

Exploring professional development interventions for improving the teaching practice of primary school teachers

by

Cristina Raul César Augusto Tembe

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DECLARATION

I hereby declare that *Exploring professional development interventions for improving the teaching practice of primary school teachers* is my own work and that all sources that I used or quoted have been indicated and acknowledged by means of complete references.

Signature: _____

Date: _____

Mrs CRCA Tembe

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ABSTRACT

Since the independence of Mozambique in 1975 teacher education and teacher continuing professional development (TCPD) have been a matter of concern for the Ministry of Education (MINED) and teachers. Both the MINED as employer and the teachers individually have permanently been looking for models and ways to upgrade their academic and professional qualifications levels.

The constraints faced by Mozambique are similar to those faced by other sub-Saharan African countries since their independence due to the increased pressure for more attention to all levels of education, with particular emphasis on primary education. Although TCPD is usually seen as part of the overall Strategy for Teacher Education (Ministry and Education and Culture, 2004), this scenario privileges initial teacher education since there are many unqualified teachers facilitating learning.

The main challenge of this study was to investigate the practices of primary school teachers in Grades 1 and 2 through a participatory action research (PAR) in a study titled *Exploring Professional Development Intervention for Improving the Teaching Practices of Primary School Teacher*. Mixed methods research was used, namely quantitative and qualitative methods. A quantitative method was used during the baseline study which consisted of questionnaires administrated to 1 028 teachers from six provinces in the country. Qualitative research was used with five practitioner-researchers (PRs) in one school. Each PR was approached as a single case study.

The findings of this PAR indicate that, on the one hand, the teachers are aware of the need for more academic and pedagogical qualifications, and on the other hand, of the individual responsibility they have. They believe that progression in their careers should be a credible procedure that recognises the TCPD programmes they have attended. The teachers are of the opinion that the MINED should formally recognise the TCPD by allocating credit points to teachers.

Although the self-directed professional development (SDPD) model used in this study was time consuming, it has revealed that TCPD can provide effective results when with the

appropriate support and follow-up of methods of facilitating the learning of reading and writing skills in Grades 1 and 2. The study involved all teachers appointed to Grade 1 in 2007, and continued with the same teachers until 2010. During this period the teachers were appointed to facilitate learning in Grades 1 and 2. Notwithstanding the fact that the PRs were only from 2 of the 7 grades provided in primary education, the study revealed the advantage of *whole school professional development*

The study took into consideration the Mozambican school context and calendar. For instance, the PRs were certified by the latest model of teacher education (10+2 teacher education programme) provided by the MINED. In addition, the meetings were carried out during the period scheduled for the planning of pedagogical practices and TCPD programmes.

Throughout the study the constant issue that emerged was the need for a paradigm shift in TCPD. Providers of TCPD need to introduce changes in the way they view primary school teachers and confer on them the responsibility for their individual continuous professional development. Action Research could be the new research paradigm used by providers and teachers to improve their work, understand learners' learning problems and find the appropriate solutions to improve achievement. The findings of this PAR both contribute to understanding the teachers' views with respect to the TCPD programmes being provided, and offer the option for a new paradigm for TCPD. In this regard the current providers of such programmes can also consider the school principal and the deputy principal as fundamental facilitators of TCPD through a SDPD model.

Key words: participatory action research, practitioner-researcher, learning opportunity, learningshop, teachers continuing professional development, self-directed professional development, in-service educational programmes.

ABBREVIATIONS AND ACHRONYMS

| | |
|----------------|--|
| ADPP | Ajuda Dinamarquesa de Povo para Povo (Danish Support from People to People) |
| AR | Action Research |
| CFPP | Centro de Formação de Professores Primários (Primary Education Teacher Education Centre) |
| CPD | Continuing Professional Development |
| CRESCER | Cursos (Courses of school capacity building: Systematic, continuous, experimental and reflexive) |
| GTZ | Deutsche Gesellschaft für Technische Zusammenarbeit (German Government Technical Cooperation Organization for Development) |
| IMAP | Instituto de Magistério Primário (Primary Teaching Institute) |
| IMP | Instituto Médio Pedagógico (Pedagogic Medium Institute) |
| INDE | National Institute of Educational Development |
| INSEP | In-service Education Programme |
| INSET | In-service Education and Training |
| LLL | Lifelong learning |
| MEC | Ministry of Education and Culture |
| MINED | Ministry of Education |
| MP | Magistério Primário (Teacher Training College) |
| PAR | Participatory Action Research |
| PD | Professional Development |
| PR | Practitioner-Researcher |
| PRs | Practitioner-Researchers |
| QA | Quality Assurance |
| RM | Research-mentor |
| SDPD | Self-directed Professional Development |
| TCPD | Teachers' Continuing Professional Development |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| ZIP | Zona de Influência Pedagógica (Zone of Pedagogical Influence: a cluster of schools in Mozambique) |

CHAPTER 1

INTRODUCTORY ORIENTATION

1.1 INTRODUCTION

The aim of this study is to investigate teacher continuing professional development (TCPD) in lower primary education with a focus on teachers who facilitate the learning process in Grades 1 and 2 in Mozambique. Through a Participatory Action Research (PAR) approach, the study explores an intervention that can be used to support primary school teachers in such a way that they assume responsibility for their own professional development. To attain this central aim the study looks at the teachers' responsibility to monitor their own continuing professional development (CPD). In this study I investigate classroom practices in order to explore how the principles of Action Research (AR), instructional design and assessment can support teachers in identifying areas for both innovative and successful learning facilitation. Self-reflection of teachers on their learning facilitation and self-monitoring of improvements is the essence of continuing professional development.

I have used classroom practices to look into TCPD *vis-à-vis* the 'roles for educators' stated by the *Norms and Standards for Educators* (Department of Education, 2000), cooperative learning and transformative learning. My study investigates individual classroom practices by pursuing the understanding of professional development of Fullan (2001:253) and Hopkins, Ainscow and West (1994:113). This study applies the effectiveness of conferring on teachers themselves the responsibility for professional development stated by Clark (1992:77).

Teacher continuing professional development programmes are in general seen from an upgrading point of view, and focuses on individuals who received formal preparation during a certain period of time in colleges or universities. However, my study investigates a specific point of view of TCPD involving prepared, little/under prepared and unprepared teachers. The modalities of both teacher education and TCPD within the context of my study are briefly presented in Section 1.2.

1.2 BACKGROUND OF STUDY

The context of this study is Mozambique. The Republic of Mozambique is located on the East coast of Southern Africa. By 2007 Mozambique had a population of 20 530 714 inhabitants (Instituto Nacional de Estatística [INE], 2008). In terms of political and administrative organisation, the country is divided into eleven provinces, namely Cabo Delgado, Nampula, Niassa, Zambézia, Tete, Manica, Sofala, Inhambane, Gaza, Maputo and Maputo-Cidade. The capital of The Republic of Mozambique is Maputo-Cidade, which is the biggest town located in the south of the country as shown in Figure 1.1 below.

Figure 1.1: Administrative Organisation of Mozambique (Passos, Nahara & Lauchande, 2005:2)



Taking into consideration both the location and the overall characteristics of the eleven provinces, the Mozambican administrative organisation considers three geographical Zones. The Northern Zone includes Cabo Delgado, Nampula and Niassa provinces; the Central Zone consists of the provinces of Zambézia, Tete, Manica, Sofala whereas the Southern Zone comprises Inhambane, Gaza, Maputo and Maputo-Cidade.

Portuguese is the official language in the Republic of Mozambique (República de Moçambique, 2004:7). However, the majority of Mozambicans speaks local languages as a mother tongue, while only two percent speaks Portuguese as mother tongue. According to Siteo and Ngunga (2000), the Mozambican linguistic panorama consists of eighteen Mozambican languages. In spite of being one of the less spoken languages, Portuguese is the only language that is spoken in all provinces, all over the country. This linguistic situation led the Government of Mozambique to choose Portuguese as the official language and also as the medium of instruction after the Independence from the Portuguese colonial government in June, 25, 1975. Portuguese remained the sole medium of instruction up to 2004 when the curricular plan for basic education was introduced, opening the possibility for bilingual education in Grades 1 and 2 (Instituto Nacional do Desenvolvimento da Educação [INDE], 2003a).

1.2.1 Mozambican National Education System

For many years, during the colonial times, education in Mozambique did not follow a unique system as a whole. The Portuguese government distinguished between education for whites and *assimilados* (assimilated Mozambicans) and education for indigenous Mozambicans. The *assimilados* had the same education rights as Portuguese people do, for instances in terms of attending all levels from primary to higher education (Almeida, 1973). Accordingly, public and private schools, located in urban areas and head-quarters of the colonial administration, provided education for white people, mulattos, Indians and *assimilados*. Education in those schools followed the Portuguese curricula established in Portugal. Missionary schools – located in rural and some suburban areas – provided education to indigenous Mozambicans.

In these schools education followed elements of the Portuguese curricula and Christian learning content.

From the 60s the Portuguese government began to provide similar education for all learners in Mozambique and all primary schools followed the same curriculum as a result of the new practices in the Portuguese policy of colonisation.

Through the years, changes in education were continuously introduced, and in 1974, still in the transition period from the colonial government to a Mozambican one, the primary school syllabus was revised. This revision aimed at the removal of the Portuguese learning content and themes, and the inclusion of those having more to do with the new Mozambican political context (Balate, 2009).

After the independence in 1975, one of the priorities in the education sector was to set up a national education system for all Mozambicans without any racial or social distinction (República Popular de Moçambique, 1983). Therefore, apart from the policy on the use of Portuguese as medium of instruction, the education reforms – undergone from 1975 – encompass the implementation of a Mozambican National Education System (SNE) in 1983 through the Law 4/83, on March 23 (República Popular de Moçambique, 1983).

During the following decade, apart from the political changes, great social and economic transformations took place in the country that impacted on education in terms of the organisation of the system itself, the provision of learning and the entrance age in Grade 1. Then, the SNE was readjusted in 1992 in terms of pedagogic and organisational aspects under the Law 6/92 on May 6 (Assembleia da República, 1992), with a view to responding to the current conditions. However, in spite of the changes introduced in the overall structure of the SNE, the official organogram still is the same one created in 1983 as represented in Figure 1.2.

For the purpose of this study I include the official organogram, in order to be consistent with the official document of the Ministry of Education and what is more known in schools and in

the various public and private institutions. Since these professional development interventions were carried out in schools I designed an organogram comprising the main changes introduced in 1992 as shown in Figure 1.3.

One of the general principles guiding the SNE is that education is a right and a duty for all citizens, established in the Constitution of the Republic of Mozambique (República de Moçambique, 2004:35). To put this amendment into practice, the Government (Assembleia da República, 1992) has ordained that private and community entities can provide education and has established the following central aims for the SNE, namely to:

- eradicate illiteracy
- guarantee basic education for all citizens
- ensure access to professional education for all Mozambicans
- provide sound scientific, technical, cultural and physical preparation and high moral, civic and patriotic education
- prepare the teacher as a conscious educator and professional with a sound scientific and pedagogic practice
- develop aesthetic sensitivity and artistic skills for children, youth and adults.

To attain these aims, the SNE comprises three levels of education, namely pre-school education, school education and extra-school education. The SNE's organisation also includes special modalities of the school education. Figure 1.2 is a representation of the entire Mozambican National Education System.

1.2.1.1 Pre-school education

Pre-school education is provided by public, private and community crèches and *jardins de infância* (Kindergarten) for children under the age of six, in order to complement the education given at family level and prepare them for the attendance of primary school. In some cases public or private services provide pre-schooling for their employees' children. Notwithstanding the expansion of crèches in urban, suburban and, to some extent, in rural

areas, the majority of Mozambican children do not benefit from the psychological, physical and intellectual development provided by pre-school education. This situation is mainly a direct consequence of a shortage of institutions providing pre-school education or lack of families' means to afford it. Therefore, realising these weaknesses, the SNE has established that to attend pre-school education or not is an optional decision of the child's family (República de Moçambique, 1992).

1.2.1.2 School education

School education comprises three types of education, namely general education, technical and professional education. General education is the central axis of the education system and includes primary and secondary education. All these levels have been provided by public, private, community and religious groups as well. Besides these two types of education, school education also encompasses special modalities of education such as special education, vocational education, adult education, distance education and teacher education. In this section I detail the general and teacher education since they are directly related to the topic of this study.

General education

General education encompasses primary and secondary education.

- Primary education is subdivided into two levels, namely 1st level of primary education (PE1) and 2nd level of primary education (PE2). PE1 is the lower primary education and includes Grades 1 to 5. PE2 is the upper primary education and includes Grades 6 and 7.
- Secondary education encompasses Grades 8 to 12, subdivided into two cycles. The 1st cycle is junior secondary education and includes Grades 8 to 10. The 2nd cycle is senior secondary education and includes Grades 11 and 12.

Technical education

Technical education encompasses three levels, namely elementary vocational education, basic vocational education and vocational education.

