienced needs and interests which the learning would satisfy them. Learning for adults is lifelong, experience-based, self-directed, and individual differences among people increase with age (Knowles, 1980). Smith (1982) also observed that to motivate adult towards learning, there is a need to generate different conditions for learning and relate them to the learners' developmental changes and life roles. He added that the climate of learning should be non-threatening and should recognise various styles of learning. Furthermore, MacKeracher (1999:28) pointed out that adults will learn best when:

- others respect and acknowledge them and their past experiences and personal knowledge, skills, values, and motives;
- they are treated in ways which are consistent with their existing description of who they are and what they are capable of doing;
- their learning bears some relationship to past experience and can be connected to their existing meanings and personal model of reality;
- they have some sense of where they are going in the learning process, how they will get there, and how they will know when they have succeeded.

Therefore, motivation in professional learning refers to getting the best learning out of teachers. Adults are motivated to learn when they have a sense of belonging to a community of professionals. Motivation is important in professional learning because TPD revolves around the development of identity as a teacher. A growing participation in the social practice of the profession involves an increasing sense of identity as a master practitioner, which is a source of motivation (Lave and Wenger, 1991). Therefore, motivating teachers as adult learners to learn is to motivate them to work towards learning goals in which they have been involved and to which they are committed. If teachers do not feel committed towards a given learning result or activity, the only sources of motivation are rewards and punishment. Having discussed the main features of adult learning and how they relate to TPD, it is important to also consider principles which are guidelines for enhancing adult learning, as I discuss in the next section.

5.2.2 Principles of adult learning

According to Gordon (2004) and Merriam (2001), there are a number of principles of adult learning which relate to TPD. First, adults need to be actively involved in their learning process. This principle means that as adult learners, teachers need to be involved in planning, designing and implementing their PD programme. Second, experience provides the foundation for their learning. This means that adults enter learning with prior knowledge, skills and attitudes, which serve as advance organisers of their new learning. Thus, there is a need for providing teachers with an opportunity to participate in their PD processes and to reflect on their experiences and knowledge during their learning. Third, adults are most interested in learning about subjects that have immediate relevance to their job or personal lives. This principle implies that needs assessments are essential to design TPD programmes around the identified needs. Finally, adult learning is problem-centred rather than contentoriented and it occurs when problems relate in meaningful ways to adult life. This principle indicates that adult learners prefer doing realistic tasks rather than following unrealistic instructions.

Similarly, Speck (1996:36-37) noted that there are some important points of adult learning theory which could be considered when designing PD activities for teachers. First, adults are motivated to learn when the goals and objectives

are realistic and important to them and their PD learning and daily activities are related and relevant. They also need direct, concrete opportunities to apply their learning in real work. Second, adults want to be the source of their own learning and will resist learning activities that confront their competence. Thus, PD needs to give participants some power over their learning. Third, PD needs to be structured, to encourage collaborative learning and to reduce anxiety during learning. Fourth, adults need to participate in small-group activities during their learning to promote higher-order learning (application, analysis, synthesis, and evaluation) through sharing, reflecting, and generalising their learning experiences. Fifth, adult learners come to learning with a variety of previous experiences, knowledge, self-direction, interests, and competencies. Therefore, when planning for PD, there is a need to accommodate this diversity in learners. Sixth, for adults, transfer of learning into daily practice is not automatic. It is facilitated and sustained through coaching, mentoring and other kinds of follow-up support. Finally, adults need to receive feedback on how they are doing and the results of their efforts. Therefore, PD activities should provide opportunities for learners to practice what they have learnt and receive useful feedback.

The adult learning principles discussed in the preceding paragraphs have implications for TPD programmes. For example, emphasis on the importance of prior knowledge, experiences, beliefs and culture in adult learning (Terehoff, 2002, Speck, 1996) implies that TPD programmes should recognise teacher's prior experiences and beliefs. Thus, principles of adult learning are important tools in investigating whether the TDCs consider the principles of adult learning in PD programmes.

5.2.3 Adult development and functional theories

A number of theories of adult learning can help in investigating the influence of the TDCs as a support strategy for TPD (Knowles, 1984). The theories discussed in this section include: Age Theory, Stage Theory, Cognitive Development Theory, and Functional Theory (Trotter, 2006).

5.2.3.1 Age theory

Age theory suggests that as people age, they do not stop learning. Learning continues throughout the human life cycle. Age theory identifies age-related periods of life and focuses on the problems and personal issues that affect adults at certain ages. Advocates of age theory contend that the issues which adults face change with age (Trotter, 2006). For example, according to OECD (2009), teacher participation in PD increases with age, with a peak between 40 and 49, before their participation begins to drop. However, this variation varies from country to country. Age theory focuses on concerns, problems or tasks common to most or all adults at various times in their life cycle (Trotter, 2006). Sheehy (1976) cited in Trotter (2006) reported that adults pass through a midlife transition period that occurs in the late thirties and early forties. Sheehy (1976) referred to this transition period as the elbow joint of life, during which adults reflect upon and evaluate their lives. During this stage, adults develop a sense of contextual and cultural identity.

Levinson, Darrow and Klien (1979), cited in Trotter (2006), reported that by their mid-40s and early-50s, adults enter the next stage in which they begin constructing new structures for the rest of their lives. During this time, adults value relationships, work, and commitments which are crucial to decisionmaking. As individuals age, they think more about their lives and their occupation and they tend to make more informed decisions about their future life. Therefore, PD providers need to take into consideration the practical knowledge and experiences of their teachers as adult learners.

5.2.3.2 Stage theory

Stage theory focuses on differences in modes of thinking at various points in adult development that are not necessarily age-related. The stage theory believes that adults move through various stages of development. For example, Daloz (1986) classified this theory into collective stages. First, the preconvention stage focuses on survival and second, the conventional stage focuses on fitting in, being accepted and conforming. The third and final post-conventional stage focuses on thinking things over and evaluating events critically rather than surviving or conforming. Loevinger (1976) examined personality development and described how adults pass through stages as they attempt to understand themselves. She contended that adults move from conformity to emotional independence, and then to a stage where they reconcile their inner conflicts, give up the unattainable and value their own identity. Furthermore, Kohlberg (1969), having studied moral development in

adults, believed that orientations toward authority, others and self changed with different stages in the life cycle. Kegan (1982) also found that individuals grow through stages of development from self-centred and impulsive to a more centred stage that involves interpersonal relationships. The final stage is gradual and involves the development of new self and making connections with others. On career stages, Huberman (1989) described the developmental stages as consisting of career entry (1-3 years), stabilisation (4-6 years), divergent period (8-18 years), second divergent period (19-30 years) and disengagement (up to 50 years) (Section 4.6.4). Thus, PD that considers differentiation for adult learners respects the personal and professional experiences of each learner.

5.2.3.3 Cognitive development theory

Cognitive development is the development of conceptual levels with degrees in abstractness and interpersonal maturity (Hunt, 1975). Cognitive development theory states that adults move from concrete to abstract thinking, and operate from internal rather than external means (Perry, 1970). The theory of developmental stages consists of four levels of progression. Level 1, dualism, is where a person sees the world in polar terms such as right and wrong. Level 2 of his theory, multiplicity, accepts diversity and uncertainty. Level 3, relativism, saw knowledge as contextual and relativistic. Level 4, the final level, commitment to relativism, involves a commitment to affirm self and the process of ongoing cycles (Perry, 1970).

This theory of cognitive development indicates that adults move from concrete to abstract and that adults move through stages with the most advanced stage operating from internal rather than external standards. Thus, experienced teachers are more likely than beginning and mid-career teachers to have a commitment to self-affirmation than to externally-generated success. They endure changes and reforms and still remain in teaching, perhaps because of the intrinsic satisfaction, regardless of negative factors that affect their lives and profession. Therefore, there is a need for TPD to realise the differing needs of teachers as adult learners to make their development more meaningful and transferable into their work.

5.2.3.4 Functional theory

Gibb (1960) who developed the functional theory of adult learning stated that learning should be problem- and experience- centred and meaningful to the learner. According to functional theory, adults prefer to plan their own educational avenues and choose learning areas which they think can be directly applied in other situations such as the classroom. Similarly, Knox (1977) believed that adults learn continually and informally as they adjust and adapt to changing roles and other conditions. Furthermore, Smith (1982) observed that adult learning is lifelong, personal, part of human development, and partly intuitive. He also observed that adult learning involves change and experience. He further asserted that the developmental stages of the learner generate different conditions for learning, and what is learnt should be related to the learners' developmental changes and life roles. He added that the climate of learning should be non-threatening and should realise a range of learning styles. Thus, TPD should take into account adult experience, background and interests so as to promote adult learning that yields positive professional change and growth, which affect their professional practice (Tschannen-Moran, 2010).

In this view, Trotter (2006) stressed that there is a need to have an understanding and appreciation of developmental and functional theories of adult learning in order to increase both the relevance and quality of PD. The developmental and functional theories of adult learners have helped in understanding and identifying the teacher characteristics used as some of the independent variables for this study.

The preceding sections have shown that there are many theories of adult learning. However, what is more critical is to put in place effective practices that support adult learning in PD. The theories of adult learning discussed so far are based on valuing the experience of adults when they are approaching professional learning. Thus, adult learning requires building on the prior knowledge using techniques that treat learners with respect (Dalgarno, 1996), and recognising that people have different learning styles and have a variety of responsibilities and time commitments. In addition, PD providers need to recognise that adults in most cases learn collectively from each other. Their learning is self-directed, self-motivated and collaborative. Therefore, PD providers and teachers themselves will be more successful in PD if they understand the theories of adult learning and apply them in PD programmes and other relevant learning activities. The theories of adult learning have indicated that learning is influenced by the environment and internal processes, and that adults engage in learning to change their practice as well as for their wellbeing. Hence, in considering adult learning as the conceptual framework for this study, teacher learning is also discussed because supporting teacher learning through the TDCs is the focus of this study.

5.2.4 The teacher as an adult learner

As discussed in Section 5.2, TPD is about adult learning (Bransford, Brown and Cocking, 2000). Thus, teachers exhibit the characteristics and principles of adult learners (Smylie, 1995). Teacher learning involves changing practice and developing the skills of professional practice with in-depth understanding (Bryk and Schneider, 2002). For this reason, teachers need a variety of opportunities to learn new information and translate it into practice. Teacher learning is cyclical rather than linear, so teachers need to be able to revisit partially understood ideas as they try them out in their everyday contexts.

Dewey (1938) claimed that education should be guided by a well trained teacher who is grounded in pedagogical and subject knowledge. Similarly, Darling-Hammond and Baratz-Snowden (2005) argued that the common practices of effective teachers utilise three general areas of knowledge. First, they have the knowledge of learners and how they learn and develop. Second, they have the knowledge of the subject matter and skills to be taught in light of the social purposes of education. Finally, such teachers have an understanding of teaching in light of the content and the learners they teach. Therefore, the goal for teacher learning is to understand both the challenges of the discipline and the needs of the students. However, for teachers to be grounded in pedagogical and subject knowledge and demonstrate their effectiveness in the classroom, they need well supported ongoing professional learning through various ways.

The importance of teacher learning is based on the following principles (Timperley, 2009). First, teachers need to alter their beliefs about teaching and learning. Such beliefs about learning are often limited by their own experiences and practices. Thus, for teachers to change these beliefs, they need to be introduced to better ideas that can challenge their own experiences and beliefs. Second, teachers need to promote their subject knowledge and learn about the diversity of culture and contexts. In order to foster their subject knowledge, teachers need to acquire sufficient ideas about their disciplines and to engage in learning activities that would help them link new ideas to formerly held ideas. After some time, this process enables teachers to understand their subjects in a broader and deeper context, thus improving their ability to present subject matter in ways that enable diverse learners to connect with subject knowledge. Finally, teachers are confronted with new roles both inside and outside the classroom. However, teacher education programmes rarely prepare teachers for the new roles and practices. Teachers need to continue to learn in order to adapt their new and challenging roles and practices.

Eraut (1995) points out that the basis for TPD is that teachers are learning professionals. Teachers go through initial training where they acquire professional knowledge about teaching and learning and continue to learn while on the job. In fact, TPD is associated with formally organised conferences, courses or educational events and also work-based learning. Teachers also learn informally from their work experiences through their perceptions, expectations and reflections, making sense and linking experiences with personal knowledge. Nevertheless, facilitating professional learning is likely to take into account an appropriate combination of learning settings, time for study, consultation and reflection, the availability of suitable learning resources, people who are prepared to give support, and the learner's own capacity to learn and to take advantage of the opportunities available (Eraut, 1995), as I elaborate later in this section.

Walgron and Moore (1991) discussed some characteristics of teachers as learners from which I also draw a parallel with characteristics of adult learning (Section 5.2.1). They stated that teacher learning is voluntary, noninstitutionalised, participatory, experience oriented, related to an independent self-concept, problem-centred and immediate. Most teachers approach learning with a particular goal in mind and/or because they want to use the knowledge and skills gained. They are motivated to learn to change their knowledge and ways of doing things, especially when they see that the knowledge gained will change their lives, such as in employment. Furthermore, teachers learn because of satisfaction such as an increase in self-esteem and a sense of pleasing and/or impressing others. Finally, many teachers engage in learning for self-development, when they set their own learning objectives, which they achieve with little help from experts.

Although many teachers may not engage in learning for self-development because of lack of time, resources and opportunity, the reasons are deeper than these (Clair and Adger, 1999). They include fear of the unknown, perhaps due to previous, possibly unpleasant, learning experiences. Teachers would like to learn things that are practical, applicable, meaningful and related to their personal and professional growth and development (Section 5.2.2). Therefore, the challenge to those concerned with providing support for TPD is to take on board what, why and how teachers learn. To this effect, Clair and Adger (1999:3-4) mentioned the need for support and integrated professional development in school development planning and also making teacher and organisational learning a priority.

For teacher learning to take place, the following conditions need to be met. First, there is need for opportunities and resources to be available for teachers. These opportunities and resources depend mostly on public and policymakers' support, and learning opportunities must consist of more than just in-service workshops and short courses (Section 4.2.5). Second, theory and practice need to be integrated (Timperley, Wilson, Barrar, and Fung, 2007). This integration helps teachers to use their theoretical understandings as the foundation for making decisions about practice. Third, teachers learn better when they are concerned with improving their real-time action (Ur, 1989). Therefore, there is a need to confront teachers with problem situations which require a solution.

Fourth, teachers learn better when their leaders are actively involved in promoting teacher learning (Robinson, 2007; Stein and Nelson, 2003). So leaders must ensure that teacher learning opportunities are well-organised and appropriate conditions are in place for ongoing and in-depth professional learning (Robinson, 2007).

Finally, teachers learn better when there are supportive organisational conditions such as sustainable infrastructure that supports professional learning. In addition, sustained teacher learning depends on teachers developing strong theoretical frameworks that provide them with a basis for making informed decision regarding changes in their beliefs and practices (Hattie and Timperley, 2007) as I discuss in the next section.

5.3 Transformative adult learning

Transformative learning theory is a component of adult learning theory and it explains how adults learn and make meaning of their lives (Mezirow, 1991). Transformative learning theory came out of Mezirow's (1978) earlier theory of perspective transformation, which he saw as the same concept as Paulo Freire's "conscientisation" and Jurgen Haberman's "emancipatory action" domain of learning. Central to transformative learning is the contention that 'because we are all trapped by our own meaning perspectives, we can never make interpretations of our experience free from bias' (Mezirow1990:10). Thus, transformative learning aims to liberate individuals through the process of 'perspective transformation', which is 'the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world' (Mezirow 1991:167). Transformative learning is learning that produces change in teachers (Section, 4.5), and which upon reflection, has a significant impact on teachers' subsequent experiences. It involves a great shift in knowledge and experience (Baumgartner, 2003). In line with the knowledge based economy (Section 2.5) in which education is seen to play a central role, there is a need for professional learning that encourages the application of knowledge (Coulby, 2005); this need has led to the application of the theories of transformative learning (Scott, 1997) in TPD.

Different theorists hold different views about transformative learning (Kerka, 2005). Freire (1970) saw transformative learning as consciousness-raising which he referred to as conscientisation. The aim is to foster critical consciousness among individuals and groups. Critical consciousness refers to a process in which learners develop an ability to analyse, pose questions, and take action on the social, political, cultural, and economic contexts which influence and shape peoples' lives (Freire, 1970). Similarly, Boyd (1989) viewed transformative learning as individuation. Adults learn by making the unconscious conscious and by becoming aware of aspects of themselves of

which they are not conscious. It is a basic change in an individual's personality that involves the resolution of a personal dilemma and the expansion of consciousness, which results into greater personality integration. By contrast, Daloz (1986) viewed transformative learning as growth and development which motivates adult learners when they participate in formal learning experiences. Likewise, Kegan *et al.* (2001) described transformative learning as a developmental process which individuals undergo as they change. This is a belief that individuals change meanings in relation to their developmental stages of their lives.

Thus, transformative learning can be understood as learning that brings about change in the learner by gaining new knowledge and experiences which affect the his/her future experiences (Cranton, 1997). Transformative learning assumes that for learners to change their meaning structures, they need to engage in critical reflection on their experiences, which in turn lead to a transformation of perspectives. Figure 5.1, below, summarises Cranton's ideas of how transformative learning occurs.

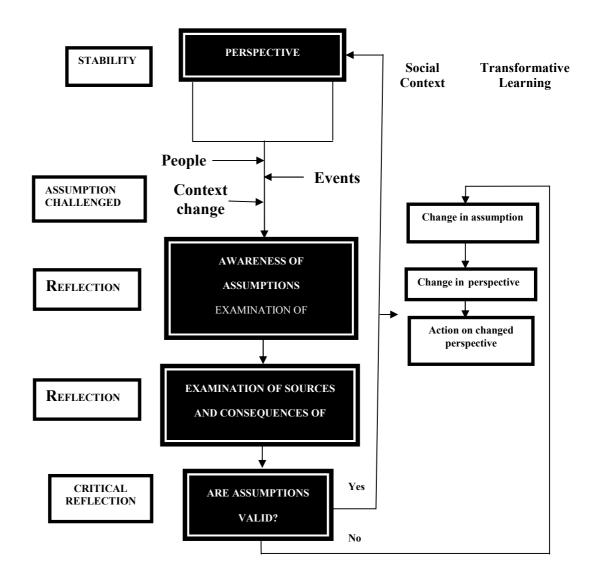


Figure 5.1: Model of Transformative Learning process (Adapted from Cranton, 1992).

According to Cranton (1992), the process of transformative learning occurs in stages: stability, reflection and critical reflection. The interaction of people, events and context in an environment challenges the assumptions which often demand that learners question their initial assumptions in very direct and sometimes terrible ways which lead to reflection.

Transformative learning moves from awareness and examination of assumptions through examination of sources and consequences of assumptions to questioning the authenticity of the assumptions themselves. Transformative learning occurs through changes in the learners' assumptions, perspectives, behaviour and self (Cranton, 1992). In this study, I am concerned with perspective transformation of teachers as a result of their involvement in the TDCs activities for their PD. The research methods used did not allow me to explore the other modes of change that would occur in teachers, as it required that I focus on observing the teachers at work.

Before Cranton's (1992) model of transformative learning was developed, Jack Mezirow, who first developed transformative learning theory in 1978 (Merriam, 2001), emphasised a cognitive process of reflection on experiences, assumptions, and beliefs that lead to the adoption of a new perspective (Mezirow, 1991). Both Cranton's (1992) and Mezirow's (1978) theories of transformative learning were developed on similar foundations of the psychoanalytic theory and the critical social theory. Mezirow (1991) and Taylor (1998) viewed transformative learning as critical reflection which involves the transformation of points of view, habits of mind and worldviews. According to Mezirow (1991), critical reflection is one of characteristics of adult learning. Critical reflection is where teachers as adults raise issues that are related to moral and ethical situations faced in their profession and where teachers may pose questions (Potter and Badiali, 2001).

In a nutshell, these views provide a central framework for understanding transformation as adult learning. First, central to these views is the emphasis on an actualisation of persons and society through liberation and freedom (Freire, 1970). Transformative learning should identify and remove factors that constrain adults to be active learners. Second, all the views underscore the importance of meaning-making in the process of learning and the role of adults in constructing the meanings in their experience (Cranton, 1992; Mezirow, 1991). Third, there is an emphasis of learning that brings about change in oneself and the society (Cranton, 1992). Fourth, transformative learning stresses the importance of the relationship between self and the society within the learning experience (Kegan, et al., 2001). Finally, transformative learning, which brings about growth and development, motivates adults to participate in formal learning (Daloz, 1986).

However, in transformative learning, adult learners need to have a responsibility for creating the learning atmosphere (Taylor, 1998) by taking an active role in their learning process. According to Mezirow (1997), transformative learning can take place in a welcoming environment in which the learners have adequate information, are free from intimidation, have equal opportunity to take up various roles in an institution, can become critically reflective of assumptions, are empathetic, are good listeners, and are willing to search for common goals. Thus, the environment in which adults have to participate in learning is a critical factor in transformative learning.

As in theories of adult learning (Section 5.3.2), there are some fundamental guiding principles in fostering transformative learning. Taylor (1998) outlined them as follows:

- Ideal learning conditions promote a sense of safety, openness, and trust;
- Effective instructional methods supporting learner-centred approaches promote learner autonomy, participation and collaboration;
- Learner activities should encourage the exploration of alternative personal perspectives, problem-posing, and critical reflection;
- Facilitators have to demonstrate qualities such as trust, empathy, care, authenticity, sincerity and a high degree of integrity;
- Feed-back and self-assessment are important to the learners (Taylor, 1998:53-54).

There is evidence of the application of transformative learning theory in adult learning. For example, King (2000) interviewed English as Second Language (ESL) learners to identify how they experienced perspective transformation. Of the 208 adult ESL learners who participated in the study, about 67% indicated to have experienced a transformation in at least one of the following areas:

- their view of English and language learning;
- their view of American culture; or
- their self-concept.

Factors which facilitated transformative learning consisted of learning activities that included reflection and exploration of different beliefs and world views, personal support and changes in their lives outside classroom. King (2000) extended her research on perspective transformation to an adult basic education setting in which 18 out of 19 adults reported transformative experiences. In describing their experiences, the learners focused on academic and personal accomplishment. They experienced a profound change in their cognitive structures and world views through a supportive environment.

In another study, the role of a supportive environment in transforming perspectives was also evident in the Adult Development Study conducted by the National Centre for the Study of Adult Learning and Literacy in the US. The experiences of 41 adult learners in three settings were explored (Kegan, *et al.*, 2001). The learners experienced perspective transformations which included ways of knowing and increased confidence. The mechanism for transformations which they experienced was a supportive and challenging environment. In this study, the environment was composed of learner cohorts. The factors enabling the learners to adopt new experiences were collaborative activities, emotional support, and the challenge of engaging with other diverse learners (Kegan, *et al.*, 2001).

Finally, reconceptualising TPD as transformative learning implies that TPD should involve personal development (Harvey and Knight, 1996), self-awareness, self-improvement, and empowerment and emancipation (Eraut,

1994). In addition, transformative learning implies that TPD should make teachers as learners see a new way to interact with others and expand their capacity for tolerance, acceptance, understanding, and compassion (Mezirow, 1997) and in particular their well-being in the world they live. Transformative learning is a state where PD is more reflective and intuitive, and which includes transformation of professional identity and professional practices. These views of personal development and PD could be understood from the perspective transformation in individual cognitive structures.

TPD as transformative learning takes place in context, which suggests that there is a need for individual reflection and collaborative negotiation in the community of professional practice. What is important is that for transformative learning in PD to occur, there is a need for learning opportunities for teachers that recognise the prior knowledge and experience of teachers as well as their ability to learn.

In conclusion, transformative learning theory, as it relates to theories of adult learning, is useful in the study because TDCs were expected to alter teachers' beliefs, feelings and actions. Often these changes mean that teachers explore their understanding of themselves and others. Transformative learning serves as a learning process in which a person becomes critical of his or her assumptions and the assumptions of others. Transformative learning theory explains why and how adults learn and achieve perspective transformation. Thus, transformative learning theory complements adult/teacher learning, to contribute to the conceptual framework for investigating TDCs as a support strategy for TPD.

Perspective transformation in TPD is indeed complex. Teachers have their own strategies for dealing with the challenges which they meet as they attempt to transform themselves individually and professionally. In this case, a question that needs to be answered is: What forms of perspective transformation practices in TDCs help the teachers develop strategies that would help them change? Beyond questions about the effectiveness of various PD practices are questions about who is able to engage in what PD activities, when, and where. In other words, what constitutes TDC activities for perspective transformation for teachers? These questions are helpful in identifying the variables to be explored in this study. Next, I explore the variables identified in these learning theories that would be used in this study.

5.4 Exploring the TDCs as a support strategy for adult learning approach to TPD

The preceding literature has shown that learning theories related to adult learning can provide useful tools to investigate TPD activities at the TDCs. In the current study, the idea of the influence of the TDCs as a support strategy for TPD is explored in several ways. First, I explore the extent to which the TDCs provide teachers with opportunities to engage in their PD: the type of PD activities and how teachers are involved at the TDCs. Second, I look at how teachers as adult learners were engaged in the learning processes at the TDCs. Third, I explore the perspective transformation in the teachers as a result of being involved in the PD activities at the TDCs and school clusters. Finally, I explore if the TDCs are creating an environment that is conducive to TPD. In this study, the theories of adult learning are used to find out how the TDCs enhance TPD. Furthermore, the learning theories are used to assess the challenges in the use of the TDCs as a support strategy for TPD. The learning theories address my interest in identifying the implicit as well as explicit features of the TDCs that influence the TPD activities. These features point to the PD activities which the TDCs provide for teachers.

Theories of adult learning imply that teachers as adults learn better when they are involved in their PD processes, have basic knowledge, are motivated, and are supported in risk free conditions and that PD may occur in groups or individual (Trotter, 2006; Speck, 1996; Huberman, 1992). Thus, for teachers to be involved in PD activities it requires involving teachers in exploring new ways of planning, organising and implementing PD activities which are ongoing through active hands-on participation (Dalgarno, 1996). However, teacher involvement in the TDC activities for TPD may be influenced by teacher characteristics such as sex and academic qualifications. In addition, teacher involvement may also be influenced by the TDC characteristics. Thus, in this study, teacher characteristics and TDC characteristics become a set of variables.

The theories of adult learning emphasise the importance of context when implementing TPD activities because, as Guskey and Sparks (1996) suggested, the context in which TPD takes place is crucial. TPD takes place in an institutional, organisational and social context, which is made up of the organisational culture, adequate funding and time, and with colleagues, positive feedback, and shared vision (Richardson, 1996). According to Kelchtermans (2004) and Guskey (2000), understanding the influence of context in supporting TPD (Section 4.6.1), implies examining organisational support, participants' use of new knowledge and skills and learning outcomes (Section 5.3).

As discussed in Section 5.2.4, leaders have responsibility for promoting professional learning by ensuring that teachers are provided with opportunities to learn new ideas and skills and be able to try them out (Robinson, 2007). Therefore, in this study, I identify the potential leaders and investigate how they support teacher learning. For example, I will explore how the TDC coordinators create opportunities and provide support for teacher learning.

In Section 5.2.3, it emerged that TPD should promote adult learning that yields positive professional change and growth, which affect their professional practices (Tschannen-Moran, 2010). In Section 5.2.4, it also emerged that teacher learning involves changing practice and developing the skills of professional practice with in-depth understanding (Bryk and Schneider, 2002; Phillips, 2003; Wilson and Berne, 1999). Finally, in Section 5.3, it is argued that transformative learning is learning that produces change in teachers. The 197

main argument here is that TPD should result in teacher change in knowledge and practice. Therefore, in this study, I set out to explore how teachers have changed as a result of being involved in the TDC activities.

From the adult learning theory point of view, sustainability is another variable for analysing the influence of the TDCs as a support strategy for TPD. Despite the use of the term 'sustainability' in relation to professional development, very few if any have attempted to define or describe the concept of sustainability within education reforms. Instead, much is written about sustainability within business studies where some authors have discussed sustainability in terms of profitability and viability of a business venture. Nevertheless, it is possible to draw a parallel understanding of the concept of sustainability between business and TPD because both of them aim at profit over time.

Using the ideas of sustainability presented by Harris, Griffin and Williams (2002), I interpret the concept of sustainability to mean that the TDC and TPD are not only compatible but necessary partners. The sustainability of a TDC means that it is developed and maintained in such a manner and on such a scale that it remains viable over a long period and does not undermine the organisational structure that sustains and nurtures it. The TDC needs to be economically viable and sustainable because if a support strategy is not economically viable, it is questionable whether it is organisationally sustainable. A TDC that is uneconomic will simply cease to exist, meaning that the TDCs might stop supporting the PD of teachers and instead they might become just centres for social activities.

In this study, I am concerned with the sustainability of the TDCs (Section 7.3) and also sustainability of teacher learning (Section 5.2.4) - whether the TDCs would support the teacher learning over a long period or not. The sustainability of TPD requires that the TDCs continue to support teachers as adult learners in their professional needs and that they remain professionally viable over a long period and do not undermine the professional demands that they support. The relevance and applicability of the TDC activities as well as the suitability and durability of the TDC as a physical structure would guarantee that the TDCs are sustainable. Thus, sustainability of the TDC as a physical structure and as a concept for providing support for TPD also becomes one of the variables in this study.

A summary of the variables which are explored in this study are presented in Figure 5.2. The arrow shows that the sources of the influence of the TDCs in supporting TPD are measured through the characteristics of the TDCs and the teacher characteristics as independent variables and PD activities as dependent variables.

Independent variables

TDC characteristics

- Policy and organisational structure
- Management strategy
- TDC resources
- Distance between TDC and school
- TDC setting-Urban/rural

Teacher characteristics

- Teacher sex
- Teacher academic qualification
- Teacher responsibility

PD activities

- Teacher involvement/participation in the TDC activities
- Teacher perceived change in professional practice
- Sustainability of the TDCs and TPD

Figure 5.2: Conceptualised relationships among variables

Figure 5.2 shows that the characteristics of the TDCs interact with those of the teachers to determine teacher involvement in the TDC activities. The theories of adult learning that encompass the conceptual framework of this study are based on the supposition that a high level of teacher involvement at the TDC is achieved through the integration of theories of adult learning in TPD activities, teachers interacting with the necessary and well-managed resources in a supportive environment (Kegan, *et al.*, 2001; King, 2000; Taylor, 1998; Mezirow, 1997; Guskey, 1995), in a humanistic approach to teachers as adult learners with the purpose of constructing knowledge and transforming teachers (Mezirow, 1997; Knowles, 1984).

The evidence of TDCs as a support strategy for TPD, teacher involvement, perspective transformation and the challenges in the use of the TDCs will be drawn from teachers' words as well as those from other key participants.

5.5 Conclusion

In this chapter, I have developed the conceptual framework for my study by using the theories of adult learning, including transformative learning, as they relate to TPD. The main argument is that TPD is about adult learning which can be investigated through the theories of adult learning. The learning theories have helped me to identify the variables which I use to explore the research problem. The conceptual framework described here provides a logical basis for exploring the research questions as presented in section 1.6. I discuss the research design and the methodology for the study in the next chapter.

CHAPTER SIX

RESEARCH METHODOLOGY

6.1 Introduction

This chapter describes and justifies the research approach used to investigate the research problem defined in Chapter One. It examines theoretical debates and practical choices for using a research approach, its potential advantages and limitations, clarifying the interface between the practice, theory and epistemological underpinnings of my study (Maykut and Morehouse, 1994). This chapter begins with a discussion of my philosophical stance on the research approach and also the issues of validity, reliability, triangulation, generalisability and research ethics, because these concepts are related and when considered together will determine the significance of my study. Then I develop my research design with a focus on the selection of research methods, research instruments, negotiating access and selection of the participants. I also describe the implementation of the study, which involves piloting, fieldwork and reflections on fieldwork. Finally, I describe both quantitative and qualitative data analysis procedures. I conclude the chapter by reflecting on how the methodology is suitable for addressing my research problem.

6.2 Research framework

I find the view of Creswell and Clark (2007:4), who extended the definition of methodology as merely "the philosophical framework and fundamental assumptions of research" to a more focused view that methodology is "the framework that relates to the entire process of research", a wonderful

encapsulation of the concept of research methodology. Indeed, whether stated or not, all types of research are guided by a framework (Cohen, Manion and Morrison, 2000) a way of looking at the world; the assumption researchers have about what is important and what makes the investigation worthwhile. In this section, I develop the research framework to guide me in data coherence so as to avoid unsystematic presentation of information (Cohen, *et al.*, 2000) by focusing on the philosophical perspectives associated with the approach to the study.

With my research inclination towards TPD as adult learning, which has its own philosophical assumptions guiding the research process (Creswell and Clark, 2007), I approached the world with a set of ideas which underpins my questions that were then examined in a specific way. This research, therefore, reflects my perspectives on ontology, epistemology and methodology which are intrinsically connected, because the methods which give me knowledge of what is out in the world may depend, in part, upon what is there to be known and how it can be known (Denzin and Lincoln, 1994).

During the course of the study, my ontological reflections, i.e. on "the nature of reality", and my epistemological assumptions, i.e. a concern for "the origin of knowledge" (Maykut and Morehouse, 1994:3) changed my prior beliefs in objective knowledge to believing in multiple realities, which coexist. My new ontological and epistemological beliefs were influenced by constructed reality (Punch, 2005). I found the view of constructed reality significant because it

shows that there are multiple ways in which reality may be constructed and that there are multiple rationales for doing so. Thus, 'truth' is that which is understood. Even though events, people and objects are concrete things, the meanings derived from or ascribed to such concrete things in order to make sense of and organise them, are but constructed realities. Furthermore, the sum of these constructed realities is not absolute truth but tentative and relative (Cohen, *et al.*, 2000).

An ontological position that asserts that "social phenomena and their meanings are continually being accomplished by social actors" (Bryman, 2004:538) denies the existence of the wholesome view of 'things' free from partiality and perspectives. As my research world is somewhat uncertain, I learned to adopt a cautious approach to all questions of knowledge. I understand that the natural and social sciences are partial as they are both controlled by our social and research interests. Moreover, I believe that we can never know anything beyond how 'things' appear to us, and the purpose of research must consequently be to describe our experience and the relationships between them, not to speculate about some reality beyond that experience.

My ontological position leads to a number of important epistemological assumptions, which include (Maykut and Morehouse, 1994:12):

• the knower and the known are interdependent: the way we understand the nature of reality directly affects the way we see ourselves in relation to knowledge. Hence, if we see knowledge as constructed, then the knower

can never be totally separated from what is known. Knowledge is seen as being collaboratively constructed;

- values mediate and shape what is understood: as the knower and the known are inseparable, the researcher's values become entrenched in the research, in the topic chosen for study, and in the way the researcher conducts the study;
- the underlying relationship is complex and multi-directional: as events are mutually shaped, multi-directional relationships can be discovered within situations. The complexity of things is evident from attempts at explaining positions that are interconnected and multi-directional;
- only tentative explanations bound by time and place are possible: research findings have to value context sensitivity. The intention is to understand a phenomenon in all its complexity and within a particular situation and environment;
- research seeks to discover propositions: research within this approach is characterised by a close examination of people's words and actions in order to distinguish patterns of meaning which emerge from data. The finality of this is the discovery of propositions, which emerge from the patterns of the examined data.

In this study, because I held these assumptions, I emphasised the socially constructed nature of reality, the relationship between what I studied, myself, and the situational constraints that shaped my enquiry. The scope of my research was to construct a social reality that is based upon the participants' frame of reference within the setting. However, exploring the philosophical orientation on which to base my research approach was challenging because of the complexity of the intellectual arguments and debates, leading to concepts which in some cases overlapped (Hospers, 1997). For example, the concept of knowledge is related to beliefs, truth and reality although there are overlaps among beliefs, truth and reality. What I claim as knowledge is usually what I believe to be an accurate representation of reality. However, not all beliefs are knowledge because they may not represent reality. Nevertheless, I was somewhat reassured to go ahead and identify the philosophical orientation around which I could conduct the research by the fact that the literature clearly states that, by its very nature; there is no conclusive answer in philosophical debates (Hospers, 1997).

Reflections on ontology and epistemology led me to methodology. According to Silverman (2005:4):

A methodology refers to the choices we make about cases to study, methods of data gathering, and forms of data analyses etc. in planning and executing a research study.

I approached my methodological issues with the view that I had to describe how I would study my research problem. When reflecting on the methodology of my study, I began by exploring my own thoughts and beliefs surrounding the research methodology. The research problem was located in the social world as it primarily focused on the practitioners and their interpretation of their experiences with the TDCs as a support strategy for PD. The relationship between self and others is a central concern in a symbolic interactionist approach to social research. My initial thoughts indicated that I must clarify my position as I am investigating a social phenomenon and that I am part of the social group that I am investigating. At the same time, I am an educator. Thus, I attempt to put my study in the symbolic interactionist framework.

Symbolic interactionism is a term coined by Blumer (1969) who suggested that people interact with each other by interpreting or redefining each other's actions instead of simply reacting to them. Symbolic interactionism believes that human actions and behaviours are based on the meanings that they attach to their situations. It is about how people attach and create meanings during the course of social interactions, how they construct the self and how they eventually define their own situation in the presence of others. The main idea is that people act and behave the way they do because of how they define situations and not how the situations define them and control their behaviour or actions.

Blumer (1969) set out three basic premises of symbolic interaction:

- Human beings act towards things on the basis of the meanings which the things have for them;
- The meaning of such things is derived from or arises out of the social interaction that one has with others;

• Such meanings are handled in and modified through an interpretive process used by the individual in dealing with the things which he/she encounters.

Thus, according to Blumer (1969), symbolic interactionism emphasises the subjective meaning of human behavior, the social process and pragmatism. It focuses on the subjective rather than objective aspects of social life because it bases its theoretical perspective on the image of humans, rather than on their image of society. Furthermore, symbolic interactionism believes that humans are pragmatic actors who continually adjust their behavior to the actions of other actors. Humans adjust to these actions because they are able to interpret them, express them symbolically, and treat the actions and actors as symbolic objects. This process of adjustment is aided by the human ability to imaginatively rehearse alternative lines of action before they act. The process is further aided by the human ability to think about and to react to his/her own actions and self as symbolic objects. Thus, through the theory of symbolic interactionism, I perceived research participants as humans who are active and creative in constructing their professional world and not passively conforming objects of the teaching profession.

As described in Section 1.2, an illustration of symbolic interaction might be teacher involvement in the activities at the TDC. Teachers might have one or more motives for their involvement in the activities at the TDCs, for example, improved teaching skills, career advancement or indeed promotion. A simple example of a symbolic interaction might be a centre coordinator (subject) who is modifying a teacher (object) so that the teaching is improved (outcome) using the resources available at the TDC (tool) as illustrated in Figure 6.1.

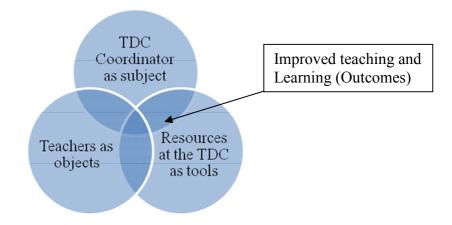


Figure 6.1: An illustration of symbolic interaction between TDCs and teachers

As teachers interact with the TDC coordinators (human resources) and materials resources at the TDCs, they construct their own meaning about teaching as a profession which may in turn influence their involvement in the PD activities.

Symbolic interactionism raises the question of how people who are interacting with each other can create the illusion of a shared social order even when they don't understand each other fully or they have different points of view (Strykes, 1980). Strykes (1980) argued that close contact and immersion in the everyday lives of the participants is necessary for understanding the meaning of actions, the definition of the situation itself, and the process by which actors construct the situation through their interaction. Thus, given my close contact with the participants, I considered this study as insider research. The term 'insider research' refers to projects in which the researcher has a direct connection with the research setting (Robson, 2002). Insider research is different from scientific research in which the researcher is an 'objective outsider' studying subjects which are external to the researcher (Denzin and Lincoln, 1994). Thus, I considered myself as an insider researcher.