Higher education

Higher education is provided by universities, academies, higher institutions and schools of higher education. Higher education comprises eight years of education. After three years of education, the learners obtain a *Licenciatura* Degree¹; two years of post-graduate studies are required for a master's degree, and three years following a masters' for a doctoral degree.

Special modalities of school education

Special modalities of school education form part of school education aiming at the provision of specific educational opportunities. There are five types of special modalities, namely special education, vocational education, adult education, distance education and teacher education.

- Special education: Special education provides all levels of education to those children and youth with physical, sensorial and mental disabilities. Children with severe disabilities are educated in schools of special education and those with minor disabilities are educated in inclusive classes at inclusive schools.
- Vocational education: Vocational education is provided in vocational schools to youths who demonstrate particular talent in sciences, arts and physical education. In vocational education learners attend school education as part of their integrated education.
- Adult education: Adult education provides all levels of education in public and private institutions to two types of learner. One group consists of those learners who are older than 15 and are not considered part of the school age population to be

¹ Bachelor

enrolled in Grade 1. The other group consists of the learners who did not complete their academic levels during the foreseen period or age.

- Distance education: Public and private institutions provide distance education using technologies of information and communication and/or text materials. This type of education is understood as a complement to regular education and as an alternative to school education and includes secondary, higher and teacher education. Private institutions providing distance education offer professional courses such as Management, Economy, Accounting, Law, Sociology and Psychology.
- Teacher education: Teacher education encompasses two levels, namely teacher education for primary school teachers, which is provided by public and private institutions (teacher education colleges) and teacher education for secondary school teachers which is only provided by public institutions and universities. To attend a teacher education college, a candidate has to hold a Grade 10 certificate, whereas to attend teacher education secondary for secondary school a candidate should hold a Grade 12 certificate.

1.2.1.3 Extra-school education

Extra-school education refers to literacy activities and both cultural and scientific programmes for improvement carried out outside of the normal activities run in schools, aiming at the provision of education opportunities to those who do not attend schools.

Since the independence of Mozambique, more learners have the opportunity to attend school elsewhere in the country as their right established in the Constitution of the Republic of Mozambique as already referred to and specified in the National Education Policy and Strategies for Implementation (Republic of Mozambique, 1995). However, due to the large number of learners attending primary education on the one hand and the poverty that is savaging the majority of Mozambicans, particularly in rural areas in combination with the shortage of teachers and schools, on the other hand, it is a huge challenge for the

Mozambican government to put into practice the aspiration of providing compulsory primary education for all. For this reason the National Education System (Figure 1.2) establishes that the Government of Mozambique will gradually provide compulsory education for all citizens geared to the economic development and the specific circumstances of the country (Assembleia da República, 1992).

A visual representation of the current education system and the proposed one referred to above are given next.

Figure 1.2: National education system of Mozambique

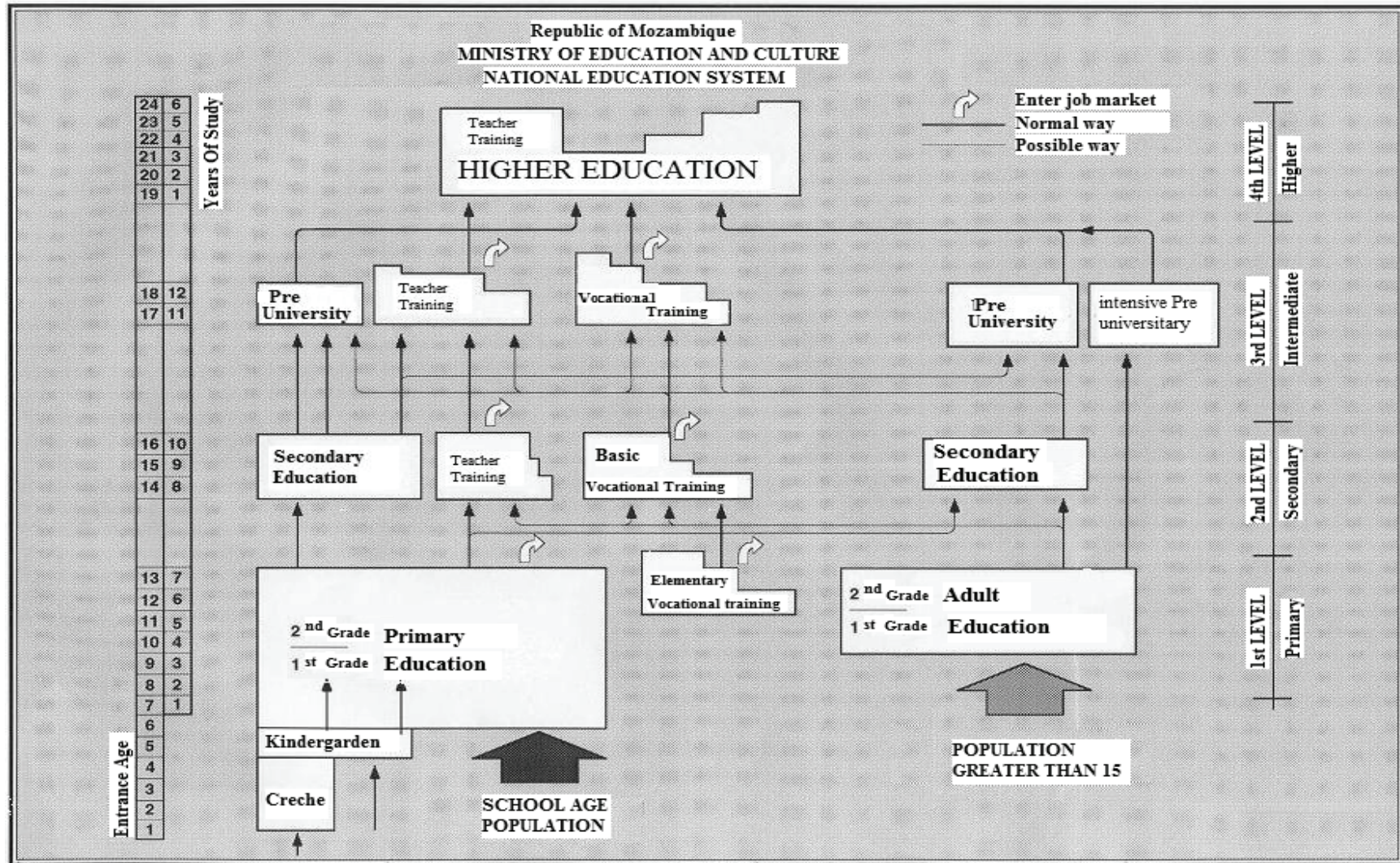
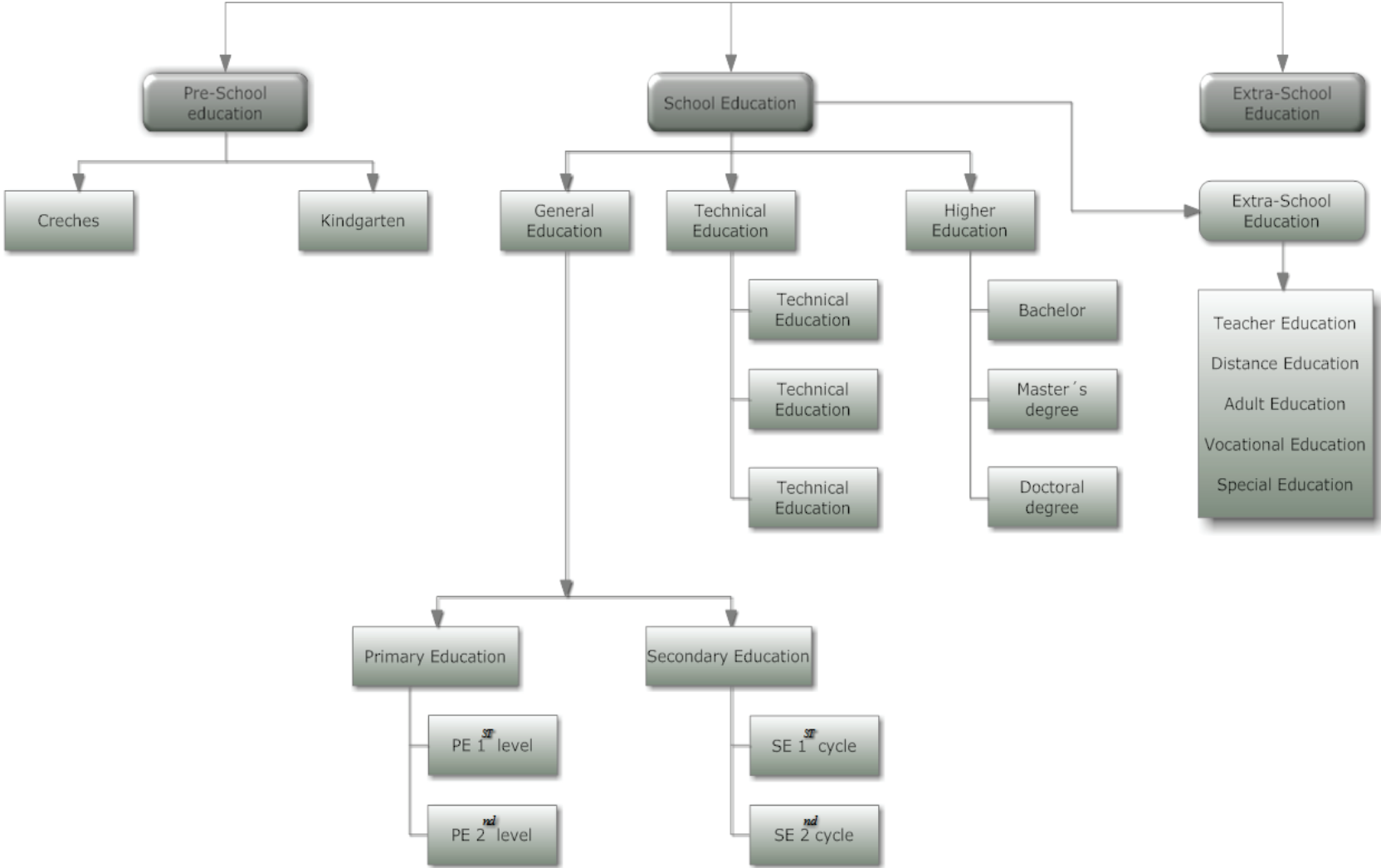


Figure 1.3: Proposed organogram for the National Education System



Many Mozambican children do not have the opportunity to continue their studies in the next level of education or even to be enrolled in Grade 1. For instance, in 2007 there were in total 4 806 497 learners enrolled in general public education, distributed as follows (Ministry of Education and Culture, 2007:8).

| Level of Education | Number of Learners |
|---|---------------------------|
| Primary education 1 st level (PE1) | 3 866 906 |
| Primary education 2 nd level (PE2) | 616 091 |
| Secondary education 1 st cycle (SE1) | 311 903 |
| Secondary education 2 nd cycle (SE2) | 11 597 |

Table 1.1: Distribution of learners in general public education (2007)

As has already been indicated, general education is the central axis of the entire education system. From this component of the NES the Education Sector Strategic Plan (1999-2003 to 2006-2010/1) has emphasised primary education, which in Mozambique means basic education (República de Moçambique, 2006:13). Consequently the above figure and the numbers of learners attending primary education, with the emphasis on PE1, indicate that, on the one hand, the Ministry of Education and Culture endeavour to attain one of the three main objectives of the educational policy in Mozambique: to expand access to education (República de Moçambique, 2006:13). It means that in 2007, the MEC had enhanced its capacity on responding to demand of the age group at PE1, which is set up from 6-10 years old. An example of the increase of learners in PE1 is that from 1995 up 2005 the gross enrolment rate increased from 85% up 131% and in 2007 represented 179%. However, there is a need for increasing the number of learners in Grade 1 with the age of six, since from the entire population (584 092) 95,1% is 6 years old (Ministry of Education and Culture, 2007:9). To increase the school age population, as signatory of international measures for education advancement the Government of Mozambique has declared primary education free of charge and gradually compulsory for all children from the age of six. On the other hand, the figure indicates the limited capacity of the educational system in providing education to the school age population, mainly to those who successfully conclude PE1 and the subsequent levels of education.

1.2.2 History of Teacher Education

Teacher education has always been a concern and a crucial component of any educational system. Accordingly, “there can be little argument about the importance of the role of teacher education in the delivery of effective education at virtually any level of learning” (Iredale, 1996:9) and the Mozambican situation is no exception.

Teacher education as part of the National Education System has always been aligned to the political environment and educational needs, both during the Portuguese colonial period and after independence. This is the reason why teacher education has presented a variety of models since the colonial period, the period after independence and currently. Such changes aimed at accommodating global and educational policies in the country. In the colonial period the intention was to implement the Portuguese colonial policy, which was based on racial discrimination and indigenous assimilation. In this respect, access to education was very limited and the majority of Mozambicans “were simply denied entry to education both for practical and political reasons. Practically, the rural subsistence economy may not have required much education. Politically, an educated population may not have served the interest of a colonial system” (Oketch & Rolleston, 2007:131). An immediate consequence of such an education policy was a limited need for expanded teacher education.