There are some advantages of insider research. For example, insiders may have a wealth of knowledge which the outsider may not have (Tedlock, 2000). In addition, the outsiders may feel more comfortable and freer to talk openly if they are familiar with the insider researcher (Tierney, 1994). However, there are some disadvantages with insider research arising from:

- the researcher's tacit knowledge which lead to misinterpreting data or making false assumptions;
- the researcher's insider knowledge which lead to making assumptions and missing potentially important information;
- the researcher's politics, loyalties, or hidden agendas which lead to some misrepresentations of the findings; and
- the researcher's social standpoints which lead to subconsciously distorting data (Kvale, 1995).

In order to minimise such threats, I made explicit use of participants' values and at the same time tried to be objective in conducting my study. In addition, I tried to be transparent in carrying out my research process (Hammersley, 2003). The preceding discussion shows that arguments surrounding insider research are complex. However, I believe that rather than perceiving my close proximity to the research participants as problematic, I took it as advantageous in that I could understand the professional world within which teachers reside. It was important to clarify my position because it allows the reader to understand the stance I took in interpreting the participants' words and actions (Bryman, 2004:266) in this study. I agree with Maykut and Morehouse (1994) that if the participants (who were the researched) and I (the researcher) are interdependent, then there must be integrity between how I experienced the participants in the study, how the participants experienced the situation and their participation in it and how their results were presented.

6.3 Approaches to the study

As I turned to a discussion of the choice of the approach to my study, I was confronted by the question of whether I should take a qualitative or a quantitative approach to the topic, as some literature presented the two as "opposites derived from different philosophies" (Burns, 2000:391). In striving to discover the reality of the world, it was essential that I consider what knowledge is and how knowledge is acquired.

There are two main paradigms in searching for social reality: objectivism and subjectivism (Burns, 2000). Objectivism views social existence to be the world of natural phenomena where knowledge has independent natures and is external to the observer. Thus knowledge is described as being hard, objective

and tangible, and so discoverable and observable (Burns, 2000). In congruence with this paradigm, research approaches are classified as quantitative (May, 2001). Quantitative approaches are modelled on objectivism and emphasise the application of measurement for data gathering. Sophisticated statistics are employed to analyse numerical data and make deductions (Field, 2000). Data is often collected from large sample sizes and generalisations are made about the social world. However, quantitative approaches do not provide reasons for people's behaviour (Bernard, 2002).

On the other hand, subjectivism views reality as a construct of the human mind. Reality varies according to the understandings of what is real (Maykut and Morehouse, 1994). Therefore, social reality is not something objective as described by natural science but must be grounded in the ways people perceive reality through their social experience. It recognises that people are masters, controllers and constructors of their environment. Interpretations of human actions are based on the social meanings that they engage in their daily lives and are changed through social interaction (Maykut and Morehouse, 1994). Thus, knowledge is described as being soft, personal and humanly created. In congruence with this paradigm, research approaches are classified as qualitative. Qualitative approaches are modelled on the social sciences with an emphasis on understanding of subjects' perspectives, processes and contextual components (Radnor, 2001). In contrast to numerical measurement, qualitative approaches employ techniques like interviews to provide in-depth information about phenomena. Qualitative data are rich words which aim to answer the

why and how questions and provide greater depth of understanding (Bryman, 2004). They are characterised as inductive approaches and they begin with data collection and then generate theory.

Although it was very important for me to choose between quantitative and qualitative approaches, I did not try to adopt the rules that different authors have put forward for making such decisions (May, 2001). Instead, I based my decision on the nature of the research question: what exactly am I trying to find out? In studies where the research questions come earlier, it is possible to use the research questions as a guiding principle for the research approach (Punch, 2005). In fact:

The questions can be developed first, and the methods aligned; or the research might begin with only a general approach to its topic, and then develop focus in the questions and methods as things proceed; or, there might be a mixture of these two, where the researcher cycles backwards and forwards between questions, methods and some initial data (Punch, 2005:32).

However, in identifying a research approach to the study, I was mindful that the research questions were not only the guiding principles for the choice of the research approach to the study, but that the research topic and the methods were also interrelated (Punch, 2005).

My consideration of the interrelatedness between the research topic and the research approach took me back to examining the approach that would produce knowledge to guide professional practices. I wanted to explore the participants' perspectives, actions and context (Guskey, 2000). Indeed, the nature of the

constructed knowledge that I investigated had an influence on the approach I chose to adopt (Bogdan and Biklen, 1992). The nature of the social phenomena and my inclination towards social research guided me to use both qualitative and quantitative approaches (Punch, 2005; Silverman, 2005; Creswell, 2003). I believe that the social world is complex and dynamic, requiring more than one research approach, and that a qualitative approach would be more appropriate for exploring the what, why and how, whereas a quantitative approach would be more appropriate for exploring the frequency of occurrences of phenomena (Maykut and Morehouse, 1994). For me, the social settings consisted of an education system, which was implementing an education policy of a support strategy for teacher professional development (TPD), aiming at empowering teachers to plan and initiate their own professional development (PD) activities. Finally, my position and the nature of the knowledge I sought in this study are worthwhile, because research of this nature requires making a significant contribution towards the development of knowledge (Cryer, 2006).

The literature shows that the dominant research approaches, quantitative and qualitative, have both strengths and weaknesses and that there is a current shift from using a single research approach, either quantitative or qualitative, to one combining both qualitative and quantitative approaches (Creswell, 2003).

I chose to use both qualitative and quantitative approaches in a single study because I wanted to capitalise on the strengths of both (Punch, 2005; Bryman, 2004). For example, the qualitative approach provides depth whereas the quantitative approach provides breadth for the understanding of human activities (Bogdan and Biklen, 1992; Brannen, 1992). It was also my strong desire to use both qualitative and quantitative approaches in order to understand the life of teachers in the context within flexible research (Schostak, 2002).

6.4 Trustworthiness and acceptability of the study

Validity, reliability, triangulation and generalisability are central research concepts closely linked to the trustworthiness and acceptability of research findings. Although these concepts represent different aspects of research, they are concerned with persuading people to trust and believe in a study. As I needed to produce a study that is credible, I discuss their meanings, why they are important and how I applied them in my study.

Punch (2005) argues that there is no foolproof procedure to establish trust in any research, be it qualitative or quantitative, as the procedures depend on other factors such as research problem, context and theoretical framework. Thus, using both qualitative and quantitative research approaches brings about new challenges in seeking to maximise validity and reliability, because as Burns (2000:391) wrote:

It is impossible to judge one approach or method using the concepts derived from another totally different approach, thus concepts of reliability, validity... may not be relevant or require redefinition when used in another method

Burns (2000) argues for a continuous redefinition of the concepts whenever a different research method is used. My decision to use both quantitative and qualitative approaches required that I reconsider how I would assure trust, because trust is relative to the nature of the study. First, whether qualitative or quantitative or both, I considered validity - the extent to which an account accurately represents the social phenomenon to which it refers as an essential element if my research was to be credible (Silverman, 2005; Robson, 2002; Gross, 1987).

Both quantitative and qualitative approaches used in this study demanded a set of unique measures for the validity of the study. For example, the qualitative approach required that I consider such measures as honesty, depth, richness and the scope of the data achieved, clarifying bias, the participants approached, the extent of triangulation, and the objectivity of the researcher (Cohen, *et al.*, 2000:105). On the other hand, a quantitative approach required that I address:

- internal validity threats: the study procedures, treatments or experiences of the participants that threaten the researcher making inferences from the data in the study;
- external validity threats: when a researcher draws incorrect inferences from the sample data to other persons, other settings, and past or future situations;
- statistical conclusion threats: when a researcher draws inaccurate inferences from the data because of inadequate statistical power or assumptions;

• construct validity threats: when a researcher uses inadequate definitions and measures of variables (Creswell, 2003:171).

Thus, although it is difficult to talk of absolute validity, as it is relative to the nature of the study, I took measures to make my research more credible. These measures included detailed descriptions of the procedure for conducting my study and accuracy in report writing so that the reader should identify the research problem, theoretical and conceptual framework, design, data collection methods and data analysis procedures employed.

As a researcher within the research setting, the validity of this study might have been affected and this would have resulted in problematic issues such as biased and compromised behaviours during data collection and data reporting. To address these concerns, I used numerous strategies such as rich and thick description (Creswell, 2003; 1996; Hatch, 2002, Moustakas, 1994), which included direct quotations of the respondents' perceptions of involvement in the TDC activities for their professional development - respondent validity and a report of discrepant information during the data analysis phase of the study (Creswell, 1996). Section 6.7 contains a more detailed explanation of how these measures ensure the trustworthiness of the study.

Another aspect of achieving quality in the study was checking the reliability of the instruments and procedures for data collection and analysis. Reliability, which is consistency in measurement, is one of the essential parts of any research process as it is linked to validity of the study (Fraenkel and Wallen, 2009; Kumar, 2005; Bryman, 2004). For example, reliability is one of the conditions for a study to be valid; but a study which is reliable may not necessarily be valid (Fraenkel and Wallen, 2009). Evidence of reliability lies in the quality of the methods used, the extent to which records are kept as an audit trail, whether explicit links have been made between the conclusion and the data exhibits, and how explicitly subjectivity is dealt with (Bryman, 2004).

In this study, I increased reliability by conducting a pilot study to improve the quality of the data collection instruments and procedures. I developed the data collection instruments, and ensured that they were sensitive to the respondents' moods (Burns, 2000), by conducting a pilot study to improve the consistency, precision, and accuracy of the methods and data collection instruments (Sarantakos, 2005; Bryman, 2004; Gross, 1987). Finally, I conducted data analysis several times, each time starting all over again until I established the degree of consistency (Hammersley, 2003).

I did not aim at checking the replicability of all or some aspects of the study but the accuracy and comprehensiveness of the data (Silverman, 2005; Robson, 2002; Denzin and Lincoln, 1994). Therefore, my stance in this study was to view reliability as consistency in what I recorded as data of what actually occurred in the setting under study, rather than the literal consistency across different research settings. Triangulation, which is linked to research trustworthiness and acceptability, is also one of the major aspects of my research design. In fact, the current debate on use of both quantitative and qualitative approaches aims to achieve the trustworthiness of the study (Burns, 2000) through triangulation. The use of triangulation in a study of some aspects of human behaviour is seen by Cohen and Manion (1994:233) as an:

attempt to map out or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint.

Thus, I used methodological triangulation (Bryman, 2004) to check the perceptions of the same teachers who completed a questionnaire at one point and then were interviewed at another point. I also collected data from other key participants as a means of data source triangulation (Harmmersley and Atkinson, 1983).

I anticipated that triangulation could be problematic if data generated by different methods were divergent and could not be naturally accommodated within a single interpretation and conclusion; but this did not counteract the advantages in the use of both interviews and questionnaire survey. The choices of the two methods of data collection, as a means of triangulation, were subjective decisions based on my research context because I was dealing with a complex social situation which had previously not been researched in depth. Triangulation contributed to checking out the consistency of the findings that I generated through different data collection methods and sources.

Related to validity was the consideration of whether the findings of this study would be generalisable to a larger population. Generalisability, which is about external validity of the research, is a concern for the extent to which findings from a sample are applicable to the population or replicable in different settings (Fraenkel and Wallen, 2009). Much of the debate about generalisability is about how it is achieved in different research paradigms-quantitative and qualitative—as different researchers tend to view generalisability in different ways largely because of their beliefs about research paradigms (Silverman, 2005; Bryman, 2004). The objectivists view generalisability as a sample-topopulation inference which is based on how representative the sample is of the population (Punch, 2005). Sample representativeness in quantitative research is achieved mainly through probabilistic sampling techniques followed by use of appropriate statistical data analysis techniques usually to give equal chance of each member of a population to participate in the study (Bryman, 2004). However, non-probabilistic sampling techniques such as purposive technique (Fraenkel and Wallen, 2009), where members of a population are included in the study because of what they are believed to offer, were used to achieve data representativeness rather than sample representativeness in this study.

On the other hand, subjectivists view generalisability as the transferability of the findings to another situation preferably of similar characteristics. In qualitative research approaches, transferability is addressed through:

• Theoretical sampling: Is the sample theoretically diverse enough to capture enough variations to encourage transfer of the findings to other situations?

- context sampling: Is the context thickly described so that the reader can judge the transferability of the findings to other situations?
- theory-generating: Are the concepts at a sufficient level of abstraction to permit their application to other settings? (Punch, 2005)

Thus, in both research paradigms (quantitative and qualitative), generalisability is a concern for external validity of research findings (Fraenkel and Wallen, 2009; Bryman, 2004) beyond the general setting; a concern for whether the findings from the sample would be applicable to the population from where the sample was drawn (population generalisability), whether the study would be replicated in different settings by different researchers (ecological generalisability), as well as whether the theory generated is transferable to other settings (theoretical generalisability) (Fraenkel and Wallen, 2009; Robson, 2002). This view, which places generalisability in the realm of trust associated with external factors to the field of study, is appropriate for this study.

Therefore, in this study, the findings from the questionnaire would be generalisable to a setting in similar conditions because of the ecological generalisability and theoretical generalisability (Fraenkel and Wallen, 2009; Bryman, 2004). Regarding interviews, generalisability of the findings was increased by using purposive sampling techniques (Lincoln and Guba, 1985) when selecting interviewees and using appropriate places for conducting interviews, thus reducing threats to the study (Robson, 2002). Furthermore, the

findings from interviews may be generalised not to the population but to the theory (Bryman, 2004:285).

In addition, I used an analytic model, which assumes that generalisability is present in the existence of any single participant. According to May (2001), generalisability in qualitative research can be achieved by not rejecting outright the findings from a single case because such findings point to a major social behaviour. The proponents of the analytical model argue that it does not matter where you begin searching for knowledge, but what counts are the findings (Burns, 2000).

6.5 Ethical considerations

I conducted my research within the code of conduct for research ethics which I was given by the university. Rather than relying blindly on the codes of ethics, I developed my own interpretations of the ethics within my research context. In practice, the ethical considerations revolved around issues of harm, consent, deception, privacy and anonymity (Miles and Huberman, 1994). However, my own ethical practices, which were based on my values and beliefs, did not prevent me from experiencing difficulties in dealing with ethical dilemmas.

As the study progressed, I became ever more conscious that the relationship between the researcher and the researched is invariably unbalanced. In particular, the awareness that the information I might obtain from the researched could give me harmful power over them (Simons, 1989) made it imperative that I protect them (Punch, 2005). Consequently, whilst I understand that the aim of research is to produce accurate accounts of social phenomena, because of my philosophical inclination I do not agree that this should be pursued at all cost. As the right to know can easily clash with the principle of respect (Pring, 2000), it is essential for each participant to give informed consent (Appendices I and J), to fully understand the conditions of consent, and to give consent voluntarily (Pring, 2000). The information given to the participants included aspects such as the research aim, participants' role, why and how participants are selected, the risks and benefits of participation, ways in which data would be used and the possibility of withdrawing participation at any time (Pring, 2000). I understand, however, that it is not always possible or advisable to tell the participants everything about the study, as some detailed information may affect participants' behaviour in a way that will invalidate the research (Ruane, 2005). As long as the interests of the participants are protected, I did not see any holding back of some information as deceitful. This permitted me to associate myself with Simmons's (1989) views that making the introduction to the study very general is not being 'cunning' as long as it serves its aim.

I had to strike a balance between the public right to know and the individual right to privacy (Simons, 1989) by negotiating clearance of information offered by participants and used as data for the study before taking it away for use (Simons, 1989), by asking a simple question: Did you find anything in this questionnaire/interview not appropriate for me to take? This is where the

principle of confidentiality, which practically assigns the right of ownership to participants in order to protect private and possibly damaging data from negotiated dissemination, comes in. As a matter of fact, I treated as confidential all data I collected until cleared by the participants by indicating that they were not concerned with any part of the questionnaire or interview. However, I did not offer the participants any form of ownership during the interpretation and conclusion of my study.

The concept of anonymity, which offers individuals some privacy in the research process or protection from identification whilst allowing more explicit discussion or reporting of contentious issues, is often linked with confidentiality (Simons, 1989). But in spite of the strong feeling amongst social researchers that settings and responses should not be identifiable in print (Punch, 2005), anonymity appears almost impossible to achieve (Simons, 1989) as the study required that perceptions of some groups of people are analysed and compared. Nevertheless, it may still be important to maintain the principle of anonymity when reports are disseminated, as this decreases the likelihood of identification over time and distance. This also applies to unpublished academic research studies, as these are usually public documents placed in a library and open to all. To protect participants from harm, the circulation of the report can be limited to relevant audiences that are negotiated and declared from the outset (Simons, 1989).

Finally, I must mention that given the complexities involved in conducting research of this kind, it was not easy to fully respect all the rights of the individuals involved. Even seasoned researchers continually experience difficulties in dealing with ethical dilemmas (Punch, 2005). Believing that the integrity of the researched and the researcher ultimately depended upon the fulfilment of expectations generated by interpersonal perceptions, I sought to position trust which I tried to win rather than assume at the centre of my work (Simons, 1989). Even though no set of rules fully captured the spirit of trust, I worked for the trust by meticulously meeting all my agreements with the participants, which concealed some of the dangers they would face in exchange for their conceding the right for me to know (Pring, 2000). Indeed, if I did err in my interactions with the participants, I did so on the side of caution and respect.

6.6 Selecting research methods and instruments

In using both quantitative and qualitative approaches, I perceived the social world as a sea of knowledge and realised that I needed to 'cast nets of different sizes,' 'wide and deep' to capture many ideas of different theoretical and practical significance. The choice of the methods, and consequently, the instruments, was arrived at after considering the research problem and also the context in which the study was to be conducted (Robson, 2002). I chose to use questionnaire survey and interviews because the two methods served as a complementary tool to each other as well as a means of methodological

triangulation (Silverman, 2005; Bryman, 2004; Hitchcock and Hughes, 1995) as discussed in Section 6.4.

6.6.1 The questionnaire survey

Although questionnaire surveys are associated with the objectivity paradigm, as they rely on numerical measurements, they interface between objectivity and subjectivity because they yield numerical data that represent human opinions, views and behaviour (May, 2001). Thus, by using a questionnaire survey, I want to be taken as standing between objectivism and subjectivism.

The survey involved administering a questionnaire - a set of written questions/statements - to a large number of respondents. The use of the survey addressed the concern for the breadth of the data I collected, because it allowed me to deal with a larger amount of content and collect numerical data that represented the views and opinions of a large sample. The questionnaire maintained a high level of anonymity. It was also economic in terms of time and resources (Sarantakos, 2005).

When constructing the questionnaire, I used the Likert scale, which asks respondents to indicate the extent to which they agree or disagree with items (Fraenkel and Wallen, 2009; Bryman, 2004; Burns, 2000). The Likert scale is popular among social sciences (Sarantakos 2005; Gross 1987) as it builds in the degree of sensitivity and differentiation of responses while still generating numbers (Cohen and Manion, 2000:253) and it also "measures the intensity of

feelings about the area in question" (Burns, 2004:68). The Likert scale can be used in different scale formats. The most common ones are the 3-, 5- and 7point scales (Fraenkel and Wallen, 2009; Bryman, 2004). The 3-point scale has manageable options but less intensity whereas the 7-point scale has a very high degree of intensity but a too large number of options. Thus, in this study, I used the 5-point Likert scale because it provided the respondents with a manageable range of responses and options to a given statement (Sarantakos 2005; Gross, 1987).

Although it was not easy for me to work out the degrees of sensitivity in the Likert scale, it provided an opportunity for flexible responses, with the ability to work out frequencies and other forms of quantitative analysis (Burns, 2000). It also afforded me the freedom to blend measurement with opinion, quantity and quality expressed in each item in the questionnaire.

When developing the questionnaire, I planned and described the variables (May 2001). I turned them into measurable ones (Sarantakos, 2005). To achieve this, I moved from the aims and objectives of the study through the general research questions to detailed and specific data collection questions focusing on activities which teachers and other key participants undertake at the TDCs and in schools as a result of the establishment and development of the TDCs in Malawi. Then, I turned them into concrete measurable fields from which actual data could be gathered. I identified and itemised the complementary topics which relate to the central purpose of the

implementation of the TDCs. For example, teacher involvement with the TDCs formed a topic which was related to the focus of the study.

The questionnaire contained main sections such as characteristics of the teachers, teacher involvement in TDC activities, perceptions of teacher perspective transformation and the perceived barriers/constraints to the role of the TDCs. These sections had sub-sections, which helped in focusing the questionnaire further on the issues deemed to be pertinent to the research focus (Appendix A). For example, management of the TDC was one of the sub-sections for perceptions of the role of the TDCs in TPD. The third phase of developing the questionnaire involved formulating specific items relating to each of the main concerns. For example, in relation to TDC management, there was a need for developing detailed information such as teacher involvement in the TDC management from a relatively large number of teachers, and possibly to compare the perceptions across different TDCs and teacher characteristics.

However, I felt that the questionnaire alone might have failed to solicit the views of the participants at a very personal level. It would provide data about words and actions but would fail to provide reasons for the actions and thought. Thus, interviews with individuals were seen to be appropriate to encouraging the participants into offering their views and opinions associated with the TDCs in supporting TPD.

6.6.2 Semi-structured interviews

In line with my epistemological stance that knowledge is socially constructed (Section 6.2), I carefully constructed semi-structured interview questions in addition to a questionnaire (May, 2001; Burns, 2000). A semi-structured interview is a set of guiding questions that are in the general form (Bryman, 2004) and stands between structured and unstructured interviews. Such questions allowed for greater flexibility and at the same time provided direction for in-depth responses from the participants' perceptions of reality, a condition that matches the exploratory design with the qualitative approach of the study (Silverman, 2005).

Before constructing the interview questions, I identified two groups of participants to interview: teachers as the target group for the programme, in one, and the Primary Education Advisors (PEAs), head teachers, middle managers, policy implementers and policy makers (referred to as other key participants in this study) in the other. The aim of the interviews was to collect information about teachers and the TDCs from the teachers and providers of support for TPD. I constructed parallel schedules of interview questions - one for teachers and the other for other key participants - because of the difference I expected from the two groups (Appendices B and C).

When constructing the questions, first I identified themes for discussion similar to the ones in the questionnaire. Under each theme was a main question, which had several specific questions used as prompts to help in focusing the interview further on the issues that were pertinent to the research focus. Prompts were useful during interviews, as they guided and helped the participants to recall their experiences in which the information was embedded and also suggested to the respondents a possible content area to be considered when answering a question (Punch, 2005; May, 2001). Unlike the main questions, prompts were simply 'signposts', as I would rephrase the wording and sometimes provide explanations when the respondent had problems in understanding. I would omit some prompts, which were not appropriate for some respondents (Robson, 2002). However, because all the participants from the same group, such as teachers, were asked the same main questions in the same order, variations in the responses were due to individual differences in viewpoints and not changes in the wording of the prompts. I also did not overuse the prompts, as this could result in my imposing what I expected from the participants (Sarantakos, 2005; Bryman, 2004; Patton, 1987).

Although I anticipated that using two schedules of interview questions would present problems during data analysis and interpretations, as the data from different key participants would be difficult to compare, the data was complementary because I had set out to explore similar issues with different groups of people who gave their views of varying degrees on related issues.

6.6.3 Identifying data sources

This section provides an explanation of and justification for the choice of participants for the present study. It was considered essential to do this, in

order to contribute to a better understanding of the context of the study. The data source is linked to the methods I chose for data collection. Identifying data sources was not straightforward, as each of the two approaches and hence each method required that I collect data from different sources which addressed theoretical underpinnings of the research approach.

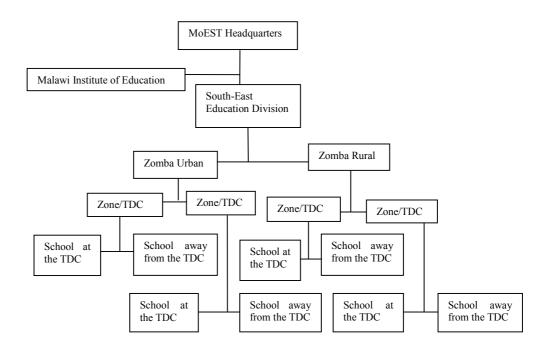


Figure 6.2: Data sources

It was not possible for me to include a representative sample on a national basis because of time and resource constraints. Instead, I conducted my study in Zomba Rural and Urban districts, because the first TDCs in Malawi were constructed in these districts so teachers in these districts had a longer exposure to the TDCs than any other district. Furthermore, since all the TDCs were established and run using the same government policy guidelines, the findings from the two districts would be representative of all the TDCs nationwide. The two districts also provided the urban/rural settings which offered me disparity 231 cases from which I could learn about issues of central importance to the purpose of the research. Particularly important was that the two districts presented what Patton (1990) calls typical cases and critical cases. The participants were purposively selected from different institutions, including the TDCs, as shown in Figure 6.2 above.

6.6.4 Negotiating access

Before I began negotiating access, I needed to be clear about 'what' (the type of data), 'whom' (the participants), 'how' (the data collection procedures) and 'when' (the appropriateness of the time and timing of the study) (Pring, 2000; Burgess, 1993). My research interest was both on the whole implementation process and at the same time on the TDCs as a support strategy for TPD. In particular, I found myself increasingly intrigued by the relationship between the functions of the TDCs in PD, and the role of the key participants in the TDCs. I needed participants to reflect on how the TDCs were supporting TPD. Thus, I began making preparations to enter formally into the field.

Bogdan and Biklen (1992) pointed out that one of the factors affecting data collection in a study of this kind is negotiating access to information because participants are not obliged to provide information unless asked politely. To negotiate access in fieldwork required that I reach mutual agreement with not only the participants but also the authorities (Bryman, 2004; Cohen, *et al.*, 2000). Furthermore, I had to start the process in good time, so as to get through the formal procedure for applying for permission can be a long and laborious

process (Taylor and Bogdan, 1998). To minimise the problem of negotiating access, I made a preliminary enquiry to obtain information of the formal education system and identify the gatekeepers as well as the potential subjects in the TDCs and TPD in Malawi (Ruane, 2005).

Initially, I identified a key gatekeeper - the Director of Planning in the Ministry of Education, Science and Technology responsible for educational research matters. But later, acting upon a suggestion from the TDC coordinators, I added the District Education Manager responsible for the management of primary education in the district, and the head teachers of the schools. My first step towards official access was to write a letter to the Ministry of Education, Science and Technology applying for permission to conduct my study in Malawi. I received a letter of approval (Appendix H), which I used to approach the middle managers and head teachers. Fortunately, none of the gatekeepers tried to influence the direction of my study. All approved and encouraged me to go ahead. Thus, it was time to identify the participants and locate them in the institutions.

6.6.5 Sample and sampling techniques

In this study, the population consisted of all the key participants in the institutions described in Section 6.6.3. The sample consisted of smaller groups of the key participants purposively chosen because of their common characteristics, which made a particular contribution to the data (Bernard, 2002; May, 2001). As discussed in Section 3.8, the key participants were those

who contributed in the establishment of the TDCs as a support strategy for TPD. The sample consisted of various units of key participants such as teachers, head teachers, PEAs/TDC coordinators, middle managers (Education Division [EDM] and District Education [DEM] Managers), policy implementers (lecturers from the Malawi Institute of Education [MIE]), and policymakers ([Ministry of Education, Science and Technology] headquarters).

Thus, the sample involved in the interviews consisted of 16 primary school teachers selected through stratified random sampling (Fraenkel and Wallen, 2009; Kumar, 2005; Bryman, 2004). However, eight head teachers, four PEAs, two DEMs, two officers from the Education Divisions, three lecturers at MIE and three senior members of staff at Ministry of Education, Science and Technology headquarters were all purposively selected.

For the purpose of using statistical analysis on the data collected through the questionnaire, the questionnaire was administered to a large sample of teachers. Therefore, the population consisted of all primary school teachers in Zomba Rural and Zomba Urban districts. Two primary schools in each of the four zones, one school at the TDC and another school away from the TDC were purposively selected, giving a total of eight primary schools. Thus, the sample for the questionnaire consisted of all teachers in the eight primary schools.

6.7 Implementing the study

I implemented the research plan in two distinctive stages: the pilot study and the actual fieldwork. In describing the implementation process, I want to make the study transparent so that the reader can appreciate the successes and challenges of fieldwork.

6.7.1 Pilot study

After completion of the construction of research instruments, I conducted a pilot study in order to verify the research instruments and identify possible mistakes (Kumar, 2005). I needed to establish what would work in the field, as not all that is planned can work (Robson, 2002); 'to check the applicability, misunderstandings, and ambiguities' concerning the research procedures (Jackson and Furnham, 2000:9); to establish the feasibility of the study before the main study was conducted (Kumar, 2005); and to experiment with and improve my research approach for the study (Maykut and Morehouse, 1994; Morrison, 1993; Oppenheim, 1992).

I conducted a two-phase pilot study. The first phase, which was an informal pilot, was conducted in Mpingu and Dzenza Zones in Lilongwe Rural West, in the Central Region of Malawi, between August and October 2003. The aim of this pilot was to establish the feasibility (Blaxter, Hughes, and Tight, 2001) of such a study in Malawi. According to Blaxter *et al.* (2001:42-43) informal piloting is defined as:

an early initial try-out, through which you can judge the feasibility of your overall research plans, and then make modifications as necessary.

During this 'fact-finding' phase, which was less focused than Phase Two, my concerns were to establish the availability of the participants and also have a feel for the fieldwork. I visited two schools and two TDCs; I interviewed some teachers and head teachers, PEAs, school committee members and one DEM and also administered a questionnaire to all teachers and head teachers from the schools hosting the TDCs and one PEA in each of the two TDCs I visited. I collected information and documents about the TDCs and also TPD in Malawi, which I used in determining the context of this study, described in Chapter Three. I used the information from the documents to identify those who played key roles in the establishment of the TDCs as a support strategy for TPD. I also found out that the TDCs were being established in phases, so some became operational earlier than others. In carrying out the first pilot study, I learnt that the sample of twelve TDCs, which I had initially intended to explore, was too large to be achieved in the period of my research study given the multiple methods of data generation.

The results of the preliminary pilot study were used to map out the focus of the study by narrowing down, for example, from including the community around the TDC and schools, to just focusing on teachers and other key people in different institutions such as MIE, Ministry of Education, Science and Technology headquarters, the Education Division office, the District Education office and the TDCs. I used the ideas collected from the documents and also

various key people in drafting the early chapters of the thesis, especially the context of the study (Chapter Three) as well as the development of the research problem and instruments. Thus, the next stage of the development of the research focused on what to collect from the key participants.

In the second phase of the pilot study, which took place in Ekwendeni Zone in Mzimba North in the Northern Region of Malawi, in March 2004, I tried out data collection methods. First, I asked people to complete the questionnaires and comment on each item as easy/difficult to understand/answer. I used this information to improve the questionnaire. For example, I found that the respondents took more than one hour to complete the questionnaire so I concluded that the original questionnaire was too long.

To pilot test the interview guide in the field, I tried it out on a sample of the actual key participants. In addition to pilot testing in the field, I was able to pilot test the interview schedules through expert judgement whereby experts read the interview schedules and commented on the possible problems of using the interview guide. The findings from the two sources helped me to reorder the questions and change the vocabulary in some items.

6.7.2 Fieldwork

I conducted the fieldwork between 1st July and 30th September 2005, during which I administered a questionnaire and conducted interviews concurrently. What follows is a detailed account of my fieldwork during that time.

6.7.2.1 Administering the questionnaire

On arrival at a school, I introduced myself to the head teacher and explained the purpose of my visit - to administer a research questionnaire. I then asked for a quiet room where teachers could complete the questionnaire. When teachers gathered in the room, I explained to them the purpose of the questionnaire and asked them to feel free to leave the room if they did not want to participate in the survey. Fortunately for me all teachers in all schools I visited consented to participate without being coerced (Appendix I).

Since the use of a questionnaire is associated with the problem of nonresponses, as many participants do not return the questionnaires (Hitchcock and Hughes, 1995), I administered the questionnaire in person, waited for the respondents to complete it and then collected the questionnaires on the same day in the same session. In this way, respondents had little opportunity to discuss their responses and I collected individual responses. This approach also helped me to achieve 100% return of the questionnaires.

There were some challenges with data collection through the questionnaire. For example, on average respondents took about one hour to complete the questionnaire, the font size was too small for two respondents with sight problems, and also five respondents did not easily understand two items. The last problem required that I explain what was meant and required of them. For the respondents who had the sight problem, I prepared questionnaires with a large font size and one-half line spacing, which I had already prepared in anticipation of such problems. I also encouraged all the respondents to ask for clarification when they did not understand any of the items. The second part of the challenge was to make sure that the respondents did not omit any question. This required that I check that every participant had responded to all the items before leaving the room.

6.7.2.2 Conducting semi-structured interviews

I used stratified random sampling to select two teachers, one male and one female (Cohen, *et al.*, 2000) (Section 6.6.5) from each school, to ensure that there was equal representation of male and female teachers in the interview sample. This was appropriate because I needed to guard against male dominance in the teacher interviews, where a very small group of teachers would participate, to avoid gender-biased interview data. Gender issues remain a challenge in developing countries such as Malawi (Section 3.6). The other participants were drawn from a population of people who took a leading role in the establishment of the TDCs, using purposive sampling. For example, the head teacher of the school was eligible for interviews. In all, a total of 38 participants, consisting of 16 teachers, eight head teachers, four PEAs, four middle managers, three policy implementers and three policy makers were interviewed (Section 6.6.5).

In the same way as for the questionnaire survey, I introduced myself to the head teacher and explained the purpose of my visit - to conduct interviews. I

then asked for a quiet room where I could conduct individual interviews. I explained to each participant the purpose of the interviews and asked them to feel free to leave the room if they did not want to participate. Fortunately for me all participants consented without being coerced (Appendix J).

I initially planned to conduct the interviews in English, because I was aware that I was required to write the thesis in English. I had hoped that all participants would welcome the use of English, as English is the official language in Malawi, the language of study at all levels of education and the medium of instruction from Year 5 of the Malawi Primary education system (Section 3.3). On the other hand, I was aware that all the participants were also fluent in Chichewa, which is the national language. Soon I noticed that some teachers had problems expressing themselves in English, I quickly allowed them to use whichever they felt comfortable with. Although conducting the interviews in two different languages made data analysis challenging, it posed no threat as I was fluent in both languages. What emerged from the interviews was that fewer than five teachers kept switching from English and Chichewa whereas I constantly presented the questions in English.

When conducting the interviews, I used an advanced organiser of the questions by reading out the areas on which the interviews focused. The advanced organiser was useful because, as Foddy (1994) argues, it may be dangerous to assume that the informant is exposed to the information you want and that s/he will remember everything. People are known to remember only events which affect their life and forget the rest. Some people are not aware of the causes of their behaviour and memory of events fades with time.

I also used probes to collect richer data (Punch, 2005; Patton, 1987), by seeking clarification, especially where the response was not very clear, or asking questions to follow up on points mentioned or not by the participants (Ruane, 2005). In a similar way, probes helped me to gain more information about an issue addressed in a primary question, exemplifying, and extending statements, and stimulating, guiding and assisting the respondent to answer the questions (Sarantakos, 2005). The probes I used took different forms. For example, I used probes such as *tell me more; expand on this* (Rubin and Rubin, 1995) as well as to find out 'why' and 'how' (May, 2001), and to seek details, elaboration and clarification (Patton, 1990). As Rubin and Rubin (1995:148) pointed out, I also used probes to show that I was paying attention to the conversation. However, I was aware that overuse of probes might have a negative effect and if taken too far, they could result in subjective and biased data (Wellington, 2000).

I was not able to write down everything the participants said, because of the amount of talking that characterises an interview. Instead, I used audiotape recordings because they provided a permanent record of the interview, which I could replay several times for discussion, analysis and redrafting accounts (cf. Robson, 2002; Silverman, 2006). However, audiotapes may cause some loss of important visual cues such as facial expression, gesture, body language and

movement. It is difficult to identify the individuals who are speaking, and analysis time can sometimes be substantially increased (Bryman, 2004). Therefore, although audiotape recordings might have caused inhibiting effects, they were useful in my study because it was difficult for me to record verbatim interviews by hand (Bogdan and Biklen 1992).

Conducting semi-structured interviews had its challenges. First, using the interview guidelines required that I memorise the questions so that I was not seen to be reading from the paper. Second, some participants gave more information than I asked for, and this meant that I had to be patient and carefully guide the participants towards what I sought. This called for the use of proper prompts and probes. The school staff required more prompts than any other group of participants, as it was common for them to give short answers, possibly because of limited English and also inadequate knowledge of the TDC and its activities. The amount of talk increased from the school staff through to the policy makers.

In the field, I kept detailed field notes (Appendix G). Most were initially short handwritten notes recorded discreetly at the first opportunity, in order to avoid the participants feeling uneasy about my presence during data collection. But later that same day, I habitually developed these sketchy pictures into detailed accounts. This was an account of what I had seen and heard without interpretation (Maykut and Morehouse, 1994). Field notes entries included some field episodes that I recorded in a couple of sentences before, during and after data collection activities, and also my reflections on the data and my personal commentary. I was very careful to distinguish in my field notes between what was observed and what was inferred behaviour, between what I sensed and what sense I made of it. The comments in the field notes represented my feelings, reactions, initial interpretations and even working themes about the setting, people, and activities, and included relationship between self and others in the process of the research. Finally, I was also engaged in some preliminary data analysis as I was writing my field notes.

As discussed in Section 1.2 and later in Section 6.2, I approached the study as an insider researcher. According to Merton (1972) quoted in Hellawell (2006), an insider is an individual who possesses an advance intimate knowledge of the community and its members whereas Wainwright and Sambrook (2009) view insider research as any research undertaken with research 'subjects' with whom the researcher has a professional or personal relationship.

There are advantages and concerns associated with insider research. Regarding advantages, Hockey (1993) stated that an insider researcher does not experience culture shock, but enjoys a better rapport with the participants, is able to measure the accuracy of the responses to questions, and is seen by the respondent as concerned. On the other hand, Gunasekaia (2007) cautioned that the "informed perspective" of the interviewer may influence both data collection and interpretation. As such, Hellawell (2006) suggested that the researcher need to reflect on his or her own beliefs and values, as well as the research methodology employed. One possible problem with insider research is 243

over-affinity between researcher and participant. However, Miles and Crush (1993) pointed out that the interview conducted by an insider achieves "a degree of depth, flexibility, richness, and vitality often lacking in conventional questionnaire-based interviews" (Miles and Crush, 1993:85). Such an approach facilitates the discovery of "not only what people did, but what they wanted to do, what they believed they were doing, and what they now think they did" (Portelli, 1998:67). Some scholars, for example Kvale (1996), observed insider research as an approach that allows for understanding through a rational conversation and mutual critique among those identifying and interpreting a phenomenon.

From my perspective as the researcher, I viewed my knowledge of and professional relationship with some of the participants as an advantage rather than a disadvantage. In this study, although I shared a professional relationship with the participants, being out of the school setting for six years prior to conducting the study facilitated my establishing professional and personal distance between the participants and myself.

When investigating the experiences of participants, it was important for me to take measures to avoid researcher's bias in conducting the study (Hatch, 2002). To address this issue, I suspended my personal judgments about events, experiences and occurrences (Sokolowski, 2000) and also considered "setting aside predilections, prejudices, predispositions, and allowing things, events, and people to enter anew into consciousness, as if for the first time" (Moustakas, 1994:85). I also cleared my mind as much as possible prior to data

collection. This measure ensured that I listened to what participants told me with as little prejudice as possible and with an open mind about what they had experienced in interacting with the TDCs for their own professional learning.

I chose to play a central role in transcribing the interviews because I saw this as an opportunity to increase my familiarity with the growing body of data. I produced verbatim transcriptions of the recorded interviews, restricting myself to limited and purposeful editing in order to facilitate the communication of the meaning of the participants' narratives. Without this editing, statements which were perfectly coherent within the context of a live conversation would have become incoherent or even contradictory in a transcript. Although I should have ideally transcribed interviews whilst they were still fresh in my mind (Maykut and Morehouse, 1994), this was not always possible. Sometimes I began transcribing an interview days after I had recorded it, owing to the sheer number of interviews involved. Some parts of the interview tapes were so inaudible that I had to listen several times before understanding what was said. This took more time to transcribe. To partially make up for this delay, I referred to the post interview reflections I had written in my field notes before actually proceeding to the transcription. This helped me to recall and to reimmerse myself in the interviews.

6.8 Data analysis

After data collection, there was a need to analyse the data in order to find answers to the research questions. Fraenkel and Wallen (2009) described data as any information obtained about the sample or population and data analysis as the process of simplifying data in order to make it understandable. Although researchers use different approaches to data analysis (Maykut and Morehouse, 1994), Silverman (2006:52) warns that "choosing a clear analytical approach is a help but not everything." Some researchers begin their data analysis with experts' techniques (a step-by-step description of how to analyse data developed by individuals) while others prefer to develop their own strategies to respond to their research context. In this study, I adopted both experts' strategies and my own strategies, which were guided by the works of such authors as Creswell and Clark (2007), Silverman (2006), Punch (2005) and Bryman (2004). The general procedures in data analysis described by Creswell and Clark (2007) and also Fielding and Gilbert (2000) involved:

- Preparing the data for analysis: converting the raw data into a form useful for data analysis;
- Exploring the data: examining the data with an eye to developing broad trends and the shape of the distribution and/or reading through the data, making memos, and developing a preliminary understanding of the database;
- Analysing the data: examining the database to address the research questions;
- Representing the data analysis: presenting the results of the analysis in summary form such as statements, tables, and figures;
- Validating the data analysis: reporting on the reliability and validity of the data and results.

Although the general principles were the same for both qualitative and quantitative data analysis, they differed in the actual procedures. I chose to analyse quantitative data independent of qualitative data because the research design I used required that I employ techniques for quantitative data analysis different from those required for analysing qualitative data (Creswell and Clark, 2007).

6.8.1 Analysing quantitative data from the questionnaire

When preparing for the analysis of the data from the questionnaire, I entered the data into the Statistical Package for Social Sciences (SPSS) programme. Next, I employed the descriptive analyses on the SPSS to check for trends and distributions of variables. The descriptive analyses included frequencies and percentages of the ratings of the items (Creswell and Clark, 2007; Punch, 2005; Bryman, 2004; May, 2001). The descriptive analysis helped me to describe the patterns inherent in the data collected from the sample to which the findings could be generalised. I also ran cross-tabulation against some teacher characteristics to explore if such characteristics had any effect on the patterns in the data.

6.8.2 Analysing qualitative data from the interviews

In order to meet the criteria for the constant comparative methods for qualitative data analysis, I used Kemke and Kramlinger's schema for analysing the texts (Silverman, 2006), which involved producing a list of key ideas, words, phrases and quotes that were generated from each interview transcript. To do this, I read the transcripts several times, each time identifying both positive and negative issues. For example, some issues which were expressed as wishes, such as 'I wish I could use the TDC', were presented, as 'I do not use the TDC'. I considered such wishes as evidence of teacher involvement/non-involvement in the TDC activities.

As soon as I started looking at the data, I found it fascinating and rewarding to identify patterns in the data and to construct a deeper understanding of the events surrounding the influence of the TDCs as a support strategy for PD. The ideas, words, phrases and quotes which I identified, were then put into categories of similar issues obtained from different key participants. Figure 6.3 shows the data analysis process using the constant comparative methods in analysing the data from the interview findings.

As the categories began to pile up, I started to notice links and common meanings within and amongst the different data sources. As a result, specific meanings began to evolve into general themes, which then led to my data interpretation.

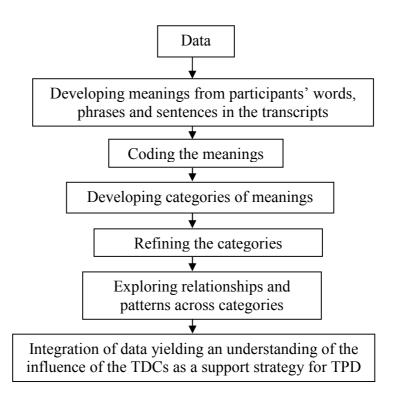


Figure 6.3: The process of data analysis.

What I present from qualitative data analysis in Chapter Seven is, therefore, tentative knowledge, bearing my marks, which is situated in its context and therefore always subject to further revision (Griffiths, 1998).

6.9 Conclusion

This chapter focused on the research design and methodology applied in the study. I discussed the importance of applying the theory of symbolic interactionism in the study. I argued that both quantitative and qualitative research approaches are appropriate to investigate teachers' perceptions of the TDCs as a support strategy for the PD of teachers in Malawi, because these approaches stress the participant's perspectives about the phenomena under study. I also discussed measures for increasing the trustworthiness and 249

acceptability of the study, as well as ethical considerations. I described the population and sample and explained the reasons for the sampling procedures used for the study. I presented an account of the data collection methods and instruments used. I described the pilot study and modifications made after the responses. Finally, I discussed data analysis procedures and indicated that simple statistical procedures would be followed during the analysis of quantitative data whereas constant comparative methods would be followed during the analysis of the study.

CHAPTER SEVEN

RESULTS OF THE STUDY

7.1 Introduction

The purpose of this study was to explore how the teacher development centres (TDCs) influence teacher professional development (TPD) in Malawi. The chapter attempts to provide answers to the research questions outlined in Section 1.6, which are:

- What professional development (PD) activities take place at the TDC?
- To what extent are teachers involved in the PD activities?
- What changes are there in the teachers as a result of their involvement in PD activities at the TDCs?
- What factors affect the sustainability of the TDCs in providing support for TPD?

As I discussed in Section 6.6.1, I used questionnaire survey to collect numerical data which explored participants' perceptions about the influence of the TDCs as a support strategy for TPD. Frequency tables containing the numbers and percentages of the participants who responded to each item are presented in Appendices D1 and F.

I also conducted semi-structured interviews to triangulate the findings from the questionnaire survey (Section 6.7.2.2). To ensure the accuracy of the findings, I used triangulation of interview data which involved using multiple sources of data to confirm the emerging findings (Harmmersley and Atkinson, 1983).

In this chapter, I present the results from the analysis of the questionnaire and interview data. The chapter begins with the presentation of the demographic information of the sample. Then I present the findings under the following themes: activities at the TDC, teacher involvement in the TDC activities, perspective teacher transformation, prospects and challenges in the TDCs and sustainability factors. Finally, I summarise the main findings of the study.

7.2 Demographic information

Data analysed in this chapter was collected using a self-administered questionnaire and interviews concurrently (Section 6.7.2.1). I administered the questionnaires to 586 participants from eight primary schools in Zomba Rural and Zomba Urban education districts. This method of administering the questionnaire ensured that there was 100% return of the questionnaires.

Participants in the questionnaire survey had different characteristics. Table 7.1 shows that almost 57% of the participants who completed the questionnaire were females indicating that the majority of primary school teachers in Zomba Rural and Urban education districts are female.

Tab	le 7.1	: Sex	of the	e particij	pants
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Sex of participants	Frequency	Percentage	
Male	253	43.17	
Female	333	56.83	
Total	586	100	

It can be assumed that the reason for this is that female teachers generally take up teaching profession.

Locality of the school clusters was also considered as a variable. The majority of the teachers who took part in the questionnaire survey were from schools in the urban area (see Table 7.2). This could be attributed to the fact that Zomba Urban has large primary schools which attract a high number of teachers, especially females who follow their spouses working in government departments and other organisations.

LocationFrequencyPercentageUrban37263.48Rural21436.52Total586100

Table 7.2: Locality/area of the zone/school cluster

This pattern of teacher distribution conforms to the findings in other national surveys which have repeatedly reported that in Malawi, there are more female than male teachers in urban schools (Ministry of Education, 2004). On the other hand, there are more male than female teachers in the rural schools (Section 3.6). The majority of teachers who participated in the questionnaire survey had leadership positions in their respective schools (see Table 7.3).

Here, leadership positions were not limited to head teachers and deputy head teachers but also heads of sections, subject committees as well as those responsibilities for extra curricular activities such as sports and clubs.

Table 7.3: Participants with/without leadership positions in the schools

Leadership position of participants	Frequency	Percentage
With leadership position	363	61.95
Without leadership position	223	38.05
Total	586	100

Over 50% of the teachers who completed the questionnaire had a Junior Certificate of Education (JCE) certificate as their highest academic qualification while the remainder had a Malawi School Certificate of Education (MSCE) certificate (see Table 7.4). This means that the majority of the teachers in this study had lower academic qualifications.

Table 7.4: Highest academic qualification of participants

Academic qualification	Frequency	Percentage
MSCE certificate	274	46.76
JCE certificate	312	53.24
Total	586	100

Finally, the interview sample consisted of 16 primary school teachers (Ts), eight head teachers (Hs), four primary education advisors (PEAs), two District

Education Managers (DEMs), two Education Divisions Managers (EDMs), three Policy Implementers (PIs), lecturers at the Malawi Institute of Education (MIE) and three Policy Makers (PMs) from Ministry of Education, Science and Technology headquarters as described in Section 6.6.5.

This demographic information is useful in this study because it provides descriptions of the independent variables upon which dependent variables such as teacher involvement in the TDC activities, teacher perspective transformation as a result of their participation in the TDC activities and challenges of TDCs as a support strategy for TPD are explored in the sections which follow. Furthermore, it defines the characteristics of the population to which the findings of the present study are generalised.

7.3 Activities at the teacher development centres

The first research question explored in this study was: *What PD activities take place at the TDC?* In answering this question, generally, participants indicated that a number of activities were taking place at the TDC. According to the teachers interviewed in this study, the most common activities included making teaching and learning materials, borrowing text books for class use and meetings related to curriculum issues connected with TPD, whereas weddings and wedding meetings, prayers, census for teachers and sports have little relevance to TPD. Some participants indicated that some activities were organised by Non-Governmental Organisations (NGOs) especially when they wanted to use teachers as agents in the implementation of their project

activities. However, the findings from the questionnaire data (Appendix F1) showed that almost 30% of teachers indicated that the PEAs initiated activities for TPD, suggesting that very few activities were initiated and organised by the TDC coordinators, especially for TPD. One of the reasons given was that the TDC coordinators were often busy with other activities (38.4%).

The limited number and range of TDC-initiated activities suggest that the TDCs were not promoting TPD (Section 3.7 and 4.2.4). In addition, the number of activities which were unrelated to TPD meant that there was limited TPD. The findings of this study demonstrate that it would be difficult to define the type of TPD which the TDCs in Malawi were promoting as deficit or aspirational (Day and Sachs, 2004). The number and range of activities taking place in the TDCs also fall short of the classification of the types of TPD activities put forward by OECD (2009) (Section 4.2.5).

7.4 Teacher involvement in the teacher development centre activities

The second research question explored in this study was: *To what extent are teachers involved in the PD activities*? In order to explore teacher involvement in the TDCs activities, I used both the questionnaire (Section 6.6.1) and the interviews (Section 6.6.2) to examine not only whether teachers were involved in the TDCs activities but also the extent of teacher involvement and reasons for their involvement/non-involvement. This approach was based on the symbolic interactionism theory described in Section 6.2. As pointed out in

Section 3.7, the TDCs were established to provide support for TPD through a range of activities to improve their classroom performance and also through the in-service training by sharing and working more closely with other teachers and schools. It is for this reason that teachers were expected to be involved in the TDC activities. The findings of this study showed that some teachers were involved in the TDC activities whereas others were not as I elaborate in the next subsections.

7.4.1 Involvement of teachers in the teacher development centre activities

In order to explore teacher involvement in the TDC activities, the respondents were asked to indicate how many times they were involved in the TDC activities in a year (Appendix A). The results from the questionnaire indicated that above 50% of the respondents were involved in the TDC activities with the least percentage in dissemination of research findings (Appendix D1). The analysis of the interview data indicated that eight out of 16 teachers who participated in the interviews were involved in a number of activities such as making teaching and learning materials at the TDC. One teacher elaborated:

I go there to make teaching and learning materials for music which is one of the subjects I teach. Sometimes I leave at the TDC some of the materials I make for other teachers to use (T11).

As the participants described the nature of their involvement in the TDC activities, they painted the picture that they did not only make teaching and learning materials but also left some of them at the TDC as a way of sharing with other teachers. Similarly, the findings from the questionnaire survey

indicated that over 70% of the respondents prepared teaching and learning materials (Appendix D1).

The library was one of the resources which were placed at the TDC for teachers to use (Section 3.7). Some participants indicated that teachers borrowed books from the TDC library. One teacher explained how he used the library as follows:

I borrow books such as teachers' guides, pupils' books, and I borrow teaching and learning materials (T6).

Over 60% of the teachers who participated in this study borrowed books from the library and over half used the library for reading (Appendix D1). Thus, the findings from both the questionnaire and the interviews indicate that teachers tended to use the TDC as a resource centre. The Teacher Resource Centre (TRC) concept was also used in countries such as Kenya, Zambia and India in the state of Andhra Pradesh (Section 4.7) because the emphasis was to have a centre where teachers could access teaching and learning materials for themselves as well as for pupils.

Some participants also indicated that teachers were involved in study circles, sessions organised by teachers to prepare for the national examinations, in order to improve their academic qualifications. One teacher explained that the TDC supported her involvement in the study circles because:

There are some books at the TDC which assist us in our study circles because we would like to sit for MSCE (Malawi School Certificate of Education). Secondary school teachers come to teach us (T13).

One TDC coordinator gave similar view when he indicated that:

Teachers come to use the TDC for their special studies. I can cite an example of teachers from the schools which come here for studies preparing for their MSCE (PEA1).

The TDC coordinators explained that the study circles were organised by teachers themselves with external facilitators such as secondary school teachers. The TDCs were used merely as venues and the PEAs played a passive role in the study circles. This finding is similar to the questionnaire findings that over 40% of the respondents were involved in the study circles at the TDC (Appendix D1). The teachers tended to use the TDCs as study centres to upgrade their academic qualifications. Improving one's academic qualifications is in line with the claim by Dewey (1938) that education should be guided by teachers who are well-grounded in pedagogical and subject knowledge, which is one of the characteristics of an effective teacher. Similarly, Timperley (2009) argued that teachers need to promote their subject knowledge in order to foster their professional competencies (Section 5.2.4). In fact, upgrading teacher academic qualifications is regarded as one of the purposes of TPD (Blandford, 2000).

Furthermore, some participants described the TDCs as administrative centres for primary education. To this effect, some teachers were involved in administrative activities such as teacher census and payment of teacher salaries. One teacher indicated: *I went to the TDC when I was asked to submit my certificate (T5)*. Another teacher elaborated further that: *There was a time*

when something went wrong with my salary. I went to the TDC to discuss the

issue with the PEA (T8). One head teacher summed up like this:

They don't go to the TDC unless there is teacher census, some messages from the DEM's (District Education Manager) office, and payment of salaries (H3).

Similarly, five teachers said that the TDC was often used by those in management positions and also those with various responsibilities. For example, one teacher indicated:

It is the very same teachers from this school, especially those who have responsibilities go to the TDC to meet the PEA to discuss how to manage and administrate schools (T3).

The use of the TDCs as administrative centres was supported by the findings from the questionnaire, which indicated that more than 85% of the respondents were involved in meetings with the PEAs at the TDC (Appendix D1). The use of the TDCs as administrative centres is in line with government efforts to decentralise education services: one of the initial functions was to administer clusters of schools. Thus, the TDC buildings were also used as administrative offices for the zones in Malawi (Section 3.7). Using the teacher centres (TCs) as administrative centres is not confined to Malawi only. Most developing countries use the TCs as part of decentralisation of education services (Yehorata, 1983) to empower teachers and give them professional autonomy in decision making (Kelly and McDiarmid, 2002).

Some participants were involved in activities related to curriculum:

They invited me to a training course on how to use some local materials to make teaching and learning materials for Social Studies (T15).

Similarly, two other teachers elaborated further:

I have been involved in the implementation of the life skills programme and also some time back, we had an INSET whereby we were trained in how we can teach the languages effectively and also how we can formulate questions when we are examining learners in various subjects (T13).

We go there to learn about class management, teaching methods and continuous assessment in infant classes organised by the Malawi Institute of Education (T9).

One head teacher also had similar views when he said:

Each year, I participate in the briefing sessions organised by MANEB (Malawi National Examinations Board) to prepare for standard eight national examinations procedures. ... Yes, the briefing takes place at the TDCs. All head teachers, invigilators and the PEA from this zone are invited to attend the briefing sessions (H5).

Thus, the findings from the interview data are comparable with the findings from the questionnaire data which indicated that the majority of the respondents were involved in subject committee meetings (60.8%) and orientation to national examinations procedures (56.7%) (Appendix D1). These findings are similar to those in Britain, where the TCs were at one stage curriculum development centres for sciences and mathematics (Section 4.7.1). The only difference here is that while in Britain teachers were developing curriculum, in Malawi, teachers discussed the implementation of the curriculum and examination issues.

Some participants indicated that they were involved in extra curricular activities such as sports for all schools in the zone. One teacher shared his view:

I am a sports master at my school. I attend sports meetings at the TDC to plan for the zonal competitions (T9).

Another teacher gave the following account of how the TDC was being used:

Sometimes we do use the TDC mainly for the activities involving all schools in the zone such as sports activities and education day activities (T15).

This statement provides evidence that the TDCs were also used as centres for zonal activities, perhaps because of the site rather than the sports facilities. During my visits to the TDCs (Appendix G), I saw no special sports equipment and facilities - to make the TDCs suitable as centres for zonal activities. It seems that establishing sports and recreation facilities at the TDCs was not in the initial plans.

The analysis of the interview data also showed that the TDCs were used for social activities such as weddings, political meetings and church related meetings organised by members of the community other than teachers themselves. For example, two teachers described their experiences as follows:

I remember one time I was doing my science subject because myself I like science. We were in the TDC after an hour we were told; 'can you please take your books and go to the class other people would like to use the TDC?' (T8).

The TDC is mostly occupied by other people and not the teachers. Most of the times it's booked for weddings, political meetings, NGO activities, meetings for health or forestry officials and for church prayers (T10). During my visit to the TDC in Zomba urban, I found a wedding ceremony in session on one day and a gender-related function organised by an NGO responsible for social mobilisation for gender in education on another day (Appendix G).

Thus, the preceding findings have indicated that although some teachers were involved in education-related activities such as making teaching and learning materials, others used the TDCs for social activities unrelated to teaching and learning, and irrelevant to TPD. Furthermore, the TDCs were mostly used as resource centres, administration centres, curriculum centres, course centres and extra-curricular activities centres. These findings suggest that the functions of the TDCs in Malawi are similar to those of the TCs in other countries such as Kenya, Zambia, Indonesia and the State of Andhra Pradesh in India (Sections 4.7.3 and 4.7.4).

7.4.2 Non-involvement of teachers in teacher development centre activities

The findings of this study have further indicated that not all teachers were involved in TDC activities for various reasons. One teacher interviewed in this study indicated:

We can't use the TDC because the PEA never wants teachers to use the TDC facilities. Teachers have to seek permission to use the TDC. Mostly the PEA is angry if someone is found using the TDC without his permission. That happened to me (T1). A poor relationship between teachers and the TDC coordinator emerged as one of the major hindrances to teacher involvement in the activities at the TDCs. Commenting on the relationship between the PEAs and the teachers, one PEA indicated:

The teacher use of the TDC will depend upon the relationship between the PEA, who is at the TDC and the teachers. When the relationship is that good teachers will be coming to the TDC because it is their source. I would say poor relationship between the PEA and teachers is a barrier, something which stops them from using the TDC. But as long as the relationship is good everything goes up because teachers work freely, other than intimidating them by shouting at them. But when they come here at the TDC, whatever they want from the TDC I have to assist them professionally whether they want to borrow books, whether they want to read, I have to assist them (PEA1).

The statements above indicate that some PEAs might not have been treating some teachers well and this could be the reason for teachers in some zones not using the TDCs. Furthermore, about half of the teachers I interviewed said that they were not involved in TDC activities because PEAs could not allow them to use the TDC on their own unless the PEAs invited them. In addition, these teachers reported that the PEAs tended to invite the very same teachers to attend TDC activities. For example, one teacher said: *No. I've never been invited by the organisers of the workshops (T1)* and another teacher added: *I have never attended a workshop at the TDC because the organisers of the workshops have never invited me (T6)*.

Two teachers attributed their non- involvement to their PEAs not inviting them.

I do not participate in the TDC activities because I am not given the chance. It happens that sometimes the same people use the TDC. There is a bit of monopoly. The PEA has that right to choose who to

participate in the TDC activities. There are always the same people who are picked, let's talk of activities like invigilation of national examinations. Instead of picking other teachers they are always the same teachers who are picked for different activities (T7).

The PEA does not invite us to raise our views on how we can use it. Sometimes the Heads are invited to discuss our concerns, and give us feed back. But we are not told the issues they discuss, They are only invited to these TDC whenever there's a certain activity, like they want to put something within the TDC or a meeting and perhaps if they've been called for a meeting to explain about exams (T8).

Similarly, some head teachers explained that PEAs did not invite some teachers

to the TDCs. One head teacher indicated that:

The teachers from my school are not invited in most activities which take place at this TDC (H4).

These findings from the interviews are similar to the findings from the questionnaire survey, which indicated that less than one-third of teachers agreed that PEAs allowed teachers to visit the TDCs for their PD activities (Appendix F1).

Thus, both teachers and head teachers agreed that some PEAs could not allow some teachers to use the TDC unless they were invited, which was contrary to the views of the PEAs. Some PEAs indicated that they invited teachers to the TDCs for various activities. *We have also some teachers who are very intelligent, they have some skills. I invite them to help other teachers (PEA3).* Another PEA insisted that:

During my school visits, if I find that the teachers are not using teaching and learning materials during the lesson delivery, I invite them to the TDC to assist them on how they can use these materials. So they come here for that particular training. I invite standard 8 teachers to come here to discuss things related to pupils' performance in tests and examinations. I invite them to read in the library (PEA1). I do not invite every teacher. I only invite their representatives (PEA2).

Yet another PEA had this to say:

When some NGOs come here to do some activities, they do not just invite me but also some teachers to the workshop. I also invite many teachers from many schools but not all the teachers, When I invite these teachers to come here, I talk to them on how they are going to manage their school-based activities, then I invite them to come again here and report whatever they have discussed in the schools (PEA4).

This contradiction highlights critical issues affecting the TDCs as a support strategy for TPD, in that teachers do not have to wait to be invited by the PEAs to use the TDCs for their PD because, as Kahn (1982) argued, the TCs are for the teachers, run by teachers to respond to the needs of teachers and enhance their PD. On the other hand, PEAs, as leaders who are entrusted with the power to support TPD in the cluster schools, need to ensure that teachers are provided with opportunities to engage in meaningful professional learning within a supportive environment (Robinson, 2007).

These findings suggest that when TPD is not compulsory, the level of teachers' participation in TPD activities becomes low. In Section 4.6.3, it has been argued that compulsory TPD increases the frequency, level and intensity of participation by all teachers (OECD, 2009). Thus, to increase teacher participation in PD, there would be a need for Malawi to introduce compulsory TPD.

Some key participants interviewed in this study indicated that some teachers were not involved in the TDC activities because of lack of incentives in the form of certificates of attendance, promotion to high positions and financial rewards which would encourage them to participate in the TDC activities. In relation to certificates of attendance and financial rewards, one policy implementer said:

When the TDCs started operating, teachers were motivated because they were promised that, after the training at the TDC, they would receive certificates and yet they have not been given certificates. Teachers were also promised to receive some salary increment as a token for attending the INSET but they did not get it. The policy on training and certification need to be reviewed (PI2).

This indicates that some teachers were not motivated to participate in the TDC activities because they were frustrated by the government's failure to fulfil its promise relating to TPD. All the policy makers and middle managers acknowledged that certificates of attendance, which would function as recognition for the importance of teacher involvement in the TDC activities, were not issued to the teachers who attended TPD activities.

The government failure to promote teachers to higher posts as promised was also reported by some participants as an issue affecting teacher involvement in TDC activities. Commenting on this, one middle manager explained:

Teachers do not participate in the TDC activities because they are not promoted as promised by the government. So this hinders them from participating in the TDC activities. Teachers say, 'whether I participate in the TDC activities or not, I will not be promoted' (MM2). Related to promotion and salary increment for teachers who participated in the

PD activities, some PEAs indicated that teachers tended not to be involved in

the TDC activities probably because they expected to receive allowances each

time they attended for their PD.

It is difficult to invite teachers to participate in activities here at the TDC because whenever we invite teachers, the first thing they would think of is how much money they are going to get from the workshop. So this element of giving financial incentives is another contributing factor that is affecting the TPD (PEA2).

Another PEA elaborated further on the problem of allowances:

Whenever I invite teachers for an INSET at the TDC, they ask for allowances. When I fail to give them allowances, teachers do not attend the INSET. They return to their schools. The TDC has no funds to pay allowances (PEA4).

In addition, all the middle managers expressed similar views that whenever teachers were involved in the TDC activities, they expected to be given allowances:

Teachers think that whenever they were called for meetings [workshops, seminars, and courses] at the TDCs, they would receive allowances. If they hear that there was no allowance, teachers would not attend. So the TDCs have inherited the problem of allowances (MM2).

Thus, giving allowances to teachers during the TDC activities tended to have

negative effect on providing support for TPD, as one policy maker observed:

If teachers attach more value to receiving allowances than to PD, they will not attend the TDC activities as they are usually without allowances. Teachers should move away from the allowance syndrome and look beyond the money issues to considering the professional gains when they attend the TDC activities (PM1). The interview data analysis also showed that activities initiated by some nongovernmental organisations (NGOs) had some financial incentives whereas the TDC initiated activities had little or no financial incentives. As one middle manger said:

It is these NGOs who are bringing the allowance syndrome. They come with big pay of allowances to attract people into attending the NGO activities. Consequently, the people expect every institution to pay lots of allowances. If they don't, people don't attend the activities (MM1).

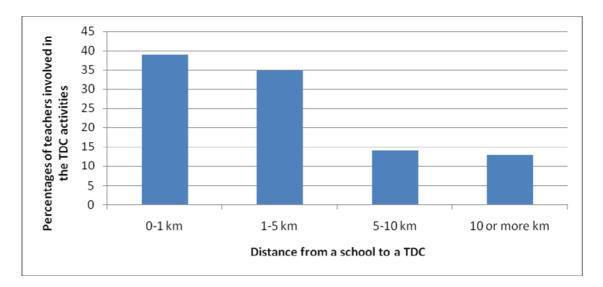
As a result, teachers tended to shun TDC activities organised by the PEAs because such TDC activities lacked monetary incentives. Instead, they preferred to be involved in NGO initiated activities because of monetary incentives, even if the activities had little relevance to TPD. This finding is consistent with the findings from the questionnaire where over 60% of the respondents indicated that the TDCs had no funds for its activities and over 80% with no plans for raising funds for running the TPD activities (Appendix F2).

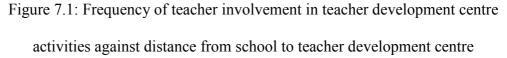
Generally, the interview findings suggest that non-involvement of teachers was an isolated issue applicable to few individual teachers because the questionnaire findings indicated that the majority of teachers were involved in the TDC activities. Nevertheless, the few teachers who indicated that they were not involved in the TDC activities with the reasons given suggest that some teachers were not motivated to be involved in their PD activities. This nullifies the influence TDCs have on TPD. Thus, the findings presented here suggest that some teachers were not involved in the TPD activities partly because of lack of motivation in form of incentives. As discussed in Section 5.2.1.5, teacher motivation should be a constituent element of TPD. In addition, what has emerged in this section is that teacher non-involvement in PD at the TDCs was partly due to lack of leadership, guidance and support (Section 5.2.4).

7.4.3 Teacher involvement against distance from school to the teacher development centre

The establishment of the TDCs was aimed at promoting TPD by bringing educational resources close to schools so as to increase the accessibility of the resources. Thus, when the TDCs were being established, as discussed in Section 3.7, the site was determined by the number of schools and teachers that each would support. The distances between a TDC and the furthest schools in a cluster were estimated to be not more than ten kilometers (Ministry of Education, Sports and Culture, 1998). It was assumed that the distance teachers had to travel from their schools to their own TDCs was likely to affect their involvement in TDC activities. Those teachers who were nearer to the TDCs might use the TDCs more than those teachers who were far away.

The results from the questionnaire showed that about 70% of the respondents who were involved in TDC activities were from schools at a distance of 0-5km from their TDC (Figure 7.1). Some schools, however, were at a distance of 10 or more kilometres from the TDCs, contrary to the idea of bringing resources close to schools (Section 3.7).





Similarly, some participants interviewed perceived that accessibility of the TDCs was affected not only by distance, but also by geographical barriers and sites. On distance between schools and the TDCs, the findings from the interview data showed that some teachers could not access their TDCs because they were very far. Transport was also a problem as one teacher explained:

I have not been to this TDC on my own. It is too far and I have no bicycle. I wish I had transport to go and read in the library (T10).

One PEA indicated similar problems:

Some teachers do not use the TDCs because they come from very far away from the TDC. This TDC is not at the centre. Some schools in my zone are about 20 km away from the TDCs (PEA1).

In relation to geographical terrains, one PEA cited one school in his zone and another PEA cited three schools, far and cut off from the TDC by impassable geographical terrain, all in rural areas. I have a school behind those mountains. It is in a valley that has swamps. It is difficult even for me to reach that school especially during rainy season. I wish it was under a different zone (PEA2).

One PEA in the urban area also cited one school, which was situated on mountain plateau, which was also far and difficult to communicate with.

One school is at the top of Zomba plateau. I think you know it. It belongs to this TDC. Yet I find it difficult to invite teachers from that school. So there is no communication and no transport (PEA3).

Thus, the long distances from the schools to the TDC, coupled with poor mode of transport, especially in the rural areas, affected the accessibility of the TDCs.

In relation to accessibility, some participants tended to perceive the site of the TDC as having an effect on teacher involvement in TDC activities. They cited two such examples. First, some head teachers and teachers felt that teachers from the centre schools (where the TDC was located) dominated in the activities and management of the TDCs. One teacher from the host school said:

We [staff from the centre school] have an advantage over other schools. We can borrow books frequently, we get news of any development at the TDC and mostly we are the first to benefit from most of the activities here (T1).

Additionally, two head teachers and all the four PEAs involved in this study indicated that teachers from the centre schools used the TDCs more than teachers from other schools. For example,

Unlike other schools, we at this school are privileged to have the TDC on our school premises. All members of staff at my school borrow books from the TDC library and we use the TDCs to hold

staff meetings. This is not easy with other schools because of distance (H4).

Furthermore, related to the site of the TDC was that some TDCs were constructed on religious premises, which created tension in the use of the TDCs, as different religious groups required that teachers use the TDCs at specific times and not other times. One policy implementer and one PEA reported this concern:

In ... district, in ... Zone the TDC has been built at the ... church run school. So teachers cannot carry out activities at the TDC on Saturdays because it is a day of prayers (PM2).

This TDC is sometimes out of bounds for teachers because the church personnel close the gate to protect the church property. The TDC is within the fence and the church keeps their property here. After all, the school buildings are theirs (PEA3).

These findings from both the interview and questionnaire data are similar to those of Gibbs and Kazilimani (1998) that in Zambia the location of the TRCs had an influence on their use. Most teachers could not use the TRCs due to the long distances which they had to travel from their schools. Similar findings were reported from the State of Andhra Pradesh in India where attendance at activities at the TCs was affected by the distance which some teachers had to travel (Weigand and Jain, 1998). The implication is that shortening the distance which teachers travel between schools and TDCs would be one way of increasing teacher involvement in the TDC activities for their PD.

7.4.4 Zonal variations in teacher involvement in the teacher development

centre activities

The analysis of the interview data further showed that teacher involvement in the TDC activities varied from zone to zone, as two teachers and one middle manager perceived that there were some zones where teachers effectively used the TDCs whereas in other zones teachers did not use the TDCs at all. One teacher said:

teacher said:

There were some activities at the TDC but time has gone since we last had them. That time we had a PEA things were working very well. Then came another PEA, things changed. The PEA was not coming up with activities for teachers. We were not coming to the TDC on our own. But now that we have a new PEA, things have started working again (T2).

A new teacher at one school indicated that:

I was at a school before coming here. While there, I was involved in a number of TDC activities. I would say the TDC was helping us there. But since I came here, although the TDC is there, very close to us, I have not been involved in any activities. I have witnessed very few activities at the TDC which involve teachers. Things are different here from where I was. I don't know why (T11).

One middle manager described the variations of the TDC activities as follows:

The use of the TDCs varies from zone to zone and they are very few zones where teachers are using the TDCs but in some zones not very much. In fact, in some zones the TDCs are dead (MM1).

The opinion expressed in the above statements indicates a strong perception that there were differences in the use of the TDCs in different zones. Similar results from the questionnaire indicated that the majority of the respondents from both the rural and the urban area were involved in the TDC activities, with slightly higher percentages in the rural areas (Appendix D2). This could be partly because of the differences in socio-economic and educational levels among the rural and urban communities in which the TDCs were set up.

Furthermore, one head teacher said that there were some variations in teacher involvement in the TDC activities at school level.

Mostly it is teachers in the senior section at my school who use the TDC most, because teachers in the senior section need wider reading to understand and teach the subject content well. But teachers from lower classes don't (H1).

The above observation is confirmed by the teachers of senior classes, who might be challenged by subject content. They often went to the TDC library to consult textbooks for lesson preparation, as one Standard 8 teacher explained:

I teach standard 8 and some of the content I teach is difficult to explain. There at the TDC there is a library where I go to read the books to prepare for my lessons. Sometimes I don't have the right materials. So I borrow the materials from the TDC for my class (T14).

The findings of the study indicate that there were some variations in the use of the TDCs at zonal, school and teacher levels. These variations may imply that there were some challenges associated with the policy for TPD. These challenges might be due to lack of comprehensive guidelines on TPD (Section 3.2.).

7.5 Teacher involvement and their perspective

transformation

The third research question I explored in this study was: What changes are there in the teachers as a result of their involvement in PD activities at the 275

TDCs? The essence of this research question was to establish possible occurrences of teacher learning which could be attributed to perspective transformative learning from participants' perspectives.

7.5.1 Views from teachers

The questionnaire findings indicated that a total of 76 respondents (13%) out of a sample of 586 were involved in all 14 TDC activities. My assumption was that the respondents who indicated that they were involved in all activities were more likely to have experienced changes in their professional knowledge and skills and that they could easily describe these changes. Similarly, 16 teachers and other key participants in the semi-structured interviews (Section 6.6.2) were asked to state their perspective transformation in teacher professional practices as a result of their involvement in TDC activities.

One of the challenges in Malawi is teaching large classes, which render teaching and learning ineffective. However, one teacher indicated: *I have learnt to teach large classes (T6)*. To address challenges of teaching large classes, some teachers use group work as a teaching method, as one teacher indicated:

Before attending the INSET at the TDC, I was not using group work in my methods of teaching. But now I am grouping them in 10 because in my class I do not have enough textbooks (T10).

Generally, using group work is one of the effective methods of teaching large classes as it provides an opportunity for collaborative learning. It can also be suitable where teaching and learning resources are limited. The data analysis further indicated that some teachers had improved in class management skills. For example, one teacher said:

At this school, class management is by defaults because I have a class as large as 200 pupils in standard 8 (T16).

While this teacher admitted that there were challenges in managing of large class, another teacher indicated having learnt strategies to manage large classes.

Now I know how to make a sitting plan for pupils and take measures to make the class attentive and I know how to make them busy so that they gain more from the lesson (T3).

Related to large class sizes is the challenge of managing pupil negative behaviour, which one teacher indicated having improved.

In the past, you know, I used to whip pupils when they do wrong things. I have changed the way I punish pupils (T16).

By whipping pupils to manage negative behaviour, the teacher was using corporal punishment, which, according to the rights of the child, is prohibited in Malawi (Centre for Human Rights and Rehabilitation, 2011). Stopping the use of corporal punishment to control pupil behaviour was in line with the Constitution of Malawi and Teachers' Code of Conduct (Section 3.6). Thus, the TDCs were helping teachers to change their beliefs and practices in line with educational policies.

The questionnaire findings also indicated that over 80% of teachers had improved in class management skills (Appendix E4). Class management is one

of the challenges which teachers face in Malawi schools because of large class sizes against limited resources (Section 3.6). These findings indicate that through the use of the TDCs, teachers realised the importance of class management skills for promoting pupil learning. Teachers were adopting strategies to improve classroom conditions which facilitated teaching and learning, which is one of the purposes of TPD (Bell, 1991). Effective classroom management is an important condition for effective teaching and learning because it is management which sets the social and psychological climate for learning to take place (Ministry of Education, Science and Technology, 2009).

The interview data also indicated that some teachers improved in planning and teaching different subjects. One teacher indicated having improved in writing lesson plans.

I have improved in writing well detailed lesson plans as well as schemes of work. I have also improved my teaching skill such as timing the lesson delivery (T3).

The above finding is confirmed in the questionnaires, which indicated that over 80% of teachers had improved in lesson preparation (Appendix E2). These statements indicate that although teachers learn how to prepare for teaching during their initial teacher training programmes, they do not master all the skills, leading to poor lesson preparation during their career (Kunje and Chimombo, 1999). Thus, PD helps teachers improve skills which they might not have mastered during the initial teacher training programmes (Speck and Knipe, 2005).

Furthermore, six teachers indicated that they had improved in teaching of various subjects. For example, one teacher explained:

I had problems with teaching English in the past but now I am one of the best teachers in the teaching of English. I didn't know how to use methodology properly but now am able to use appropriate methods during my lessons. In my lessons I used to omit pair work because I thought it was difficult as I have a large class but once I learnt about it at the TDC, I find it very interesting. I've also improved my teaching skills because in the past I was using lecture methods but when we met at the school we agreed to change the methods because it's boring to pupils. So nowadays we are using brainstorming, discussions, pair work, and group work (T9).

Other teachers gave similar brief comments:

I have increased my knowledge in the teaching of science and English (T10). I am now confident in teaching Social Studies and Chichewa. (T13).

These statements suggest that teachers experience challenges in teaching some subjects. Improving the teaching of specific subjects is one of the purposes of TPD because, as OECD (2009) argued, initial teacher education cannot prepare teachers for all the challenges of their teaching career. These findings are congruent with the claim made by Dewey (1938) that teachers need to be grounded in pedagogical and subject knowledge in order to be more competent in their work.

The interview data further indicated that some teachers had improved in making and using teaching and learning materials. One teacher remarked: *I have also found a lot of materials at the TDC which are making my work easy (T11)*. Another teacher claimed:

I have improved in the use of materials for teaching. I now use local materials for example, seeds to draw a map on a paper and then have simple seeds and put them around the map so it will have something like a decoration (T15).

Similarly, the questionnaire findings indicated that almost 90% of teachers had improved in making and using teaching and learning materials (Appendix E3). These findings suggest that some teachers recognised that using teaching and learning materials during lesson delivery enhances students' learning and that they needed to improve their skills in making appropriate materials. As discussed in Section 3.6, in Malawi, classrooms lack adequate teaching and learning materials. Thus, the role of teachers is to improvise the materials where possible. However, since there are limited storage facilities, making of teaching and learning materials is an ongoing activity (Milner and MacJessie-Mbewe, 2010).

Commenting on improving students' assessment procedures, three teachers indicated that PD activities at the TDC had helped them improve in the construction of test tools.

I have also improved in assessing pupils especially by providing a short quiz at the end of each lesson (T2).

I assess them individually and through groups, in my subjects which I teach, I form questions to assess pupils of different abilities (T13).

I assess pupils weekly through writing an exercise not just oral. I can now assess each one's ability confidently (T15).

Two teachers also indicated that they had improved in skills for pupil assessment, as one explained:

I assess pupils on their daily exercises which are given to them as I need to know if pupils are improving and that they have to be assessed weekly. I now know whether pupils are improving or not. I know their progress they're making, and I do assist them (T10).

Another teacher said:

Nowadays, I do continuous assessment. I assess pupils almost daily. Pupils are able to complete daily work because I tell them that I will be assessing them daily; so they are ready every day to do whatever I want them to do (T9).