However, after independence, the Mozambican government aimed at rapidly expanding the access to education in order to face up to the increasing demand for education (Ministério da Educação, 2004a:6), although few teachers within the system were prepared to respond to this appeal. This situation has led the Government to put in place various measures to expand teacher education programmes to satisfy the need for more and better prepared teachers.

1.2.2.1 Teacher education in the colonial period

In the colonial period two modalities of initial teacher education were established. One of them was the *Escolas de Habilitação de Professores de Posto Escolar* (Schools of Teachers’ Qualification for school district). This modality of teacher education was launched and

funded by the government and run by colleges of Catholic Missionaries, preparing teachers to teach indigenous learners in Missionary schools mainly located in rural or suburban areas. The teacher-candidates were black people who had satisfactorily completed primary education. In the college they attended a four-year teacher education programme, also called ‘four plus four’ teacher education (4th+4). The other model was the *Magistério Primário* (Primary Mastership) funded and carried out by the government itself, preparing teachers for white and *assimilados* (assimilated) learners in public or private schools in towns and districts headquarters. The candidates were white and assimilated black people who were prepared during two years after having concluded nine years of schooling.

Simultaneously, during the struggle for national liberation in the so-called “free zones”², other types of teacher education and syllabi were provided. The candidate-teachers were selected from the existing guerrilla and the more educated individuals (Gómez, 1999). In turn, the subjects that were incorporated in the curricula were adequate for the Mozambican context and introduced learning content concerning the country. In this respect the History and Geography subjects were totally structured with new learning content, and cultural activities, such as dance and revolutionary song, were introduced.

1.2.2.2 Teacher education in the post-independence period

Education is a right and a duty established in the Constitution of the Republic of Mozambique for all citizens (República de Moçambique, 2004:35). As a result, the school attendance in primary education has been increased since independence in 1975. For instance, from 1999 to 2005 the number increased from 2,3 to 4 million learners (República de Moçambique, 2006:21).

In putting the right to education into practice by means of providing prepared and qualified teachers to facilitate learning for all school age children, the Ministry of Education and Culture (MEC) was facing serious constraints. For example, approximately 660,000 children

² Free zones were the Mozambican regions dominated by the guerrilla during the war.

from 6 to 12 years old remained out of school without the opportunity to learn (República de Moçambique, 2006:24) because of a shortage of teachers as well as a lack of infrastructure.

Looking at the macro-political and the socio-economic situation, the country has undergone once more educational changes in the earliest years of independence, caused by two simultaneous phenomena. On the one hand, most qualified Portuguese teachers and education officers continued abandoning the country and on the other hand, the increase in attendance, previously referred to, took place. What followed, as a result, was a lack of prepared teachers. The Ministry of Education attempted to establish a system for contracting secondary education graduates to teach in primary schools even without an appropriate qualification. Most candidates attended short term programmes varying from one to two weeks.

The main concern that was guiding educational policy at a teacher education level was to ensure that school age children had access to education provided by educated teachers. Therefore, to respond to the continuous demand of provision of teachers, new models of initial teacher education programmes – requiring different academic entry levels and different duration³ – were successively introduced. However, the challenge of providing more teachers is still relevant in our times. The Strategy for Teacher Education – 2004/2015 (Ministério da Educação [MINED], 2004b:17), reflects this concern, despite the fact that an increased number of teachers have been prepared under the mentioned programmes.

In 1987 a primary in-service teacher education programme, employing distance education methodology, was introduced to update teachers who attended the 4th+4 programme during the colonial era. The qualification provided through this distance learning model conferred a certification comparable to Grade 7 of primary education and 3 years of teacher education in colleges. Years later, in 2004 using the same model of teacher education, the Ministry of

³ - 6th grade and 6 months of initial teacher education
- 6th grade and 2 years of initial teacher education
- 6th grade and 3 years of initial teacher education
- 7th grade and 3 years of initial teacher education
- 10th grade and 2 years of initial teacher education, and 6th grade and 3 years of initial teacher education at the same time
- 10th grade and 1 year of initial teacher education.

Education (MINED) introduced the model of Grade 10 and 2 years of teacher education, to increase opportunities for current teachers in schools, aiming at improving their knowledge and skills.

The current public and private institutions provide different teacher education programmes for primary education. Those public schools, institutions such as *Instituto de Formação de Professores* (IFPs) (teacher education institutions) provide the Grade 10+1 programme. Similarly, the *Instituto de Educação a Distância Aberta* (IEDA) (Institute of Open Distance Education) provides a distance education programme. The private institution providing teacher education programmes is *Ajuda Dinamarquesa de Povo para Povo* (ADPP) (Danish Support from People to People) that provides the Grade 10+1 programme. The Grade 10+1 programme is the highest level of teacher education for primary school provided in Mozambique. Table 1.2 illustrates the current public teacher education and TCPD programmes. Currently, the Eduardo Mondlane University and the Pedagogical University provide teacher education for secondary schools.

| Level of education | Institution | Initial education | Models of Teacher Education | | | Continuing professional development |
|--|-------------------------------|-------------------------------------|---|----------------------------------|----------|--|
| | | | In-service education via distance education | | Duration | |
| | | | Entry profile | Duration | | |
| Primary | IFP IEDA | Grd 10 | 1 year | Category N5 and N4 | 2 years | Student-teachers All primary school teachers All primary school teachers |
| | ZIP/CFR | | | | | |
| Secondary | Higher education institutions | Grd 12 | 2 years | Grd 12 | 3 years | Student-teachers |
| Adult | INEA CPFQ CRFQ | Grd 7 | 2 years | | | Adult education teachers |
| | | Grd 10 | | | | |
| Technical and professional Teacher educators (primary education) | UEM | | | <i>Licenciatura</i> ⁴ | 2 years | Technical and professional education teachers All teacher educators |
| | Higher education institutions | Primary school teachers with Grd 12 | 3 years | | | |

Table 1.2: Teacher education and teacher continuing professional development models (Ministério da Educação, 2004b)

Legend

IFP= *Instituto de Formação de Professores* (Teacher Education Institute)

IEDA= *Instituto de Educação a Distância Aberta* (Institute of Open Distance Education)

ZIP= *Zonas de Influência Pedagógica* (Zones of Pedagogical Influence)

CFR= *Centro de Formação e Recursos* (Education and Resource Centre)

INEA= *Instituto Nacional de Educação de Adultos* (National Institute of Adult Education)

CPFQ= *Centro de Professores e Formação de Quadros* (Teachers and Personnel Education Centre)

CRFQ= *Centro de Recursos e Formação de Quadros* (Resources and Personnel Education Centre)

UEM= *Universidade Eduardo Mondlane* (Eduardo Mondlane University)

Grd= Grade

The number of primary school teachers prepared through the previously mentioned institutions does not meet completely the education demand in terms of the number of teachers needed for the learners enrolled in primary education. For instance, in 2006 the MEC appointed 5 000⁵ teachers educated in both public and private teacher education

⁴ Teacher education for technical and professional education is being provided by the Eduardo Mondlane University since 2009 by means of a master's degree programme.

⁵ This number represents less than 50%

institutions along with 2 000 teachers admitted without attending any teacher education programme (República de Moçambique, 2006:44). This scenario shows that at least 7 000 new teachers were working in primary education. Nevertheless, to respond effectively to the demand, in terms of school enrolment, the MEC should annually have appointed approximately 10 000 new teachers for the period 2006-2010/11 (República de Moçambique, 2006:44). Therefore, the upgrading of the existing 60 000 teachers in primary education (in PE1 and PE2) and the new 10 000 teachers – prepared and unprepared – (República de Moçambique, 2006:43-44), by the TCPD programme cannot be carried out as an *ad hoc* activity to solve current or even recurrent problems in education.

It should be noticed that apart from the insufficient number of educated teachers in primary education, the graduates from Teacher Education Institutes (IFP's) programmes do not have the appropriate qualification to actually facilitate learning due to a number of reasons (Ministério da Educação, 2004b:5). One of the reasons is that the duration of the courses is insufficient to implement the curriculum, manage the classroom, employ sound facilitating learning methodologies and monitor and assess the learners' knowledge and skills. Another concern is the limited opportunities that student teachers have for school practice in primary schools during their study (Passos & Cabral, 1998). In addition to this, most teacher educators were selected from secondary school teachers without previous preparation for primary school (Ministry of Education, 2004:7; Passos, & Cabral, 1998).

The overall situation related to teacher education as mentioned above, shows the relevance of initial teacher education “especially when so many ‘unqualified’ teachers operate in classrooms” (Iredale, 1996:9). Moreover, it is clear that the Mozambican education system still faces the challenge of an ongoing improvement of the content and the duration of teacher education programmes.

1.2.3 Teacher Education in Sub-Saharan African Countries

Teacher education and TCPD in Sub-Saharan African Countries, Mozambique included, have been influenced by the education development process in general and the challenges and particular demands posed by both expanding and sustaining education. Moreover, increasing

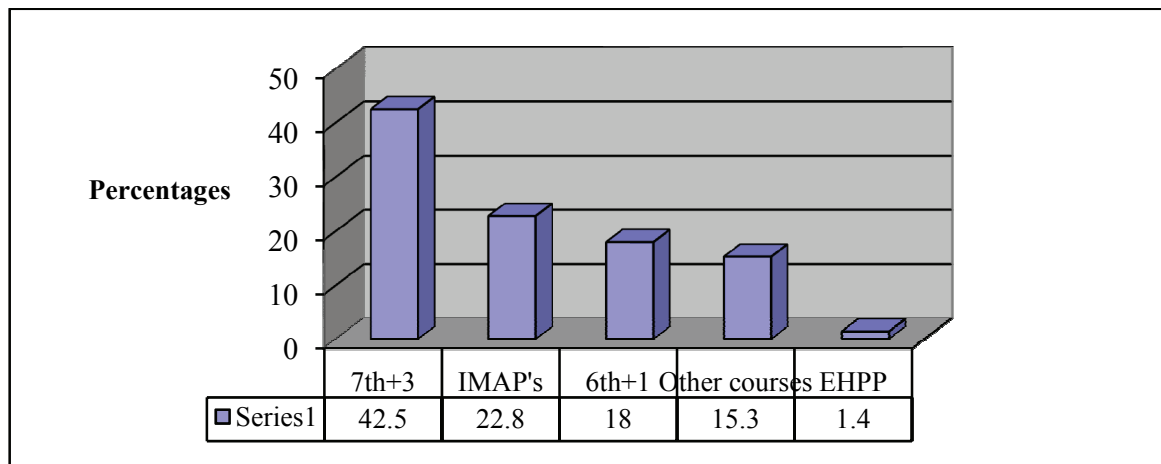
pressure for more school attendance and extra school buildings, has led to ‘quick’ teacher education programmes. Therefore, as Christie, Harley and Penny (2004:168) argue, TCPD in Sub-Saharan Africa has to be seen as a scenario that involves education, the state and development in a broad sense.

In this context, teacher education and TCPD programmes in Sub-Saharan African Countries will be necessary while Government promotes mass education. Consequently, the number of prepared teachers in the educational system is below its real needs (Figure 1.4). In addition, a significant number of prepared teachers are facilitating learning in grades or levels they were not prepared for, because of a shortage of human resources. This is the case of IFP’s graduates who facilitate learning in secondary schools and graduates from the Pedagogic University facilitate learning in teacher education colleges (Ministério da Educação, 2004a).

In Mozambique, like in many other Sub-Saharan African countries, the education system still has to face the challenge to prepare new primary school teachers as well as to qualify large numbers of teachers that are already in the profession. According to the statistical data from the Ministry of Education and Culture (2007:19), Mozambique had 52 998 Mozambican primary school teachers in PE1, which represents 99,89% of the total number of teachers facilitating learning on this level of education to 4 000 000 enrolled learners. Of those teachers, 31 687 (59,8%) have a pedagogical preparation and 21 311 (40,2%) do not.

The next figure is a visual representation of the distribution of teachers by type of teacher education modality.

Figure 1.4: Distribution of teachers by type of teacher education modality



(Ministry of Education and Culture/Directorate of Planning and Cooperation, Education Statistics-Annual School Survey-2007)

1.2.4 Teacher Continuing Professional Development in Mozambique

In the colonial period, TCPD was under the guidance of the Inspectorate of Education since this was the entity responsible for pedagogical orientation at district level. By then TCPD was designated *Cursos de Aperfeiçoamento* (improvement courses) (Balate, 2009). According to Balate (2009), the inspectors used to identify methodological teaching concerns among primary school teachers by paying regular visits to schools. This activity often led to recommendations for measures for improvement to be carried out by more qualified teachers. Qualified teachers were appointed to deliver in-service courses for all primary school teachers.

The main pedagogical issues in post-independent Mozambique were related to the low professional development of teachers (Gómez, 1999:305). By recognising such a weakness, TCPD is seen as a teacher education component within the Mozambican Education and Culture Strategic Plan. However, since provision of teachers is still a challenge, these conditions impose an emphasis on initial teacher education instead of on TCPD (Christie et al., 2004:171). Actually, due to the shortage of financial resources, CPD is often not at the top of the agenda in terms of budget allocation. Therefore, the teacher professional

development modalities such as teacher education have changed across the years. TCPD began in the late 70's with study sessions at a *Zonas de Influência Pedagógica (ZIP)*⁶ level, following a calendar as well as contents determined by the MEC for all teachers in primary schools. In the 80's the responsibility for the study sessions lay with the ZIPs.

A ZIP is an 'organ' created by the MEC in 1977 aiming at joining primary school teachers from a group of 3-5 lower primary schools, according to neighbourhood, for mutual pedagogical support. At the ZIP, teachers have pedagogical sessions where they are prepared for/or discuss about the subjects from the grades in which they are involved, plan learning opportunities and produce learning materials. In this regard, Hoppers (1998:233) indicates that "a circular by MINED set the tone by describing the new ZIPs as 'pedagogical units of teachers' aimed at development of teachers competencies, 'improvement of educational quality', and dissemination of pedagogical experiences". However, this pedagogical role was disturbed by non-pedagogical issues to be discussed by the teachers at ZIP level. In some situations, the head of the ZIP holds administrative duties, like salaries and other administrative matters (Chirime, 1994), owing to the vast distance from the school to the district and provincial directorate. In deep rural areas, the previously referred schools' neighbourhood means 500m to 10 km in length due to distances from one school to another. This situation combined with the shortage of financial resources contributes to some extent to the shift from a monthly to a trimester ZIP session.

Years later the teachers began to become less motivated to attend ZIP sessions due to the lack of an innovative approach for TCPD. Apart from repetitive topics to be discussed at ZIP level, teachers were bound to attend these sessions every year, even though they had done so the year before. In spite of these weaknesses, some ZIPs continue working with both MEC and Non Governmental Organisations (NGOs) financial and pedagogic support.

⁶ Zones of pedagogical influence – cluster schools for mutual pedagogical support among teachers from closed schools

Besides programmes initiated by the government, there are also experiences on TCPD sponsored by several NGOs that are based in Mozambique, through educational projects such as GTZ, *Programa a Nossa Escola* (PRONES), PROGRESSO, OSUWELA and later on named Courses of school capacity building: Systematic, continuous, experimental and reflexive (CRESCER), *Unidade para o Desenvolvimento da Educação Básica* (UDEBA). The German Government Technical Cooperation Organization for Development (GTZ) works in Sofala and Inhambane provinces on teaching methodology in lower primary education. PROGRESSO basically works in four districts of the Cabo Delgado province and in three of the Niassa province on reading and writing methodologies in Grades 1 and 2. The OSUWELA Project started in 1999 in Marrere, Nampula Province (UNESCO, 2000). The project was located in a teacher education institution and worked on methodologies of learning facilitation, reflection on the teachers' practice and the construction of learning material with both groups: teacher educators and teachers at ZIP level. Taking into consideration all experiences on TCPD, the current perspective of the MINED is to approach TCPD in the context of ZIP revitalisation supported by teacher education institutions around the country (Ministério da Educação, 2004a).

The basic assumption leading TCPD programmes is that they are the most appropriate strategy to prepare and update primary school teachers and at the same time improve learning. For this reason, and because of an ongoing attempt to find better ways to increase the achievements in Grades 1 and 2, a new modality of TCPD was introduced in 2008, following the 2008 Coordinator Council of the MEC. The latter modality was designated *Jornadas Pedagógicas* (pedagogical journeys) and took place in all districts and ZIPs of the country. The central goal of the *Jornadas Pedagógicas* is to improve initial reading and writing skills in Portuguese in Grades 1 and 2 of primary education at national level (Ministério da Educação e Cultura, 2008). For this purpose, central, provincial and district teams were created, involving currently working or retired inspectors, pedagogical technicians, teacher educators and teachers who have relevant experience in both methodologies and strategies on reading and writing in Grades 1 and 2 (Simbine & Balate, 2008). The aim was to train all teachers appointed in these grades through a cascade training

model. Simultaneously, a monitoring structure was established by the MEC at provincial, district and school level.

The *Jornadas Pedagógicas* were established because of the urgent need of the Ministry of Education and Culture to improve the learners' achievements in Grades 1 and 2. These pedagogic activities are compulsory and take place on all Saturdays and during the tri-semester break at ZIP level, supported by provincial and central technicians.

The ZIP activities and the *Jornadas Pedagógicas* are currently supported by human and financial resources from the MEC and permanently monitored by the related Provincial Directorate of Education and the MEC itself. The overall organisation of *Jornadas Pedagógicas* attempts to apply the experiences from CRESCER and action research practices.

1.2.4.1 Experiences in action research in Mozambique

There are two significant experiences with action research (AR) involving professional development and practices of primary school teachers in Mozambique, namely the Professional Development Programme and the Quality Education Project (QEP).

Professional Development Programme

The Professional Development Programme was designed by the MEC and the Finland Embassy in Mozambique in 2003, for the period 2003-2005 involving 13 of the 16 teacher education colleges (Instituto Nacional de Desenvolvimento da Educação [INDE], 2003). The project aimed at both improving knowledge and developing research skills among teachers' educators for the implementation of the new curriculum for Primary Education. In this project action research as one of the research methods was one of the topics for which the participants were prepared (Instituto Nacional de Desenvolvimento da Educação [INDE], 2003).

The project had a positive impact on the teacher education with respect to the improvement of research skills and the perspective at both macro and micro level. In acknowledging the practical and reflexive components in teacher education (Instituto Nacional de Desenvolvimento da Educação [INDE], 2006), the MEC introduced in 2007 action research as a syllabus in the new teacher education curricular plan. In turn, at a micro level, at teacher education institutes the teacher educators developed knowledge and skills related to action research.

The Quality Education Project

The Ministry of Education and Culture and the Save the Children Norway (SCN) undertook in the Manica and Sofala provinces a project named Quality Education Project (QEP) from 2004 up 2007, involving 30 primary school teachers, three school principals, three ZIP coordinators, 16 teacher educators and 11 pedagogical technicians from district, provincial and central levels. The aim of the project was to prepare the participants in the design and implementation of action research projects by “allowing participants to be aware of the serious problems that affect the teaching/learning process and the responsibility they had to change the situation through changes in their teaching practices in their own work places” (Save the Children Norway, 2007:7). An international team from SCN (Oslo, Zambia, Zimbabwe and Ethiopia) facilitated the interventions supported by a team from SCN – Mozambique. In order to monitor the project and create sustainability, a central core group was created comprising central institutions, one lecturer from the Eduardo Mondlane University and another from the Pedagogical University.

The QEP is an international project involving seven developing countries in Africa, Asia and Latin America. Mozambique was the third country to introduce QEP. The interventions included issues such as quality education in Mozambique, qualitative and quantitative research, action research, methods of data collection and data coding. The theoretical component was complemented by reading material that was distributed among the participants.

To practise observation as a research method to begin with, the participants carried out a set of classroom observations in schools in their ZIP. Following this phase, each teacher performed her/his classroom observation in the context of his own action research. Primary school teachers were more motivated than the teacher educators and the pedagogical technicians who did not design their action research projects, probably due to the reason that the project contents were not new for them (Save the Children Norway, 2007).

The evaluation report shows that the projects “were not implemented fully due to time constraints” (Save the Children Norway, 2007:10). However, the QEP promoted a change in teachers’ attitude towards facilitating learning and learning itself, even among unprepared teachers. According to the Save the Children Norway (2007) the QEP was not adopted by the MEC, in spite of being considered an approach to be used in teacher education institutions. The reasons for the weaknesses have mainly to do with the following aspects:

- No formalisation of research practices in teacher education institutions.
- High costs required for performing the several interventions and field work.
- Involvement of few teachers.
- Long term impact on quality of education.

1.2.4.2 Experiences in quality assurance

The activities carried out by technicians at the Ministry of Education, provincial and district directorates of education, by teachers and teacher educators, respectively at school and teacher education college level, broadly aim at planning, implementation, supervision and assessment or evaluation. In this process the activities regarding assessment and evaluation to some extent include quality assurance procedures. The process follows a cascade model of assessment from the MEC to provincial and district directorates, from school to the individual teacher who assesses the learners regarding assessment and evaluation to some extent include quality assurance procedures. The process follows a cascade model of assessment from the MEC to provincial and district directorates, schools up to the individual teacher who assesses the learners.

Examples of the current idea of assessment and evaluation of what others have achieved are both the regular assessment tests and the examination at the end of each level of education (PE1, PE2, SE1 and SE2) established in the *Regulamento de Avaliação* (Regulation of assessment and evaluation). Actually, the process seems to give indications that the learners' achievement is simply viewed as what the learners have achieved and rarely analysed in terms of what the teachers and the MEC and the subordinate institutions (provincial and district directorates) carried out to promote learning. This applies to teacher education as well.

Annually the Ministry of Education carries out the *Reunião de Planificação* (Planning Meeting) and the *Conselho Coordenador* (Coordinator Council). These events at least engage the Ministry and Vice-Ministers, the National Directors, National Inspectors, Provincial Directors, Heads of Central Department aiming at the evaluation of the activities performed and the outline of the activities for the coming academic year. The *Reunião de Planificação* discusses human, financial and material resources, infrastructures included, whereas the *Conselho Coordenador* discusses education as a whole with the emphasis on educational policies and regulations.

A clear example of quality assurance procedures in the MEC activities is that the IV meeting of the *Conselho Coordenador* discussed the deficient reading and writing skills among the learners in lower grades of PE1 (Ministério da Educação e Cultura, 2008). As a result of the discussions, corrective measures were introduced. The National Directorate for Basic Education created the *Jornadas Pedagógicas*, already referred to in this chapter, and during the *Conselho Coordenador* meeting in 2009 they were evaluated. The fourth meeting of the *Conselho Coordenador* seems to be an innovation in terms of quality assurance procedures. However, the lack of the teachers' voice, for example, about their learning in teacher education college or throughout professional development courses is not properly considered.

There also exists a third procedure of quality assurance: internal or external evaluation usually carried out by international and/or Mozambican consultants selected by invitation. The purpose of these has been to perform a midterm review or final evaluation of

governmental or NGOs programmes on school education, teacher professional development and other education areas. Internal and external evaluations include questionnaires and interviews in order to gather information from the beneficiaries of the programmes. The MEC also performs external evaluation carried out by the education donors during semester and annual meetings.

Quality assurance is explained in detail in Chapter 2.

1.2.4.3 The need for new approaches TCPD

In recent years there have been a variety of TCPD programmes in Mozambique. One compelling reason for multiple provisions and also for different approaches is the deficient reading and writing skills in lower primary education, with a noticeable and specific prevalence in early years (Ministério da Educação e Cultura, 2008). At the end of Grade 2, the curricular plan for basic education establishes that the learner should acquire basic reading and writing skills. In addition to this constraint, is the prevailing problem of the under qualified graduates from CFPP and IFP already mentioned in Section 1.2.1.

The Ministry of Education strategy on teacher education – 2004-2015 – acknowledges the role that TCPD can play in the general efforts to improve the qualifications of teachers in primary education. The MINED also emphasises the linkage between initial teacher education and TCPD (Ministério da Educação, 2004a:4). Therefore, to improve teacher education as a basic and TCPD as a particular component, the MEC is moving on to implement a global strategy, in which the Zone of Pedagogical Influence (ZIP) and Resource Centres will play a crucial role. Collaboration among teachers is an issue to take into consideration in view of professional development. However, it is important to ensure the existence of both qualified teacher educators and teachers who can support TCPD programmes at ZIP and Resource Centre level. Teacher educators should be selected among teachers who not only have a professional qualification, but also professional knowledge concerning primary education and high-quality experience on primary school teaching.

In spite of the improvements achieved through the compulsory *Jornadas Pedagógicas*, which from 2008 up to now have taken place at ZIP (Bembele, 2011; Xerindza, 2011) there are some weaknesses with respect to the fact that teachers do not take responsibility for their own professional development. The *Jornadas Pedagógicas* as a model of TCPD should involve teachers in selecting the knowledge or skills they need to acquire or to develop, and when possible, the teachers should develop learning opportunities (Hawley & Valli, 1999). Although these sessions already include the development of learning opportunities, the main topics are not selected by the teachers themselves (Bembele, 2011). The programme is sent by the Ministry of Education.

The teachers feel more motivated to attend courses one academic level higher than their current qualification, which allows a remunerable growth within their professional career. Another weakness in this field is that the TCPD programmes do not pay attention to the question how to monitor the learning process and the consequent support to be provided to individual learners.