Similarly, the questionnaire survey also revealed that over 80% of teachers had improved in pupil assessment skills (Appendix E5). Pupil assessment is an issue at this time, when Malawi is implementing outcome-based education (OBE) curriculum which emphasises continuous assessment (CA) in primary schools. CA is different from other forms of assessment and is more demanding, in that it is done throughout the course at regular intervals using different assessment tools (Malawi institute of education, 2008). However, many teachers, especially those who graduated before OBE was introduced in primary schools in 2007, might be ill-prepared for the implementation of CA (Malawi institute of education, 2007). Therefore, pupil assessment needs to be part of the teacher learning content within the policy framework of TPD (Sugrue, 2004).

In terms of collaboration among teachers, one teacher explained that:

I assist other teachers in teaching of music and creative arts. In these subjects that's where I can say I am doing my best. When I know that I am lacking some knowledge I ask other teachers to assist me and I also invite teachers to observe my lessons in creative arts especially when I am doing paper recycling (T11). Another teacher explained that their head of section encouraged teachers who teach pupils of the same class to plan together and teach the same content. *I* mean teachers of standard 4A, 4B and 4C plan together (T10).

Similarly, the questionnaire findings showed that over 80% of teachers improved in working with other teachers within the school (Appendix E1). These findings reflect a popular belief that teachers as adults learn from each other (Thiessen, 2001) by working together in the school or classroom. They exchange expertise, plan collaboratively and change their classroom practices through their evolving relationships (Thiessen, 2001). After all, it is claimed that working together reduces anxiety among teachers as adults (Speck, 1996).

The interviews revealed that some teachers improved their academic qualifications, as one teacher indicated: *Definitely the TDC has helped me studying for my MSCE certificates (T11)*. The questionnaires likewise indicated that over 80% of teachers had improved in subject knowledge (Appendix E2). As indicated in Table 7.4, over half the teachers had JCE as their highest academic qualification. Previously, the Government of Malawi was recruiting both JCE and MSCE holders for initial teacher training. However, in order to improve the quality of teaching, the Government of Malawi stopped recruiting JCE holders because JCE qualification was regarded as insufficient for effective teaching (Pfaffe, 1999). Thus, the government is encouraging teachers with JCE to improve their academic qualification to MSCE level if they are to be considered for promotion or further training. Perhaps that is why the

findings of this study have indicated that some teachers were involved in the study circles to prepare for the national examinations (Section 7.4.1).

On networking, some teachers indicated that they had little time to visit other schools to seek professional assistance, because they were overloaded with classroom work. For example: *I hardly find time to visit other schools because I teach all the subjects alone (T7)*. This statement suggests that some teachers did not engage in networking. One of the reasons for not having the time for networking was high teaching workloads (Kadzamira, 2006) due to acute shortage of teachers which affects most schools, especially in rural areas in Malawi (Ministry of Education, Malawi, 2008a).

Another reason for not engaging in networking was lack of knowledge about networking as one teacher indicated:

I have not heard anything about networking. No one has mentioned about it. So we don't know it (T5).

Lack of teacher knowledge about networking was perhaps due to insufficient training of teachers in TPD (Banda, 2002).

Generally, the findings indicated that teachers experienced some changes in their teaching processes, such as in classroom management skills, making teaching and learning materials and pupil assessment skills, as well as academic qualifications,. However, they did not embrace networking as one of the PD activities because of lack of time due to high teaching workloads and lack of knowledge about networking.

7.5.2 Views from other key participants

In this section, I triangulate the views of the teachers with those of other key participants on how they felt about the perceived teacher changes as a result of engaging in PD activities at the TDC. As discussed in Section 7.2, the other key participants in this study who were involved in the semi-structured interviews included Hs, PEAs, DEMs, EDMs, PIs and PMs.

The interview findings indicated teachers who were involved in TDC activities for their PD had improved in a number of ways. Commenting on management of pupil behaviour, two head teachers indicated that:

They are now aware of the rights of pupils and the pupils themselves know their rights and responsibilities. Pupil drop out rate at this school has also decreased which means there is a change in coming of the TDCs (H2).

Some teachers no longer use corporal punishments to pupils (H5.)

The statements above indicate that there was a growing awareness of rights of children to education. These views correlate with those of teachers presented in Section 7.5.1 in that some teachers indicated that they had stopped administering corporal punishment as a way of managing negative behaviour of pupils.

Some PEAs mentioned that some teachers had started being committed to their

work. For example, one PEA elaborated:

In my zone, teachers used to be lazy. They were unable to prepare lesson plans, teach effectively and even to prepare and administer mock examinations. But today, teachers prepare lessons and mock tests together and the teaching has really improved (PEA4).

These views from the PEA are congruent to the characteristics of a profession which calls for commitment to convert knowledge to action (Section 4.2.1). This is important especially since teachers are often accused of being lazy and negligent in their profession, as the above PEA stated.

One head teacher indicated that there was a spirit of self-development in some teachers: *Teachers have realised the importance of reading different books in the TDC library (H2).* One policy maker also explained:

Teachers are eager to improve in their own way of doing things in the classroom as a result of using the TDC. They learn from the assistant coordinator, from the PEAs or from other teachers. In some centres I have seen that there are some teachers who are trying to improve in certain things so that the rest of the teachers in the zones can also learn from them (PM3).

The statements from the head teacher and PM support the views of some teachers who indicated that their involvement in TDC activities had helped them to recognise the need to increase their knowledge and skills to improve their classroom practice (Section 7.5.1). Teachers as adult learners engage in learning for self-development, so they like to set their own goals which they achieve with minimum help from experts (Walgron and Moore, 1991. The

TDCs create an environment that motivates teachers towards their selfdevelopment (Hoppers, 1996).

Furthermore, four head teachers observed that there was an increase in teamwork among teachers in schools, for example:

There is teamwork at my school as a result of school managers attending the meetings at the TDC. Teamwork is really helping us a lot in such a way that when a teacher is teaching in a class, normally a partner would help in marking the exercise given to the students. ...Teachers are no longer isolated when staying at this school but they are able to associate with others (H5.

Two PEAs also expressed similar views that there was improved teamwork among teachers, for example: *When there is something in their schools, they come together and plan (PEA1)*. Another PEA was more elaborate when he said:

About team work, I can say that it has improved as a result of teacher involvement in the TDC activities because as I go round supervising schools, I observe lessons where teachers' team teach and so on (PEA3).

Finally, one policy-maker had similar perception that teacher involvement in

TDC activities helped them improve in teamwork;

Team work is taking place when teachers go to draw a plan together because may be they are having problems in certain areas in their work. They team up to come with some way out. But of course that is unlikely to happen in other schools especially in the rural areas where there is shortage of teachers (PM2).

Thus, some head teachers, PEAs and a policy-maker believed that teacher participation in TDC activities helped them to improve in how to work as a team, an indication that teachers realised the importance of cooperative efforts in teaching. These views are comparable to those of the teachers that their involvement in TDC activities helped them to work as a team in their schools (Section 7.5.1). Developing a professional community of teachers who share knowledge and professional standards through teamwork is one of the characteristics of teaching as a profession (Bransford, Darling-Hammond and LePage, 2005).

Related to networking, some key participants indicated that teachers were visiting each other in search of possible solutions to their professional problems. Two head teachers made these brief statements:

... Teachers from other schools are invited to attend in these meetings (H6).

Teachers go to their friends from other schools to borrow books (H2).

Two other head teachers also observed:

There is networking among teachers in my zone. For example, when we have a problem of teachers' guides, we go to other schools to borrow them. So we exchange the materials and information (H5).

Teachers from my school went to see how other teachers in another school are doing to make sure that many standard 8 pupils get selected to secondary schools (H7).

Furthermore, two PEAs held similar views:

There are different programmes in which teachers work together. Teachers go to another school to observe other teachers' lessons under the MBTL [Malawi Breakthrough to Literacy] project (PEA3)

Whenever one school has a problem the Head teacher has a chance of inviting teachers from another school to assist them (PEA4).

Thus, there was a general agreement among head teachers and PEAs that teachers improved in networking. Contrary to the views of the head teachers and the PEAs, some teachers indicated that there was little or no networking among schools and that they did not have time to visit other schools because they were overloaded with classroom work (Section 7.5.1). This contradiction might indicate participants' lack of knowledge about networking (Section 4.4.5).

Related to teacher resourcefulness, some key participants observed that some teachers were becoming more resourceful in order to improve teaching and learning in their schools. For example, one middle manager stated that:

Realising that teachers are lacking teaching and learning materials in their schools, they organised a workshop to learn how to make teaching and learning resources using locally available materials (MM3).

This statement corresponds with the assertions made by the majority of teachers that they were involved in making teaching and learning materials at the TDC and that some of the materials were left at the TDC for other teachers to borrow and also for display in the TDC. Displaying materials at the TDCs was also practised in the State of Andhra Pradesh in India where the materials served as models (Weigand and Jain, 1999).

Furthermore, some key participants indicated that pupil performance had improved in some schools as a result of teacher involvement in TDC activities for their PD. For example, one head teacher explained: There is a lot of improvement considering the results of the pupils in different classes which are taken by these teachers who have gone to attend workshops and INSET at the TDC (H8).

Two PEAs held similar views when they indicated that the TDCs had helped teachers improve pupil performance. For example, one PEA had this to say:

I recall that the schools where pupils are selected to go to secondary schools are those who get involved more in the TDC activities. I had quite a good percentage from those schools, not only boys but also girls have gone to national secondary schools (PEA3).

The claims made by these key participants that teacher involvement in TDC activities for their PD helped teachers to improve pupil performance in their schools may relate to the teachers' perceived changes as indicated in Section 7.5.1. However, there may be no direct link between teacher change and pupil performance because improved pupil performance is a function of numerous factors, including the curriculum, pupil, teacher and school.

Generally, the findings from the interviews of both teachers and other key participants have indicated that there was teacher perspective transformation in their job. The teacher questionnaire findings indicated similar changes (Appendices E1; E2; E3; E4; E5). However, while these findings indicated that there was networking among teachers, the teacher interview findings indicated that there was little networking among teachers. The possible reason for this discrepancy could be as noted above in Section 7.5.1, that teachers might have a scanty idea about what constitute teacher networks.

Based on the findings of this study, it can be concluded that the majority of teachers were involved in the TDC activities and some teachers perceived changes such as in their classroom practices, although the study has not provided supporting evidence to elaborate on how they changed, as it did not involve systematic classroom observations to quantify teacher change as already stated above. Superimposing the findings of this study on the theory of symbolic interactionism (Section 6.2), it appears that there was little interaction among teachers to understand each other's professional actions instead of simply reacting to them. Teachers did not create or attach meanings to their school and classroom situations during their involvement in activities at the TDCs. They did not construct their self as professionals in the presence of others. The argument here is that teachers acted and behaved the way they did because of how they defined the teaching profession (Section 4.2.6) and not how the teaching profession defined them and controlled their behaviour or actions.

Teachers change in different ways as a result of participating in PD. A number of factors influence the type of change, including:

- Individual factors which include their experiences, background, and motivation as they come into the PD;
- Professional development factors which include the quality and amount of professional development attended;

• Program and system factors which include the structure of and support offered by the program, education system, and PD system in which they work, including teachers' working conditions.

Therefore, teacher perspective transformation is dependent on many factors. So for teachers to experience more and meaningful changes, they need to understand the factors which enable teacher professional learning to take place.

The findings of this study are similar to those of a study by King (2000) who reported that about two-thirds of the English as Second Language (ESL) learners who participated in the study experienced a perspective transformation in views about English and language learning; the United States of America (USA) culture; and their self-concept. Unlike King's (2000) study, where factors facilitating transformative learning were identified as learning activities with reflection and exploration of different beliefs and world views, and personal support and changes in their lives outside classroom, in this study, teachers experienced perspective transformation through their involvement in TDC activities but with little reflection on knowledge, skills, beliefs and values, with little support from the TDC coordinators, and with inadequate resources to support them in their learning process.

7.6 Prospects and challenges of the TDCs as a support

strategy for TPD

The final research question explored in this study was: *What factors affect the sustainability of the TDCs in providing support for TPD?* In order to understand the prospects and challenges in the TDCs as a support strategy for TPD, I sought the views of the participants about the TDCs as the participants understood them. Many issues emerged from the data analysis too numerous to be reported here. However, these issues have been grouped into training of PEAs, head teachers and teachers; coordination of TDC activities; management of the TDCs; links with other stakeholders; resources at the TDCs; and sustainability of the TDCs as a support strategy for TPD. In developing the themes I present the factors that determine the influence of the TDCs on PD together with the sustainability of the TDCs and PD. The overlaps among the themes of the factors make the themes less discrete.

7.6.1 Training of primary education advisors, head teachers and teachers

As pointed out in Section 3.7, a training course for the PEAs, head teachers, deputy head teacher and one head of section from each school was conducted to provide them with the knowledge, skills and attitude they needed to undertake and support TPD. The results from the interview data analysis showed that all the PEAs were trained in supervision, inspection, provision of in-service education and training (INSET) for teachers and management of the

TDCs during the Malawi Schools Support Systems Project (MSSSP). One policy maker explained:

Training course was conducted to prepare all the PEAs from all the zones on provision and management of INSET for teachers using the TDCs and also in how to orient teachers. We went to each district to train them and we even trained them how to establish their TDCs as a PD centre for teachers. I am sure that the PEAs have the knowledge and skills required for them to establish the TDCs, but why they are not using that knowledge and skills to support the teachers in all zones, I don't know (PM3).

The claims made in the above statement could not be verified because, despite the national training course for all the PEAs, head teachers and a deputy head teacher or a head of section per primary school which was conducted during the life of the project (Section 3.7), it was surprising to me to find that three out of the four PEAs and all the eight head teachers involved in this study had not been trained in PD. The possible reason for not training them was that the trained TDC coordinators (PEAs) were posted away from their TDCs and were replaced by new coordinators, as one teacher explained:

The PEA who was here got a new post as head teacher of primary school. He went through interviews, passed and accepted the post of the primary school head because the post of head teacher was higher than that of a PEA. Since then, things are not working because the new PEA does not know what to do (T2).

One policy implementer elaborated further:

The PEAs were trained in the TDC management and coordination of the TDC activities. The government shortly advertised the post of head teacher of primary school which was a more senior position than the post of the PEA. Many PEAs went for the interviews for the post, passed and were transferred to be head teachers of large primary schools (PI2). The trained TDC coordinators were instead replaced by untrained ones who

were serving as head teachers, as one PEA explained:

I am new here. Before coming here I was a head teacher of primary school. I went for interviews for the post of head teacher of primary school and failed. I have been sent here to be the new PEA. The PEA who was here is now a head teacher of a primary school. I am just trying to do my job without training (PEA2).

Two policy makers supported this view, for example:

In most TDCs, the PEA who was managing the TDCs might not have been trained because the original person we trained to manage the TDC has been transferred to be a head teacher of a primary school somewhere. Some of the new TDC coordinators were recruited but without initial training in TPD. Teachers in the zones were aware of the fact that the new coordinator was not trained in how to manage the TDC and might have the feeling that the one who is managing the TDC is as ignorant as the teacher himself (PM3).

The statements above indicate that there was training for PEAs, but many of those who were trained had moved to other posts. Their replacements were not trained because, as one policy maker (PM3) explained, funds were not available.

Similarly, the questionnaire findings revealed that about 45% of teachers who took part in the survey indicated that the TDCs had staff trained in TPD (Appendix F2). Thus, the findings of the study have shown that although the PEAs were managing the TDCs, the majority of them were not trained because those who were trained during the life of the project which set up the TDCs were posted away. Instead new PEAs were appointed without any initial training. This implies that most of the TDCs were being managed by untrained PEAs.

The interview data analysis also showed that teachers were not trained in how

to use the TDCs for PD, for example:

Here, we have never been oriented. We have not heard anything about the TDC; we do not know very well; but the centre coordinators know everything (T1).

We are not free to visit the TDC because we have not been oriented to the use of the TDC. We have not been oriented to the functions of the TDC (T4).

These statements indicate that many teachers had little or no knowledge about the TDCs or late alone how to use them. Similarly, the questionnaire findings indicated that less than half of the number of teachers involved in the survey knew how to use the TDC (Appendix F2).

Commenting on self-development, one teacher elaborated:

For other teachers to participate in the TDC activities we teachers have got a disease, this disease is that we want to receive something without working hard for it. Whenever I visit the TDC my fellow teachers ask me if I will receive something. When I was doing it in Mangochi District, I was producing materials some of which I left at the TDC for others to use. But some of my friends were murmuring: what are you doing? Do you think you are going to receive something there? I said no it's not you who is going to bless me it's God who is going to bless me because you don't know where I am coming from and you don't know where I am going. So I believe that teachers fail to use the TDC because of their thinking capability. So I think teachers are not serious enough to use the TDC for selfdevelopment (T16).

This teacher showed that he was committed to self-development, even though other teachers who were apparently not committed to self-development discouraged him. The possible reason for some teachers discouraging others from self-development activities, according to the policymaker, could be this. First thing is that there is lack of knowledge of PD. In Malawi, selfimprovement among teachers is unheard. Teachers join teaching just because they have no other jobs to do. Once employed, what they aim for is the earnings. They do not try to reflect on teaching, school effectiveness or to understand the teaching and learning processes. They are contented with teaching. Next, they get pay. They do not understand that teaching is the child's future and the future of the country. So lack of knowledge among teachers is quite a critical problem (PM2).

Although this is subject to verification, the perception expressed by the policymaker cannot be ignored because of the clear absence of teacher assertiveness in describing their involvement in TDC activities. Critical thinking about their PD and also reflective practice in identifying ways and means of improving their teaching practices, vital tools to enable them to undertake PD activities, seemed not to be completely lacking.

The findings have thus indicated that some PEAs, head teachers and teachers were not trained in the use of the TDCs for TPD, which exacerbated the problems of teacher involvement in TPD activities (Section 7.4). Lack of training for teachers denied them of readiness to learn which, is one of the characteristics of adult learning (Section 5.2.1). Training would have prepared teachers for PD.

7.6.2 Coordination of teacher development centre activities

As part of the establishment of the TDCs, the PEAs who were already managing their zones were given another responsibility of coordinating the activities of the TDCs. The TDC coordinators had clearly defined roles, as pointed out in Section 3.7. In order to explore the prospects and challenges of TDCs supporting TPD, the participants were asked to indicate their degree of agreement with statements related to roles and responsibilities of coordinating TDC activities.

The results from the questionnaire survey indicated that less than 50% of the teachers who took part in the survey perceived that coordination of TDC activities was taking place (Appendix F1). This means that some teachers perceived that coordination of TDC activities was not adequate to support TPD. The reasons for inadequate coordination of the TDC activities emerged from the analysis of the interview data.

The interview data showed that using the PEAs as coordinators for TDC activities had its challenges in that, apart from coordinating the TDC activities, these PEAs had other roles such as inspection, supervision, and administration, as one PEA indicated:

I cannot implement my work plan because when I make my own plan for a month, you see a lot of things coming in. They tell me oh! You do this, oh! Go somewhere, and do this and that. That's why when we sometimes meet, to review the activities of the TDC, we have problems. I can cite activities for this zone, I planned to do this and that and within our plan I was asked to attend a social studies workshop and I came back, then another workshop, came back. I was told to do this and that, so there is always disturbance in whatever programme I make in this zone, so that's why I am saying I don't really fulfil all those plans. It seems we are also serving other roles which are not of our role as such (PEA3).

Similarly, one policy maker had this to say:

The PEA is supposed to manage the TDC. At the same time the PEA is supposed to visit the school to supervise teachers and advise them. Not only is that, the same PEAs involved in inspection. They don't inspect their own zones but they are taken to inspect other zones in the same districts or in other districts that is still going on. But then when it comes to effectiveness, you find that I mentioned about NGOs and these other institutions that are bringing in new things which pupils need to know. PEAs are involved. So you find that maybe even 50% of their time they are being involved in these other activities and the other 50% is shared for the management of the TDC, and yet for inspection and supervision, it is not enough because the ministry's priority is to spend 65% of their time in schools, something that they are not doing (PM3).

Asking PEAs to coordinate TDC activities was an added role which exerted specific demands on them in initiating, developing, organising, conducting and monitoring PD activities for teachers over and above those of inspection and supervision. With added roles, the PEAs could not fulfil all the plans because of other activities that required their attention. Related to the added roles of the PEAs was the concern for the changing roles of PEAs over the years, which had left the PEAs not sure of what they were supposed to be doing.

For you to appreciate the problems which the PEAs are facing you need to understand who the PEA is and to whom he/she reports. This PEA was previously a district inspector of schools. Now, the PEA reported to the education methods advisory service. The introduction of school clusters necessitated the establishment of TPD centres within the same area in order to carry out in-service with the PEA as the coordinator. Because the PEA changed from inspector to advisory roles, he does all the three roles of inspector, advisor and in-service provider. The PEA is now confused and to the extent that the functions of this PEA being an advisor, inspector and in-service provider are conflicting and the effectiveness of that particular office is compromised (PM2).

Thus, the statements above indicate that coordination of the TDCs was difficult partly because the PEAs had many roles. It was for this reason that perhaps teachers rarely found their PEAs when they visited the TDCs, as one teacher complained: *I came here and found that there was nobody. The TDC was closed. They said the PEA was busy. So I failed to borrow the books (T5).*

Some head teachers shared similar views concerning the PEA as a TDC coordinator. One indicated: *Sometimes they [teachers] could go to the TDC and find that the PEA is out (H7).* Another mentioned the actual days when the TDC coordinator was not available at the centre: *Most of the times from Monday to Thursday they [PEAs] are always not there [at the TDC] (H3).* Yet another head teacher said:

Most of the time when I want to go and use the TDC I find it closed. I don't find the PEA, even the assistant coordinator who is also a teacher. She has a class to teach at her school. And the PEAs themselves are also involved in other education matters. So when I go there, I find that there is nobody (H8).

The statements above highlight one of the reasons why some teachers could not go to the TDCs for PD. Teachers were not likely to travel to the TDCs if the availability of and access to the TDCs was unpredictable. The unavailability of the PEAs at the TDCs was supported by the two PEAs in the urban area, who told me that they were found at the TDCs on Thursdays only because they were required to do school inspection and supervision on the other days of the week. Apparently, during my study visit to the TDCs, I found that three TDCs were closed and that the PEAs were reported to have gone out on other official duties (Appendix G). Interestingly, one day, when I went to interview the District Education Manager (DEM) at his office, I found some PEAs in the urban area gathered at the district education office supervising the administration of national examinations (Appendix G). This was an indication to me that the PEAs had some administrative roles as well (Section 7.3). Thus, because of the many roles which the PEAs had, they were rarely found at the TDCs because they were mostly out in the field performing other roles. However, the questionnaire findings indicated that less than 40% of the teachers who took part in the survey believed that the PEAs were busy with other TPD activities (Appendix F1). This contradiction can be attributed to teachers' lack of knowledge about the numerous roles and responsibilities of the PEAs who were also TDC coordinators.

The findings from the interview data analysis further indicated that the assistant coordinators, who were appointed from among the school staff usually from the host school, were also busy with teaching in their schools. One teacher said:

The teacher who assists the PEA teaches standard 7. He has a full class to teach and he is rarely at the TDC. When a visitor comes he leaves the class unattended to go and attend to the visitor at the TDC. This is not good. Why not have full time assistant coordinators for the TDC? (T12).

Thus, appointing the assistant coordinator, who might have already some teaching roles and responsibilities, from among the school staff is not appropriate for the coordination of TDC activities. The assistant coordinator is unlikely to have enough time to attend to his/her teaching roles and responsibilities and at the same time coordinate the TDC activities.

In addition, as pointed out in Section 3.7, one of the roles of the TDC coordinator was to develop and implement programmes of activities for the zone. However, the interview data showed that there were very few

programmes of activities for TPD in the zones and that the PEAs tended not to organise PD activities for the teachers, as one PEA was quick to say: *To be honest, I haven't conducted any activities which involve teachers (PEA2).* Another PEA could not implement some TDC activities because she was not oriented to the functions of the TDC:

But for your information, I am not oriented to the use of the TDC. I didn't find any PEA to help me in orienting my teachers on how to use the TDC (PEA3).

In terms of the ability of PEAs to coordinate TPD activities in their zones, one

policy implementer explained:

The biggest problem is the ability of the PEAs to initiate and plan for the education development activities because they seem not to understand the PD concept; I don't think they have grasped the concept of the TDC. Their academic background is limited for them to grasp it, because from the study we conducted, we found that their understanding of PD was very limited (PII).

Another policy implementer explained that:

I think the problem is the TDC coordinators themselves, because they don't organise INSET which may help teachers to grow professionally. The action plan may be there but it is not implemented. They can sometimes prepare the action plan but fail to implement. They are too busy with other education matters (PI2).

The statements above indicate that, apart from having too many roles to do, the PEAs seemed not to have adequate time to implement TDC activities and their knowledge of TPD was questionable. These findings could explain the problems of coordination of the TDCs as indicated in the findings from the questionnaire in (Appendix F1).

Furthermore, one of the responsibilities of the PEAs was to monitor the TDC activities in supporting TPD (Section 3.7). In the present study, the interview data show that there was little monitoring of the TDC activities. One PEA indicated:

No I don't have the records of the activities at this TDC and I have not been told what and how to record things at the TDC (PEA4).

Another TDC coordinator elaborated:

At zonal level we have not evaluated the TDC activities. We have not come to a stage of finding out if we have achieved anything because there is nothing to find out. ... yes, I do not monitor (PEA3).

Linked to lack of monitoring of TDC an activity was that very few meetings were organised at zonal level to evaluate the activities of the TDCs. If the evaluation meetings were organised, the analysis indicated that teachers were rarely invited to such meetings to discuss the activities at the TDC, as one teacher indicated: *The PEA has never invited anyone from this school to a meeting to review the activities for the TDC (T3).* Furthermore, one head teacher made a similar observation:

We sometimes just hear that there was a meeting. They agreed that teachers must contribute money towards the maintenance of the TDC (H3).

Another head teacher said: *I have not been involved in the monitoring of the activities of the TDCs (H7)*. These statements indicate that some head teachers and teachers seemed not to be involved in monitoring and evaluating the TDC activities. Thus, the consistency in the findings from teachers, head teachers

and PEAs suggests that there was little monitoring and evaluation of the TDC activities.

Generally, the findings from the study have indicated that TDC coordinators were not effective in coordinating TDC activities for TPD. There were a number of reasons for their ineffectiveness. First, the TDC coordinators were not trained in how to coordinate TDC activities as they replaced the trained TDC coordinators, who were given different jobs as head teachers of the primary schools. This suggests that there was a policy conflict regarding staffing at the TDC. There was no more provision for training of the newly recruited TDC coordinators because of discontinued financial support for training when the MSSSP which set up the TDCs wound up its activities. This finding is similar to those of the studies conducted in Zambia, (Gibbs and Kazilimani 1999), Kenya, (Welford and Khatete, 1999) and Indonesia (Tangyong and Gardner, 1994), in that TPD activities could not be sustained when the donors stopped funding their activities.

The second reason was that the TDC coordinators (PEAs) were constrained by having many roles and responsibilities such as inspection, supervision and administration, apart from coordination of TDC activities. The implication is that the TDC coordinators were overloaded with work resulting in reduced TDC activities for TPD. There is a need to reduce the roles of the PEAs to just coordinating the TDCs for TPD, as in Britain, where the wardens were responsible for coordinating PD activities whereas the Local Education Authorities (LEAs) were providing the actual courses (Knamiller, 1999). In addition, the wardens ensured that the centres provided a stimulating environment for teachers (Knamiller, 1999). The idea of reducing the roles and responsibilities of the TDC coordinator is to ensure increased efficiency.

The third reason was that the coordination of TDC activities was constrained by the poor relationship between the TDC staff and some of the teachers. Some teachers who visited the TDCs were subjected to questions, which made them feel unwelcome to use the TDCs for their PD. Smith (1982) observed that the climate of learning for adults should be non-threatening. In addition, in Britain, one of the principles for the TCs was to serve the teachers with all the diligence and respect for their profession, without fear or favour (Kahn, 1982). Similarly, the major components of the centres in the USA included a stimulating and flexible physical environment, but structured with a supportive, collaborative personal climate, and active learning through direct interaction of the participants with the environment (Buxton, 1976). Furthermore, in a study by the National Center for the Study of Adult Learning and Literacy (2003) in the USA, one of the findings was that one factor for teachers to attend to PD was motivation. Teachers would not be expected to go to the TDCs if they were not respected by those in charge of the TDCs. The TDCs needed to recognise and respect those teachers as adult learners who are self-directed, self-actualised and active participants who learn through a series of interpersonal relationships and will not learn if they do not want to (Section 5.2.1). Therefore, TPD has to

provide learning opportunities for all teachers (Blandford 2000) without constraints.

Finally, considering that Malawi opted for a TDC which would be a centre for networking, not just between the schools and the TDCs but also among the schools (Section 3.7), there was a need for Malawi to have an effective TDC coordinator if networking was to succeed. The role of the TDC coordinator in a network model is crucial. For example, it was reported in Guinea (Dembele and Miaro-II, 2003) that using a network model in supporting TPD failed due to poor coordination. It was also reported that in the Netherlands (Veugelers and Zijlstra, 1995) coordination of TPD based on network model was challenged by long distances which teachers had to travel, differences of interests, lack of flexibility and lack of mutual trust.

7.6.3 Management of the teacher development centres

One of the principles followed in the management of the TDCs was to try and make teachers feel that the TDCs belonged to them and give them control over its functions (Section 3.7). This principle might imply that teachers needed to take a greater role in the management of the TDCs. In order to understand the role of teachers in the management of the TDCs, participants were asked to comment on whether and how teachers were involved.

The results from the questionnaire survey indicated that, on average, about 44% of the teachers who took part perceived that management of the TDCs

was appropriate (Appendix F2). In other words, management of the TDCs had challenges in providing support for TPD. The reasons for the challenges emerged from the analysis of the interview data.

The interview data indicated that some teachers were involved in the management of the TDCs through representatives. For example, one of them said:

We participate in the TDC management meetings through representatives. We have a teacher from this school who is a member of the TDC management committee. Our head teacher too is a member (T11).

One middle manager held similar views that teachers were involved in the

TDC management through representatives.

We have got the TDC management committee. We have got the teachers, head teachers and section heads that are represented in the management committees (MM4).

Furthermore, some teachers indicated that they were involved in the TDC management through contributions to funds for maintaining the TDCs, as one teacher elaborated: *We discuss how we can raise funds for the TDC (T13)*. Another teacher recalled:

I remember sometime back, during our meeting, the head teacher told us that every teacher is asked to contribute K30 for payment of electricity bills at the TDC (T14).

The fundraising was conceived as part of management strategies (Section 3.7) for the sustainability of the TDCs. It appears that teachers were required to help alleviate the financial problems of the TDCs.

In Section 3.7, I pointed out that one of the principles adopted in the management of the TDCs was to have a broad-based management committee with members drawn from schools, communities as well as institutions surrounding the TDCs. However, the analysis of the interview data indicated that this principle was not followed by some TDCs as the composition of the management committees varied from one TDC to the other.

There are some TDCs where the management committees have educated people with work experience and retired people, and some of them are university graduates. So when such people are included in the TDC management committees they help their PEAs to be competent. The other reason is how central the TDCs are and what was it that the PEAs started with when it came to sensitising the communities. So these are some of the reasons why the TDCs have differed in the way they perform (MM1).

This illustrates that the TDCs with educated members in their management committees were likely to perform better than those with less educated members. The other factor highlighted here is the need to sensitise community members about the concept of the TDC and the role of the community members.

The findings of the study also indicated that for some TDCs, there was little commitment of some members of the community in the management of the TDCs. Two PEAs explained that some members tended not to attend the TDC management committee meetings despite being invited to attend. As a result, one of the four TDCs dropped out the community members from the management committee as one PEA elaborated:

We had them [community members], for example, last year. But as for today there are no longer in the committee because in most of the meetings, they would not turn up (PEA2).

Further analysis of the interview data also indicated that key people who could provide professional support were not included in the TDC management committee. One middle manager argued:

The TDC committee has no influence on the PD probably because of the composition of the committee. There is no direct link between the members of the management and teacher activities at the TDC. The community members in the committee also do not have the capacity to advise on the TDC activities which would benefit teachers (MM3).

It can be deduced from such statements that some key participants believe that the committees were contributing very little to the overall management of the TDCs because most members lacked the capacity to support the TDCs in achieving their objectives.

The findings further indicated that lecturers from teacher training colleges (TTCs) who might have knowledge about TPD were not included in TDC management committees. The participants tended to think that lecturers would help to make a difference in the role of the TDCs in supporting TPD as they would provide the technical know-how. This concern was expressed by all the policy makers, policy implementers and middle managers. For example, one policy maker said:

We expect other institutions with interest in education activities to take a role in the TDCs management. The lecturers from the TTC can help in the TDCs activities for TPD. We didn't bring them on board not fully (PM1). In general, the findings have indicated that the TDC management committees which had a responsibility to support the TDCs for TPD varied from one TDC to the other. For example, some TDC management committees contained members who had little education whereas other TDC management committees had some members who were well educated and had retired from civil service and other jobs. This variation obviously contributed to the differences in the management of the TDCs. As described in Section 3.7, the TDC management committees had clearly defined responsibilities (Ministry of Education, Sports and Culture, 1998). One wonders if the TDCs were functioning as desired if some committee members were not educated and had inadequate knowledge about TPD.

The findings also have indicated that although the TDC management committees were required to include representatives from teachers, some management committees did not have teachers as representatives. Empowering teachers to own the TDCs would mean that teachers take an active role in the management of the TDCs. For example, teachers were supposed to be given opportunities to participate in decision-making regarding their PD needs. This is in line with one of the principles of adult learning that teachers as adults need to be actively involved in their learning process such as in planning, designing and implementing their own PD activities (Gordon, 2004; Merriam, 2001).

Furthermore, TDC management committee meetings had little focus on TPD; instead the focus was on fundraising activities for maintaining the TDCs. The implication here is that even if teachers participated in the management of the TDCs, TPD issues were not put on the agenda of such meetings.

The findings have also indicated that the middle managers who were responsible for education services in the districts and divisions respectively were not actively involved in the running of the TDCs until at a later stage. This might have created some dilemmas and tensions in the middle managers regarding their roles and responsibilities in the management of the TDCs. For example, it was not clear whether the middle managers at district and division levels or DTED were responsible for the inclusion of funding in the TDCs for TPD in their annual budget for submission to the central government. The implication is that the TDCs were poorly funded, if at all.

Furthermore, the interview findings indicated that the TTC lecturers were not included in the TDC management team until later, when a few lecturers were incorporated only as members of the National Core Training Team (NCTT) for the MSSSP (Section 3.7). Unlike TACs for primary schools in Kenya (Welford and Khatete, 1999) and TCs in the USA (Redknap, 1977) (Section 4.7), the TDCs in Malawi did not involve the TTCs in management of the TDCs for TPD. The implication is that by leaving out the college lecturers, the TDCs in Malawi lacked professional expertise in TPD.

7.6.4 Teacher development centre links with other stakeholders

As pointed out in Section 3.8, links with the appropriate departments in the Ministry of Education were thought to be a means of increasing the efficiency and effectiveness of the TDCs. Nonetheless, this study's findings suggest that some stakeholders were not linked to the TDCs even at policy level. The interview data indicated that the TDCs were not clearly linked to other departments within the organisational structure in the Ministry of Education, as one policy maker explained.

The PEA is under Department of Education Methods and Advisory Services (DEMAS) and yet there's no time when DEMAS people visit the TDCs because they mostly deal with secondary schools. So although we say this PEA belongs to DEMAS and is responsible to DEMAS, there's no direct link between these two in terms of supervision and accountability. The PEA, who is said to belong to DEMAS, is used by DTED to coordinate the TDC which is under DTED. In other words DTED is using an officer from DEMAS to run its centres; yet the PEA's job under DEMAS is to inspect, supervise and advise teachers and not to coordinate the TDCs. The organisational structure is in shambles (PM2).

This implies that the TDC is linked to DTED whereas the PEAs are linked to three education departments—as PEAs, to DEMAS; as primary education officers, to the Department of Basic Education; and as TDC coordinators, to DTED. To this effect, one policy maker elaborated:

The PEA receives instructions from DTED on supervision and training in in-service and from DEMAS on advisory and inspection (PM1).

This statement entails that the PEAs serve three different education departments with different functions: DTED, which is responsible for teacher education and development, requires the coordinator of the TDC to conduct TPD activities, whereas DEMAS requires the coordinator to inspect schools. The Department of Basic Education uses the coordinators in the administration of schools. Thus, when discharging the duties, the coordinators might have been experiencing 'role conflict' when dealing with teachers and schools, for example, whether to pose as an inspector or administrator or support teachers in TPD. Thus, each department demanded that the TDC coordinator fulfilled certain roles which would be equally plausible. In this way, the demands on the PEA created not only dilemmas and tensions but conflicts of interest among the policy makers when it came to how PEAs were to work and how the TDCs were to be run. The effect of organisational conflict on PEA's work is reflected in the words of PEA3, cited in Section 7.6.2: he outlined his problems in implementing work plans.

Related to organisation of the TDCs was a need to constantly monitor the activities of the TDC, the schools and the teachers. The findings of the study showed that there were no plans and procedures for monitoring and evaluating TDC activities (Section 7.6.2) at the national, division, and district levels. There was only one officer at the national level at DTED and none at division, district or local levels who could monitor the TDC activities, as one policy implementer commented:

Unfortunately, at national level, we have not evaluated the TDCs. The problem is that we start a thing but we do not try to find out if we have achieved the objectives. What we see is a TDC as an institution but the effects of the TDC we have not evaluated whether the objectives have been achieved or not (PI3). There has clearly been a lack of organisational commitment to monitor and evaluate TDC activities.

Generally, the findings indicate that there was conflict among departments in the Ministry of Education as to who was responsible for the TDCs, which in turn affected their operation. The working relationship among the stakeholders was not supportive of each other in the management of the TDCs. For example, the middle managers were not involved in the monitoring of TDC activities, yet they were directly responsible for all the education services including the TDCs in the districts. Instead, there was only one officer responsible for the monitoring of the TDCs based at DTED and there was no monitoring mechanism at the district and divisional level. This omission of important players in the management of TDCs might have caused the TDC coordinators not to effectively plan and implement their TDC activities for TPD. Perhaps, in Malawi, there is a need for a well-organised structure at national, divisional, district and zonal levels involving key people working together in the management of the TDCs, as happened in the State of Andhra Pradesh in India (Weigand and Jain, 1998) (Section 4.7.3).

7.6.5 The resources at the teacher development centres

As pointed out in Section 3.7, TDCs were established to bring resources closer to schools, not in schools, so that a cluster of schools could share limited resources for maximum output. In this study, in order to understand the resources at the TDCs, I solicited the views of the participants about the availability, adequacy and the appropriateness of the TDC resources.

The results from the questionnaire showed that, on average, 32% of the teachers who took part perceived that the resources and equipment at the TDC were available, adequate, and relevant or appropriate (Appendix F3). The interview data elaborated further on the status of the resources at the TDCs. The most commonly mentioned resources included library books, buildings, furniture, teaching and learning materials and motor cycles, available in all the four TDCs. Although not directly mentioned, staff working at the TDC constituted one of the resources.

In relation to human resources at the TDCs, all the TDCs studied had a coordinator and an assistant coordinator. In addition, each TDC had a security guard. However, the TDC coordinator and his/her assistant were described as not enough to provide support for TPD because they had other roles to perform, as discussed in Section 7.6.2. The TDC coordinator was a PEA whereas the assistant coordinator was a class teacher. The work at the TDC was a secondary job for both of them. In addition, the TDC coordinators in this study were in some cases not trained in the provision of TPD as most of those who were trained had been posted away to be head teachers of some primary schools, as discussed in Section 7.6.1. The problems of human resources at the TDCs in Malawi are similar to those in other countries. For example, Tangyong and Gardner (1994) found that in Indonesia, the project suffered

from lack of new posts created at national, provincial and district levels to continue with the programme activities.

Regarding material resources, the interview data showed that some of the resources were inadequate for certain TDC activities. Some teachers repeatedly mentioned that, each time they went to the TDCs, they could not find enough textbooks to borrow for teaching in their schools. For example, one teacher explained: *The TDC does not have enough books to help me in teaching and also books to read about PD (T13)*.