1.3 CRITICAL RESEARCH QUESTIONS

Taking into consideration that the purpose of this study is to explore an intervention to support primary school teachers within the conditions of the study, the exploratory research questions are the most appropriate type (Mouton, 2001:53). Fouché and De Vos (2005:106) state that exploratory research questions are identified/formulated to explore social or educational programmes. For this purpose I formulated the following central research question to guide the study:

How can teachers in Grades 1 and 2 be supported in terms of improving their practices by taking responsibility for their own professional development?

In order to address the central question, I formulated three sub-questions, as follows:

- How do Grade 1 and 2 teachers take responsibility for monitoring their own professional development?
- What kind of intervention could be developed to support teachers to take responsibility for monitoring their own professional development?
- How can elementary principles of action research, instructional design and assessment support teachers on monitoring their own professional development?

1.4 RATIONALE

Four reasons basically sustain the significance of this study. The first one is personal and it is related to my experience in primary education as learning facilitator, supervisor and coordinator. The second reason is aligned with the importance of teacher education in lower primary education, in the Mozambican context, where education is offered by a large number of unprepared teachers. Another reason is pragmatic in the sense that I want to, even beyond the scope of this study, continuously explore an intervention for improving the practice of primary school teachers. The fourth reason lies in the scholarly component, contributing to a wider body of knowledge about teacher continuing professional development with the emphasis on developing countries where teacher qualifications are still a great concern. Findings from this study are useful for my own practice, for the teachers involved, for MEC and other teacher professional development providers, and for other researchers in this field.

1.4.1 Personal Rationale

My interest in TCPD in primary education derives from my background, namely primary school teaching. I successively acted as a pedagogical supervisor for primary schools and teacher education colleges, as a curriculum planner and author of textbooks and teacher guides, as a facilitator in TCPD programmes for teachers, teacher educators and other

educators, as national team member for TCPD in the context of primary education mainly for Grades 1 to 3. The term *other educators* is used in the sense of one of the postulations of the Norms and Standards for Education (Department of Education, 2000). The groups of other educators engaged in the PD that I facilitate, included a head of department, heads of District Directorate, primary school principals and their deputies, coordinators of Zones of Pedagogical Influence and delegates of specific subjects in the 2nd level of primary education.

As a supervisor and facilitator I have examined the procedures used by teachers in facilitating learners' learning in terms of knowledge and skills acquisition and development. In addition to that, I encountered the challenging situation of learners who could not properly read nor write after completing Grade 1 or 2, even under the new curriculum for basic education, which was conceived mainly to offer a solution to pedagogical difficulties in these grades.

Thinking of TCPD in primary education, my recent experience as a lecturer in instructional design and curriculum development in the Faculty of Education at the Eduardo Mondlane University in Maputo initiated many questions with respect to classroom practice and teacher responsibility regarding what they should know and do in order to facilitate the learning process. Therefore this study intends to be a contribution to both my personal and my participants' professional knowledge on how to enhance our own professional development.

1.4.2 Contextual Rationale

The rationale for deciding on primary education derives from the contextual reality of education in Mozambique. In Mozambique, primary education means basic education in the areas of communication, mathematics, natural and social sciences, physical, aesthetic and cultural skills (Republic of Mozambique, 1995:14). In the country primary education plays a central role in the overall Government strategy to decrease poverty and promote Education for All (Ministério de Educação e Cultura, 2006:21). However, the MEC faces constraints in implementing this principle. On the one hand there is the large and annually increasing number of learners, mainly in primary education, and on the other hand there is a lack of

capacity to provide sufficient teachers in terms of quantity and quality, particularly in the 1st and 2nd grades. Therefore, addressing professional development in primary education, and particularly in the mentioned grades, implies dealing with a significant component of the education sector.

In Mozambican schools, many learners admitted in Grades 1 or 2 show early underachievement when assessed against the outcomes specified for the grade. Such a weakness limits the learners' opportunities to perform successfully in these grades, as well as in the rest of their primary education and across their overall school career and beyond. A number of changes have been introduced in teacher education programmes and in TCPD. The objectives of these programmes are to prepare and update teachers in methodologies concerning initial writing and reading in Grades 1 and 2 in order to improve learners' achievement. This is done from the awareness that learners' achievement in the earliest years of schooling is a critical prerequisite for later academic success (Jimerson, Egeland & Teo, 1999:116).

Another weakness is that the qualified teachers do not facilitate in lower primary education. They are often appointed in the highest grades of primary education for the reason that they have a more comprehensive knowledge about the subject matter. As a result, the lower grades are in the hands of unprepared and/or inexperienced teachers.

Teacher education and consequently the impact upon learners has been an object of study in Mozambique. The problems studied in this area comprise the language of instruction, teacher's qualifications in terms of their knowledge of subject matter (Palme, 1992) and knowledge of teaching methodologies even among prepared teachers (Tembe & Dodds, 2003; Passos, 2004). In addition there is no TCPD system for the provision of programmes, which takes into consideration the specific condition of both newly appointed teachers and those who are already in the profession.

The present study takes into consideration that the 10+1 programme is the highest model for teacher education for lower primary education. Another set of issues that this study takes into account is the reality in primary schools:

- The teachers involved are prepared in 10+2 teacher education programmes; most of them continued their studies and finished Grade 12.
- The teachers work from 10:30 to 13:30.
- A session for the planning of learning opportunities takes place every two weeks from 08:00 to 12:00 approximately.
- The teachers are involved in pedagogical support activities at school and at ZIP level during the break of the trimester and semester.

This study aims to explore an intervention for improving the practice in primary schools. It includes examining contemporary TCPD models in Mozambique and their impact on practices of primary school practices. Besides informing my practice and the participants' practice, this study also informs governmental PD programmes and NGOs providing PD. The findings of this study show improvement of the participants' understanding of the process of facilitating learning and the need for innovative practices towards their own PD.

1.4.3 Pragmatic Rationale

This Participatory Action Research study explores an intervention for TCPD that promotes/encourages an individual teacher to take responsibility for her/his own professional development based on his/her current learning needs, instead of a top-down motivation and prescribed learning content. In this study the limitation of top-down oriented programmes for TCPD where the content, the time and procedures are selected by people other than the teachers themselves, are discussed at length.

The classroom plays a central role in this study. The importance of the classroom as a place for teacher development is mentioned by Hopkins et al. (1994) and Thiessen (1992). In this

regard, this PAR study was basically carried out in the context of classroom practices of the participating teachers, with the intention to explore a feasible model of TCPD. In addition, I worked with the teachers for three years, acknowledging the disadvantage of being seen as an inspector or a teacher checker.

The study takes as a starting point the belief that conferring the responsibility for professional development on teachers themselves is most effective as is stated by Hargreaves and Fullan (1992:64). Accordingly, in this PAR study the teachers take responsibility for their own CPD by observing their day-to-day work and by investigating concrete classroom activities, within their normal classes. As a researcher I saw to it that the needs and desires of each teacher were taken care of and I emphasised the importance of self-directed professional development as referred to by Hargreaves and Fullan (1992:77).

1.4.4 Scholarly Rationale

Teacher continuing professional development has been a matter of debate within educational systems in general and within or with reference to the developing countries in particular. Researchers in this field have reviewed TCPD policies and practices (Avalos, 2004; Hardy, 2008; Tripp, 2004). There are case studies from sub-Saharan Africa (Christie et al., 2004). There are studies about the effect of national policies on teachers' perception of professionalism (Day, Flores & Viana, 2007), the attitude of teachers towards professional development by distance learning and teachers' in-service training needs (Karagiorgi & Symeou, 2008). Other researchers studied the impact of teacher professional development on learners' achievement (Bartlett & Burton, 2003; Campbell & Jackes, 2004; Lisle, 2006). Most of the studies concerning TCPD refer to the United States of America and to European countries and less to developing countries.

Although TCPD in developing countries has also been a big concern, findings from current studies in other countries cannot be linearly applied to Mozambique. Such studies refer to TCPD as a teacher education complement. For example, there are studies on TCPD

involving newly prepared teachers in the United Kingdom (Attard & Armour, 2005), involving teachers already in the profession in United States of America (Sato et al., 2005), in the United Kingdom (Peder, 2007). In developing countries, such as Zimbabwe, Mushayika and Lubben (2009) studied self-directed professional development in involving high qualified teachers. Joshua, Joshua, Bassey and Akubuiro (2006) studied the attitude of Nigerian teachers to peer evaluation of teachers. These studies were carried out applying theoretical frameworks already designed for other geographical and socio-economic contexts. For instance, regarding the context, Christie et al. (1992:172) advocate that CPD in Africa can best be implemented by using different ways from the models described in (Western) literature. With a view to applying a feasible intervention in this study, I explore one intervention from the classroom practices throughout the teacher normal class and school schedule for pedagogical support and planning sessions.

The focus of this study is innovative since it aims at looking at classroom practices with the focus on what teachers do to monitor their professional development. As a consequence potential and innovative areas for CPD can be identified by teachers themselves. There are insufficient TCPD models designed from the teachers' practice, exploring with the teachers themselves what they want to learn apart from methodologies of specific subject. Most TCPD models were designed from expertise knowledge or reports from the field.

Observation and reflection on my practice can help teachers in two ways. First of all they will understand better the self-monitoring model or theoretical knowledge that I am exploring and jointly applying with them. The second advantage of the self-monitoring model is the growing capacity for lifelong learning in formal and informal situations. The capacity to learn from our own actions is a strong tool for CPD and it strengthens teaching as a profession.

Looking at the Mozambican context, it can be said that there is still a weak acknowledgement of teaching as a profession. Primary school teachers are not considered as professionals. In this study I assume that primary school teaching is a profession to be developed and promoted, primarily by the teachers themselves.

As a contribution to existing literature, this study takes as a starting point the self-directed professional development approach of CPD as expounded by Clark (1992). In this approach Clark states that experienced teachers can design their own professional development programmes. He systematises the self-directed professional development principles of such a design as follows:

- Write your own credo of teaching.
- Start with your strengths.
- Make a five-year plan.
- Look at your own backyard.
- Ask for support.
- Go first class.
- Blow your own trumpet.

(Clark, 1992:78-83)

Clark argues that “the question is not whether teachers have what it takes to be designers of their professional development. They do. The question is, How can we help them with the process?” (Clark, 1992:77-78). In the context of this study, like in the most developing countries, where the majority of teachers are little prepared or unprepared, the question appears to be, ‘How can this approach of self-directed learning help teachers with little or no training to develop methodologies and strategies on how to facilitate learning now and in the future’. Hawley and Valli (1999:136-145) developed eight design principles for effective professional development and highlight their relationship with learning principles during “continuous teacher and administrator learning in the context of collaborative problem solving”. This view defends PD towards learners’ learning by stressing PD as a means for changes in the knowledge, skills and behaviour of teachers.

From Clark’s (1992) perspective on the self-directed professional development principles and Hawley and Valli (1999), my understanding is that they can be summarised in a more holistic picture that comprises personal, professional and institutional dimensions. Table 1.3 indicates the principles of self-directed professional development.

| Principle | Dimension of PD | Factors impacting | |
|---|------------------------|--|---|
| Driven by questions and purpose identified by the teacher | Personal | Motivation | |
| Self-esteem and self-respect | | Suitable to age and stage of the career | |
| Based on teacher strengths | | Accreditation and incentives | |
| Analytic and reflective | | Progression in the career | |
| Grounded in relevant knowledge, skills, values, principles, methods | Professional | Professional knowledge and skills | |
| Participatory and collaborative | | Promoters/facilitators accreditation | |
| Includes making public her/his development | | Learning material | |
| Promotes professional growth and maturation | | Planning/schedule for academic and professional upgrading | |
| Commitment with learning | | Research support | |
| Scholarly encouraged/motivated | | | |
| Knowledge-based | | | |
| Innovative | | | |
| Classroom based | | | Regulation on continuing professional development |
| Continuous | | Institutional | Planning systematic provision |
| Comprises follow-up | Quality assurance (QA) | | |
| Includes support | - Self-directed QA | | |
| Includes evaluation | - Internal QA | | |
| | | - External QA | |
| | | Autonomy/flexibility on curriculum development at school level | |

Table 1.3: Principles of self-directed professional development

1.5 STRUCTURE OF THE DISSERTATION

This dissertation describes an action research process with the intention of exploring an intervention for improving the facilitation capacity of primary school teachers through self-monitoring as a means of their continuing professional development. To describe this process the dissertation consists of six interrelated chapters.

Following **Chapter 1** which gives the introductory orientation by tracing the background and the substantiation of the study **Chapter 2** gives the theoretical framework underlying the topic of this study. Literature on teacher continuing professional development (TCPD) was reviewed with the view to outlining the main issues of this study and to understanding the characteristics of several models of TCPD. The chapter goes on to point out where this study links up with various theoretical research reports and the theoretical foundation of action research is chosen to enhance self-directed professional development.

The purpose of **Chapter 3** is to outline the research design and methods, the instruments used for data collection, the sampling strategy and how data were collected, analysed and interpreted. In this chapter the content validation of the instruments is provided. Action research as the most appropriate research paradigm is also described. The chapter also accounts for the activities the researcher carried out along with the participants throughout the study in order to explore an intervention for teacher continuing professional development.

The data that are collected and the main empirical study findings are analysed, interpreted and reported in **Chapter 4**.

Chapter 5 highlights the conclusions and recommendations for TCPD policies and practices at school level. The chapter continues with the presentation of some recommendations for further studies that would deepen the focus of this study.

Chapter 6 is the final chapter and presents the metareflection on the study process. The chapter contains the main findings emerging from the study, the evaluation of the research

process and a discussion of the methodological approach. The chapter ends with the summary of my knowledge claim and the main conclusions of the study.

CHAPTER 2

THEORETICAL FRAMEWORK

2.1 INTRODUCTION

In this chapter I address specific theoretical matters regarding teachers' continuing professional development (TCPD) from a multidimensional viewpoint. Hence the various aspects related to professional development (PD) form the theoretical basis of my study. I reviewed the literature which deals with the topic of my study (professional development) as well as with educational change, learning styles, transformative learning, cooperative learning, instructional design and assessment.

This PAR study was conducted to apply the theories of a self-directed professional development approach on TCPD and to contribute to the wide body of existing knowledge, as I previously explained. My study fits into the nature of the action research aim stated by Kember (2000:25):

Perhaps the clearest distinction between action research and other modes lies in the attitude to changes to what is being researched. (...) Action researchers set out with the avowed intention of improving their practices. Action Research (...) contributes to both social practice and the development of theory.

Kember (2000:23-24) on stating the nature of action research indicates three conditions for action research referred to Carr and Kemmis (1986:156-66). He states that "firstly, a project takes as its subject-matter a social practice". In the context of this study, the social practice is primary education. In this sense, the learning facilitation by teachers in their own classes and school supports the first condition stated by Kember. "Secondly, the project proceeds through a spiral of cycles of planning, acting, observing and reflecting". My study integrates the four components of action research, as explicated in Chapter 3. The group of teachers involved in the study as participants systematically participate in both the design and the implementation

process; the teachers also reflect on their practices, and present suggestions and critiques to evaluate the process. “Thirdly, the project involves those responsible for the practice”. The people “responsible for the practice” in my study are the primary school teachers.

Applying the action research “participative” nature indicated by Kember (2000:24) had as a consequence that the study covered a time span from 2007 to 2010, since teachers are only available for a very short time after their class period and school duties. Thus, research activities had to be carried out accordingly.

The findings of this PAR study are first and foremost applicable to the individual teachers who participated in the study. However, the MINED and the TCPD providers in Mozambique can use the outcomes of this study to support teachers in other locations by making the model of PD available, for instance to all teacher training colleges, all PD providers and to teachers themselves.

The epistemological view of this study attempts to understand and interpret teachers’ practice and the ways in which teachers handle responsibility for their own CPD. I followed an interpretative theoretical basis to orient the interpretation of the teachers’ experiences and the discussions that were held during all the steps of the project. This basis serves to understand and get insight into the field of self-directed professional development. The epistemological view of my study is not positivistic.

The theoretical framework of my study seeks a theoretical understanding of CPD. Therefore I also reviewed the literature which deals directly with the topic of my study as well as with educational change, transformative learning, instructional design and action research. Insight into those pertinent scientific matters will be fruitful to critically review and elucidate possible reasons for the low individual responsibility for CPD among teachers in Grades 1 and 2 and it was helpful in designing a more effective intervention. In order to have a better understanding of the teachers’ role within the wide process of change, scholars who describe the phenomenon and the meaning of educational change such as Fullan (1992, 1993, 1997, 1998, 2001), Hargreaves (1992, 1998, 2000), Liberman (1998) and Hopkins (1993, 2001)

were consulted. The diversity of teacher development approaches were also studied as done by Day (1990), Day and Sachs (2004) and Christie et al. (2004). Concerning educational change attained through action research, Elliot (1991) was studied.

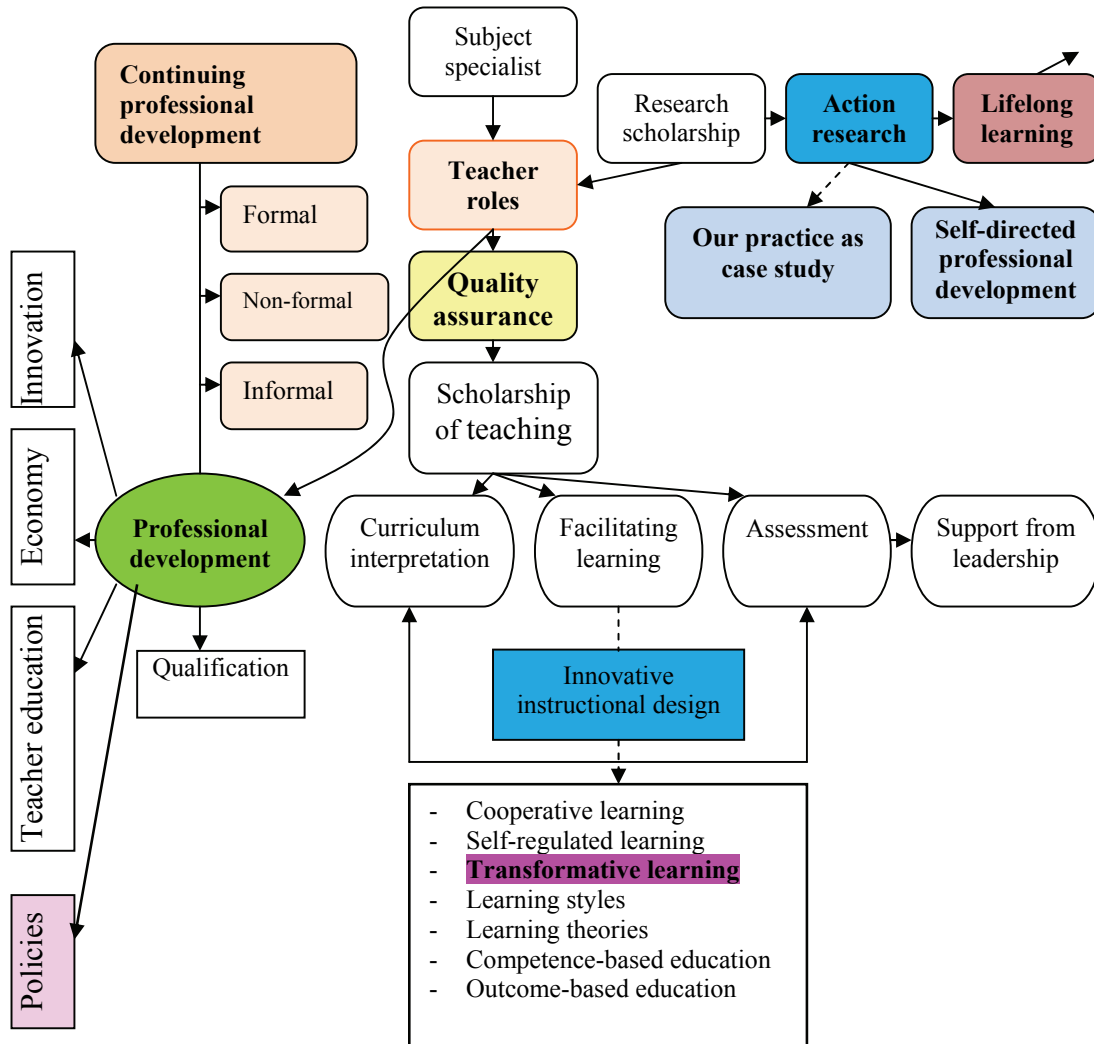
My literature review also contains works on instructional design applied to PD, for example Gagné (1985) with his discussion about learning; theories of instruction by Reigeluth (1987); descriptions of theories and models of instructional design by Romizovsky (1984) and Morrison, Ross and Kemp (2001) about the process of effective instruction.

Due to the exploratory nature of this PAR study as referred to in Chapter 1, the theoretical framework provides a holistic approach of TCPD. This framework integrates the specific theories that are used – according to the phase of my study in order to answer a particular issue of the study research questions. In this study I intend to learn from the teachers' multidimensional classroom practices. As “learning is a holistic process of adaptation to the world” Zuber-Skerritt (1992:104), I will not use a reductive approach by applying one specific learning theory since no unique theory summarises TCPD. In this same flow of reasoning, Flood (2001:141) argues that “reductionism, let us be reminded, advocates analysis of phenomena, which means breaking them down into constituent parts and then studying this simple elements in terms of cause and effect relationship”.

Notwithstanding the holistic approach of TCPD, the visual representation of my theoretical framework does not encompass the exhaustive theoretical thinking guiding TCPD. Rather, it shows a picture of the intellectual puzzle driving this study to explore an intervention to support primary school teachers in taking responsibility for their own CPD.

On exploring an intervention for TCPD, the theoretical framework discussed in this chapter assisted me in gaining insight into TCPD and in providing the theoretical basis for the topic being studied. The insight from this chapter guided my intention to answer the research questions as well to analyse the results and findings of this study. Figure 2.1 shows the holistic representation of TCPD theoretical framework in this study.

Figure 2.1: Holistic theoretical framework for teacher continuing professional development



The above framework represents the multi-dimensional nature of the professional development intervention. Only the essential aspects included in the figure, as highlighted by means of shadowing, are discussed next.

2.2 PROFESSIONAL DEVELOPMENT

The purpose of this section is to examine the concept of PD of teachers. The literature on professional development of teachers is replete with perspectives on analysis and discussion on teaching as a profession and teacher professionalism (Sachs, 2003). For instance, Darling-Hammond (2006) refers to professional standards and professional communities whereas Hargreaves and Fullan (1992) examine professional development and professional growth of teachers. In this study, I discuss PD with the intention to get insight into the professional development of teachers and not to deepen a discussion on understanding about whether or not facilitating learning within formal settings is considered an integral part of the teaching profession or not.

2.2.1 Professional Development as Concept

The concept *professional development* brings to mind the dimensions of profession, professionalism and development. Facilitating learning as a profession is an expression widely used, not only among those who facilitate learning themselves but also among others like laypersons, politicians, and the media (Hoyle, 1995). A wide variety of definitions is used to explain the terms *profession*, *professional* and *development* as indicated in the following discussion.

Profession

A large number of writers have been tempted to define the term *profession* and/or describe a set of criteria that could be used to define the term *profession*. In this regard Cogan (1995:105) simply states that an attempt on defining profession “is to invite controversy” since there is no consensus on previous definitions which have been formulated, taking into consideration a specific case. In searching for such definitions, Hoyle (1995) based his assumption on the functionalist theory of the professions that states that “the professions are those occupations whose members bring a high degree of knowledge and skill to those social functions which are most central to the well-being of society”. Table 2.1 offers the criteria generated by Hoyle (1980) and quoted by Hoyle (1995). However, Hoyle (1995) cautiously

points out two aspects: the first one is that the criteria are not all of the quality met in all societies; the second aspect is that facilitating learning as a profession does not fully meet all the criteria.

| Issues raised | Criteria for the Professions |
|--|---|
| Definition | A profession is an occupation that performs a crucial social function. |
| Requirements | The exercise of this function requires a considerable degree of skill. |
| Context | This skill is exercised in situations that are not wholly routine, but in which new problems have to be handled. |
| Ways to gain knowledge | Thus, although knowledge gained through experience is important, this recipe-type knowledge is insufficient to meet professional demands and the practitioner has to draw on a body of systematic knowledge. The acquisition of this body of knowledge and the development of specific skills require a lengthy period of higher education. |
| Components of professional education | This period of education and training also involves the process of socialisation in terms of professional values. |
| Nature of the values | These values tend to centre on the pre-eminence of clients' interests, and to some degree they are made explicit in a code of ethics. |
| Professionals' responsibility on the use of skills | Because knowledge-based skills are exercised in no-routine situations, it is essential for the professionals to have the freedom to make their own judgement with regard to appropriate practice. Because professional practice is so specialised, the organised profession should have a strong voice in the shaping of relevant public policy, a large degree of control over the exercise of professional responsibilities, and a high degree of autonomy in relation to the state. |
| Acknowledgement | Lengthy training, responsibility, and client-centeredness are necessarily rewarded by high prestige and a high level of remuneration. |

Table 2.1: Criteria generated from the functionalist theory of the professions (adapted from Hoyle, 1995:12)

The assumption here is that a profession is a set of cognitive matters leading to technical or practical learning and the affective domain which involves attitudes, values and beliefs.

Siggler and Hiebert, quoted by Fullan (2001:253), corroborate the above criteria by simply commenting that “a profession is not created by certificates and censures but by the existence of a substantive body of professional knowledge, as well as a mechanism for improving it,

and by a genuine desire of the profession's members to improve their practice". Their comment goes further than the idea that a profession is characterised by holding certificates. They emphasise the fact that not only knowledge but also the adequate use and improvement of that knowledge is the basic condition of a profession. Hargreaves (2000) takes a different approach and cautiously analyses this concept. He emphasises the understanding of the concept in other fields than in education, maintaining that:

Outside education, professions have been represented theoretically, in the image of those who belong to them, and who advance their interest as having a strong technical culture with a specialized knowledge base and shared standards of practice, a service ethic where there is a commitment to clients needs, a firm monopoly over service, long periods of training, and high degrees of autonomy.