Similarly, one head teacher indicated that:

Some of the materials are in short supply at the centre. For example, some books especially standard seven and eight science books and other teaching and learning materials such as the charts are not enough (H7).

Furthermore, the PEAs, middle managers, policy implementers and policy makers also acknowledged that the TDCs did not have enough materials because of lack of continued material support from the government to provide resources after the life of the project.

The data analysis also showed that the resources at the TDCs seemed not to be appropriate for teachers who were studying for high academic qualifications. One PEA had this to say:

There are three teachers who would like to improve their academic qualifications. So they would like to have many professional books from the library. The books which are here are just too shallow (PEA4).

It appears that the procurement of books for the TDCs was done with little consideration of what books would be required to support TPD. Indeed, most of the books were donations to the TDCs, with little relevance to TPD. It was clear from the TDC libraries that most of the books and materials were for use in the classroom and not for teachers to use for PD (Appendix G).

Furthermore, some TDCs did not have equipment, facilities and materials for

producing teaching and learning materials, as one PEA explained:

You know we run mock examinations for standard 8 pupils. But we have no machines for producing the examination papers. We go to town to have the examinations papers typed and we borrow the duplicating machine from secondary school to produce copies. This is not good. We require machines for running our exams here (PEA1).

The policy makers were also aware of the non-availability of equipment,

facilities and materials in some TDCs as one policy maker observed:

Some TDCs have no computers, no telephone, no internet, and no fax machines. There are no syllabuses, reference books, and some equipment like projectors for teaching and learning. Most of the TDCs in the rural areas have no access to electricity and piped water. So how would we expect teachers to use the TDCs without these facilities? (PM3).

The above statements indicate that some TDCs lacked most of the resources, such as electricity, piped water and equipment which would make the TDCs function effectively for the day-to-day administration of the centre. However, with the recent development in telecommunications technology, such as mobile phones, this finding may become irrelevant in the near future. Generally, the findings have indicated that the TDCs had limited resources, although the availability of resources may not be a solution to the use of the TDCs for PD. For example, in Zambia, it was reported that teachers made very little use of facilities such as duplicating machines and photocopiers for their PD (Gibbs and Kazilimani, 1998), suggesting that it may not be enough just to provide the equipment, but also necessary to train teachers in how to use and repair the equipment. No wonder therefore that I noted that a computer was just gathering dust at one of the TDCs, because no one knew how to use it (Appendix G).

In relation to financial resources, the analysis showed that all the participants tended to view TDC funding as very crucial if teachers were to undertake activities there. They mentioned that the TDCs seemed not to have enough money for various activities such as paying utility bills, maintenance work and buying new materials and equipment. One PEA elaborated:

The TDC needs money to pay bills, to buy materials for running and maintaining the motor bike as you can see it there. It broke down when I went to visit a school. We have no money to pay bills for telephone, electricity, and water and to pay security man. There is no money to conduct TDC activities (PEA2).

Since the TDCs are government institutions, participants' expectations were that the government would fund TDC activities, as one respondent indicated:

As the District Coordinating PEA, I am involved in making budgets for the district. In the budgets, there is provision for the TDC funds. However, for the past three years my TDC has been receiving MK3000.00 for one INSET per year. In most cases, the money has not been enough as I just use it for food and transport for those invited (PEA1).

These findings suggest that the TDCs had no funds to maintain infrastructure, let alone conduct PD activities, which could result in TDCs becoming nonfunctional unless the funding issues are addressed. However, commenting on funding for the TDCs, all the middle managers indicated that there was a budget for all. For example, one middle manager explained:

There is a budget set aside for the running of the TDCs but the PEAs do not make a request for money for their activities (MM4).

One policy implementer also said:

Since the project came to an end, there has been no money given to the TDC for the activities. The budget is made and submitted to the government but no money is released. I wonder whether we are serious about PD. The Ministry of Education has no budget for running the TDCs. The budget is nil. There is completely nothing. Teachers are discouraged. They think the TDCs are not important (PII).

Related to the problem of funding the TDCs, one policy-maker elaborated:

There is need to have a budget for the TDC activities, replacing text books at the TDCs, getting connected to the internet, paying the telephone bills DTED has some funds to run its activities but not for the teacher initiated activities at the TDCs. Most of the time when the internal training budget is presented to the treasury, it is heavily reduced to say K10m. But how much can be done with K10m? That is not enough for about 50,000 teachers (PM1).

Another policy maker also said:

The primary sub sector does not budget for the TDCs because they think it is donor funded. Fortunately, of late the government has instructed that the TDCs activities be funded from the government treasury. So the districts through the division are making some budgets for the TDC activities. But I have not seen the budgets. So this is an issue in the budgeting system to make sure that someone is responsible for the budget for the TDCs because this is where the question becomes complicated. It could be the DEM doing the budgeting but DTED and DEMAS are also responsible for budgeting (PM2).

These findings indicate that the Government of Malawi did not provide enough funds for the TDC activities. The TDC coordinators also seemed to have little knowledge about how to source funding from government. However, participants held conflicting views regarding financial resources at the TDCs, when some indicated that the TDCs had money for running TDC activities, yet others said there was no allocation of funds. In addition, it was not clear which department was to follow up the issues of funding because there was an information gap or communication breakdown among the stakeholders. Contrary to the operational procedures which set up the TDCs (Section 3.7), in this study it was reported that teachers were contributing money for running the TDC activities, as one teacher explained: *There is money at the TDC. We contribute money towards the TDC funds. The community hires the TDC hall and pay money (T8).*

Furthermore, one PEA described how money was raised for their TDC.

When I was at Bala [not real name], teachers were asked to contributed K100 per term and raised about K10 000 per term and K30, 000 in three terms. Then from that we started a revolving fund (lending out the money with some interest). And not only that, the school committees assisted us with about K200. We organised a bicycle ride for girls only they had to ride from Chini [not real name] to Phala [not real name] and we raised about K15, 000 to contribute towards that TDC. That is how we raised money for the TDC (PEA1).

These findings indicate that due to lack of funds some TDCs resorted to fundraising through other means, such as allowing the community to use the facilities for social activities as discussed in Section 7.6.3. Furthermore, there was little transparency in the budgeting process for the TDC activities as different participants gave conflicting information on the status of TDC funding. Furthermore, the TDCs had insufficient funds for their activities and had unreliable sources of funding, as they mostly depended on fundraising activities at the TDC. Considering that some TDCs are in rural settings in lowincome communities, generating funds through fundraising is not feasible. These findings are similar to those in other countries such as in Zambia, where the development of teaching and learning aids was hampered by lack of funds (Welford and Khatete, 1999). Similarly, in Indonesia some TPD activities such as monitoring stopped because of insufficient funding (Tangyong and Gardner, 1994). However, in Britain, where the concept of the TC was hatched, the TCs received regular and reliable funding from the LEA (Section 4.7). The problems of funding in developing countries confirm the global view that education in Africa is an expensive social service that requires adequate financial support (Adelabu, 2006; te Velde, 2005; Cogburn and Adeya, 1999).

As discussed in Section 4.6.4, time is one of the major resources for TPD. However, the findings indicated that some teachers did not have the time to go to the TDCs for PD. The interview data indicated that it was impossible, because the teachers were overloaded with class work which took up most of their time. For example, one teacher said: *I hardly find time to visit the TDC because I teach all the subjects alone (T7)*.

Similar findings were reported by Sturrock and Lennie (2009), who found that lack of time and workloads were factors which prevented dietitians from participating in PD. On the other hand, Abdal-Haqq (1996) and Darling-Hammond (1996) reported that in developed countries such as China, Germany and Japan, teachers had enough time to engage in PD because they taught fewer classes.

Another challenge related to time was inconsistency in the opening times for the TDCs, as some teachers would find their TDCs closed with no one to attend to them. This challenge affected not only teachers but also head teachers, as we noted for both in Section 7.6.2. These statements suggest that the TDC coordinators did not have enough time to open the TDCs for teachers to use because they were busy with other roles, as already pointed out in Section 7.6.2.

These findings are comparable to those from the State of Andhra Pradesh, where some teachers had no time to go to the TCs for their PD activities because the TCs were opened at the same time as the schools (Wiegand and Jain, 1998). They support the findings of other studies which indicated that a challenge to effective TPD is lack of time (Villegas-Reimers, 1998; Abdal-Haqq, 1996; Darling-Hammond, 1996), in particular in developing countries (Villegas-Reimers, 1998). These differences in the amount of time provided for PD could be related to differences in conditions of employment between developed and developing countries (Darling-Hammond, 1996).

Finally, as pointed out in Section 3.7, the establishment of the TDCs was aimed at promoting TPD by bringing educational resources close to schools so as to increase the accessibility of the resources. Most participants in this study perceived that accessibility of the TDC resources was affected by distances between schools and the TDCs, geographical barriers, and sites of the TDCs.

Regarding distances which teachers had to travel from their schools to the TDCs, the findings indicated that there were some variations in teacher involvement in the TDC activities within and between the zones influenced by the proximity of the TDCs to the schools. For example, the majority of teachers who used the TDCs were those who were coming from schools which were closer. In other words, the shorter the distance, the greater the number of teachers involved in the TDC activities (Figure 7.1). The interview data showed that some schools could not access the TDC resources because they were very far away. Both teachers and PEAs confirmed the problems created by distance from TDC, as reported in Section 7.4.3. Thus, the long distances from the schools to the TDCs, coupled with poor mode of transport, especially in the rural areas, affected the accessibility of the TDCs for TPD. In addition to distance, accessibility of some TDCs is affected by geographical location, as

also noted in Section 7.4.3. These statements suggest that some parts of Malawi are so underdeveloped that it is difficult to access the TDCs for TPD.

These findings are similar to those of Gibbs and Kazilimani (1998), that in Zambia most teachers could not use the TRCs due to the long distances which they had to travel from their schools. Similarly, in the State of Andhra Pradesh in India teacher attendance to the activities at the TCs was affected by distance which some teachers had to travel (Weigand and Jain, 1998). Thus, distance which teachers travel from schools to their TDCs is an important factor in TDCs supporting TPD.

The questionnaire data indicated that some teachers were at schools more than 5 km from the TDCs (Figure 7.1). The distance which teachers were to travel to the TDC is critical to TPD in that teacher involvement in the TDC activities decreased with distance from the schools to the TDCs (Figure 7.1) Thus, the long distances from the schools to the TDC coupled with poor mode of transport especially in the rural areas, affected the accessibility of the TDCs.

Moreover, the participants perceived the site of some TDCs as having an effect on teacher involvement in TDC activities. Some head teachers and teachers, and all PEAs, felt that teachers from the centre schools (where the TDC was constructed) were at an advantage, and dominated in the activities and the management of the TDCs, again as noted in Section 7.4.3, for example:

The staff from my [centre] school uses the TDC. Every member of staff uses this TDC. Since the TDC is close to our school we come here to conduct the staff meeting monthly (H1).

There was sufficient evidence from the interview data that the staff from centre schools tended to use the TDCs more than those from other schools, suggesting that constructing the TDC at the centre school premises made it difficult for teachers from other schools to use the TDCs.

Furthermore, related to the site of the TDC, some TDCs were constructed on religious premises, which created tension in the use of the TDC, as different religious groups required that teachers use the TDC at some times and not others. Both policy implementers and TDC coordinators reported this concern, as noted in Section 7.4.3.

Thus, teachers were allowed to use the TDCs on some days and not others, as dictated by the church. It appears that church premises are common sites for the TDCs (Appendix G).

Thus, these findings on TDC resources in Malawi support the views that in developing countries there are limited resources for providing support for education services (Christie, *et al.*, 2004). These issues about resources confirm Fullan's (1995:397) views that:

... in their desire to bring about needed changes, policy makers frequently neglect or seriously underestimate issues of resources ...

Perhaps, that is why Adams and Chem (cited in Bishop, 1986) emphasised that there is a need to consider issues of resources when planning for any educational reform, in this case, resources to support TPD at the TDCs, because, as McEntyre and Pahl (2006) contended, self-directed learning in adults can be enhanced by means of facilitation, along with the provision of resources.

In concluding this section, I am overwhelmed by the similarities of the findings from both the questionnaire and interview data as they not only confirmed but also complemented and supplemented each other. For example, while the questionnaire data suggested that the TDC coordinators might be incompetent in the coordination of the TDC activities, the findings from the interview data explained further that the TDC coordinators were incompetent because they had many roles to perform. The differences emerged especially in the interview data because the interviews explained both differences in perceptions and reasons for these perceptions. For example, a contradiction emerged on the funding of the TDCs in that most key participants in management positions indicated that there was a budget for funding the TDCs, whereas most teachers indicated that they were not aware of any funding of the TDCs from the government. These differences call for further verification.

7.7 Sustainability of the teacher development centres

In Sections 2.4, 3.7, 4.7, and 5.4, I discussed the concerns for sustainability of TPD and TDCs. In Section 5.2.4, I also discussed the importance of sustainability of teacher learning through constant support from the environment. In order to explore the sustainability of the TDCs and teacher learning, I solicited the views of the participants on the future of the TDCs. The

findings from both the questionnaire and interview data showed that the majority of the participants perceived that the TDCs were not sustainable. The interview data further provided the reasons why the TDCs were not sustainable, especially after the life of the project which set them up.

Different reasons were given for the lack of sustainability. Some TDCs were deemed unsustainable because the PEAs were not sensitising members of the community in raising funds for the TDCs, suggesting that some TDCs operated without enough funds.

However, it is clear that a support strategy such as a TDC requires that enough financial resources, not relying on contributions from the community members, since this might work only where the economy of the community is good, as noted by this PEA:

Yes, it's going to be sustained, as long as we the PEAs continue to involve teachers in the TDC activities such as fundraising to run the TDCs. The community hires out the TDCs that we can carry out some small maintenance but still the government should provide some money for maintenance. At the moment the Ministry of Education does not provide funds for running the TDC (PEA4).

In the State of Andhra Pradesh in India, it was reported that the project was sustainable because the government continued to support PD activities after the life of the project (Wiegand and Jain, 1999).

Another reason for the TDCs not being sustainable is that there was no sustainability framework, as a policy-maker elaborated:

The TDC management, the district level, and the national office seem not to think of sustainability mechanisms and at each level there is need to see that everyone is doing his/her part. At the national level there is no provision for a sustainability framework. The TDC should be part and parcel of the institutions under a department such as DTED. We need to have mentor teachers in the zone to facilitate the training of other teachers at both the zonal level and even within their schools, instead of relying on the PEAs only. So whatever the DTED plans to do should involve all stakeholders (PM2).

To this policy-maker, the TDCs can be sustained if there is a proper organisational structure involving all stakeholders with defined roles and responsibilities in supporting TPD. In the State of Andhra Pradesh in India, the planning and implementation of a similar project on TPD involved all stakeholders, including clear organisational structure (Weigand and Jain, 1999; Ravi and Rao, 1994).

Finally, the sustainability of TPD was perceived in terms of involving stakeholders such as lecturers from the TTCs and middle managers in designing and implementing TPD activities. One policy-maker explained:

We also have to involve the tutors from the TTC in helping the TDCs. There is no national INSET programmes in which all teachers would participate in the year (PM3).

One middle manager had similar views on how TDCs would be sustained:

I think stakeholders needed to come in, not just the PEAs. The DEMs should take an active role in the TDCs. Right from the beginning of the project, the middle managers needed to take an active role as they are directly involved with teachers in the districts and schools (MM3).

Central to these statements above is that sustainability of the TDCs was affected by lack of involvement of some stakeholders who would provide expertise in PD. Weigand and Jain (1998) reported that, in the State of Andhra Pradesh in India, teacher educators were included in the steering committee responsible for TPD. Teacher educators might have been involved to provide the technical know-how.

Generally, the findings of this study have indicated that the TDCs could not be sustainable unless certain conditions were met. The participants perceived sustainability as questionable because, despite TDCs having strong buildings, there were challenges in relation to training of teachers, coordination of TDC activities, management of the TDCs, TDC links with other stakeholders and the resources at the TDCs as discussed in Section 7.6. As discussed in Section 5.4, sustainability of the TDCs means that the TDCs are developed and maintained in a manner and at a scale such that they remain viable over a long period.

The findings on the sustainability of the TDCs as a support strategy for the TPD in Malawi are similar to those reported in some developing countries such as Kenya (Welford and Khatete, 1999), Tanzania (Bennell and Mukyanuzi, 2005), Zambia (Gibbs and Kazilimani, 1998) and Indonesia (Tangyong and Gardner, 1994), where there were problems sustaining the TCs for PD. In fact, Lilly (1990) observed that in developing countries there were problems for the government to sustain the TCs after the life of the project, due to limited resources, especially funding (Crossley, 2005). It is impossible, without

adequate and appropriate resources, to the TDCs to effectively support TPD as TPD is resource intensive (Dembele and Miaro-II, 2003).

The sustainability of the TDCs as a support strategy for TPD suffered from lack of posts created specifically for TPD at national, division, district, zonal and school levels. Malawi decided to use the existing structure of the civil service in the implementation of the TPD programme because, as pointed out in Section 3.7, was seen as an economical way. However, this arrangement created unfavourable conditions for TPD as the existing staff had already roles and responsibilities. As noted in Section 4.7.3, in Indonesia the sustainability of a similar project suffered from lack of new posts created at national, provincial and district levels to continue with the activities of the programme (Tangyong and Gardner, 1994).

7.8 Conclusion

The findings presented in this chapter have shown that some teachers were involved in some and not all TDC activities, and that their involvement had helped them perceive some changes in their job as teachers. The symbolic interaction that occurred between teachers and the TDC resources provided the teachers with meaningful learning opportunities that related specifically to their needs and the needs of their students. However, teacher involvement was constrained by long distances which teachers had to travel between schools and TDCs, teacher desire for workshops and monetary gains, lack of clarity on the organisation of the TDCs and insufficient resources at the TDCs. As discussed in Section 4.7, resources tended to influence the sustainability of the TDCs as a support strategy for TPD. In light of these findings, where knowledge and practices of TPD and limited resources created multiple challenges which might have made them less sustainable in providing support for TPD. The TDCs had strong physical infrastructures but they were struggling in providing professional support. Through the construction of the TDCs nationwide, the PD programme became too big for a programme which lacked institutional and organisational structure to coordinate and manage it. Contrary to the claims made in the conceptualisation papers in guiding the establishment of the TDCs in Malawi (Section 3.7), the implementation was not based on the principles of decentralisation. The TDCs were organised, managed and run from the Ministry of Education headquarters and not the existing structure of the division and district offices. The findings are consistent with the problems of decentralisation of education services discussed in Section 4.6.1. In addition, the conceptualisation of the TDCs was not based on theories of adult learning as discussed in Chapter Five.

Having identified in this chapter the extent of support that the TDCs were providing to teachers, I explore the interrelatedness of the elements of support in the next chapter.

CHAPTER EIGHT

INTERPRETATION OF THE FINDINGS

8.1 Introduction

In order to explore the influence of the teacher development centres (TDCs) as a support strategy for the professional development (PD) of primary school teachers in Malawi, the following general research question was formulated: *To what extent do the TDCs provide support for TPD in Malawi?* Data collection for this investigation involved administering questionnaire to 586 teachers and conducting semi-structured interviews with 16 primary school teachers, eight head teachers, four primary education advisors, two District Education Managers, two Education Divisions Managers, three Policy Implementers at the Malawi Institute of Education and three Policy Makers.

In Chapter Seven, the findings of the study were presented. The purpose of this chapter is to make sense of the findings by developing the core categories and relating them to each other; describing the nature and the implications of the teacher TDCs as an implicit support strategy for teacher professional development (TPD) in Malawi; identifying the determinants of the TDC as an explicit support strategy; and developing a model of a TDC as an explicit support strategy for TPD.

During interpretation of the findings, I refer back to the literature presented in Chapters One to Six for the purpose of elaborating, validating and placing the findings in the wider body of knowledge in providing support for TPD. I further examine how the TDCs in Malawi support TPD within the dynamics of the social and economic context prevalent globally (Chapter Two) and locally in Malawi (Chapter Three). I also consider the relatedness of the essential elements of the TDCs, which constantly influence teacher involvement in TPD activities and develop the type of support strategy being experienced in Malawi.

8.2 The TDC as an implicit support strategy for TPD

In this section, I discuss the major lessons which I have learnt from the research findings in order to elaborate on the nature of the influence of the TDCs in supporting TPD in Malawi. Although the findings of the study indicated that there was evidence of teacher involvement in TDC activities, which resulted in some teacher perspective transformations, many challenges were identified with the TDCs in supporting TPD. Thus, in reflecting on the type and nature of the problems at the TDCs as a support strategy, I deduce that the TDCs supported TPD *implicitly* rather than *explicitly*, as I elaborate below.

8.2.1 A teacher development centre with limited coordination

The findings of the study indicated that coordination of TDC activities was limited for a number of reasons. First, some of the TDC coordinators were not trained in how to support teachers in their PD. Many of the coordinators who were trained during the life of the project were subsequently given other posts and were replaced by untrained coordinators. Second, the coordinators were overloaded with roles and responsibilities such as those of school inspection, supervision and administration, in addition to those of coordination of TDC activities. These problems meant that the TDC coordinators could not conduct systematic needs identification, plan, implement and monitor the TDC activities for TPD. Thus, the findings suggest that coordination of the TDC activities to support TPD was considered as simple, and that it could be coordinated by what Bishop (1986) called intuitional judgement or educated guess (Section 1.4). They further suggest that the TDC activities, which were not well coordinated, resulted in waste of scarce resources, stress and disillusionment among teachers and ultimately failure of the TDCs to support TPD.

The findings also indicated that some of the TDC coordinators were unfriendly to teachers who wanted to use the TDC facilities. For example, teachers reported that they were subjected to questions about why they had come to the TDC. The negative attitude of TDC coordinators towards the teachers irritated many teachers who swore never to go back to the TDC. This finding suggests that, much as teachers would want to visit the TDC, some TDC coordinators did not welcome the teachers with dignity. The findings highlight the problems of using the PEAs as TDC coordinators, in that the PEAs behaved more as inspectors of schools than as TDC coordinators when they met teachers at the TDCs. This finding is similar to the teacher advisory centres in Kenya where Welford and Khatete (1999) reported that teachers had a negative attitude towards advisors but not towards college tutors. These findings are contrary to theories of adult learning, which emphasise that adults learn better in an environment which is free from intimidation (Mezirow, 1997) and promotes a

sense of safety, openness, and trust (Taylor, 1998). Adults need to be shown respect. There is a need to acknowledge the wealth of experiences which they bring to PD and avoid discrimination.

Finally, coordination of the TDC activities was challenged by the fact that teachers were not oriented to the use of the TDCs for their PD. Implying that, both the TDC coordinators and teachers had little knowledge about the TDCs as a support strategy for PD. Perhaps, that is why most of the teachers indicated to have little knowledge about the TDCs and their functions. Considering that different countries - including Malawi - are trying to adapt the teacher centres (TCs) as a support strategy for TPD, the findings of this study have demonstrated that there is a need for training teachers in the functions of the TDCs as a support strategy because teachers have their own perceptions of how things should work in as far as the use of the TDCs for TPD is concerned. This is what Stoll and Fink (1996:110) emphasised when they wrote that:

What teachers do and think is fundamentally influenced by their beliefs, assumptions, and values, which, in turn shape norms.

Thus, what teachers did and thought about the TDC was a function of beliefs, assumptions and values they held about TPD. For example, teachers were not proactive in their PD meaning that they waited for a chance to be invited (reactive) rather than organising their own programmes of activities based on their professional needs (proactive) (Hargreaves, 2000). This is in contrast with the assumption in the establishment of the TDCs in Malawi that teachers were to take an active role in initiating, organising, conducting and evaluating their

own PD (Section 3.7). This finding is in support of the theory that teachers cannot change what they don't know (Simons, 1982). Thus, with the problems highlighted above in relation to the coordination of the TDC activities for PD, I argue that although teachers were involved in their PD and that some teachers perceived transformation in their teaching, coordination of the TDC activities was limited in some ways.

8.2.2 A teacher development centre with limited management

The findings further indicated that there was limited capacity for the management of the TDCs because the TDC management committees did not include some key stakeholders such as teacher educators from the Teacher Training Colleges (TTC) who would provide expertise on TPD. Furthermore, most of the management committees had members who had little knowledge about education in general and in particular TPD. This suggests that the composition of the TDC management committees lacked some experts in PD. Some TDC management committees were not helping the TDCs to realise the goals of providing support for TPD. Lack of expertise in the management of the TDCs meant that TPD needs were not being identified, experts were not consulted, action plans were not carried out and relevant information was not disseminated to stakeholders. Instead the committees spent time discussing issues of how to raise money for maintaining the TDCs and how to find resources to sustain them, and not discussing issues relating to TPD. These findings indicate that the management structure of the TDCs in Malawi was slightly different from those of other countries such as the State of Andhra

Pradesh in India where, for example, teacher educators were included in the committees (Weigand and Jain, 1998). Thus, the fact that some of the TDC management committees in Malawi were composed of people with little or no knowledge about education in general and TPD in particular meant that the TDC management provided limited support for TPD.

8.2.3 A teacher development centre with limited resources

The findings of the present study have indicated that the basic resources at the TDCs were either inadequate or unavailable. First, some TDCs had no equipment, facilities and materials for producing teaching and learning materials. Second, some resources were not accessible to teachers due to the distance that they were to travel to the TDCs, impassable geographical terrains, restrictions due to religious festivities and transport problems. Third, funds were either insufficient or not available for TDC activities because the sources of funding were not reliable, as in most cases the main source of money was income-generating activities at the TDC. In other cases, teachers were asked to contribute to the management of the TDCs, which was against the guidelines for managing the TDCs. Although the findings indicated that there was a government budget for TDC activities held at the district office, all the TDC coordinators in this study indicated that they were not aware that there were some funds allocated for the TDC activities.

Fourth, the findings of the study also indicated that the TDCs did not have adequate staff to provide support for TPD. For example, one coordinator and his/her assistant at the TDC were far too few to coordinate the TDC activities 336

in a cluster of schools especially that these two people had other roles to perform. The TDC coordinator had other roles to perform as a PEA and the assistant coordinator had other roles to perform as a class teacher. The findings are similar to those of studies conducted in other developing countries such as Kenya (Welford and Khatete, 1999) and Zanzibar (Bennell and Mukyanuzi (2005), where TCs were reported to be understaffed. They support reports from the State of Andhra Pradesh (Ravi and Rao, 1994) and Indonesia (Tangyong and Gardner, 1994) (Section 4.7.3) that TCs were regarded as demanding huge resources. Where the government had failed to provide the resources, the TCs failed to support TPD. Perhaps that is why the people of Indonesia believed that the TCs as a support strategy for TPD would be suitable for the rich countries (Tangyong and Gardner, 1994). Thus, the TDC approach to providing support for TPD could be depicted as not viable in poor countries such as Malawi.

8.2.4 A teacher development centre with limited support for TPD

The findings of the study have indicated that although there were some activities which took place at the TDCs, most of them were traditional activities based on teaching routines with little focus on TPD as they seemed to offer few opportunities for teachers to learn new knowledge, skills and attitudes. For example, making teaching and learning materials is a typical teaching routine. Mention of PD activities such as observation visits to other schools, mentoring, peer observation and coaching (OECD, 2009) were conspicuously missing from the interview data. By contrast, PD activities at the

TCs in the State of Andhra Pradesh were characterised by presentations of model lessons and displays of teaching and learning materials and some group work (Weigand and Jain, 1998), suggesting that, teachers were actively engaged in their PD because there were some PD plans at the centre.

The findings also indicated that teacher involvement in TDC activities might have been affected by a conflict between using the TDC as a resource centre or as a PD centre or as an administration centre. As a resource centre, the TDC was being used by teachers for such activities as making and borrowing teaching and learning materials they needed in their classrooms. As an administration centre, the TDC was being used by teachers for meetings with the coordinator (PEA) to discuss administration issues such as teacher salaries. As PD centre, the TDC was being used for activities such as orientation to the new curriculum. Such conflicts in the activities at the TDCs could be reduced if there was a policy for compulsory TPD in Malawi (Section 4.6.3) so that teachers would have adequate time to engage in PD activities at the TDC.

Furthermore, there was very little evidence of networking among teachers and schools because the trained coordinators at the TDCs were quickly posted away and the TDCs were staffed by untrained coordinators. This meant that the TDCs were deprived of knowledgeable personnel capable of providing support for networking among teachers in the zone. In addition, teachers did not engage in networks because they were overloaded with classroom work and there was no time set aside for networking among teachers. Yet, one of the functions of the TDC in Malawi was to act as a focal point for sharing and exchanging expertise (networking) among teachers (Section 3.7). However, there are reports that networking approach to TPD can be challenging. For example, Veugelers and Zijlstra (1995) reported that in the Netherlands the model of networks did not work because of long distances which teachers had to travel (Section 4.4.5). Perhaps, in Malawi, the distance which teachers had to travel affected the implementation of networking among teachers. On the other hand, in Britain networking among teachers disappeared because the TCs were reduced to resource centres where teachers just went to use the resources. Expertise was re-allocated to schools (Section 4.7.1).

In short, considering that TPD in Malawi was characterised by activities drawn from teaching routines rather than exploring new knowledge to improve teacher classroom practices, conflict in the use of the TDCs and lack of time for teachers to engage in networking, I conclude that the TDCs were limited in the PD of teachers. Thus, the present state of the TDCs could not sustain teacher learning.

8.2.5 A teacher development centre within a TPD policy vacuum

The findings of the study indicated that the TDCs in Malawi were operating under a government policy vacuum because there was no policy statement to guide the purpose, process and product of the PD activities. For example, none of the four education development plans (EDPs) reviewed in this study is explicit on the policy of PD of teachers in Malawi (Section 3.2). There has been no clear policy direction on what, why, how and when to conduct TPD except for policy guidelines for the operation of the TDCs.

According to the findings, the policy vacuum had consequences for the TDCs as a support strategy for TPD. First, the budget for TPD from the government was not clear because, although the middle managers said that a small amount of money was allocated for TPD, the TDC coordinators and teachers were not aware of the budget. Second, the TDC coordinators who were trained during the life of the Malawi Schools Support Systems Project (MSSSP) got posted away from the TDCs, only to be replaced by untrained people, and there was no more training after the life of the project. Yet, in the current global view, investing in education such as TPD is one way of promoting human capital economic growth through quality education at all levels (Robertson, *et al.*, 2007).

Third, the findings indicated that there was no provision of time for PD at the TDCs. Yet, time is one of the major factors affecting the provision of effective TPD (Villegas-Reimers, 1998; Abdal-Haqq, 1996; Darling-Hammond, 1996). In the same vein, Cambone (1995) argued that teachers as adult learners need time for learning, experiencing and integrating new ideas in their work. Related to the provision of time for TPD, the findings also suggested that the teaching loads might have a negative influence on how teachers used the TDCs for their TPD (Section 4.6.3). For example, it was impossible for many teachers to find time to visit the TDCs. Furthermore, teachers seemed not to discuss anything about TPD at school level, suggesting that it was regarded as an extra activity 340

which teachers would do if they had the time. Related to time was the fact that TPD was not integrated into the primary school calendar. If TPD is not included in the school calendar to provide time for teachers to engage in meaningful TPD activities, then the TDCs will have problems to systematically support TPD. Having observed similar problems of time for PD, Abdal-Haqq (1996) suggested that more time for PD can be added by extending the school day or year, extracting time from the existing schedule, and altering staff utilisation patterns.

Fourth, the findings of this study have indicated that TPD was voluntary, not compulsory as it is in other countries such as the United Kingdom (UK), Australia and Germany (Sugrue, 2004) (Section 4.6.3) and in the State of Andhra Pradesh in India (Weigand and Jain, 1998) (Section 4.7.3). Where compulsory TPD occurs, frequency, level and intensity of participation in PD activities are required by all teachers (OECD, 2009).

Fifth, the findings have indicated that there was no mechanism for motivating teachers to engage in TPD. For example, it was reported that some teachers were not involved in their PD because of lack of incentives in the form of certificates of attendance, promotion to high positions and financial rewards, suggesting that teachers were not motivated. This finding is consistent with those of Kadzamira (2006), who noted that factors that affected teacher motivation were remuneration, opportunities for further training and seminars [leading to certification] which might lead to receiving allowances or

promotion (Section 3.6). Participation in TPD might in some cases lead to teacher certification (OCED, 2009). For example, as pointed out in Section 4.7.4, in Kenya, issuing certificates to teachers who attended PD tended to motivate them to engage in more PD activities (Welford and Khatete, 1999). Thus, teachers as adults were not motivated to engage in their PD because they were not informed of the reason for engaging in learning and their immediate needs and interests were not addressed (Merriam, 2001; Knowles, 1990).

Finally, the findings have indicated that in all four TDCs where this study was conducted, not one teacher was specialised in special needs education (SNE) based at the TDC to coordinate PD in SNE. Yet, the Malawi government has a policy on inclusive education (Section 3.3). Having no policy on TPD regarding SNE meant that SNE was not important in TPD, thus, denying children with special education needs (SENs) of quality education. If TDCs in Malawi were part of a support strategy for TPD, all teachers, including those who teach children with SENs, would have equal opportunities in the use of the TDCs with appropriate resources support.

In conclusion, the fact that TPD was not fully integrated in a macro-framework of improving education is congruent to Guskey's (1995) argument that TPD might fail. Introducing TPD without policy guidelines may result in overloading teachers with disjointed, clumsy and short-lived PD activities. Some teachers may view PD as isolated trends that are soon replaced by others. Thus, with the global influence on education reforms in which teachers have witnessed many TPD activities coming in and phasing out, for example, the Malawi Institute of Education in collaboration with Brandon University (MIE/BU), MIITEP and MSSSP (Section 3.7), many teachers may not take seriously the implementation of such PD because of the belief, "Don't worry, this too shall pass" (Guskey, 1995:115).

So far, I have described in my own words what the findings of this study have revealed: that the TDC was an implicit support strategy for TPD. I have drawn from the findings some of the reasons for describing the TDC as an implicit support strategy. Next, is the discussion of the implications of the TDC as an implicit support strategy for TPD.

8.3 Implications for an implicit support strategy for TPD

Having made sense of the findings of this study, I now move on to discussing their implications for how the TDCs might implicitly support TPD. The implications formulated here subsequently serve to shed light on the quality of the TDCs from the perspective of creating teacher learning communities. There are a number of implications of the TDCs being implicitly involved in TPD deduced from the findings, as described in the preceding sections of this chapter together with those from Chapter Seven. First, failure of the educational system to help teachers become professionally conscious, as most teachers were not oriented to the use of the TDC for their PD, makes it impossible for them to fully benefit and take ownership of the TDCs (Section 3.7). Teachers cannot use the TDC for their PD without understanding the

what, why and how. Without the appropriate knowledge of TPD, teachers are likely to perceive the TDC as an administrative office rather than a centre for their PD. This will prevent teachers from engaging in TDC activities that are needed to address their day-to-day classroom practices. Perhaps to enhance teacher knowledge about PD, there is need for the initial primary teacher education courses to include PD in the curriculum; otherwise teachers shall only rely on the TDCs for their PD.

Second, the fact that the TDCs emphasised more non-TPD activities such as weddings, religious meetings and those organised by NGOs, with less focus in TPD, meant that the TDCs were failing to serve the needs and interests of teachers. If the TDCs offered activities without defining professional values embedded in them, teachers could only grow professionally through what von Glasersfield (1995) called 'fortunate accidents'. The TDCs needed to focus on supporting TPD and not engage in unrelated activities. The TDC activities were supposed to aim at improving classroom teaching and learning, which is one of the global benchmarks of TPD (Section 2.6).

Third, a further implication is based on a concern for the failure of the TDCs to actively involve teachers in initiating, planning, developing and conducting short and long term programmes of activities, as the findings of this study indicated that none of the TDCs visited had a formal programme of activities for TPD. The TDCs might have failed to support TPD when they mostly relied on activities externally initiated by NGOs and MIE. Effective TDCs might need teachers to take on the responsibility for their learning process by identifying their learning needs, setting goals, finding resources, implementing strategies, and evaluating their results, typical of self-directed learning in adults (McEntyre and Pahl, 2006), of course with some support from the TDC coordinators and other experts because of the varying professional needs and interests of adults (Knowles, 1980).

Fourth, the findings indicated that TPD was not integrated in the school calendar, suggesting that the TDCs were unlikely to effectively support TPD. Failure of the TDCs to integrate TPD into school and national education development programmes had implications for its sustainability in the TDCs. TPD is effective only if it is an integral part of school development planning, with the teachers having a clear vision of what they intend to achieve and how (Guskey, 2000).

Fifth, the findings indicated that the TDCs had limited resources, which had implications for how they supported teachers in their PD. For example, some teachers had difficulty accessing resources at the TDCs because, in most cases, the TDCs were closed. This implies that teachers would stop going to the TDCs for their professional needs because of physical and emotional fatigue, frustration and loss of interest in TPD. As Dembele and Miaro-II (2003) pointed out, TPD is resource intensive, and teachers as adults are motivated in PD if they are supported with adequate, appropriate and relevant resources. Thus, Malawi needed to plan for the sustainability of the TDCs in order to continue supporting TPD after the life of the donor who funded the establishment of these TDCs as many countries fail to sustain TCs without donor funding.

Similarly, in the State of Andhra Pradesh, the distance which some teachers had to travel, affected their attendance at the TCs, as some teachers would arrive at the centre tired and, therefore, ineffective. In addition, the TCs were open when the schools were also open and teachers found it difficult to leave their classrooms to attend activities at the centre (Weigand and Jain, 1998).

Sixth, the findings have implications for the nature, power and control of the TDCs. Empowering teachers to engage in PD met problems because there were factors of control of the TDC in supporting TPD that originated from individual teachers, institutions (TDC), organisations (coordination and management) and policy (guidelines for TPD) and they permeated through the input (TDC resources), process (TDC activities) and product (teacher change). They collectively manifested themselves in individual teacher involvement in TDC activities. For example, tensions and dilemmas were created in teachers because they were attempting to meet their immediate professional needs and at the same time to be professionally recognised by the Ministry of Education, Science and Technology. The immediate teaching needs required that teachers understood teaching skills, whereas at the same time they needed to be prepared for the future challenges of their teaching profession by engaging in

academic studies. Thus, lack of power and control of teacher involvement in the TDC activities might have resulted in an unsystematic approach to TPD.

Furthermore, empowering teachers to undertake their own PD could not take place because, as the findings have indicated, there were dilemmas between using the TDC without needing to be invited and participating in TDC activities when invited. The findings further indicated that teachers were aware that one of their roles was to use the TDC for their PD, but they could not visit the TDC without permission from the TDC coordinators or leave the classroom unattended during school time. As such, teachers were waiting to be invited to be involved in TDC activities, which rarely occurred. Therefore, a balance between teacher use of the TDC facilities and teachers being invited to be involved in the TDC activities might have partly accounted for the nature of influence of the TDCs in Malawi. This is contrary to the claim made at its inception that the TDCs would be 'of the teachers for the teachers and by the teachers' (Section 3.7). Such dilemmas would hinder teachers from using TDCs for TPD.

Seventh, the fact that the findings of the study indicated that some teachers would not get involved in the TDC activities for their PD unless there were some incentives attached, meant that they would only get involved in externally initiated activities which had some monetary incentives, even when such activities had little relevance to their classroom needs. On the other hand, this meant that teachers did not attach value to their own PD. Thus, lack of incentives in the TDC-initiated PD activities might not only have affected their classroom work but also their personal development (Harvey and Knight, 1996), their self-awareness, self improvement, and empowerment and emancipation (Eraut, 1994) and in particular their well-being. Perhaps there is need for a policy on incentives to motivate teachers to engage in their PD. In addition, the TDCs needed to have very clear purposes of why teachers would be required to engage in their PD, typical of theories of adult learning that, for example, adults are motivated to learning when the goals and objectives are realistic and important to them (Speck, 1996). Therefore, the absence of well articulated purposes of TPD at the TDCs might have made teachers consider engaging in PD only when there are incentives.

The findings of this study, which focused on subjective rather than objective aspects of teacher learning, reflect the theory of symbolic interactionism. Teacher involvement in the TDC activities suggests that teachers were pragmatic actors who continually learnt from others. They treated the learning support symbolically and the TDC activities as figurative objects. This teacher learning was assisted by their ability to creatively practice alternative action before they acted. The learning process was further assisted by their ability to think about and to react to their actions and even their selves as symbolic objects. Thus, teachers are active, creative participants who construct their teaching profession, not passive, conforming objects of professional development. These characteristics of teacher learning emphasis on symbols

and negotiated reality, and consequently, lead to an interest in the roles TDCs play in supporting TPD.

The poor working conditions of primary school teachers in Malawi might have aggravated teachers' desire for monetary incentives whenever there was PD activity. For example, as discussed in Section 7.6.1, one teacher was challenged by his colleagues who questioned the gains in getting involved in the TDC activities. The findings of numerous studies (Kayuni and Tambulasi, 2007; Kadzamira, 2006; Moleni and Ndalama, 2004; Chimwenje, 2003; Kadzamira, 2003; the National Economic Council, 2002; Tudor-Craig, 2002; Kadzamira, et al., 2001; Kadzamira and Chibwana, 2000; Malawi Institute of Education, 1991) indicated that there was low morale among teachers due to poor working conditions, poor housing, meagre salaries and little chance for promotional incentives. In contrast to the noble work of teaching, teachers were reported to hold very low status in the community in Malawi (Kadzamira, 2006). Thus, considering the meagre salaries that teachers receive, they seemed to be concerned with alleviating their poverty rather than engaging in professional growth, as in Zanzibar where teachers ended up doing business such as herding cattle and selling different commodities (MacNeil, 2004) in order to improve their standard of living.

Finally, the findings of this study indicated that there was little monitoring and evaluation of TPD activities, implying that stakeholders had little knowledge of what was happening in relation to TPD in the TDCs in Malawi. The absence of systematic monitoring and evaluation of TPD activities at the TDCs, meant that 349

there was no mechanism for checking to what extent the TDC were supporting TPD. Lack of monitoring and evaluation meant that there was no feedback on TPD and the results of teachers' efforts in their PD were not acknowledged. Unlike Indonesia, where the project on TPD suffered from lack of continued monitoring due to insufficient funding (Tangyong and Gardner, 1994), in Malawi, there were no attempts to monitor TPD activities due to lack of knowledge about monitoring and evaluation by the TDC coordinators. Although there was no monitoring of TPD activities in the TDCs and schools, it is important to know that teachers as adult learners are motivated when they receive feedback on what they are doing (Speck, 1996). Therefore, feedback is an essential part of TPD as it forms a basis for critical reflection about what teachers do in TPD, which is also a necessary condition for transformative learning (Mezirow, 1991).

The preceding section has highlighted the implications of having a TDC as an implicit support strategy for TPD. In the next section, I discuss the determinants of an explicit support strategy.

8.4 Determinants of a support strategy for teacher professional development

The findings discussed in the previous section have clearly indicated that certain factors determine the influence and sustainability of the TDCs in supporting TPD and that they must be seriously considered when reconceptualising the TDCs as a support strategy for TPD. Taking into account 350

the argument that a large number of teachers throughout the world, especially in developing countries, are under-prepared for their profession (Villegas-Reimers, 2003; Kadzamira, 1996; Farrell and Oliveira, 1993), there is a need to devise a detailed model for an explicit support strategy to help teachers in Malawi benefit from the TDCs. I use the term *determinants* to signify the possible factors of the influence of the TDC in supporting TPD, such as coordination, management, resources, and preparation of the key participants.

This is not the first time that the term *determinant* is used in studies of TPD. For example, Kadzamira (2006) used the term to describe the factors for teacher motivation. Bennell and Mukyanuzi (2005:3) also used it in their study on teacher motivation in Tanzania, "... to explore the specific determinants of teacher motivation and job satisfaction in primary schools". Furthermore, Huberman (1992) used the term to distinguish the stages through which teachers go from the point of career entry to the stabilisation phase.

Six groups of determinants have emerged from the findings of this study. The basic determinant is policy guidelines on how the TDCs can effectively support TPD in Malawi. There is a need for clear policy guidelines on organisational structure for supporting TPD; training of stakeholders in TPD; whether TPD is to be compulsory; whether and how TPD is to be integrated in the school calendar; motivation of teachers in TPD; collaboration of the TDCs with other stakeholders such as college lecturers, the MIE and institutions of higher education; monitoring and evaluation of TDC activities; integration of emerging issues such as special needs education and gender in TPD; and the roles of various stakeholders including donors and NGOs in TPD at the TDC. Clear policy guidelines in these areas would effectively and efficiently promote the operations of the TDCs, which would then influence the TPD.

The *underlying determinants* include TDC coordination, management and resources, which set the conditions for teacher use of the TDC for TPD. For example, teachers may be encouraged or discouraged by the environment at the TDC; availability, adequacy and appropriateness of the resources; expertise available at the TDC; types of activities at the TDC; incentives for participating in TPD; and accessibility of the TDCs such as distance from the school to the TDC. In this way, coordination, management and resources at the TDC will ensure that teachers are encouraged to come to the TDC for their TPD.

The *immediate determinants* are school factors such as school leadership and culture which may encourage or discourage teachers from going to the TDC. In addition, teachers may also be encouraged or discouraged by the head teacher, fellow teachers and pupils; educational changes such as the changes in curriculum which bring about anxiety in teachers; resources at the school; expertise in TPD available at the school; incentives for participating in TPD at school level; teacher responsibilities at the school; teacher perception of teaching as a profession; whether teachers are given a chance to implement in the school what they have learnt in PD; relevancy of TPD to teachers' work; living and work conditions of teachers; and teachers' career path. These factors are immediate to the teachers' job and are likely to dictate the teachers' actions

and beliefs in their involvement in the TDC activities for TPD. The factors will determine the teacher learning opportunities.

In connection with *practical determinants*, classroom factors which may affect the teacher going to the TDC or not for TPD are considered. These factors include class size; teaching loads; teacher class cover when away at the TDC; level of competence; demands of classroom procedures; relevance of TPD to classroom work; classroom conditions (type of classroom, classroom resources, etc.); pupil abilities; and nature of the learners (inclusion of children with special needs in a class). These are some of the factors that make up the teaching conditions which provide challenges needing professional decisions by the teacher.

The *manifestation determinants* focus on the evidence of teacher involvement in the TDC activities for TPD, in particular observable activities in which teachers are involved for personal, professional and institutional development. These would include mentoring, coaching, peer observation, model lessons, team work and team teaching; reflective teaching practices; observation visits to other schools; participation in a network of PD of teachers; individual or collaborative research on topics of professional interest; dissemination of research findings through various media; study cycles; and education conferences and seminars, courses and workshops. The major thrust here is the approaches taken to engage teachers in PD activities and the outcome thereof. Teachers may or may not participate in meaningful PD, depending on the relevance and congruence or otherwise of the approaches used to principles of adult learning and the teaching profession.

In this case, activities may need to be based on a clear theoretical framework; identified needs of the individual teachers, of the profession and those of the institution; a variety of approaches, strategies and methods and not just traditional routines of teaching; collaborative approaches where expertise is sought from other stakeholders; and active involvement of teachers in the planning of TPD activities. Thus, it is my understanding that these determinants would make the TDC an explicit support strategy for TPD with the aim of improving teaching and learning.

8.5 An explicit support strategy for TPD

In exploring a model of a TDC as an explicit support strategy for TPD, I examine the relationships among the determinants as presented in Figure 8.1 below. In constructing the model, I am reducing the conceptual complexity for the sake of visual simplicity. The determinants of the TDC as an explicit support strategy for TPD progress in stages.

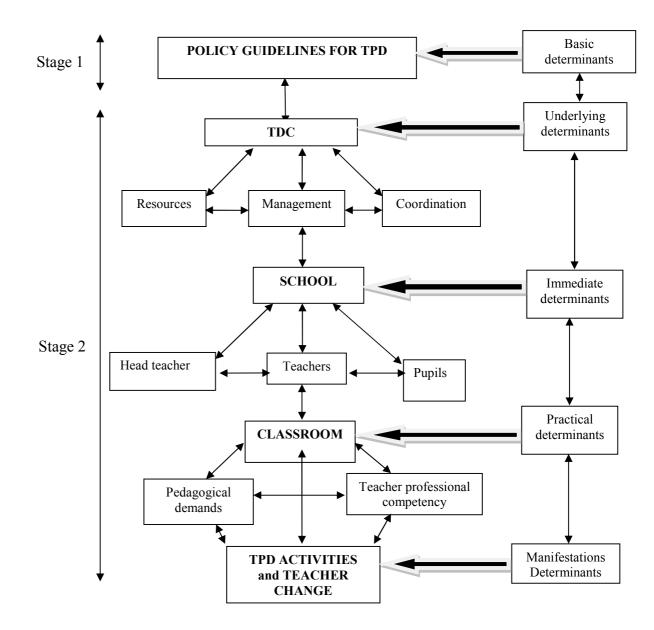


Figure 8.1: A model of an explicit support strategy for TPD.

In Stage I, teacher use of the TDC for TPD will depend on the overall national policy guidelines in teacher education and development. In Stage II of the determinants, the functioning of the TDC will depend on the policy on TPD on the one hand, and the conditions at the TDC, the school and the classroom on the other hand, resulting in changes in teacher professional practices and in personal well-being.

The descriptions on the right-hand side of the figure represent the determinants. In the middle are some of the factors which make up each of these determinants. On the left-hand side are the stages of the determinants. The arrows used in the figure indicate that the model is interactive in the sense that every factor between and within stages influences another. These determinants are more theoretically than empirically based because the data I collected on teacher perceptions do not allow such effects and changes to be mapped or even identified particularly well.

Second, I conceive the determinants as hierarchical in nature because there is what I would call basic determinants at the top, which I perceive as determinants that should come first in the conceptualisation of the TDC as a support strategy for TPD. At the bottom I place manifestation determinants, which include TPD activities in which teachers are involved. The hierarchical order does not suggest the level of importance but rather stages of the process towards developing a sustainable and explicit support strategy for TPD.

My model relates to theories of adult learning and transformative learning reviewed in Chapter Five. For example, it calls not only for recognising teachers as learners (Macleod and Golby, 2003) but also for providing them with a range of opportunities for learning for perspective transformation through collaborative efforts and a supportive environment. In this way teacher learning should be at the centre of any support strategy for TPD. My model is similar to that of Guskey (2000), in that organisational support and change is critical to any support strategy for TPD.

However, many models similar to mine have tended to focus on effectiveness of TPD programmes rather than the support strategy involved (O'Sullivan, 2005; MacNeil, 2004; Knamillar, 1999; Greenland, 1983; Henderson, 1978). The distinction between TPD activities and a support strategy for TPD must be made clear here because TPD is concerned with an increase in professional efficiency arising from engaging in planned or unplanned activities, whereas a support strategy is concerned with providing teachers with opportunities for TPD activities. Thus, my model presents my understanding rather than dispositions of support strategy as they relate to practices of TPD.

It is perhaps not surprising that my model represents somewhat typical adult learning constructs, such as the importance of realistic goals and objectives for adult learning (Speck, 1996; Knowles, 1980); motivation (Merriam, 2001; Merriam and Caffarella, 1999; Knowles, 1990; 1980; Smith, 1982); collaborative approaches, working in groups and being actively involved in the planning of their own learning, with some support from the PD providers (Gordon, 2004; Merriam, 2001); and a supportive environment (Smith, 1982; Knowles, 1980) for TPD. These adult learning constructs can be crudely expressed as concerns about the organisation and management of the TPD, explicit coordination of the TDC activities and teacher knowledge of PD as they penetrate through a thicket of school conditions (Section 3.6) as well as social, political and economic context (Lockheed, 1993). The model further supports the view that every teacher is a learner, which implies that TPD is also a learning activity which can be described using theories of learning. The tendency of some teachers not to want to use the TDC for TPD, perhaps due to unclear goals and motivational factors, supports the theory that providing resources is not enough; but rather there is need to motivate teachers to use the resources for self-development.

Finally, it is encouraging that some of the findings of this study are comparable with those of other researchers cited. If the findings had not been comparable, there might have been questions about the validity or extendibility of the analysis.

8.6 Conclusion

In this chapter, I interpreted the TDC as an implicit support strategy for TPD by focusing on coordination, management, resources, the nature of the PD of teachers and issues relating to policy. Next, I described a model of determinants of the TDC as an explicit support strategy for TPD by focusing on the policy guidelines, the TDC, the school, the classroom and the expected outcomes of the TPD activities. The model can shed light on theoretical issues behind the operations of the TDC and also professional issues behind the development of teachers. My model is not in conflict with the operations of the TDCs in supporting TPD. Instead, it offers a further dimension to the understanding of the complexity of the interplay among policy, theory and practice in using the TDCs as a support strategy for TPD, given the harsh

conditions prevalent in education systems in most developing countries such as Malawi. TPD is more effective where teaching enjoys high professional status. The model I have presented here is but a simplified theory that explains the complex model of the TDC as an explicit support strategy for TPD. My last chapter concludes the thesis, and suggests the way forward.

CHAPTER NINE

SUMMARY AND CONCLUSION

9.1 Introduction

As I indicated at the beginning of this thesis, the initial motivation for my study was to explore the influence of the teacher development centres (TDCs) as a support strategy for teacher professional development (TPD). Thus, this research project focused on the following research questions:

- What professional development (PD) activities take place at the TDC?
- To what extent are teachers involved in the PD activities?
- What changes are there in the teachers as a result of their involvement in the PD activities at the TDCs?
- What factors affect the sustainability of the TDCs in providing support for TPD?

In concluding my thesis, I would like to return to my original concern about the influence of the TDCs in enhancing TPD. This chapter draws together the outcomes of the research, guided by the research questions set out in Chapter One and discusses the contribution of the findings to the theory and practice of supporting TPD. This chapter also reflects on the strengths and limitations of the study, implications of the study for theory and practice, provision of recommendations and suggestions of possible areas for further research.

9.2 Overview of the study

The focus of my study on the TDCs as a support strategy for TPD, as I indicated in Chapter One, arose from my work experience (Section 1.2). The focus was further sharpened by my first and second degrees, during which, apart from reading various literature on CPD, I also conducted my projects in the same area. The theoretical framework and practices of PD were linked to TDCs within the conceptual framework of the theories of adult learning and transformative learning to guide my exploration of the influence of the TDCs on TPD. The theories emphasise that teachers as adults are motivated to learn if there is self-directedness and recognition of learners' prior experience; they are ready to learn, take an active role in their learning and see its immediate relevance and application.

The research approach was based on three basic premises of symbolic interaction (Section 6.2). Although the findings presented in Chapter seven indicated that the majority of teachers were involved in the TDC activities for their PD and that some teachers perceived some changes, there were many challenges such as TDC coordination, management and resources, which affected teachers' use of the TDCs for their PD. Therefore, according to the theory of symbolic interactionism, the TDC as a support strategy for TPD did not help teachers construct self, nor meanings of teaching as a profession in relation to others.

In addition, the findings of the study have demonstrated that although the TDCs in Malawi have a purpose-built infrastructure, there was the need for more PD activities at the TDCs rather than non-professional activities. Furthermore, the TDC coordinators had too many and challenging roles to perform in both the zone and district, which in turn had implications for their efficiency and effectiveness as coordinators of the TDCs. For the TDCs to be more effective there was a need to either create post of TDC coordinator and other staff responsible for TPD at various levels or reduce the roles of the PEAs to give room for the new job of TDC coordinator.

Finally, the findings have highlighted how developing countries such as Malawi can implement and cope with externally initiated education development programmes. As a member of a global village (Chapter Two), Malawi adopted the teacher centre (TC) concept to provide support for TPD. The programme was technically and financially supported by bilateral organisations such as, the Department for International Development (DfID), Gesellschaft fur Technische Zusammenarbeit (GTZ), and the Danish International Development Agency (DANIDA) in the construction of the TDCs. In addition, DfID was involved in the establishment of the TDCs and training of stakeholders in TPD. The findings suggest that, if not carefully planned, such programmes become unsustainable after the international donor stops providing funds. With regard to the TDCs in Malawi, when the project came to the end, the TDCs could not replenish the resources, there was no more

training of PEAs, head teachers and other school staff and the TDCs were slowly coming to a halt.

9.3 Contribution to theory of teacher professional

development

In the course of the present study, I developed my understanding of TPD by relating the theoretical perspectives to the conceptual framework presented in the literature review. I had to synthesise and expand my prior knowledge into a framework that adds new insights and structures for theoretical analysis, as part of my interpretation of the findings. What I have achieved in this study has been to present an understanding of the determinants of the influence of the TDCs in supporting TPD, which compares and complements the existing approaches to supporting TPD (Chapter Four). What I have presented is both as an illustration and manifestation of some determinants of the TDCs in supporting TPD. The existing literature does not always present the support strategy for TPD as supporting learning for change, but often presents theoretical issues unexamined in an empirical context and inherent in the classroom, subject matter and the teacher.

The findings of this study have contributed to the development of the theory about TPD in that studies on support strategies for PD of teachers are uncommon. Instead, most of the studies have focused on the impact of TPD on pupil learning (Fosnot, 2005a). Although PD of teachers would be made effective if the characteristics and principles of adult learning are applied, the use of the TDCs did not uphold such theories. While many people have pointed out that TPD is about adult learning, very few studies have applied to the theories of adult learning such as motivation, goal setting, experiential and pragmatic learning (Chapter Five). To me, the study has contributed to the theory of TPD in that constructing the TDCs in Malawi as a support strategy for PD was not enough to support TPD. There was a need to also incorporate the theories of adult learning and transformative learning to enhance teacher learning and change. The findings of the study, therefore, have demonstrated that just as TPD is complex, so too is a support strategy which includes policy, theories and practices of TPD as well as involvement of teachers and other stakeholders in TPD.

9.4 Implications of the study for practice

The findings of the study have implications for the concept of a TDC as a support strategy for the PD of teachers. In Chapter One of this thesis, it was stated that the aim of the study was to explore the influence of the TDCs as a support strategy for the PD of primary school teachers. The TDCs were a new initiative in providing support for teachers in Malawi. The assumption was that the TDCs were supporting teachers in their PD. The theoretical framework and subsequently the conceptual framework that I developed assisted in the interpretation of influence of the TDCs as a support strategy for TPD. It was anticipated that the findings would be of interest to professionals in the field of teacher education and development, curriculum designers concerned with the

development of the curriculum and curriculum materials, and other stakeholders.

The findings have revealed a number of issues which have implications for both theory and practice. First, the educational system has failed to conscientise teachers to their need for PD, as most teachers were not oriented to the use of the TDC for their PD, which makes it impossible for them to benefit fully and achieve ownership of the TDCs. This suggests that there is a need for the Ministry of Education, Science and Technology to engage teachers in PD that is ongoing, which begins with initial preparation and only ends when the teacher retires from the profession.

Second, the fact that the TDCs emphasised the non-TPD activities such as weddings, religious meetings and also those organised by the NGOs, more than TPD, meant that they were failing to serve the needs and interests of teachers. If the TDCs offer activities without defining professional values embedded in the activities, teachers cannot use the TDCs for their professional needs. Therefore, there is a need for both the TDC coordinators and teachers themselves to find ways of engaging in more PD activities which aim at improving their knowledge of the subjects they teach, including the content for learners of diverse educational needs.

Third, the fact that the TDCs were failing to involve teachers as adult learners in initiating, planning, developing and conducting their own PD activities with the support of the TDC coordinators meant that teachers mostly relied on externally-initiated activities which were sometimes irrelevant to their professional needs. If the activities at the TDCs are of little relevance to TPD, teachers may not see the need for using the TDCs for their PD. Therefore, there is a need for TPD to be systematically planned and supported to guarantee the effectiveness of its process.

Fourth, TPD was not integrated into the school calendar and national education development programmes for it to be sustained in the TDCs, suggesting that TPD was not part of the main stream of education system in Malawi. Having TPD integrated into the school calendar and national education development programmes may ensure that all teachers participate in PD.

Fifth, there were problems with coordination of the TDC activities because the TDC coordinators had too many roles and responsibilities which were sometimes conflicting, resulting in dilemmas and tensions in the coordinators. In most cases, the TDCs were closed when the TDC coordinators were away on other duties, making them inaccessible to teachers. Thus, there is a need to reduce the roles and responsibilities of the TDC coordinators or employ other staff at the TDC to take up some of the roles and responsibilities from the TDC coordinator. Related to the problems of coordination of the TDCs was that some TDC coordinators were not trained in TPD because they had been sent to replace those who were trained but had been posted away to head primary schools. The new TDC coordinators were not trained because there was no

more provision of training when the donor who funded the project finished its activities in Malawi. The implication is that some TDCs lacked the necessary expertise to support teachers in PD. Thus, there is a need for a more sustainable strategy of training the TDC coordinators by the Government of Malawi so that they are professionally competent in supporting TPD. The skills acquired during training would help the TDC coordinators to effectively coordinate, monitor and evaluate TPD programmes in Malawi.

Sixth, the TDCs had limited resources, implying that teachers were not getting the resource support they needed in PD. Teachers as adults are motivated to learn when they interact with adequate and relevant resources. Therefore, there is a need to have enough, appropriate and relevant resources in the TDCs in order to continue supporting teachers in their PD, because TPD not only helps teachers to improve their classroom practices but has a considerable impact on the success of educational reforms and their own development.

Seventh, the fact that the TDCs had no incentives attached to teacher involvement in PD activities implied that teachers would only be involved in PD at the TDCs when there are some incentives. Lack of incentives might not only have affected their classroom work but also their personal and institutional development. A clear policy on incentives is needed so that teachers engage in PD in Malawi without losing track of its value, because incentives such as certification would motivate teachers to engage in their own PD, resulting in promotion of quality education which is related to economic development of any country.

Eighth, the fact that there were no activities at the TDCs on special needs education meant that the TDCs were denying children with special education needs (SENs) quality education. If TDCs in Malawi were part of a support strategy for TPD, all teachers including those who teach children with SENs should have equal opportunities in the use of the TDCs with appropriate resources support.

The problems highlighted in this section have clearly indicated that if TPD is to take root in Malawi, there is a need for the government to have a clear policy to guide the development of the TDCs as a support strategy in PD.

9.5 **Recommendations**

Based on the findings of this study, I recommend the following:

- Examine the policy on teacher development and support in primary schools;
- Integrate TPD in the initial teacher training courses;
- Plan and implement TPD programmes with sufficient resources at the TDCs;
- Provide technical and financial support for conducting research in TPD;
- Allocate funds for workshops and seminars for stakeholders to share knowledge of the role of the TDCs in supporting TPD;

- Reduce the number of schools in a cluster for effective support for TPD;
- Promote school-based TPD which reflects on classroom experiences;
- Strengthen networking among the schools, between the schools and the TDCs as well as national and international education forums for a broader exposure and to share expertise;
- Prepare a national calendar of TPD activities to be integrated into the school calendar;
- Restructure teacher time in schools to allow for regular collaborative planning, lesson observation, evaluation of learning, development of curriculum, preparation of lesson plans, lesson demonstrations and peer observation to foster PD;
- Develop effective TPD based on learning theories such adult learning and transformative learning, for meaningful change in teachers;
- Train key participants such as teachers, head teachers and PEAs for effective coordination and management of TPD activities;
- Offer undergraduate and postgraduate courses in TPD and school improvement;
- Use collaborative approaches to TPD with all stakeholders, including the district, the division, Malawi Institute of Education, Teacher Training Colleges and institutions of higher education;
- Recognise teachers' efforts in TPD by providing incentives;
- Conduct regular monitoring and evaluation of TPD activities.

9.6 Evaluation of the study

This study has both strengths and limitations. The strengths are that the findings of the study have answered the research questions using both qualitative and quantitative research approaches. Triangulation was applied throughout the data collection, analysis and interpretation procedures, thus providing an in-depth understanding of the influence of the TDC in supporting TPD to come up with valid conclusions. The study has clearly demonstrated the importance of triangulation in the social dynamic conditions prevalent in the field. Triangulation has also demonstrated how complex the nature of TPD is and that further study is urgently required if teachers are to be assisted in the use of the TDC for TPD.

The complexity of the findings supports the argument for using different data sources. For example, it would not have been useful to ask the participants themselves to identify the influence of the TDCs in supporting TPD, because the positive influences could have been exaggerated or even invented while negative influences would have been conveniently overlooked (English, 1995). Furthermore, TPD activities might have been taking place at the TDCs which the key participants were not aware of because such activities had taken place slowly over a long period of time. That is why concerns such as these were addressed by using questionnaires and semi-structured interviews for data collection from different key participants. Using one method to collect data in these circumstances was not considered reasonable.

The data is remarkably diverse, providing rich and complex findings on the influence of the TDC on TPD, which was demonstrated by teachers and other key participants. At the same time, it was possible to identify a number of common issues or concerns, which emerged from different methods and data sources. The commonalities of perceptions among teachers and other key participants with different characteristics about the influence of the TDC in supporting TPD were a positive outcome because they demonstrated the extent to which different teachers and other key participants had similar perceptions concerning the influence of the TDCs in supporting TPD.

On the other hand, the study design and methods that determined the sample sizes and sampling procedures of the teachers and other key participants in Malawi made the results generalisable only to participants who share similar characteristics and settings. In short, the findings of this study are tentative as they are inductively developed, prone to subjectivity and subject to modification through subsequent research findings. Similarly, although they may have a wider applicability in the field of TPD, they can only be generalised to the sample under study.

Researchers of TPD have tended to examine more about the impact rather than the influence of the strategies for TPD. Consequently, little had been done to come up with established methodologies, instruments and procedures for studying the influence of the strategies for TPD. For this reason I had to construct my own instruments and procedures, which were rigorously validated through pilot testing within the period of my study.

A number of questions arise from my methods calling for an alternative approach if this study was to be conducted again. For example, investigating the influence of TDC as a support strategy for TPD using case study design would provide additional insight into TDC activities and their usefulness in promoting TPD. A case study would involve an exploration of a case such as a "programme, an event, an activity, or individuals" (Creswell, 1998:61) using different data collection methods, within a specific setting and time frame. Examining such cases would enable me to look deeper into the nature of the TDC activities for TPD using additional data collection methods such as observations and focus group interviews to describe the phenomenon of TPD in more detail.

In addition, since TPD seeks to improve pupil learning and achievement (Speck and Knipe, 2005; Guskey, 2000; Craig, Karft and Du Plessis, 1998), gathering quantitative data in the form of pupil test scores and qualitative data that explores teacher perspective transformation as a result of their involvement in PD, would provide a better understanding of the relationship between teacher change and pupil learning and achievement.

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9.7 Suggested areas for further research

What this research has accomplished is to point out that constructing a TDC is not a panacea for the problems of TPD but a means of influencing TPD. However, no research is complete as there will always be some areas that need clarification. It is against this background that I suggest that there is need to investigate:

- the effect of distance between the TDC and the schools on teacher involvement in the TDC activities;
- the effect of the TDCs on student learning;
- the impact of the TDC resources on TPD;
- how the nature and functions of the TDC management influence TPD;
- how the roles of the PEAs affect the coordination of the TDCs activities;
- the perceptions of teachers on the TDCs;
- the relationship between teacher characteristics and TPD;
- the perceptions of teachers on TPD;
- the appropriateness of TDC activities for TPD.

9.8 Summary

The main purpose of this study was to explore the influence of the TDCs as a support strategy for TPD. Attempts have been made to apply theories of adult learning in investigating the influence of TDCs in supporting TPD activities. Issues explored in the study included activities at the TDC; teacher involvement in the TDC activities for their PD; teacher perspective transformation as a result of their involvement; and factors which affected the sustainability of the TDCs for TPD.

The findings of the study indicated that there were, at the TDC, both PD activities such as making teaching and learning materials and curriculumrelated activities as well as non-professional activities such wedding and religious meetings. The findings also indicated that the majority of teachers were involved in TPD activities at the TDC although there were slight differences in their involvement regarding teacher sex, teacher academic qualifications, teacher management position at school and the TDC setting (urban/rural). Furthermore, the findings of the study indicated that the majority of those teachers who indicated that they were involved in a number of activities at the TDC for their TPD perceived a substantial change in their classroom practices as well as in their profession as a whole. Finally, despite the fact that the majority of teachers were involved in TDC activities for TPD and that some teachers perceived some changes, there were some challenges in the areas of policy guidelines, management of the TDCs, coordination of the TDC activities, resources at the TDCs, organisational factors, lack of training for the newly appointed PEAs (TDC coordinators), conflicting roles of the PEAs, distance from the schools which some teachers travelled to their TDCs and teacher desire for some incentives. These challenges resulted in dilemmas and tensions in teacher involvement in the TDC activities and affected the sustainability of the TDCs.

REFERENCES

Abdal-Haqq, I. (1996) Making time for teacher professional development. **Teaching and Teacher Education**. Washington DC: Eric Digest. [On-line]. Available at: http://www.ericdigests.org/1997-2/time.htl. [Accessed: 18/07/2009].

Adams, E. (Ed.) (1975) **In-service Education and Teacher Centres**. Oxford: Pergamon Press.

Adelabu, M. (2006) Globalisation and Imperatives for Changes in Educational Policy Making and Implementation in Nigeria. A Paper Presented At The 3rd Vittachi.

Alter, C. and Hage, J. (1993) **Organizations Working Together**. Newebury Park, CA: Sage.

Argyris, C. and Schon, D. A. (1978) Organisational learning: A Theory of Action Perspective. San Francisco: Jessey-Bass.

Asgedom, A., Desta, D., Dufera, D., Leka, W., Barrow, K., Leu, E., and Price-Rom, A. (2006) Ethiopia Pilot Study of Teacher Professional Development Quality in Education, Teaching, and Learning: Perceptions and Practice. Addis Ababa: Institute of Educational Research Addis Ababa University with Academy for Educational Development (AED).

Australian Council of Professions, (2004) **About Professions Australia: Definition of a Profession.** [On-line] Available at <u>http://www.professions.com.au/defineprofession.html</u>. Accessed: 20/02/2011.

Ayot, H. (1983) Teacher advisory centres in Kenya. In: Greenland, J (Ed.) **The In-service Training of Primary School Teachers in English-Speaking Africa.** London: Macmillan Press: pp. 1–20.

Banda, G. M. K. (2001) **Towards staff development for primary school teachers in Malawi**. B.Ed Dissertation (unpublished), University of Nottingham, UK.

Banda, G. M. K. (2002) An Evaluation of head teacher training course in Malawi. M.A (Ed) Dissertation (unpublished), University of Nottingham, UK.

Banda, G. M. K., Chisale, S., Chona, M., Kanjala, B., Longden, K. and Reed, J. (1999) Setting Up Teacher Development Centre in a Zone – The First Steps; Guidance for primary education advisors, (unpublished papers). Banda, K. N. (1982) **A Brief History of Education in Malawi.** Blantyre: Dzuka Publishing Company Ltd.

Baumgartner, L. M. (2003). Self-directed learning: A goal, process, and personal attribute. In L. Baumgartner (Ed.) **Adult Learning Theory: A primer,** Columbus, OH: Center on Education and Training for Employment, pp. 23-28. [Online]. Available at: http://cete.org/acve/majorpubs.asp. [Accessed on: 10/05/2011].

Becker, G. S. (2006) **The Age of Human Capital. The Concise Encyclopaedia of Economics.** [On-line] Available at: <u>http://www.econlib.org/libraryEnc/HumanCapital.html</u>. [Accessed: 03/01/2010].

Bell, L. (1991) Approaches to the PD of teachers. In: Bell, L and Day, C. (Eds.). **Managing the Professional Development of Teachers.** Milton Keynes: Open University Press: pp. 3-22.

Bennell, P. and Mukyanuzi, F. (2005) **Is there a teacher motivation crisis in Tanzania?** [On-line].Available at: http://www.elds.org/html. [Accessed 28/03/2008].

Bernard, H. R. (2002) **Research Methods in Anthropology: Qualitative and Quantitative Approaches.** 3rd ed. Walnut Creek: Alta Mira Press.

Bernier, N. R. and McClelland, A. E. (1989) The social context of professional development. In: Holly, M. L. and McLaughlin, C. S. (Eds.) **Perspectives on Teacher Professional Development: the Continuing Agenda.** East Sussex: The Falmer Press: pp. 19-53.

Bezeau, L. M. (1989) Educational Administration for Canadian Teachers. Ontario: Copp Clark Pitman Ltd.

Bhola, H. S. (2000) Reclaiming old heritage for proclaiming future history: the knowledge-for development debate in African contexts. **Africa Today**, 49 (3). [On-line]. Available <u>http://www.iupress.indiana.edu/journal/africatoday/af149-3.html</u>. [Accessed: 30/04/2008].

Bishop, G. (1986) Innovation in Education. London: MacMillan.

Black, P. and William, D. (1998) **Inside the Black Box: Raising Standards Through Classroom Assessment.** London: King's College.

Blackman, C. A. (1989) Issues in professional development: the continuing agenda. In: Holly, M. L. and McLaughlin, C. S. (Eds.) **Perspectives on Teacher Professional Development: the Continuing Agenda.** London: The Falmer Press. pp. 1–15.

Blackwell, J. (1977). Teacher's group, centres and curriculum development. In: L. Ankrah-Dove (Ed). **Teachers Groups and Centres in developing countries: Report of a Workshop help jointly by the British Council and the Department of Education in Developing Countries**, London: University of London, School of Education.

Blandford, S. (2000) Managing Professional Development in Schools. London: Routledge.

Blaxter, L., Hughes, C. and Tight, M. (2006) **How to Research.** 3rd ed. Milton Keynes: Open University Press.

Blumer, H (1969) **Symbolic Interactionism: Perspective and Method**. Berkeley: University of California Press.

Bogdan, R. C. and Biklen, S. K. (1992) **Qualitative Research for Education: An Introduction to Theory and Methods.** 2nd ed. Boston: Allyn and Bacon.

Bolam, R. (1993) **Recent Developments and Emerging Issues in the Continuing Professional Development of Teachers**. London: GTC.

Bolam, R. and McHahon, A. (2004) Literature, definitions and models: towards a conceptual map. In: Day, C. and Sachs, J. **International Handbook on the Continuing Professional Development.** Berkshire: Open University Press.

Borko, H., Elliott, R., and Uchiyama, K. (2002) Professional development: a key to Kentucky's educational reform effort. **Teacher and Teacher Education**, **18**: pp.969-987.

Boyd, R. D. (1989) Facilitating Personal Transformation in Small Groups, Part I. **Small Group Behaviour, 20**.

Brannen, J. (Ed.) (1992) Mixing Methods: Qualitative and Quantitative Research. Aldershot: Avebury.

Bransford, J., Brown, A. L., and Cocking, R. R. (2000) **How People** Learn: Brain, Mind, Experience, and School. Washington: National Academies.

Bransford, J., Darling-Hammond and LePage, P., (2005) (Eds) **Preparing Teachers for Changing World.** San Francisco: Jossey-Bass.

Brookfield, S. D. (1986) Understanding and Facilitating Adult Learning. San Francisco: Jossey-Bass, Inc.

Brugelmann, H. (1975) **The Teacher Centre, Safari Case Studies**. Norwich: University of East Anglia, Centre for Applied Research in Education, Occasional Publications (3).

Bryk, A. and Schneider, B. (2002). **Trust in Schools: A Core Resource for Improvement.** New York: Russell Sage Foundation.

Bryman, A. (2004) **Social Research Methods.** 2nd ed. Oxford: Oxford University Press.

Bull, B., Buechler, M., Didley, S., and Krehbiel, L. (1994) **Professional Development and teacher time: Principles, guidelines, and policy options for Indiana.** Bloomington, IN: Indiana Education Policy Center, School of Education, Indiana University.

Burbules, N., and Densmore, K., (1991) The limits of making teaching a profession. **Educational Policy**, **5**(1): pp. 44–63.

Burgess, R. G. (Ed) (1993) Educational Research and Evaluation for Policy and Practice. London: The Falmer.

Burns, R. B. (2000) Introduction to Research Methods. London: Sage.

Bush, W. S. (1999) Not for sale: why a bankroll alone cannot change teaching practice. Journal of Staff Development, 20(3): pp. 61-64.

Buxton, A. P. (1976) Teacher active learning centre (TALC): A case study. **Educational Leadership**, **33(6):** pp. 423-433.

Calderhead, J. (1988) **Teacher's Professional Learning**. London: The Falmer Press.

Caldwell, B. J. and Spinks, J. M. (1988) **The Self- Managing School.** Lewes: Falmer Press.

Cambone, J. (1995) Time for teachers in school restructuring. **Teachers College Record**, **96(3):** pp. 512-43.

Carter, B. and Dearmum, A. K. (1995) Child Health Care Nursing: Concepts, Theory and Practice. Oxford: Blackwell Science.

Centre for Human Rights and Rehabilitation (CHHR), (2011) Final end of Year Report of the "Learn without Fear" Project. Plan Malawi, Lilongwe, Malawi.

Chelu, F. and Mbulwe, F. (1994) The Self-help Action Plan for Primary Education (SHAPE), Zambia. In: Little, A., Happers, W, and Gardner, R.

(Eds.). **Beyond Jomtien: Implementing Primary Education for All.** London: Macmillan, pp. 99–123.

Chimwenje, D. (2003) **Secondary Teacher Education in Malawi.** A paper presented at an International seminar on Teacher Education held on 27-28 March 2003 at Chancellor College, Zomba.

Chona, M. G. (1996) **The Teacher Resource Centres: Ideas from the Arusha Workshop**. Lilongwe: Ministry of Education, Science and Technology.

Christie, P., Harley, K., and Penny, A. (2004) Case studies from sub-Saharan Africa. In: Day, C. and Sachs, J. (2004) **International Handbook on the Continuing Professional Development**. Buckingham: Open University Press, pp. 167 – 190.

Clarke, D and Hollingsworth, H. (2002) Elaborating a model of teacher professional growth. **Teaching and Teacher Education**, **18(5)**: pp. 947–967.

Clement, M. and Vandenberghe, R. (2000) Teachers' professional development: a solitary or collegial (ad)venture? **Teaching and Teacher Education, 16:** pp. 81-101.

Cogburn, D. L. and Adeya, C. N. (1999) **Globalisation and the information economy: challenges and opportunities for Africa.** A Paper prepared as a working paper for the African Development Forum '99 24-28 October 1999, United Nations Conference Centre, United Nations Economic Commission for Africa, Addis Ababa, Ethiopia [On-line]. Available at: <u>http://</u>www.unu.edu/africa/papers/cogburn-adeya.pdf. [Accessed: 30/04/2008].

Cohen, D. K., and Ball, D. L. (1999) **Instruction, Capacity, and improvement.** CPRE Research Report No. RR-043. Consortium for Policy Research in Education, University of Pennsylvania, Philadelphia, PA.

Cohen, L and Manion, L (1994) **Research Methods in Education.** 4th ed. London: Routledge.

Cohen, L., Manion, L. and Morrison, K. (2000) **Research Methods in Education.** 5th ed. London: Rutledge/Falmer.

Commonwealth Secretariat (1980) In-service Teacher Education in Commonwealth Africa. A Report of a Commonwealth Regional Workshop, 15-25 May, 1979, Swaziland. London: Commonwealth Secretariat. Conlan, J., Grabowski, S., and Smith, K. (2003) Adult Learning. In M. Orey (Ed.), Emerging perspectives on learning, teaching, and technology. [Online]. Available at: <u>http://projects.coe.uga.edu/epltt/</u>. [Accessed: 14/03/2011].

Conner, M. L. (2007) **How Adults Learn. Ageless Learner**. [On-line] available at: http://agelesslearner.com/intros/adultlearning.html. [Accessed: 09/07/2011]

Corcoran, T. C. (1995) **Transforming Professional Development for Teachers: A Guide for State Policymakers.** Washington, DC: National Governors' Association.

Coulby, D. (2005) The knowledge economy: technology and characteristics. In: Coulby, D and Zambeta, E. (Eds.) **Globalisation and Nationalism in Education**. Oxon: Rutledge/Falmer: pp 23-36.

Craft, A. (2000) **Continuing Professional Development.** London: Open University.

Craig, H. Kraft, R. and du Plessis, J. (1998) **Teacher Development: Making an Impact**. Washington DC: ABEL Clearinghouse for Basic Education Academy for Educational Development

Cranton, P. (1992) **Working with Adult Learners** Toronto: Wall and Emerson, Inc.