(Hargreaves, 2000:152)

With reference to these discussions, it appears that facilitating learning still is a vast field for discussion on the profession concept. However, the discussion needs to be contextualised, looking at the specific contexts where teachers work. The ideas mentioned by the above authors seem to have been formulated from geographical contexts where to be a teacher one should be educated in formal settings. In other words, the interpretation is that the commencement of the profession is provided by the specialised institutions which that profession refers to. In developing countries like Mozambique, the demand for professional services is increasingly high. Therefore, in some social fields like education, there are tasks where to enter the profession (and facilitating learning is one of the cases) professional knowledge and skills are not required.

The previous discussions on the term *profession* encountered gaps concerning the number of criteria and the contents indicated by the authors in Mozambique and other developing countries. These gaps or inadequacies, in summary, jointly form the weakness of the teacher education models with respect to:

- the entry level and the degree conferred to the graduates in initial teacher education;
- duration of the programme;

- knowledge and skills acquired throughout the attendance of teacher education programmes;
- teachers’ responsibility for their continuing professional development and innovation;
- overall acknowledgement of the profession by the society.

Professional

Sachs (2003:2-3) discusses the terms *professional* and *professionalism* and he relates these terms to what it means for those who facilitate learning to be professional and the meaning of belonging to the facilitation of learning profession. He starts in a provocative manner when he continues saying that

at a time real estate agents refer to themselves as professionals, window cleaners claim that they provide professional service and sellers of used cars celebrate a professional code of practice, we are left asking what relevance the concept has for teachers individually and collectively?

With respect to facilitating learning, its professional basis is randomly discussed with regard to practical issues in the teaching profession in terms of knowledge, expertise, commitment and responsibility. Accordingly Darling-Hammond (2005:4) simply comments that:

These professional cornerstones are only haphazardly developed in teaching, where preparation is not always required for practice and where bureaucratic rules and employer-employee contracts are often developed and implemented without regard to professional knowledge or the needs of clients. At the same time, teachers as a group exercise little control or responsibility for defining, transmitting, and enforcing standards of professional practice in teacher education and certification policies, school personnel decisions, or the job review of practice.

Here Darling-Hammond (2005) stresses the importance of initial teacher education to the professional component of facilitating learning. She discusses this component from both perspectives: from an education decision-maker’s perspective, implying appointing an individual to be a teacher without the required education and professional, and from a

teacher's perspective, implying that teachers do not take responsibility for evolving the issues directly linked to facilitating learning.

Bransford, Darling-Hammond and LePage (2005), supporting the importance of initial teacher education what they name 'preparation', state that like in other professions, medicine, engineering, law and architecture, the field of facilitating learning should build a set of practices developed from a consensus with reference to the required knowledge and skills for teachers in order to profit from profession-wide knowledge. They continue to say that "if teachers are to have access to the knowledge available to inform their practice, such consensus must become a reality for the teaching profession as well" (Bransford et al., 2005:9).

From the previous statements it is clear that to be professional in any profession, a basic initial education comprising areas of understanding and consensus with respect to what learning objectives, content, skills and professional character have to be developed.

Development

With respect to the term 'development', Darling-Hammond (2005:232) has the assumption that development means both a rupture from a static attitude and the willingness to improve

Development is growth and maturation. Growth must be related to an increase in the amount and quality of knowledge possessed by individuals. Maturation indicates that the individual has been able to interrelate the knowledge of various types in order to reinforce the goal achievement which each individual is entitled to identify and describe.

Professional development

Like the separate concepts of 'profession' and 'development', the united concept of 'professional development' is also explained by an abundance of terms in educational literature. From the previous definitions of profession and development, PD can be explained

as a growth in the profession based on individual planning and desire to achieve higher and better levels of knowledge, skills and values. However, professional development encompasses more than knowledge.

Bezzina (2002:58) discusses the phrase *professional development* in the context of the learning facilitation and she understands PD as short-term programmes that include activities to be performed towards the promotion of personal and professional growth of learning facilitators.

Glatthorn, Jones, and Bullock (2006:40) also look at the term ‘staff development’ from an institutional perspective, namely the school system or the school itself when they state that

Staff development includes organized training programs provided for groups of faculty and offered by the school system or the school. Two elements are crucial. First, staff development is presented to groups of faculty, to distinguish it from individual services of supervision. Second, the programs are offered by the school system or the school, in contrast to graduate courses offered by a university. Of course, many effective staff development programs have been the result of collaborative school/university activities.

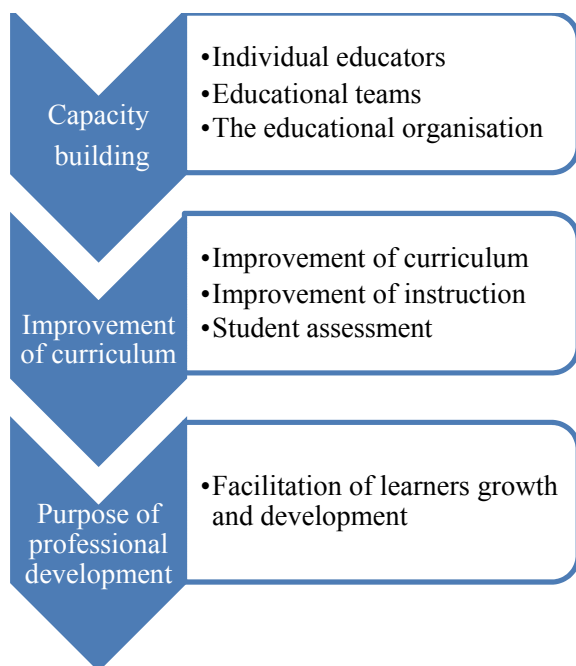
The understanding here is, first of all, that the initiative and responsibility for being engaged in professional development programmes rely on others than the teachers themselves. Secondly, this definition excludes academic courses. However, academic courses are also ways for PD. For instances, Jablonski (2001) discusses doctoral courses as forms of PD in the United States of America. In the case of Mozambique, academic courses form part of PD that people follow.

According to Díaz-Maggioli (2004:5) PD can be defined as “a career-long process in which educators fine-tune their teaching to meet student needs. As such, it directly tackles teachers’ teaching styles – the patterns of decisions teachers make when mediating their students’ learning”. This understanding of PD implies a previous learning in initial teacher education colleges and successive activities aimed at improving or adjusting pedagogical knowledge and skills, values and attitudes. However, in contexts of insufficient qualification or lack of

qualification like Mozambique and other developing countries, PD consists of short-term programmes aiming at filling gaps. Therefore, in the learning profession facilitation, Secondly, PD also refers to programmes involving all learning facilitators from the same grade or level of education concerning a subject or issues that they have in common.

In discussing PD, Gordon (2004:5) takes a different perspective on the previous definitions and expands it by addressing issues related to the factors that affect learners' learning. Thus he provides a definition of “*successful* professional development, which includes experiences” related to capacity building, learners' learning and the purpose of PD.

Figure 2.2: Experiences that characterise successful professional development (adapted from Gordon, 2004:5)



This view expresses the traditional characteristics of a PD programme, since it stresses matters concerning educational policies and does not take into consideration components related to the “total teacher and total school” (Fullan & Hargreaves, 1992:5). Section 2.3 offers the components suggested by these authors. Likewise, in Mozambique, PD

programmes are mostly recommended by the Ministry of Education or national and international organisation working in this field.

From the above understanding, there is an urgent need to re-examine PD as part of an institutionalised training system executed by the school and the teacher education institutions in Mozambique. From as early as 1998, Ingvarson (1998) claims the importance of a PD by the reference to “professional development system”. He notes that the mechanisms that each country implements to support school on the implementation of educational reforms “have to generate ideas for improvement, to keep these ideas circulating, and to provide opportunities for teachers to share them and to learn how to use them” (Ingvarson, 1998:1007). Developing the idea of ‘professional development’ he enumerates key components of a PD system, in the following way:

- The governance: control questions
 - Who determines goals and purposes?
 - The allocation of resources
 - Legitimation of in-service education activities: for credit; for promotion

- The knowledge: goals of the PD system
 - How goals and purpose are determined
 - The basis for determining what teachers should get better at
 - The main goal helps teachers learn how to implement an employer determined policies
 - Does the system depend on standards?

- The incentives

- The provider

From the previous definitions I am of the opinion that, in this study, professional development is the process that provides the opportunity of increasing those above-mentioned professional competencies, attitudes and values. This can be obtained by using

formal and/or informal education settings, which can comprise upgrading academic or professional courses, in the first place, or in-service programmes that focus on learning, how to become a professional facilitator through collaborative and individual learning activities and also through observation of the work of other colleagues or professionals

2.2.2 Practices of Professional Development

A wide variety of people such as teachers, engineers, lawyers and medical doctors are regularly expected to attend PD programmes for a variety of reasons: credit completion, career growth, lifelong learning and professional upgrading or as a mandatory activity. When deciding on engaging in PD programmes, one can probably combine two or more of those reasons in order to find a satisfactory way of ensuring sustainability in the profession.

The intended learning outcomes in the professional development of teachers mostly comprise activities that lead to acquisition and/or improvement of knowledge and competencies about new or specific subject matter, methods of facilitating learning, information related to changes in education paradigms and policies.

Yet, concerning what professional development of teachers should be, several authors (Bolam & McMahon, 2004; Christie et al., 2004; Day & Sachs, 2004; Sugrue, 2004) use the phrase *continuing professional development* stressing the fact that PD should be ongoing and permanent activity. Continuing professional development of teachers which considers that “teachers, individually and collectively, take charge of their own professional development” (Christie et al., 2004) is the theoretical basis of this study.

A distinction between the different ways in which professionals can develop themselves is offered by Sugrue (2004). He uses the phrase “The nature of continuing professional development practice” and considers three main modes, namely formal, non-formal and informal. Table 2.2 shows his views.

| Formal | Non-Formal | Informal |
|---|---|---|
| Taught courses | Emphasis is on inquiry/ learning | Individual, private |
| Credit and non-credit by university personnel and CPD experts, facilitators | School based/focused | Includes: staffroom conversations; occasional lectures, family/close friends; reading professionally related journals/magazines; TV/video |
| Short “in-service” as well as extended post-graduate course modules for awards (diploma/degrees) | Partnerships: school/ university | |
| | Networks: interests, subjects, innovations | Unplanned/opportunistic conversations |
| | Communities of practice: professional support, sharing expertise, knowledge generation, action-orientated | Hobbies/interests |

Table 2.2: The nature of CPD practice

Grundy and Robinson (2004:146) point out the importance of professional development by the reference to the example of Australian schools where the academic year begins with planning and PD. This stance indicates that PD is an essential activity for teachers already in the profession and those newly appointed.

2.2.3 The Mozambican Case of Professional Development

In Mozambique the recent approach on what professionals should do to improve their professional skills is generally referred to as *desenvolvimento profissional* (professional development), instead of the term *curso de capacitação* (programme for skills training) largely used throughout the past decades in the education sector. *Curso de Formação* (training programme) is another term used to name professional development mainly in other sectors. Accordingly, PD includes all those programmes aiming at upgrading professionals or providing opportunities to acquire professional skills for those who are entering the profession without specific preparation.

In countries like the United States, Australia, New Zealand and the United Kingdom teachers point out the decrease in status and recognition of the profession. In Mozambique teachers

complain about the teacher's status in society. They feel that the society does not realise their real value. In this respect, at the MINED level, there is no doubt that they are concerned about the teacher's status and the important role that teachers play in the education system. The Education Sector Strategic Plan states that the issues related to teachers' motivation and satisfaction and also the work conditions have to be examined in combination with the budget for salaries (República de Moçambique, 2006:18).

With reference to the professional development in Mozambique, the MINED emphasises the importance of in-service teacher education, continuing professional development of teachers and teacher educators through the programmes of the current National Strategy for Teacher Education (Ministério da Educação, 2004). Consequently PD is viewed in the context of the teacher education policy agenda due to the pressure of reforms and the weakness of the education achievement. To attain the proposed aims, the MEC acts upon PD programmes, which are concentrated, on the one hand, on educational policies and, on the other hand, on the improvement of the education provided in schools and institutions for teacher education. However, there is a lack of differentiation between PD programmes for teachers and teacher educators who are already in the profession for a considerable time and such programmes for those who are rapidly prepared to enter the profession in the beginning of the academic year.

Actually PD has been looked upon as short-term programmes basically aiming at the provision or improvement of professional skills to newly appointed teachers, teachers who are in the profession and teacher educators. The newly appointed teachers are individuals who have only completed Grade 10 or 12 and did not attend any kind of teacher education before. This group of teachers is trained through short-term programmes at ZIP level by provincial or district pedagogical technicians.