Cranton, P. (Ed.) (1997) **Transformative Learning in Action: Insights from Practice. New Directions for Adult and Continuing Education No. 74**. San Francisco, CA: Jossey-Bass.

Crawford, M., Kydd, L. and Riches, C. (1997) (Eds). Leadership and Teams in Educational Management. Buckingham: The Open University Press.

Creswell, J. W. (2003) **Research Design: Qualitative and Quantitative Approaches.** London: SAGE Publications.

Creswell, J. W. and Clark, V. L. (2007) **Designing And Conducting Mixed Methods Research.** Thousand Oaks, CA: Sage.

Crime and Justice Statistics Division, National Statistics Office, (2005) Suffering at School: Results of the Malawi Gender-Based Violence in Schools Survey. Pretoria: Institute of Security Studies.

Crossley, M., Herriot, A., Waudo, J., Mwirotsi, M., Holmes, K., and Juma, M. (2005) Research and Evaluation for Educational Development: Learning from the PRISM Experience in Kenya. Oxford: Symposium Books Cryer, P. (2006) **The Research Student's Guide to Success**. 3nd ed. Maidenhead: Open University Press.

Dalgarno, B. (1996) Constructivist computer assisted learning: theory and technique. **ASCILITE Conference, 2-4 December 1996**. [Online]. Available at: http://www.ascilite.org.au/conferences/adelaide96/papers/21.html.

[Accessed: 20th May, 2008].

Daloz, L. A. (1986) Effective Teaching and Mentoring. San Francisco: Jossey-Bass, Inc.

Daniels, H. (1999) **The Missing Link in School Reform: Professional Development, Testimony Before the US Senate Labor and Human Resources Committee, Subcommittee on Education, Arts, and Humanities.** [On-line] Available at: <u>http://www.ncrel.org/mands/docs/7-10</u> htm. [Accessed 22/04/2003].

Darling-Hammond, L. (1996) The quiet revolution: rethinking teacher development. **Educational Leadership**, **53**(6): pp. 4-10.

Darling-Hammond, L. (1999) Target time towards teachers: Journal of Staff Development, 20(2): pp. 31-36.

Darling-Hammond, L., and Hudson, L. (1990) Precollege science and mathematics teachers: Supply, demand, and quality. **Review of Research in Education**, **16**(1), 223-264.

Davies, N. (1999) **The globalisation of education through teacher education with new technologies: a view informed by research** [online]. Available at: www.editlib.org/index.cfm/files/paper-pdf.htm. [Accessed: 12/05/2008].

Davies, R. V. (1978) How to involve teachers in their own in-service work, through a Teacher centre. An Article Based on a Paper Presented to the Annual DES/NATHFE Conference, Bristol Polytechnic, September 1978: pp. 30-38.

Day, C. (1993) Reflection: a necessary but not sufficient condition for professional development. British Educational Research Journal, 19 (1): pp. 83-93.

Day, C. (1994) Planning for the professional development of teachers and schools: a principled approach. In: Simpson, T. (Ed.) **Teacher Educators Handbook.** Brisbane: Queens University of Technology: pp. 216-288.

Day, C. (2000) Effective Leadership and Reflective Practice. **Reflective Practice**, **1**(1): pp.113-130.

Day, C. and Sachs, J. (2004) International Handbook on the Continuing Professional Development. Buckingham: Open University Press. Dean, J. (1991) Professional Development in Schools. Milton Keynes: Open University Press.

Dembele, M. and Miaro-II, B. (2003) **Pedagogical Renewal and Teacher Development in Sub-Saharan Africa: A Thematic Synthesis - Working Document.** Paris: Association for the Development of Education in Africa.

Denzin, N. K. and Lincoln, Y. (Eds.) (1994) Handbook of Qualitative Research. Thousand Oaks, CA: Sage.

Dewey, J. (1938) Experience and Education. New York: Collier.

Dladla, N and Moon, B. (2002) **Challenging the assumptions about teacher education and training in Sub-Saharan Africa: A New role for open learning and ICT.** A Paper presented to the Pan Commonwealth Forum on open learning International Convention Centre, Durban, South Africa, July 29 – 2 August 2002.

Dorph, G. Z. and Holtz, B. W. (2000) Professional development of teachers: Why doesn't model change? **Journal of Jewish Education**, **66(1/2)**: pp. 67-76.

Duke, D. L. and Stiggins, R. J. (1990) Beyond minimum competence: evaluation for Professional Development. In: Millman, J. and Darling-Hammond, L. (Eds.) **The New Handbook of Teacher Evaluation: Assessing Elementary and Secondary School Teachers.** Newbury Park, California: SAGE: pp. 116-133.

Edelfelt, R. and Hruska, M. (1982) British-American exchange on teacher centres. British Journal of In-service Education, 9(2): pp. 80-87.

English, R. (1995) INSET: initiating change or merely supporting it? British Journal of In-Service Education, 21 (3): pp. 295-309. Eraut, M. (1994) Developing Professional Knowledge and Competence, London: Falmer Press.

Evans, L. (2002) What is Teacher Development? **Oxford review of Education**, **28** (1): pp. 123-137.

Everard, K. B. and Morris, G. (1996) Effective School Management. Third Edition. London: Paul Chapman. Farrell, L. P. and Oliveira, L. B. (Eds.) (1993) **Teachers in Developing Countries: Improving Effectiveness and Managing Costs.** Washington DC: World Bank, Economic Development Institute Seminar Series.

Feiman, S. (1977) Teacher Centers: What Place in Education? Journal of Teacher Education, 30(2): pp. 47-48. Feiman-Nemser, (2001) From preparation to practice: designing a continuum to strengthen and sustain teaching. Teacher College Record, 103(6): pp. 1013-1055.

Field, A. (2000) **Discovering Statistics Using SPSS for Windows.** London: SAGE Publication.

Fielding, J. and Gilbert, N. (2006) **Understanding Social Statistics.** 2nd ed. London: SAGE Publications.

Foddy, W. H. (1994) Constricting Questions for Interviews and Questionnaires: Theory and Practice in Social Research. Cambridge: Cambridge University Press.

Fraenkel, J. R. and Wallen, N. E. (2009) **How to Design and Evaluate Research in Education, 7th Ed.** New York: McGraw-Hill

Franke, M., Carpenter, T., Fennema, E., Ansell, E., and Behrend, J. (1998). Understanding teachers' self-sustaining, generative change in the context of professional development. **Teaching and Teacher Education**, **14** (1): pp. 67–80.

Freire, P. (1970) **Pedagogy of the oppressed.** New York: Herder and Herder.

Fullan, M. (1995) The limits and potential of professional development, In:

Guskey, T. R. and Huberman, M. (Eds.) **The Professional Development in Education: New Paradigms and Practices.** New York: Teacher College Press: pp. 253–367.

Fullan, M. G. (1991) **The New Meaning of Educational Change**. New York: Teachers College Press.

Fullan, M. G. (1996) What's Worth Fighting for in your School. New York: Teachers College Press.

Ganser, T. (2000) An ambitious vision of professional development for teachers. **NASSP Bulletin, 84** (618): pp. 6-12.

Geiger, P. (1996) The politics of professional development. American School and University, 68: p. 40.

Gibb, J. R. (1960) Learning Theory in Adult Education. In: M.S. Knowles (Ed.), **Handbook of Adult Education in the United States.** Washington, D.C., Adult Education Association of the USA.

Gibbs, W. and Kazilimani, J. (1998) Teacher resource centres in Zambia. In: Knamiller, G. (Eds.). **The Effectiveness of Teacher Resource Centre Strategy**: **Full Report. [On-line]** Available at: http://www.dfid.org.gov.uk/AboutDFID/education/research/library/content

<u>s/c0176e/ch10</u>. [Accessed: 17/11/2003].

Giddens, A. (1990) **The Consequences of Modernity**. Stanford: Stanford University Press.

Glewwe, P. and Kremer, M. (2000) Schools, Teachers and Education Outcomes in Developing Countries. A Second Draft Chapter for Handbook on Economics of Education. Harvard University, Brooking Institute Centre for Global Development, and NBER.

Gorman, C. (2008) Malawi halts nursing brain drain, Lilongwe, Malawi.

Gough, B. (1989) 20 Years or so of Teacher centres. What have we learnt? What can we share? **British Journal of In-service Education**, **15**(2): pp. 51-54.

Gough, B. (1997) Teacher's centres as seen through the pages of the British Journal of In-service Education, **British Journal of In-service Education**, **23** (1): pp. 23-29.

Gould, D., Drey, N. and Berridge, E. (2007) Nurses' experiences of continuing professional development. **Nurse Education. Today, 27:** pp. 602–609.

Greenland, J. (Ed.) (1983) **The In-service Training of Primary School Teachers in English-Speaking Africa.** London: Macmillan Press.

Grieve, K. (2003). Supporting learning, supporting change: A research project on self-management and self-direction. Toronto: Ontario Literacy Coalition. [Online]. Available at: http://www.on.literacy.ca/research/smsdfld/smsd_fld.pdf. Accessed on: 10/05/2011.

Griffiths, M. (1998) Educational Research for Social Justice. Buckingham: Open University Press.

Gross, R. D. (1987) **Psychology: the Science of Mind and Behaviour**. London: Holder and Stoughton. Grossman, P., Schoenfeld, A, and Lee, C. (2005) Teaching subject matter. In: Darling-Hammond, L. and Bransford, J. (Ed.) **Preparing Teachers for a Changing World.** San Francisco: Jossey-Bass, pp. 201 - 231. Gunasekaia, C. 2007. Pivoting the Centre: Reflections on Understanding of Qualitative Interviewing in Academia. **Qualitative Research**, 7 : pp. 461-471.

Guskey, T. R. (1986) Staff development and the process of teacher change. **Educational Researcher**, **15**(5): pp. 5-12.

Guskey, T. R. (1995) The PD in education: in search of the optimal mix. In:

Guskey, T. R. and Huberman, M. (Eds.) the Professional Development in Education: New Paradigms and Practices. New York: Teacher College Press, pp. 114–132.

Guskey, T. R. (2000) **Evaluating Professional Development.** California: Cornwin Press.

Guskey, T. R. and Huberman, M. (Eds.) (1995) **The Professional Development in Education: New Paradigms and Practices.** New York: Teacher College Press.

Guskey, T. R. and Sparks, D. (1996) Exploring the relationship between staff development and improvements in students learning. Journal of Staff Development, 17(4): pp. 34-48.

Hammersley, M. (2003) Can and should educational research be educative. **Oxford Review of Education, 29** (1): pp. 3- 25.

Hargreaves, A. (1994) Changing Teachers, Changing Times: Teachers' Work and Culture in the Postmodern Age. London: Cassell.

Hargreaves, A. (2000) Four Ages of Professionalism and Professional Learning. **Teachers and Teaching: Theory and Practice, 6**(2): pp. 151–182.

Hargreaves, A. and Goodson, I. (1996) Teachers professional lives: aspirations and actualities. In: Goodson, I. and Hargreaves, A. (Eds.) **Teachers Professional Lives.** London: The Falmer Press: pp. 1–27.

Hargreaves, A. and Goodson, I. (2002) Series editors' preface. In: Hoban, G.F. (Ed.). Teacher Learning for Educational Change: A Systems Thinking Approach. Buckingham: Open University Press: p. x.

Harvey, L., and Knight, P. (1996) **Transforming higher education.** Buckingham: SRHE/Open University Press. Hattie, J. and Timperley, H. (2007) The power of feedback. **Review of Educational Research**, 77 (1): pp. 81–112.

Hauya, R. (1993) **Primary School Education in Malawi: The Question of Curriculum**. Domasi: MIE.

Hawes, H. (1977) The role of Teacher groups and centres in developing countries. In: Ankrah-Dove, L. (Ed.) **Teachers Groups and Centres in Developing Countries: Report of a Workshop Help Jointly by the British Council and the Department of Education in Developing Countries**. London: University of London.

Hellawell, D. 2006. Inside-out: Analysis of the Insider-Outsider Concept as a Heuristic Device to Develop Reflexivity in Students Doing Qualitative Research. **Teaching in Higher Ed, 11**: pp. 483-494.

Henderson, E. S. (1978) **The Evaluation of In-service Teacher Training.** London: Croom Helm.

Hitchcock, G. and Hughes, D. (1995) **Research and the Teacher**. 2nd ed. London: Routledge.

Hockey, J. (1993). Research Methods – Researching Peers and Familiar Settings. **Research Papers in Education. 16** (2), 1-15.

Hopkins, D. (2001) **School Improvement for Real**. London: Routledge Falmer.

Hoppers, W. (1996) **Teacher centres and Resource work in Southern African Education: An investigation into decentralisation and educational reform.** Paper presented at NASEDEC Conference, October 1996, Harare, Zimbabwe.

Hospers, J. (1997) An Introduction to Philosophical Analysis. 4th ed. London: Routledge.

Hoyle, E. (1995) **Professional Knowledge and Professional Practice.** London: Cassell.

Huberman, M. (1989) The professional Life Cycle of Teachers. **Teachers College Record**, **91**(1): pp. 31-57.

Huberman, M. (1992) Teacher development and instructional mastery. In: A. Hargreaves and M. G. Fullan (Ed) **Understanding Teacher Development**. New York: Teacher College Press: pp. 122-142.

Huberman, M. (1993) **The Lives of Teachers**. New York: Teachers College Press.

Huberman, M. (1995) Professional careers and professional development. In: Guskey, T. R., Huberman, M. (Eds) **Professional Development in Education: New Paradigms and Practices.** New York: Teachers Colleges Press.

Hunt, D. E. (1975) Person-environment interaction: a challenge found wanting before it was tried. **Review of Educational Research**, **45**: pp. 209-230.

Iheanachor, O. U. (2007) **The influence of teachers' background, professional development and teaching practice on students' achievement in mathematics in Lesotho.** [On-line]. Masc. (Mathematics Education) Dissertation, University of South Africa. Available at: http://www.eld.unisa.ac.za/ETD-db/thesis/available/etd-/unrestricted/dissertation.pdf. [Accessed: 18/04/2008].

Ingalls, J. D. (1984) A Trainers' Guide to Andragogy. Washington D. C. Peace Corps.

InWent-Internationale Weiterbildung und Entwicklung, (2008) Learnercentered Education: Approaches to Successful Classroom Teaching and Learning. Lilongwe: Ministry of Education, Science and Technology.

Jackson, C. J. and Furnham, A. (2000) **Designing and Analysing Questionnaires and Surveys: A Manual for Health Professionals and Administrators.** London: Whurr.

Jackson, W. (1996) **Survey of an Adult Learner.** [On-line]. Available at: <u>http://internet.cybermesa.com/~bjackson/Papers/?Adultlearner.htm</u> [Accessed: 09/07/2011].

Jarvis, P. (2004) Adult Education and Lifelong Learning: Theory and Practice. 3rd ed. London: Routledge Falmer.

John, G. M. (1993) **Report on Teachers Centres to the Field Manager, Andhra Pradesh Primary Education Project**. Madras 600 002: APPEP/British High Commission, British Council Division.

Kadzamira, E. C. (2003) Where Has All the Education Gone in Malawi: Employment Outcomes of Secondary and University Leavers. Brighton: Institute of Development Studies.

Kadzamira, E. C. (2006) **Teacher motivation and incentives in Malawi.** [On-line]. Available at: <u>http://www.eldis.org/go/country-</u> profilesandid=33281andtype=document.htm. [Accessed: 11/08/2009]. Kadzamira, E. C. and Chibwana, M. (2000) Gender and Primary Schooling in Malawi, IDS Research Report No 40. Brighton: Institute of Development Studies.

Kadzamira, E.C., Swainson, N., Maluwa-Banda, D., and Kamlongera, A (2001) **The Impact of HIV/AIDS on Formal Schooling in Malawi**. Brighton: Centre for International Education, University of Sussex.

Kadzombe, E. D. (1992) Professionalisation of teaching. In: Roy J. R. Hauya (Ed) **Training for Effective Teaching: A Review of the Strategies.** MIE, pp. 19-23

Kahn, H. (1982) The role of Teacher centres in in-service education. **Trends in Education, 1977**(3): pp. 27-31.

Kahn, H. (1991) **Teacher Resource Centres, Commonwealth Education Handbooks**. London: Commonwealth Secretariat.

Kallestab, J.H. and Olweus, D. (1998) Teachers, emphases on general educational goal: a study of Norwegian Teachers. Scandinavian Journal of Educational Research, 42(3): 257-279

Kaperemera, N. T. (1992) Primary and Primary Teacher Education Curriculum Change in Malawi. A Discussion Paper Presented at Workshop for DIS, Domasi, Malawi. Domasi: MIE.

Kaphesi, E. S. (2000) English Versus Chichewa in mathematics teaching. A case study of teachers in selected primary schools in Zomba, Malawi. In: Pfaffe, J. F. (2000) (Ed.). Local Languages in Education, Science and Technology: Proceedings of the Second National Symposium on Language Policy Formulation held at Sun 'n' Sand, Mangochi, Malawi, 25 - 28 October 2000. Zomba: Centre for Language Studies.

Kapinga, S. R. (1996) Tanzania resource centres. A Country Paper Presented at Regional Workshop on TRCs. 3-7 June, 1996, Arusha, Tanzania. Dar res Salaam: Ministry of Education, Science and Technology.

Kayuni, H. and Tambulasi, R. (2007) Teacher turnover in Malawi's Ministry of Education, Science and Technology: Realities and Challenges. **International Education Journal, 8** (1): pp. 89 – 99.

Kegan, R., Broderick, M., Drago-Severson, E., Helsing, D., Popp, N., and Portnow, K. (2001) **Towards a new pluralism in ABE/ESOL programs: Teaching to multiple "cultures of mind."** NCSALL Reports No.19. Cambridge, MA: National Center for the Study of Adult Learning and Literacy. [Online]. Available at http://ncsall.gse.harvard.edu/research/19_c1.pdf (ERIC Document Reproduction Service No. ED 465 014. [Accessed on: 10/05/2011].

Kegan. R. (1982) The Evolving Self: Problem and Process in Human Development. Cambridge, MA: Harvard University Press.
Kelchtermans, G. (2004) Continuing professional development for professional renewal beyond knowledge for practice. In: Day, C and Sachs, J. International Handbook on the Continuing Professional Development of Teachers. Bershire: Open University Press, pp. 215 – 238.

Kelly, P. P. and McDiarmid, G. W. (2002) Decentralisation of professional development: teacher decision and dilemmas. Journal of In-Service Education, 28 (3): pp. 409-425.

Kennedy, P. (1999) Sub-Saharan Africa's Current Plight and the Threat or Promise of Globalisation. **Global Society**, **13**(4): pp. 441-466.

Kerka, S. (2005) **Teaching Adults: Is It Different? ERIC Myths and Realities No. 19.** [On-line]. Available at: <u>http://ericacve.org/docgen.asp?tbl=mrandid=111</u>. [Accessed: 09/07/2011].

Kettle, B. and Sellar, N. (1996) The development of student teachers' practical theory of teaching. **Teaching and Teacher Education**, **12**(1): 1-24

Kiely, R. (1998) Globalisation (post-) Modernity and the third world. In:

Kiely, R and Marfleet, P. (Eds.) (1998) Globalisation and the third world. London: Routledge: pp. 1-22.

King, K. P. (2000) The Adult ESL Experience: Facilitating perspective transformation in the classroom. Adult Basic Education, 10(2), 69-89.

Kishindo, E. J. (1990) A Historical Survey of Spontaneous and Planned Development of Chichewa. Language Reform, V: pp. 59-81.

Knamiller, G. (Ed.) (1999) **The Effectiveness of Teacher Resource Centre Strategy: Full Report. Education Research Paper No. 34.** London: Department for International Development. [On-line]. Available at:

http://www.dfid.org.gov.uk/AboutDFID/education/research/library/content s/c0176e/ch10. Accessed: 17/11/2003.

Knamiller, G., Maharjan, S., and Shresth, R. (1999) Teacher resource centres in Nepal. In: Knamiller, G. (Ed.) **The Effectiveness of Teacher Resource Centre Strategy.** Leeds: Department for International Development. [On-line]. Available at http://www.dfid.org.gov.uk/AboutDFID/education/research/library/content s/c0176e/ch10. [Accessed: 17/11/2003].

Knight, A. and Morledge, R. (2005) Professionalism and ethical decision making. In: Sidwell, A. C. (2005) **Conference Proceedings, 4-5.** Brisbane, Australia

Knight, P. (2002) A systematic approach to PD: learning as practice. **Teaching and Teacher Education, 18** (2): pp. 229-241.

Knowles, M. (1980) **The Modern Practice of Adult Education: From Pedagogy to Andragogy.** Englewood Cliffs, NJ: Prentice Hall Regents.

Knowles, M. (1984) Andragogy in Action. Applying Modern Principles of Adult Education. San Francisco: Jossey Bass.

Knowles, M. (1990) **The Adult Learner: A Neglected Species**. 4th Ed. Houston: Gulf Publishing Company.

Knox, A B. (1977) Adult Development and Learning: A Handbook on Individual Growth and Competence in the Adult Years. San Francisco: Jossey-Bass, Inc.

Kohlberg, L. (1969) Stage and Sequence: The Cognitive Developmental Approach to Socialization. In D.A. Goslin (Ed.), **Handbook of Socialization Theory and Research,** Chicago: Rand-McNally: pp. 347-380.

Kolb, D.A. (1984). Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs, N. J.: Prentice-Hall.

Kumar, R. (2005) **Research Methodology: A step-by step Guide for Beginner**. 2nd Edition. London: SAGE Publisher.

Kunje, D. and Chimombo, J. (1999) Malawi: A baseline study of the teacher education system. A **Discussion Paper 5.** Sussex: MUSTER Centre for International Education, University of Sussex institute of Education.

Kunje, D. and Chiwaula, L. (2010) Action research for human development and progress in primary schools in Zomba, Malawi. **The Malawi Journal of Education and Development, 3**: pp. 15-34.

Kunje, D. and Stuart, J. S. (1996) An evaluation of the emergency teacher programme in Malawi. A **Report for ODA.** Lilongwe: Ministry of Education, Science and Technology.

Kunje, D., Lewin, K. and Stuart, J. (2000) **Primary Teacher Education in Malawi: Insights into Practice and Policy. Country Report 3.** Sussex: Centre for International Education.

Kvale, S. (1996) InterViews: An Introduction to Qualitative Research Interviewing. Newbury Park, CA: Sage Publications.

Kwame, Y. (2007) **The Impact of Globalization on African Culture**. Odense: University of Southern Denmark.

Lam, S. (2001) Educators' opinions on classroom observation as a practice of staff development and appraisal. **Teaching and Teacher Education**, **17**(2): pp. 161-173.

Lave, J. and Wenger, E (1991) **Situated Learning. Legitimate Peripheral Participation.** Cambridge: Cambridge University Press.

Leggate, M. and Russell, E. (2002) Attitudes and trends of primary care dentists to continuing professional development: a report from the Scottish dental practitioners survey 2000. **British Dentist Journal, 193**: pp. 465–469.

Levinson, D. J., Darrow, C. N., Klien, E. B. (1979) The Season's of a Man's Life. New York: Alfred A. Knopf.

Lewin, K. M. (1999) **Counting the cost of teacher education: cost and quality issues.** Discussion Paper, Centre for International Education, University of Sussex institute of education. [On-line] Available at: <u>http://www.sussex.ac.uk/usie/muster/list.html</u> [Accessed: 18/01/2011].

Lewin, K. M. (2007) Long Term Planning for EFA and the MDGs: Modes and Mechanisms. Pathways to Access Research Monograph No 7, Consortium for Research on Equity, Access, and Transitions in Education (CREATE). Centre for International Education, University of Sussex.

Lieberman, A. (1994) Teacher development: commitment and challenge. In: Grimmett, P. P. And Neufield, J. (Ed) **Teacher Development and the Struggle for authenticity: Professional Growth and Restructuring in context of change.** New York: Teachers College Press.

Lieberman, A. and Miller, L. (1999) **Teachers--Transforming Their World and Their Work**. New York: Teachers College Press.

Lilly, C. D. (1990) A study of the Development of Teacher Centres in Kenya and Tanzania and the Resulting implications for the setting up of Further Teacher Centres, unpublished M.Ed. Thesis, School of Education, University of Leeds. Lindeman, E. C. (1926) **The Meaning of Adult Education.** New York: New Republic, Inc., 1926.

Lipman, P. (1997) Restructuring in context: A case study of teacher participation and the dynamics of ideology, race and power. **American Educational Research Journal**, 34 (1): pp. 3–37.

Lipnack, J. and Stamps, J. (1986) **The Networking Book: People Connecting with People**. New York: Routledge and Kegan Paul.

Little, A., Hoppers, W. and Gardner, R. (Eds.) (1994) **Beyond Jomtien: Implementing Primary Education for All.** London: Macmillan.

Locke, M. (1990) Can collegiality and entrepreneurianalism exist together? **Management in Education, 3**(4): pp. 6.

Lockheed, M. E. (1993) The condition of primary education in developing countries. In: Levin, H. M. and Lockheed, M. E. (Eds.) **Effective School in Developing Countries**. London and Washington DC: The Falmer Press: pp. 20–40.

Lockheed, M. E. and Verspoor, A. (1991) **Improving Primary Education in Developing Countries.** Oxford: World Bank and Oxford University Press.

Loevinger, J. (1976). **Ego Development: Conceptions and Theories.** San Francisco: Jossey-Bass, Inc.

MacBride, R. (Ed.) (1989) **The In-service Training of Teachers: Some Issues and Perspectives**. London: The Falmer Press.

MacJessie-Mbewe, S. and Kholowa, F. (2010) The Malawi Education System and Reproduction of Social Inequalities: Implications for Education for Sustainable Development. **Malawi Journal of Education and Development, 3:** pp. 63 – 74.

MacKeracher, D. (1999) Making Sense of Adult Learning. Toronto, Ontario: Culture Concepts.

Macleod, F. and Golby, M. (2003) Theories of learning and pedagogy: Issues for teacher development. **Teacher Development**, **7**(3): pp. 346-362.

MacNeil, D. J. (2004) School-based and cluster-based teacher PD: Bringing teachers learning to the schools. Working Paper Number 1 under EQUIP's study of School-based Teacher In-service Programmes and Clustering of Schools. USAID: World Education, Inc.

Malawi Human Rights Commission, (2007) The existence and Implementation of Laws, Policies, and Regulations in Education and How they can affect the girl child in Malawi. Lilongwe, Malawi.

Malawi Institute of Education, (1991) Report of a Workshop on Teaching and Learning Methods and Techniques, 25 – 30 November, 1991, Domasi, Malawi. Domasi: MIE.

Malawi Institute of Education, (1996) **MIE Annual Report 1995/1996.** Domasi: MIE

Malawi Institute of Education, (2006) **Initial Primary Teacher Education Programme: Programme Handbook.** Domasi: MIE.

Malawi Institute of Education, (2008) **Initial Primary Teacher Education: Education Foundation Studies Lecturers' Handbook.** Domasi: MIE.

Malawi/GTZ, (1996) A Report on the Establishment of Sub-Zonal Centres in Zomba District. Zomba: Malawi/Germany Basic Education Project.

Marczely, B. (1996) **Personalising Professional Growth: Staff Development that Works**. Thousand Oaks, California: Corwin Press, Inc.

May, T. (2001) **Social Research: Issues, Methods and Process**. 3rd ed. Buckingham: Open University Press.

Maykut, P. and Morehouse, R. (1994) Beginning Qualitative Research: A Philosophic and Practical Guide. London: Falmer.

McLaughlin, M. W. (1994) Strategic sites for teachers' professional development. In: Grimmett, P. P. and Neufield, J. (Ed) **Teacher Development and the Struggle for authenticity: Professional Growth and Restructuring in Context of Change.** New York: Teachers College Press.

McMillan, J. H. and Schumacher, S. (2006) **Research in Education: A Conceptual Introduction.** New York: Addison Wesley Longman.

Merriam, S. (2001) Andragogy and self-directed learning: Pillars of adult learning theory. In: S. Merriam (Ed.) **The New Update on Adult Learning Theory.** San Francisco: Jossey-Bass, pp. 2-13.

Merriam, S. B., and Caffarella, R. S. (1999) Learning in Adulthood: A Comprehensive Guide. 2d ed. San Francisco: Jossey-Bass.

Mezirow, J. (1990) How critical reflection triggers transformative learning. In: Mezirow, J. (Ed.) **Fostering critical reflection in adulthood**. San Francisco: Jossey-Bass.

Mezirow, J. (1991) **Transformative Dimensions of Adult Learning**. San Francisco: Jossey-Bass.

Mezirow, J. (1997) Transformative Learning: Theory to Practice. In: Cranton, P. (Ed.) **Transformative Learning in Action: Insights from Practice. New Directions for Adult and Continuing Education.** San Francisco, CA: Jossey-Bass, pp. 5-12.

Midwinter, E. (1974) Teacher centres: the facilitators. **British Journal of In-service Education, 1** (1): pp. 10-14.

Miles, M. B. and Huberman, A. M. (1994) **Qualitative Data Analysis: An Expanded Sourcebook,** (2nd edition). Thousand Oaks, CA: Sage.

Millerson, G. (1964) **The Qualifying Associations: A Study in Professionalization.** London: Routledge and Kegan Paul.

Milner, G. and MacJessie-Mbewe, S. (2010) An analysis of the implantation of teacher deployment policy in Malawi primary schools: The case of Lilongwe District. **Malawi Journal of Education and Development, 3:** pp. 34-49.

Ministry of Development Planning and Cooperation, (2003) Malawi Millennium Development Goals Report. Lilongwe, Malawi.

Ministry of Development Planning and Cooperation, (2009) Malawi Millennium Development Goals Report. Lilongwe, Malawi.

Ministry of Economic Planning and Development, (2008) **Population and Housing Census: Preliminary Report.** National Statistics Office, Zomba, Malawi.

Ministry of Education (1999a). **TDCs Documentation**. Lilongwe, Malawi School Support Systems Programme.

Ministry of Education and Culture, (2004) **Education Statistics.** Lilongwe, Malawi.

Ministry of Education and Culture, (1985). Education Development Plan 1985 - 1995: A Summary. Lilongwe, Malawi.

Ministry of Education and Department for International Development (1998) Joint Review Mission. Report of the Review Team, 9-19 February, 1998, Lilongwe, Malawi.

Ministry of Education and The Malawi National Commission for UNESCO, (2004) **The Development of Education in Malawi 2004. Report Prepared for the 47th Session of the International Conference on Education, held 7 – 11 September 2004, Lilongwe, Malawi**.

Ministry of Education, (1996) **Regional Workshop - Teachers resource centre, unpublished paper presented at Regional Workshop on TRCs,** Arusha, Tanzania, June, 3-7, 1996. Harare, Zimbabwe

Ministry of Education, Culture and Sports, (2003) **Teacher professional development in Zanzibar: a case study of the teacher centres. Country Case Study – Zanzibar.** Paris: Association for the Development of Education in Africa.

Ministry of Education, Science and Technology, (1996) Teachers Resource Centre. A Country Presentation by INSSTEP (In-Service Secondary Teacher Education Project), Inspectorate at a Regional Workshop on TRCs, June 3-7, 1996, Arusha Regional Workshop Arusha, Tanzania. Kampala, Uganda.

Ministry of Education, Science and Technology, (1997) **1994 MASTEP Report.** Lilongwe, Malawi.

Ministry of Education, Science and Technology, (1998) An Education Policy and Investment Framework (PIF) for Education in Malawi 1999-2009. Revised Draft April, 1998. Lilongwe, Malawi.

Ministry of Education, Science and Technology, (1999b) **Teacher Development Programme: MSSSP Strategic Background Paper.** Lilongwe, Malawi.

Ministry of Education, Science and Technology, (2000) A Report of a Study Tour to Teacher Development and Management System (TDMS) in Uganda, 14th - 18th February 2000. Lilongwe, Malawi.

Ministry of Education, Science and Technology, (2001) Education Sector: Policy and Investment Framework (PIF) 1995 – 2005. Lilongwe, Malawi.

Ministry of Education, Science and Technology, (2003) **The National Strategy for Teacher Education In Malawi (Draft).** Lilongwe, Malawi.

Ministry of Education, Science and Technology, (2007) Syllabus for IPTE Education Foundation Studies, Lilongwe, Malawi.

Ministry of Education, Science and Technology, (2008a) Education Statistics, 2008, Lilongwe, Malawi.

Ministry of Education, Science and Technology, (2008b) National Education Sector Plan 2008 – 2014. Lilongwe, Malawi.

Ministry of Education, Science and Technology, (2009a) **Implementation guidelines for the National Policy on Special Needs Education.** Lilongwe, Malawi.

Ministry of Education, Science and Technology, (2009b) An investigation on the effectiveness of special needs education services delivery in Malawi Primary Schools. Lilongwe, Malawi.

Ministry of Education, Sports and Culture, (1998) **Teacher Development Centres Handbook.** Lilongwe, Malawi.

Moleni, C. and Ndalama, L. (2004) **Teacher Absenteeism and Attrition in Malawian Primary Schools: A Case Study of Four Districts Draft report** (Unpublished).

Moon, B. (2000) The changing agendas for professional development in education. In: Moon, B., Butcher, J., and Bird, E. (Eds). Leading **Professional Development in Education.** London: Routledge and Falmer: pp. 3-8.

Morant, R. W. (1978) Re-appraising the role of teacher centres. **British Journal of In-service Education**, **4**(3): pp. 198-205.

Morgan, W. J., Sives, A, Appleton, S. (2006) **Teacher Mobility, 'Brain Drain', Labour Markets and Educational Resources in the Commonwealth.** Nottingham: DfID Research Paper.

Mottram, D. R., Rowe, P., Gangani, N. and Al-Khamis, Y. (2002) Pharmacists' engagement in continuing education and attitudes towards continuing professional development. **Pharmaceutical Journal, 269**: pp. 618–622.

Mulkeen, A. (2006) **Teachers for Rural Schools: A Challenge for Africa. Working Document.** Biennale on Education in Africa.

Mzumara, P. S. (1995) Staff development: a comparative study of job performance of MIE - Brandon University Trained and untrained elementary heads in Malawi. M. Ed Thesis, Brandon University.

Nair, A. (1996) **Resource Centres - The Zambia AIEMS Experiences,** (Unpublished paper). Primary Community School, Lusaka, Zambia.

National Economic Council, (2002) **Qualitative impact monitoring** (QIM) of poverty alleviation policies and programmes in Malawi Vol. 1 survey findings. National Economic Council.

Neumann, K. D. (1994) **Primary Teacher Training in Malawi.** Zomba: Malawi/GTZ Education Project.

Nyirenda, D. M. C. (1994) An Evaluation of the implementation of national curriculum changes in science and mathematics in Malawi with reference to parallel changes in England and Wales. Ph.D. Thesis, University of Nottingham.

Nzimande, G. S. B. (2002) Address to international conference on decentralisation and democracy in education. [On-line]. Available at: <u>http://www.sacp.org.za/docs/speeches//sphtml</u> [Accessed: 22/04/2003].

O'Brien G. (2004) **What are the principles of adult learning?** [Online]. Available at: <u>http://www.southernhealth.org.au/cpme/articles/adult_learning.htm</u>. Accessed: 14/03/2011.

O'Sullivan, M. C. (2002) Effective follow-up strategies for PD for primary teachers in Namibia. **Teacher Education**, **6(2)**: pp.181-201.

O'Sullivan, M. C. (2005) What is happening in the classroom? A commonsense approach to improving the quality of primary education in developing countries. **Teacher Education**, **9**(3): pp. 301-314.

Obasi, E. (2000) The impact of economic recession on UPE in Nigeria. **International Journal of Educational Development, 20**(3): pp. 189-207.

Obstfield, M. and Taylor, A. M. (2003) Globalisation and capital markets. In: Bordo, M. D., Taylor, A. M. and Williamson, J. G. (Eds.) Globalisation in Historical perspective. Chicago: University of Chicago Press, p121-187.

OECD, (1998) Staying Ahead: In-service Training and Teacher Professional Development. Paris: L'Ecole a la Page.

OECD, (2009) The Professional Development of Teachers: Creating Effective Teaching and Learning Environments: First Results from TALIS. Paris: L'Ecole a la Page.

Oldroyd, D and Hall, V. (1991) Managing Staff Development: A Handbook for Secondary Schools. London: Paul Chapman Publishing Ltd. Omolewa, M. A. (2005) Meeting global challenges in university education: the implication of globalisation for educational development. Keynote Address by President of UNESCO General Conference and Ambassador plus Permanent Delegate of the Federal Republic of Nigeria to UNESCO at Babcock University Academic Congregation Colloquium, Ogun State, Nigeria, August 16, 2005, UNESCO.

Oppenheim, A. N. (1992) Questionnaire Design, Interviewing and Attitude Measurement. (New ed.). London: Printer Publishers Ltd.

Patton, M. Q. (1987) **How to Use Qualitative Methods in Evaluation.** Newbury Park: SAGE Publications.

Patton, M. Q. (1990) **Qualitative Evaluation and Research Methods.** 2nd ed. California: SAGE Publications.

Paul, T. V. and Rapsman, N. M. (2004) Under pressure? Globalisation and the National Security state. **Millennium: Journal of International Studies, 33**(2): pp. 355-380.

Perry, W. (1970) Forms of Intellectual and Ethical Development in the College Years: A Scheme. New York: Holt, Rinehart, and Winston.

Pfaffe, J. F. (1999) Teacher development programme in Malawi: German Support to the Malawi Integrated In-service Teacher Education Programme (MIITEP): Report on a Short-Term Consultancy from 04 October - 10 December 1999, Lilongwe, Malawi:

Ministry of Education, Science and Technology. Phillips, J. (2003). Powerful learning: Creating learning communities in urban school reform. **Journal of Curriculum and Supervision**, 18 (3): pp. 240–258.

Pinch, T. J. (1996) The social construction of technology: a review. In:
Fox, R. (Ed.), Technological Change; Methods and Themes in the
History of Technology Amsterdam: Harwood Academic Publishers, pp. 17 - 35.

Pollard, A. and Tann, S. (1987) **Reflective Teaching in the Primary School: A Handbook for the Classroom.** London: Cassell.

Power, T. (2004) ICT and teacher education in the global south: costing the benefits of learning. In Third Pan-Commonwealth Forum on Open Learning, 4-8 July 2004, Denedin, New Zealand, Distance Education Association of New Zealand: Commonwealth of Learning. [on-line]. Available at: www.uk.encarta.msn.com. [Accessed 24/04/2008].

Pring, R. (2000) **Philosophy of Educational Research**. London: Continuum

Priselac, N. J. and Priselac, S. M. (1975) Profile of a functional teacher education centre. **British Journal of In-service Education**, **2** (2): pp. 88-99.

Punch, K. F. (2005) Introduction to Social Research: Quantitative and Qualitative Approaches. 2nd ed. London: SAGE Publication.

Radnor, H. (2002) **Researching your Professional Practice: Doing Interpretive Research in Educational Settings.** Buckingham: Open University Press.

Ravi, Y. and Rao, S. (1994) The Andhra Pradesh Primary Education Project. In: Little, A., Happers, W. and Gardner, R. (Eds.) **Beyond Jomtien: Implementing Primary Education for All.** London: Macmillan: pp. 20 - 41.

Redknap, C. (1977) **Focus on Teacher Centres,** Windsor: NFER Publishing Company.

Richardson, J. (1996) **School Culture: A Key to Improved Student** Learning. [On-line] Available at: <u>http://www.ovid.bids.ac.uk/ovidweb/ovidweb.cgi</u>, [Accessed: 26/04/02].

Robertson, S., Novelli, M., Dale, R and Tikly, L. (2007) **Globalisation, Education and Development, Ideas, Actors and Dynamics.** [On-line]. Available at: <u>http://.dvv-international.de/files/dve-68.pdf</u>. [Accessed: 02/04/2010].

Robinson, V. (2007) School leadership and student outcomes: Identifying what works and why. William Walker Oration. Australian Council of Educational Leaders Monograph No. 41. Australia: ACEL.

Robson, C. (2002) **Real World Research: a Resource for Social Scientists and Practitioner-Researchers.** 2nd ed. Oxford: Blackwell Publishing.

Rose, P. (2006) From the Washington to the post-Washington Consensus: the influence of international agendas on education policy and practice in Malawi. In: Lauder, H., Brown, P., Dillabough, J. and Halsey, A. H. (Eds.) **Education, Globalisation and Social Change**. Oxford: Oxford University Press, pp.1016-1028.

Ruane, J. M. (2005) Essentials of Research Methods: A Guide to Social Science Research. Oxford: Blackwell Publishing.

Rubin, H. J. and Rubin, I. S. (1995) **Qualitative Interviewing: The Art of Hearing Data**. Thousand Oaks, California: SAGE.

Russel, T, Thomo, E., Susuwele, W., Mwalwenje, D. and Kadzuwa, B. (1999) Consultancy to develop a Baseline study for evaluation of the impact of the Malawi School Support Systems Programme. Lilongwe, Malawi: Teacher Development Unit.

Salter, B., Parsons, C. and Steadman, S. (1983) Teacher centres and the schools council. Educational Studies, 9 (1): pp. 1-7.

Sarantakos, S. (2005) **Social Research.** 3nd ed. London: Palgrave Macmillan.

Schein, E. H. (1988) **Organisational Culture and Leadership**. San Francisco: Jossey-Bass.

Scholte, J. A. (2007) **Globalisation**, Microfts Encarta Encyclopaedia. [Online]. Available at: www.uk.encarta.msn.com. [Accessed: 24/04/2008].

Schön, D. A. (1987). Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions. San Francisco: Jossey-Bass.

Schostak, J. F. (2002) **Understanding, Designing and Conducting Qualitative Research in Education: Framing a Project.** Buckingham: Open University Press.

Shaeffer, S. (1993) Participatory approaches to teachers training. In: Farrell, L. P. and Oliveira, L. B. (Eds.) **Teachers in Developing Countries: Improving Effectiveness and Managing Costs.** Washington DC: World Bank, Economic Development Institute Seminar Series.

Sheehy, G. (1976) **Passages: Predictable Crises of Adult Life**. New York: Dutton.

Shimahara, N. K. (1998) Japanese model of PD: teaching as craft. **Teaching and Teacher Education**, **14** (5): pp. 451-462.

Shostak, R. J. (1987) Teacher centres. In: Dunkin, M. (Ed.) **The International Encyclopaedia of Teaching and Teacher Education.** Oxford: Pergamon Press. pp. 1-10.

Silverman, D. (2005) **Doing Qualitative Research: A Practical Handbook**. 2nd ed. London: SAGE Publications.

Silverman, D. (2006) **Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction.** 2nd ed. London: SAGE Publications. Simons, H. (1982) Suggestions for a school self evaluation based on democratic principles. In: McCormick, R. Bynner, J., Cliff, P., James, M., Brown, C. (Eds.) **Calling Education to Account**. London: Heinemann Educational, pp. 286-295.

Simons, H. (1989) Ethics of case study in educational research and evaluation. In: Burgess, R. (Ed.) **The Ethics of Education Research**. New York: The Falmer Press. pp. 114-138.

Smith, M. K. (2001) **Informal and non-formal education, colonialism and development** [On-line]. Available at: www.infed.org/globalisation.htm [Accessed: 11/04/2008].

Smith, M. K. (2002) Globalisation and the Incorporation of Education. **The Encyclopaedia of Informal Education** [On-line]. Available at: www.infed.org/globalisation.htm. [Accessed: 11/04/2008].

Smith, M. K. and Doyle, M. (2002) **Globalisation the encyclopaedia of informal education** [On-line]. Available at: www.infed.org/biblio/globalisation.htm. [Accessed: 11/04/2008].

Smith, R. M. (1982) Learning How to Learn: Applied Learning Theory for Adults. New York: Cambridge Books.

Smylie, M. A. (1995) Teacher learning in workplace: implication for school reform. In: Guskey, T. R. and Huberman, M. (Eds.) **The Professional Development in Education: New Paradigms and Practices**. New York: Teachers College Press. pp. 92–113.

Speck, M. (1996), Best practice in professional development for sustained educational change. ERS Spectrum, pp. 33-41. [Online]. Available at: <u>http://www.ncrel.org/sdrs/areas/issues/methods/technlgy/te10lk12.htm</u>). Accessed on: 10/06/2011.

Speck, M., and Knipe, C. (2005) Why Can't We Get It Right? Designing High-Quality Professional Development for Standards-Based Schools. Thousand Oaks, CA: Corwin.

Stein, M. and Nelson, B. (2003) Leadership content knowledge. Educational Evaluation and Policy Analysis, 25 (4): pp. 423–448.

Stoll, L. and Fink, D. (1996) Changing our Schools: Linking School Effectiveness and School improvement. Philadelphia: Open University Press.

Sturrock J. B. E. and Lennie, S. C. (2009) Compulsory continuing professional development: a questionnaire-based survey of the UK dietetic profession. Journal of Human Nutrition and Dietetics, 22: pp. 12–20.

Sugrue, C. (2004) Rhetorics and realities of CPD across Europe: from Cacophony towards coherence. In: Day, C. and Sachs, J. **International Handbook on the Continuing Professional Development.** Buckingham: Open University Press, pp.67-94.

Sunal, C. S., Inuwa, R. R., Sunal, D. W. and Haas, M. E. (2001) **Three Nigerian primary school teachers: classroom days.** [On-line]. Available at: http://www.thefreelibrary.com. [Accessed: 28/03/2008].

Tangyong, M, A. F. and Gardner, R. (1994) The active learning through professional support. In: Little, A., Happers, W. and Gardner, R. (Eds.). **Beyond Jomtien: Implementing Primary Education for All**. London: Macmillan, pp. 45–64.

Taylor, E. W. (1998) **The Theory and Practice Of Transformative Learning: A Critical Review. Information Series No. 374.** Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, Center on Education and Training for Employment, College of Education, the Ohio State University.

Taylor, S. J. and Bogdan, R. (1998) **Introduction to Qualitative Research Methods: a Guide and a Resource.** 3rd Ed. New York; Chichester: John Wiley.

Taylor, W. (1975) The universities and in-service education. **British** Journal of In-service Education and Training, 1 (3): pp. 5–9.

te Velde, D. W. (2005) Globalisation and Education: What do the trade, investment and migration literatures tell us? Working Paper 254, August, 2005, Overseas Development Institute, London.

Tedlock, B. (2000) Ethnography and ethnographic representation. In N. Denzin and Y. S. Lincoln (Eds.), **Handbook of Qualitative Research.** Thousand Oaks, CA: Sage, pp 455-486.

Tembon, M. And Fort, L. (Eds) (2008) Girls' Education in the 21st Century: Gender Equality, Economic empowerment and growth. Washington DC: World Bank

Thiessen, D. (2001) Classroom- based teacher development. In: Banks, F. and Mayes, A. S. (Eds.) **Early Professional Development for Teachers.** London: David Fulton Publishers, pp. 5-13.

Thornbury, R. (1977) A history of British teacher centres. American Educator, 1(4): pp. 13-15.

Thornbury, R. (Ed.) (1973) **Teachers' Centres,** London: Darton, Longman and Todd.

Tierney, K. J. (1994) Making Sense of Collective Preoccupations: Lessons from Research on the Iben Browning Earthquake Prediction. In: Platt, G, M. and C. Gordon, C. (Eds). Self, Collective Behavior and Society: Essays Honoring the Contributions of Ralph H. Turner. Greenwich, C T., JAI Press Inc. pp. 75-95

Timperley, H. (2007). Teacher Professional Learning and Development: Best Evidence Synthesis Iteration. Wellington, New Zealand: Ministry of Education, Science and Technology.

Timperley, H. and Phillips, G. (2003). Changing and sustaining teachers' expectations through professional development in literacy. **Teaching and Teacher Education**, no. 19, pp. 627–641.

Tomlinson, J. (2003) The agenda of globalisation. **New Formation. 50:** p10-21.

Tonna, M. A. (2007) Globalisation, education and teacher education – a critical review. **Journal for Critical Education Policy Studies, 3(1).** [On-line]. Available at: www.jceps.com/?pageID-articleID=88. [Accessed: 12/05/2008].

Troen, V., and Bolles, K. (1994) Two teachers examine the power of teacher leadership. In: Walling, D. R. (Ed.) **Teachers as leaders. Perspectives on the professional development of teachers** Bloomington, IN: Phi Delta Kappa Educational Foundation, pp. 275-86.

Trotter, A. (1999) Preparing Teachers for the Digital Age. **Technology Counts '99. Education Week**. September 23, 1999. [online] Available at: <u>http://www.edweek.org/sreports/tc99/articles/teach.htm</u>. Accessed on 31/05/12

Trotter, Y. D. (2006) Adult Learning Theories: Impacting Professional Development Programs. **Delta Kappa Gamma Bull, 72**(2). [Online]. Accessed: 09/07/2011.

Tschannen-Moran, M. (2010) Adult learning theory and literacy coaching. Cross-Disciplinary Perspectives in Educational Theory, Research, and Practice. Educational Policy, Planning and Leadership (K-12 Administration). The School of Education. The College of William and Mary. Research Paper

Tudor-Craig, (2002) **Teacher Talking Time**. VSO Valuing Teachers Research in Malawi.

UNESCO, (2003) **The Education For All 2000 Assessment Country Reports: Zambia.** [On-line]. Available at: http://ww2.unesco.org/wef/countryreports/zambia/rapport_1.html. [Accessed: 22/04/2003].

UNICEF, (2009) **Progress for Children: A report card on child protection**. NY: UNICEF and GTZ.

Urwick, J., Mapuru, P. and Nkhoboti, M (2005) **Teacher Motivation and Incentives in Lesotho.** Lesotho College of Education, Maseru, Lesotho November 2005. [On-line]. Available at: http://www.elds.org/Teacher_motivation_Lesotho.pdf. [Accessed: 18/04/2008].

Veugelers, W. and Zyjlstra, H. (1995) Learning Together: In-service Education in Networks of Schools. **British Journal of In-service Education**, **21**(1): pp. 37-48.

Villegas-Reimers, E. (2003) **Teacher Professional Development: an International Review of the Literature.** UNESCO: IIEP. [On-line]. Available at: <u>http://www.glp.net/c/document_library/get_file?p-1-id=4737118andfolderid=12858andname=DLFE-1218.pdf</u>. [Accessed: 06/02/2011].

Villegas-Reimers, E. and Reimers, F. (1996) Where are sixty million teachers? The missing voice in educational reforms around the world. **Prospects, 26** (3), 469-492.

Voluntary Services Overseas, (2000) What Makes Teachers Tick? A Policy Research Report on Teachers' Motivation in Developing Countries. London: Voluntary Services Overseas.

von Glasersfield, E. (1995) Radical constructivism: a way of knowing and learning. London: Falmer.

Vongalis-Macrow, A. (2005) Teacher: agency in globalised education. International Education Research Conference Parramatta 27th November - 1st December, 2005, Campus of the University of Western Sydney, Australia. Creative Dissent: Constructive Solutions.

Waters, M. (1995) Globalization. London: Routledge.

Watts, G. D., and Castle, S. (1993) The time dilemma in school restructuring. **Phi Delta Kappan 75**(4): pp.306-10.

Weindling, D., Reid, M. I. and Davis, P. (1983) **Teacher Centres: A Focus for In-service Education? Report of the Schools Council Teachers' Centre Project.** London: Methuen Educational. Welford, G. and Khatete, D. (1999) Teacher resource centres in Kenya. In: Knamiller, G. (Ed.). **The Effectiveness of Teacher Resource Centre Strategy: Full Report.** Leeds: Department for International Development. [On-line]. Available at: <u>http://www.dfid.org.gov.uk/AboutDFID/education/research/library/content</u>

s/c0176e/ch10. [Accessed: 17/11/2003].

Wellington, J. (2000) Educational Research: Contemporary Issues and Practical Approaches. London: Continuum. Wideen, M. and Andrew, I. (1987) (Ed.) Staff Development for School Improvement. New York: Falmer Press.

Wiegand, P. and Jain, P. (1999) Teacher resource centres in Kenya. In: Knamiller, G. (Ed.) **The Effectiveness of Teacher Resource Centre Strategy: Full Report**. Leeds: Department for International Development, pp. 95-119.

Williams, J. (1981) Teacher centres - an antipodean view. British Journal of In-service Education, 7(2): pp. 131-134.

Willis, K. (2005) **Theories and Practices of Development**. London: Routledge

Wilson, S. and Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *In:* Iran-Nejad, A.; Pearson, P.D. eds. **Review of Research in Education**, no. 24, Washington, DC: Sage Publications, pp. 173–209.

Yehorata, Y. (Ed.) (2001) Decentralisation of education and reform of intergovernmental relations should be coordinated. **ICPS Newsletter, Issue No 99.** Kyiv, Ukraine: The International Centre for Policy Studies.

Zambeta, E. (2005) The survival of nationalism in a global system. In: Coulby, D and Zambeta, E. (Eds.) **Globalisation and Nationalism in Education**. Oxon: Routledge/Falmer. pp. 89-114.

Zigarmi, P. (1978) Teacher centres: a model for teacher initiated staff development. **Teacher College Record, 80** (1): pp. 172-187.

APPENDICES

Appendix A: Questionnaire Fo	r Teachers						
SECTION	NA: PERSONA	L INFO	RMATIO	N			
1. Please fill in: (a) Name of the	school:(b)	Zone:		(c) Distri	ict:		
2. Please answer questions (a)	to (h) by marking	with a ti	ck in one o	of the box	tes belov	w that	
represent your response							
(a) Your sex: 1. Ma	lle 2. Fem	ale					
(b) What is your highest academ	ic qualification?						
1. MSCE Level 2. JCl	E Level	3. PSC	E Level				
(c) Are you a trained teacher? 1.	Yes Go to	question	n e) 2. No		(Go	to	
question d)			L				
(d) Are you a student teacher? 1.	Yes	2. No					
(e) How many years have you be	en teaching?						
	Loss than 1	1 2	3 5	6 10		on 10	٦
As untrained teacher	Less than 1	1-2 2	<u>3-5</u> 3	<u>6 - 10</u> 4		er 10 5	_
On training	1	2	3	4		5	_
As a qualified teacher	1	2	3	4	-	5	
(f) Which class (es) do you teach	h?						
	None 1 2	3 4	5 6	7 8			
(g) Do you have any managemer			Yes	Go to ite	em (h)	2. No	
(h) What is your management po							
1. Head teacher		uty Head					
3. Head of Section	4. Othe	er (s) (Ple	ease specify	/)	_		
SECTION B: DISTAN	ICE BETWEEN T	гне тра	C AND TH	E SCHO	OLS		
Please answer these questions by						h item	
to indicate your response	,		rr •rw				
3. What is the distance in km			Less	1-2	3-5	6-10	Over
			than 1	km	km	km	10 ki

SECTION C: TEACHER INVOLVEMENT IN THE TDC ACTIVITIES

(a) From your school to the nearest **any** TDC?

(b) From your school to **your** TDC?

Please answer these questions by circling the number in the appropriate box against each item to indicate your response

4. How many times are you involved in these activities in a year?	Never	1-2	3-5	6-9	10 or more
(a) Meetings with the PEA	1	2	3	4	5

1

1

2

2

3

3

4

4

10 km

5

5

(b) TDC management committee meetings	1	2	3	4	5
(c) Fund-raising activities for the TDC	1	2	3	4	5
(d) Preparation of teaching/learning materials	1	2	3	4	5
(e) Reading in the TDC library	1	2	3	4	5
(f) Borrowing books from the TDC library	1	2	3	4	5
(g) Meeting with teachers from other schools	1	2	3	4	5
(h) Planning for the INSET for teachers	1	2	3	4	5
(i) Meeting with community members	1	2	3	4	5
(j) Study circles	1	2	3	4	5
(k) Orientation to the examinations procedures	1	2	3	4	5
(1) Dissemination of research/project findings	1	2	3	4	5
(m) Training courses in school management skills	1	2	3	4	5
(n) Subject committee meetings	1	2	3	4	5

SECTION D: TEACHER CHANGE Please answer these questions by marking with a circle around a number in the box against each item to indicate your response

My involvement with the TDC has helped	Strongly	Disagree	Don't	Agree	Strongly
me to:	Disagree		Know		Agree
5. Lesson preparation					
(a) identify learning content	1	2	3	4	5
(b) select learning objectives	1	2	3	4	5
(c) improve schemes of work	1	2	3	4	5
(d) improve lesson planning	1	2	3	4	5
(f) become more resourceful	1	2	3	4	5
(g) improve subject knowledge	1	2	3	4	5
(h) prepare learning activities	1	2	3	4	5
(i) improve records of work	1	2	3	4	5
6. Instructional skills					
(a) improve teaching skills	1	2	3	4	5
(b) reflect on my teaching	1	2	3	4	5
(c) use appropriate teaching/ learning strategies	1	2	3	4	5
(d) use teaching/learning materials	1	2	3	4	5
(e) use examples real life during teaching	1	2	3	4	5
(f) improve teaching methods	1	2	3	4	5
(g) improve pupil assessment	1	2	3	4	5
(h) improve self assessment	1	2	3	4	5
(i) improve marking procedures of pupils work	1	2	3	4	5
(j) communicate effectively in the classroom	1	2	3	4	5
7. Class management skills					
(a) improve the culture of learning	1	2	3	4	5
(b) improve relationship with pupils	1	2	3	4	5
(c) improve pupil behaviour management skills	1	2	3	4	5
(d) improve resource management skills	1	2	3	4	5
(e) improve displays in the classroom	1	2	3	4	5
(f) improve time management skills	1	2	3	4	5
(g) organize the classroom	1	2	3	4	5
8. The professional growth					
(a) improve motivation as a teacher	1	2	3	4	5
(b) improve leadership skills	1	2	3	4	5
(c) get promoted to senior position	1	2	3	4	5
(d) work with other teachers within school	1	2	3	4	5
(e) work with teachers from other schools	1	2	3	4	5
(f) improve academic qualification	1	2	3	4	5

(g) improve professional qualification	1	2	3	4	5
(h) improve relationship with educational	1	2	3	4	5
institutions					
(i) become an expert in teaching	1	2	3	4	5
9. Monitoring and assessing pupils' learning					
(a) improve recording of pupils' progress	1	2	3	4	5
(b) improve communication with parents	1	2	3	4	5
(c) discuss pupils' progress with their parents	1	2	3	4	5
(d) use rewards to motivate pupils to work	1	2	3	4	5
hard					
(e) engage pupils in meaningful learning	1	2	3	4	5
(f) provide feedback to pupils	1	2	3	4	5
(g) assess pupils	1	2	3	4	5
(h) mark pupils work	1	2	3	4	5
(i) encourage pupils to work hard	1	2	3	4	5

SECTION E: Please answer these questions by circling a number in a box against each item to indicate your response

General statements about the TDC Strongly Disagree Don't Agree Strong										
General statements about the TDC	Disagree	Disagree	Know	Agree	0.					
10 Favinment facilities and resources	Disagree		KIIOW		Agree					
10. Equipment, facilities and resources	1	2	2	4	5					
(a) There are enough facilities	-	_	3	4	-					
(b) There are not enough books on TPD	1	2		4	5					
(c) Most teachers know how to use the resources	1	2	3	4	5					
(d) Much of the equipment are broken	1	2	3	4	5					
(e) There is electricity at the centre	1	2	3	4	5					
(f) There is water supply at the centre	1	2	3	4	5					
(g) There is adequate time TPD activities	1	2	3	4	5					
(h) There are overnight accommodation	1	2	3	4	5					
facilities at the TDC for teachers	1	2	2	4	5					
(i) The trained staff in the use of the TDC does not stay long enough at the TDC	1	2	3	4	5					
11. The TPD opportunities										
(a) The facilitators are competent	1	2	3	4	5					
(b) The TDC initiates TPD activities	1	2	3	4	5					
(c) The are clear guidelines for the use of the TDC	1	2	3	4	5					
(d) Teachers have reliable transport to travel to the TDC	1	2	3	4	5					
(e) My school have a plan for TPD	1	2	3	4	5					
(f) My school has information on how to use the TDC	1	2	3	4	5					
(g) It is easy to identify activities that can take place at the TDC	1	2	3	4	5					
(h) The TDC lack leadership in TPD	1	2	3	4	5					
(i) The TDC is too far away from my school	1	2	3	4	5					
(j) The coordinators stay long enough at this TDC	1	2	3	4	5					
12. The professional support					1					
(a) The TDC staff assists on how to use the TDC	1	2	3	4	5					
(b) There are facilitators for TPD in the zone	1	2	3	4	5					
(c) The TDC provides teachers with time to use the TDC	1	2	3	4	5					

(d) My PEA allows teachers to go to the TDC during school time only	1	2	3	4	5
(e) There is adequate TDC staff to assist with TPD	1	2	3	4	5
13. Centre management					
(a) The TDC Coordinator is too busy for TPD	1	2	3	4	5
(b) The TDC has a plan of the TPD activities	1	2	3	4	5
(c) The TDC is used by teachers only	1	2	3	4	5
(d) There are coordinated TDC activities	1	2	3	4	5
(e) There is money for TPD	1	2	3	4	5
(f) It is cheap to run the TDC activities	1	2	3	4	5
(g) There are plans for raising funds TDC activities	1	2	3	4	5
(h) The TDC is mostly used by the senior school staff	1	2	3	4	5

THE END

Appendix B: Interview Questions for Teachers

- 1 Do you use the TDC? If so, how? (If not, why not?)
 - (a) Would you say that you use your TDCs for your teacher development activities? If so, how? (If not why not?)
 - (b) Do you think there are any possible barriers to the use of the TDC for your teacher development? If so, what are they? (If not why not?)
- 2 Would you say that your involvement in TDC activities has helped you to improve your teaching skills? If so, how? (If not, why not?)
 - (a) Would you say that you are involved in TDC activities? If so, how? (If not, why not?)
 - (b) Would you say that your involvement in TDC activities has helped you to improve your:
 - (i) Subject knowledge? If so, in which subject(s)? (If not, why not?)
 - (ii) Teaching skills? If so, in which subject(s)? (If not, why not?)
 - (iii) Classroom management skills? If so, how? (If not, why not?)
 - (iv) Pupil assessment skills? If so, how? (If not, why not?)
- **3** In general, would you say that TDC resources are appropriate for teacher development activities? If so, how? (If not, why not?)
 - (a) What are your views about the accessibility of the TDC facilities for teacher development activities?
 - (b) Would you say that the resources at your TDC are helping you to improve your teaching skills? If so, how? If not, why not?
- 4 Do you think that the management of your TDC supports your the teacher development activities? If so, how? (If not, why not?)
 - (a) Would you say that you involvement in the management of your TDC? If so, how? (If not why not?)
 - (b) Do you think that your involvement in the management of your TDC has helped to improve teacher development activities? If so, how? (If not why not?)
- 5 Would you say that your TDC is sustainable as a strategy for teacher development? Why do you think so?
 - (a) Do you think that your TDC will continue to support your teacher development activities? If so, how? (If not, why not?)
 - (b) Would you say that you will continue to put into practice the knowledge and skills acquired through your involvement with the TDCs? If so, what are they? (If not, why not?)
 - (c) Would you say that the physical infrastructure of the TDCs is sustainable? If so, how? (If not, why not?)

Appendix C: Interview Questions for Other Key Participants

- 1 Does school staff use the TDC for the teacher development? If so, how? If not, why not?
 - (a) Would you say that school staff uses the TDCs for teacher development? If so, how? (If not, why not?)
 - (b) Do you think there are any possible barriers to the use of the TDCs for teacher development? If so, what are they? (If not, why not?)
- 2 Would you say that teacher involvement in the TDC activities is benefiting them? If so, how? If not, why not?
 - (a) Would you say that teachers are involved in the TDC activities? If so, how? (If not, why not?)
 - (b) Would you say that teacher involvement in the TDC activities has helped to improve:
 - (i) Teamwork in schools? If so, how? (If not, why not?)
 - (ii) Networking among teachers in schools? If so, how? (If not, why not?)
 - (iii) Pupil achievement in schools? If so, how? (If not, why not?)
- 3 In general, would you say that TDC resources are appropriate for teacher development activities? If so, how? If not, why not?
 - (a) What are your views about the accessibility of the TDC facilities for the teacher development activities of teachers?
 - (b) Would you say that the resources at the TDCs have helped to improve teaching and learning? If so, how? (If not, why not?)
- 4 Do you have any views about the management of TDCs in relation to teacher development activities? If so, what are your views? If not, why not?
 - (a) Would you say that teachers are involved in the TDC management? If so, how? (If not, why not?)
 - (b) Do you think that teacher involvement in the TDC management is benefiting them in any way? If so, how? (If not, why not?)
- 5 Would you say that the TDCs are sustainable as a strategy for teacher development? Why do you think so?
 - (a) Do you think the TDCs will continue to support teacher development activities? If so, how? (If not, why not?)
 - (b) Would you say that teachers will continue to put into practice the knowledge and skills acquired through their involvement with the TDCs? If so, what are they? (If not, why not?)
 - (c) Would you say that the physical infrastructure of the TDCs is sustainable? If so, how? (If not, why not?)

Appendix D: Frequency Tables

Appendix D1: Frequency of teachers involved in TDC activities

Statements	Teacher sex (%)		Teacher qualification (%)		Teacher management position (%)		TDC setting (%)		TOTAL (%)
	Male	Female	MSCE	JCE	Yes	No	Rural	Urban	
Meetings with the PEA	88.1	84.3	85.8	86.2	89.5	80.7	87.9	85.2	86.2
Meetings with teachers from other schools.	74.3	71.5	71.9	73.4	71.9	73.4	73.8	72.0	72.7
Preparation of teaching and learning materials	76.3	68.2	69.7	73.4	74.1	67.7	75.7	69.4	71.7
TDC Fund-raising committee meetings	70.4	67.5	61.3	69.9	70.5	58.3	71.0	62.9	65.9
Meetings with community members	67.6	61.9	60.6	67.6	67.8	58.7	68.6	61.8	64.3
Training courses for school managers	70.4	59.5	56.2	66.3	73.0	49.8	65.9	63.2	64.2
TDC management committee meetings	70.4	57.4	60.2	65.4	68.0	54.7	66.4	61.0	63.0
Subject committee meetings	61.3	60.4	60.6	60.9	63.6	56.1	69.2	55.9	60.8
Borrowing books from the TDC library	72.3	51.7	58.0	62.8	66.9	50.2	61.7	60.0	60.6
Orientation to the examinations procedures	67.6	48.6	56.6	57.1	62.8	47.1	55.6	57.5	56.7
Reading in the TDC library	76.3	68.2	49.6	53.5	57.0	43.0	56.1	49.2	51.7
INSET course for teachers	52.2	48.0	69.7	73.4	51.5	47.1	46.3	51.9	49.8
Study circles	45.8	38.1	39.8	42.9	43.8	37.7	39.7	42.5	41.5
Dissemination of research findings	35.6	33.6	31.8	36.9	36.1	31.2	38.8	32.0	34.5

Distance from the	TDC in	0-1 km	1-5 km	6-9 km	10 or	Totals
km		(%)	(%)	(%)	more (%)	(%)
Teacher sex	Male	64 (25.3)	87 (34.4)	54 (21.3)	48 (19.0)	253
	Female	151 (45.4)	124 (37.3)	29 (8.8)	28 (8.5)	333
Teacher academic	High	110 (40.1)	100 (36.5)	37 (13.5)	27 (9.9)	274
qualification	Low	105 (33.7)	111 (35.6)	46 (14.7)	50 (16.0)	312
Teacher having	Yes	122 (33.6)	130 (35.8)	53 (14.6)	58 (16.0)	363
management	No	93 (41.7)	81 (36.3)	30 (13.5)	19 (8.5)	223
position						
TDC settings	Rural	79 (36.9)	73 (34.1)	29 (13.6)	33 (15.4)	214
	Urban	136 (36.7)	138 (37.1)	54 (14.5)	43 (11.7)	372

Appendix D2: Frequency of teachers staying at a distance from the TDC

Appendix D3: Frequency of teachers involved in TDC activities by distance to TDCs

Teacher activities at the	0-1 km	1-5 km	6-9 km	10 or	Totals
TDC	(%)	(%)	(%)	more (%)	(%)
Meetings with the PEA	183 (36.2)	182 (36.1)	73 (14.4)	67 (13.3)	505
Meetings with teachers from	167 (39.2)	148 (44.8)	58 (13.6)	53 (12.4)	426
other schools.					
Preparation of teaching and	162 (38.5)	143 (34.0)	61 (14.4)	55 (13.1)	421
learning materials					
TDC Fund-raising committee	142 (36.8)	141 (36.5)	53 (13.7)	50 (13.0)	386
meetings					
Meetings with community	148 (39.3)	127 (33.7)	50 (13.2)	52 (13.8)	377
members					
Training courses for school	144 (38.3)	127 (33.8)	54 (14.3)	51 (13.6)	376
managers					
TDC management committee	132 (35.8)	130 (35.2)	59 (16.0)	48 (13.0)	369
meetings					
Subject committee meetings	143 (40.2)	117 (32.8)	48 (13.5)	48 (13.5)	356
Borrowing books from the	144 (40.6)	115 (32.4)	54 (15.2)	42 (11.8)	355
TDC library					
Orientation to the	116 (34.7)	118 (35.3)	54 (16.2)	46 (13.8)	334
examinations procedures					
Reading in the TDC library	126 (41.6)	93 (30.7)	43 (14.2)	41 (13.5)	303
INSET courses for teachers	122 (41.8)	101 (34.6)	35 (12.0)	34 (11.6)	292
Study circles	101 (41.6)	78 (32.0)	33 (13.6)	31 (12.8)	243
Dissemination of research	85 (42.1)	72 (35.6)	22 (10.9)	23 (11.4)	202
findings					

Appendix E: Frequency tables on teacher changes

My involvement with the TDC has helped me to	Ν	Number	Percentage
		agreed	agreed
Improve my interest as a teacher	76	71	93.4
Improve my professional leadership skills	76	67	88.2
Work with teachers from other schools	76	65	85.5
Work with other teachers within the school	76	62	81.6
Become an expert in teaching	76	61	80.3
Improve relationship with other institutions	76	59	77.6
Improve my professional qualification	76	58	76.3
Improve my academic qualification	76	53	69.7
Get promoted to senior position	76	50	65.8

Appendix E1: Frequency of teachers who changed in professional growth

Appendix E2: Frequency of teachers who changed in lesson preparation skills

My involvement with the TDC has helped me to	Ν	Number	Percentage
		agreed	agreed
Improve my schemes of work	76	68	89.5
Selecting appropriate learning objectives	76	67	88.2
Improve my lesson planning	76	66	86.8
Identify appropriate instructional content	76	66	86.8
Prepare appropriate learning activities	76	62	81.6
Improve my records of work	76	62	81.6
Improve my subject knowledge	76	61	80.3
Become more resourceful	76	51	67.1

Appendix E3: Frequency of teachers who changed in classroom instructional skills

My involvement with the TDC has helped me to	Ν	Number	Percentage
		agreed	agreed
Use teaching and learning materials more	76	68	89.5
effectively			
Use appropriate teaching and learning strategies	76	67	88.2
Improve self assessment of a lesson	76	66	86.8
Reflect on my teaching	76	62	81.6
Improve pupil assessment procedures	76	62	81.6
Improve my teaching methods	76	61	80.3
Use examples from every day life during teaching	76	57	75.0

SKIIIS			
My involvement with the TDC has helped the teacher to	N	Number agreed	Percentage agreed
Improve my relationship with pupils	76	65	85.5
Improve pupil behaviour management skills	76	63	82.9
Improve my resource management skills	76	62	82.9
Improve my time management skills	76	61	80.1
Improve culture of learning	76	60	78.9
Organise physical space effectively	76	59	77.6
Improve the displays in the classroom	76	57	75.0

Appendix E4: Frequency of teachers who changed in classroom management skills

Appendix E5: Frequency of teacher changes in pupil monitoring and assessment

skills

My involvement with the TDC has helped me to	Ν	Number	Percentage
		agreed	agreed
Recording of pupils' progress	76	66	86.8
Improve reporting of pupils' progress	76	62	81.6
Engage pupils in meaningful learning	76	61	80.3
Provide feedback to pupils	76	61	80.3
Encourage pupils to work hard	76	61	80.3
Discuss pupils' progress with their parents	76	60	78.9
Use rewards to motivate pupils to work hard	76	59	77.6
Prepare and administer tests regularly	76	59	77.6
Mark pupil exercises and make useful comments	76	58	76.3

Appendix F: Frequency tables for teacher perceptions of TDC activities

Appendix F1:	Frequency	of	teacher	perceptions	of	the	coordinat	ion (of	TDC
	activities									

Statements about coordination of the TDC activities	Ν	Number	Percentage
		agreed	agreed
The PEA identifies activities for teachers	586	287	49.0
The PEA is busy with TPD activities	586	225	38.4
The PEA is competent in conducting activities for TPD	586	186	31.7
The PEA allows teachers to visit the TDC	586	178	30.4
The PEA initiates activities for TPD	586	169	28.8
The PEA has plans of teacher activities	586	118	20.1

Statements about the management of the TDC	Ν	Number	Percentage
		agreed	agreed
The TDC has adequate staff to assist teachers	586	348	59.4
The TDC provides time for teachers to visit the TDC	586	313	53.4
The TDC has plans for teacher support	586	313	53.4
There are guidelines for the use of the TDC	586	285	48.6
The TDC staff assist teachers on how to use the TDC	586	276	47.1
The TDC has trained staff trained in the use of the TDC	586	266	45.4
Most teachers know how to use the TDC resources	586	261	44.5
The TDC provide leadership in TPD	586	247	42.2
It is cheap to run teacher activities at the TDC	586	247	42.2
The TDC has money for TPD	586	224	38.2
The TDC has information on how to use the TDC	586	212	36.2
The TDC has plans for raising funds	586	108	18.4

Appendix F2: Frequency of teacher perceptions of TDC management

Appendix F3: Frequency of teacher perceptions of the resources at the TDC

Statements about the resources at the TDC	Ν	Number	Percentage	
		agreed	agreed	
There was water supply at the TDC	586	246	42.0	
Much of the TDC facilities were in good condition	586	246	42.0	
There was power supply at the TDC	586	208	35.5	
The TDC was near enough to most schools in the	586	187	31.9	
zone				
There were enough books on TPD	586	177	30.2	
There were overnight accommodation facilities at the TDC	586	69	11.8	

Appendix G: Field notes

Site	Field Notes and Observations
TDC 1	The TDC was open and the coordinator was present. I found community members in a meeting discussing the welfare of orphans. TDC hall had locally made teaching and learning materials displays and had a library with books for classroom use and not for professional development. The TDC coordinator was new to the TDC but trained in PD. The sports ground was bare and without basic facilities for sports.
School 1	Co education with very few displays in the classroom despite being at the centre.
School 2	Learnt that the school days and other activities do not take place on Friday Afternoon to pave way for religious activities.
TDC 2	On the first day of my visit I found the TDC closed and the coordinator had gone awayon official duties. On the second day, the TDC was open and the coordinator was present. The coordinator was newly appointed and untrained. He was previously a headteacher of a primary school. The coordinator was having a motor bike repaired. He told me that he used his initiative and resources to have the bike repaired. The TDC had a ground phone line which was disconnected due to non payment of bills. TDC hall had locally made teaching and learning materials displays. The library had very few books for classroom use but none for professional development. The sports ground was bare and without basic facilities for sports.
School 3	One teacher told me that he was refused by the head teacher to go to another school to seek assistance from another teacher on a topic in religious education. because the school was not in favour of the topic to be taught at this school.
School 4	There were large class sizes but very few books. No displays in the classroom.
TDC 3	On the first day of my visits I found the TDC closed and the coordinator had gone away to the district office to supervise the national examinations. The coordinator was newly posted to the TDC and was from a primary school where she was a headteacher. She was not trained in how to use TDC for TPD. I found a wedding meeting in session and a gender related meeting organised by an NGO. TDC hall had displays of teaching and learning materials. There a computer set which was gathering dust due to non use. I learnt that the TDC staff had not been trained in how to use computers. The library had books for classroom use but none for professional development. The sports ground was bare and without basic facilities for sports.
School 5	About 2 km from the TDC. One of the largest schools in the urban with large class sizes and more female teachers.
School 6	The two teachers who were interviewed were new to the school and the TDC
TDC 4	On the first day of my visits I found the TDC closed and the coordinator had gone away to the district office to supervise the national examinations. The TDC coordinator was reported to be away from the TDC most of the time. The assistant coordinator was available but was busy teaching. On a second day of my visit, I found the coordinator. The sports ground was bare and without basic facilities for sports.
School 7	A Catholic Primary school for girls only. The TDC was within the fence with a gate which was reported to be closed when the school was not in session. The assistant coordinator for the TDC was from this school. He told me that he was in most cases busy to attend to the TDC.
School 8	Some classrooms at this school had displays of teaching and learning materials.

Appendix H: Copy of a research clearance letter

Telegrams: MINED LILONGWE Telephone: +265 1 789422 Fax: +265 1 788064/164

Communications should be addressed to: The Secretary for Education, Science and Technology



In reply please quote No..... MINISTRY OF EDUCATION, SCIENCE AND

TECHNOLOGY PRIVATE BAG 328 CAPITAL CITY LILONGWE 3 MALAWI

12th March 2004

Mrs. Grace Banda, School of Education, University of Nottingham, Jubilee Campus, Wallaton Road, Nottingham, NG8 1BB United Kingdom.

Dear Mrs. Banda,

I would like to acknowledge receipt of your letter, requesting permission from the Ministry to allow you conduct research in some education institutions.

I am pleased to inform you that your request has been granted by this Ministry to conduct research in our institution. However, on a condition that you provide the following for our scrutiny and at the end, a copy of the thesis for our information and for our library :-

- (a) Your research proposal
- (b) Data analysis techniques to be used(c) Data collection tools/instruments
- (d) Procedures to be used for data collection
- (e) If any, CVs of your collaborators in the research.

I wish you all the success.

20

Dr. J.B. Kuthemba Mwale For : SECRETARY FOR EDUCATION, SCIENCE AND TECHNOLOGY

Appendix I: A copy of a letter of consent for a questionnaire survey

The University of Nottingham School of Education

Questionnaire consent form.

A study of Teacher Development Centres and Professional Development of Teachers in Malawi

Background and aim of the study:

Thank you for agreeing to participate in a study of teacher development centres (TDCs) and the professional development of teachers in Malawi, which focuses on teachers' experiences of professional development, and the TDCs. During the study, I will interview a sample of teachers and other stakeholders who will have participated in the set up and use of the TDCs. Research findings will be used to inform future policy development relating to the TDCs as a strategy for professional development for teachers.

As a researcher, I have an obligation to those taking part in the study to make sure that nothing negative arises from their involvement. The ethical principles governing research of this kind are set out below. They are based on the code of conduct set out by the British Educational Research Association (BERA).

The code of ethics

- Participation in the study is entirely voluntary
- · Participants can withdraw from the study at any time
- · Participants are under no pressure to answer any question they may feel uneasy about
- Data will be stored securely, under the terms of the Data Protection Act (1998) (UK).
- No individual or institution will be identified by name, nor be identifiable
- Any data which I might use when reporting the findings of my study will be anonymous
- No-one outside of this study will have access to any of the data I collect

Consent

I would very much value your participation in A study of teacher development centres and the professional development of teachers in Malawi and I am happy to answer any further questions you may have about it.

If you would like to take part in the study, please sign below:

Signed Date

Print Name:

Contact details: Mrs. Grace Banda Research Student School of Education University of Nottingham Jubilee Campus, Wollaton Road Nottingham, NG8 1BB United Kingdom

Tel: +44 (0)115 951 4543 Fax: +44 (0)115846 6600 E-mail: texgmkb@nottingham.ac.uk

Appendix J: A copy of a letter of consent for the interviews

The University of Nottingham School of Education

Interviewee consent form.

A study of Teacher Development Centres and Professional Development of Teachers in Malawi

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Signed Date

Print Name:

Contact details: Mrs. Grace Banda Research Student School of Education University of Nottingham Jubilee Campus, Wollaton Road Nottingham, NG8 1BB United Kingdom

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