The PD programmes carried out by the MEC at the beginning of the academic year are of great value for the centrality of learners' learning within the facilitating learning process and for the role of PD. Developing this line of thinking, Grundy and Robinson (2004:146) argue that carrying out PD activities at the beginning of the academic year not only shows the

newly appointed teacher that PD is central to her/his work, but also that PD is a continuing activity in the teacher's career.

Henceforth, because of this great emphasis on improvement of education that, in other words, means improvement of the learners' learning, the PD programmes previously referred to include objectives related to individual teacher's needs in order to grow as a person. In fact the crucial aim of PD programmes is the learners' learning. However, "an appropriate balance between meeting the needs of the individual professional, on the one hand, and the school and national policy on the other" (Bolam & McMahon, 2000:278) has to be explored.

Professional Development provided by the Ministry of Education still takes place in the form of workshops and seminars following characteristics of traditional professional development training. At school level peer assessment takes place mainly among teachers from the same grade or coaching and supervision given by the school pedagogical dedputy. The frequency of PD activities fluctuates, mostly when a new paradigm of facilitating learning or a new curriculum has to be introduced. This is the case when a new education concern, like achievement in a specific grade, arises. That is why PD programmes have been systematically provided to teachers facilitating learning in Grades 1 and 2. Teachers' participation in these programmes is compulsory. Díaz-Maggioli (2004:6), referring to the distinction between traditional professional development and the more innovative ones, which he names "visionary professional development", identifies the characteristics of both approaches , as shown in Table 2.3.

| Traditional Professional Development | Visionary Professional Development |
|---|---|
| Top-down decision making | Collaborative decision-making |
| A "fix-it" approach | A growth-driven approach |
| Lack of programme ownership among teachers | Collective construction of programmes |
| Prescriptive ideas | Inquiry-based ideas |
| One-size-fits-all techniques | Tailor-made techniques |
| Fixed and untimely delivery methods | Varied and timely delivery methods |
| Little or no follow-up | Adequate support system |
| Decontextualised programmes | Context specific programmes |
| Lack of proper evaluation | Proactive assessment |
| Pedagogical (child-centred) instruction | Andragogical (adult-centred) instruction |

Table 2.3: Characteristics of traditional vs. visionary professional development (adapted from Díaz-Maggioli, 2004:6)

The characteristics of a visionary professional development approach as shown in Table 2.2, qualitatively add innovative ideas to the traditional one. However, visionary PD still misses the personal development dimension that PD should encompass, for example, rewards and incentives (like promotion in someone's career), as Hargreaves and Fullan (1992:8) state

There are personal development issues specific to the teaching career itself. Promotion brings its rewards and incentives. Equally the denial of promotion can create careers that become 'spoilt', leading their bearers to become disenchanted, even cynical, as they no longer feel valued by their organizations.

However, the list of characteristics of visionary professional development, which I interpret as a more innovative PD, misses the teacher's responsiveness to the programmes and the willingness to be engaged in PD through self-directed PD. Clark (1992) supports this statement in saying that "teachers are not passive, needy, deficient and homogeneous". Self-directed PD is being discussed in Section 2.7 as a model of teachers' continuing professional development.

Summing up the previous discussion on the concept and practices of PD, I have the view that PD should move from traditional practices to more innovative ones, including self-directed PD. Another issue to keep in mind is that PD should be a continuous and systematic activity throughout the career of teachers, teachers' educators and other educators in order to allow them to acquire and/or to develop the required professional skills in the context where they work. The term *educators* here is used as in *The Norms and Standards for Educators* (Department of Education, 2000) to refer to individuals who facilitate learning or educate other individuals or who provide PD services at public or private schools, offices or institutions devoted to further education. In this sense the term is applicable to a variety of functions in the education field, for instance to those who facilitate learning in classrooms, principals, head of departments, heads or pedagogical teams at district, provincial and national levels. In addition to the issues to be taken into account is the fact that it does seem logical that PD is a process to be carried out by teachers themselves.

The following section of teachers' continuing professional development traces different understandings in relation to this topic, which provide a deeper insight into the concept of

professional and a model of PD where the individual teacher takes responsibility for her/his PD.

2.3 TEACHER CONTINUING PROFESSIONAL DEVELOPMENT

The discussion on CPD in this section takes into consideration both teachers and teacher educators. Thus, the theoretical and practical issues related to teachers can be applied to teacher educators as well. However, specific emphasis is put on teachers, the crucial component in the focus of the present study.

The field of CPD has been object of a large number of researches and debates and the extensive literature in this field uses various terms with respect to CPD. For instance, continuing professional development (Day & Sachs, 2004) or professional development of teachers (Fullan, 2001) or simply teacher development (Fullan & Hargreaves, 1992), teacher development, in-service education and training (INSET), staff development, career development, human resource development, professional development, continuing education and lifelong learning (Bolam & McMahon, 2004:33) are some of the terms used.

Whatever term is used, an analysis of CPD activities or programmes may be of great importance. For example, an analysis concerning a deep understanding of the teacher roles and motivation, the context in which teachers acquire and develop knowledge, skills, values and attitudes, the specific and exclusive context in which teachers participate in CPD, and the complexity of the facilitation of learning could be helpful to the contemporary debate in this field.

The length of the era in which research concerning CPD and its main characteristics took place is illustrated by Fullan and Hargreaves (1992:1) in the following way

We divide the period of research on teacher development since 1975 into two broad phases. The first phase analyzed the relationship between teacher development and successful implementation of innovation – we call this the

innovation focused-period. The second phase takes the matter more deeply by considering the total teacher and the total school.

The *innovation focused-period* relates teacher development to the successful implementation of innovations, since “successful change involves learning how to do something new” (Fullan & Hargreaves, 1992:1). Adhering to this interpretation, (Rodrigues, 2005:1) views innovation as one of the possible origins of professional development.

In discussing “the total teacher and the total school phase”, Fullan and Hargreaves (1992:5) describe a framework that involves four main elements:

- The teacher’s *purpose*
- The teacher as a *person*
- The real world *context* in which teachers work
- The *culture* of teaching: the working relationship that teachers have with their colleagues inside and outside the school.

My understanding is that the four elements have to do with school-based professional development. With reference to school-based professional development, Moon (2007:356) consistently refers to the contemporary debate and policies about TCPD. He argues that TCPD “is best articulated close to practice, in contexts where teachers see the relevance of change and can engage in dialogue and the shared construction of new meanings with immediate colleagues and others who might play a support role”. This reasoning is corroborated in this study by exploring the intervention at the teachers’ work place. According to Moon (2007:356) this scope is of value, particularly to developing countries where financial resources still are a challenge and “where many people teaching in schools are unqualified or under-qualified”.

Besides this, the total teacher and the total school phase, as referred to by Fullan and Hargreaves (1992:1) seems to me to encompass the more recent TCPD paradigm which views teachers as both learners and teachers and promotes learner-centred professional development. Yet, the four elements to be taken into consideration in TCPD can be largely

covered by a self-directed professional development intervention within an action research paradigm. In this regard, McNiff and Whitehead (2006:8), state that

Action research can be a powerful and liberating form of professional development enquiry because it means that practitioners themselves investigate their own practice as they find ways of living more fully in the direction of their educational values. They are not told what to do. They decide for themselves what to do, in negotiation with others.

However, action research can also be an individual project (McNiff and Whitehead, 2006:8) or an “individual problem-solving activity” (Kember, 2000:28).

In-service education is the most used term to name the activities or programmes performed by teachers towards their upgrading. In this regard, as far as 1990 Maurice defended that ‘in-service training’ encompasses programmes for “continuing teacher education following licensure and employment” (12). Darling-Hammond and McLaghlin (1995:2) state that “traditional notions of in-service training or dissemination need to be replaced by opportunities for ‘knowledge sharing’ based in real situations”. The reason for doing this, they continue, is that “teachers need opportunities to:

- share what they know
- discuss what they want to learn
- connect new concepts and strategies to their own unique contexts.

Day and Sachs (2004:8) describe how they look at in-service training maintaining that the narrow INSET model (in-service education and training) continues to be the principal means of accessing development and appears to be the most efficient and cost-effective way to reach the huge population of teachers. This is the case of TCPD provided in Mozambique and in many developing countries; INSET has been the main TCPD model adopted due, on the one hand, to financial constraints and, on the other to shortage of expertise to respond to the demands of a large number of primary school teachers. A critical analysis of INSET in developing countries, brought Christie et al. (2004) to the conclusion that in many African countries, financial constrains determine the adoption of short-term pre-service education of

teachers and INSET is used to complete education provided by teacher education colleges “rather than being a continuum. Guinea and Malawi provide examples of the use of INSET to allow untrained teachers to become qualified” (Christie et al., 2004:172).

In addition to teachers' needs mentioned before by Darling-Hammond and McLaughlin (1995), it seems to me essential that teachers become actively involved in and have ownership of their CPD. The issues related to the context of learning and the specific contexts in which teachers will use new knowledge and skills, appear to be a prerequisite to be taken into consideration in CPD.

Taking into consideration the limitation of the concept of INSET or job training, Muijs, Day, Harris and Lindsay (2004:291-92) hold that “both are more limited than CPD, as CPD can encompass a wide variety of approaches and teaching and learning styles in a variety of settings (inside or outside workplace).

According to Grootenboer (n.d.:1) CPD frequently means being involved in studies for further or advanced academic qualification, updating courses, learning-workshops, seminars, self-study on professional reading and mutual assistance. Boyle, While & Boyle (2004:46) note that “the continuous deepening of knowledge and skills is an integral part of development of any professional working in any profession”. Consequently, TCPD should therefore be of concern since facilitating learning is a changing profession” (Day, Flores & Viana, 2007:249).

The research paradigm mostly used by teachers in CPD is action research. Action researchers such as McNiff, Lomax and Whitehead (2003:49) argue that it “is a process of self-study”. Practitioners engage in action research to improve their learning about their own workplace.

In general, the literature on teacher professional development emphasises the fact that pedagogical knowledge and skills, values and personal qualities and the need to effectively carry out classroom practices must be regarded as the central aim of TCPD. For understanding CPD

the function of CPD may be seen to be one of the three imperatives: to align teachers' practice with educational policies (see South America, Europe, Africa, Singapore and Australia as examples of this); to improve the learning outcomes of the students by improving the performance of teachers; or ... to enhance the status and profile of the teaching profession.

(Day & Sachs, 2004:22)

With reference to the improving the achievement of learning outcomes by learners, the National Staff Development Council (2006:1) suggests that the activities included in a PD programme should embrace topics related to the subjects that teachers teach, to the strategies they use, the assessment tools and procedures used to assess learners' progress, and the knowledge and understanding about how students develop and learn. The National Staff Development Council (2006:1) further states that another characteristic to be taken into consideration in teacher professional development is that the teachers will learn through the same instructional approaches that they can use with their learners.

In the perspective of Day and Sachs (2004:3) PD for teachers should be a continuing activity in order to attain its main aim to permanently update teachers' professional actions. They then argue that TCPD embraces "all the activities in which teachers engage themselves during a career course directed at the enhancement of their work" (Day & Sachs, 2004:3). Due to the crucial role of CPD for teachers and the attention that educational sectors and the teachers themselves should give to professional development, Day and Sachs (2004:3) go on saying that "this is a deceptively simple description of a huge complex intellectual and emotional endeavour which is at the heart of raising and maintaining standards of teaching, learning and achievement in a range of schools, each of which poses its own sets of special challenges" (Day & Sachs, 2004:3). Corroborating this view, Darling-Hammond and McLaughling (1995:3) note that currently PD cannot simply be seen as an activity to support the facilitating of learning and the building of knowledge, since teachers should also be supported to reflect on their practices and how to adapt new knowledge and beliefs to the contexts in which they work.

The provision of TCPD varies from context to context and largely depends on the financial resources of a country and, in some cases, on financial resources in the provinces as a result of external funds from NGOs. These situational variations cause differences in terms of

teachers' opportunities for CPD in less funded provinces. For instance, in a country such as Mozambique, where "financial austerity and underdevelopment, competing claims for funding within education systems are inevitable" (Christie et al., 2004:170), TCPD is not effectively covered. The government faces financial constraints that make it very difficult to systematically afford TCPD programmes. Besides this the support from NGOs is extremely selective in terms of geographical context either with respect to provinces/districts or to specific schools.

Thorough evaluation is essential for TCPD programmes, but the reality in education is that very often the programmes are not systematically evaluated (Muijs et al., 2004:297). What Guskey, quoted by Muijs et al. (2004:298) suggests, is that one of the limitations of current evaluation has to do with the content of the questionnaire use

Where some evaluation does exist, this usually takes the form of participant satisfaction questionnaires. Obviously, this allows one to gauge whether participants consider the event to have been enjoyable and successful, but it does not deal with issues such as the gain of knowledge or changes in practice that are expected from professional development, and certainly it does not evaluate whether there have been changes in student outcomes.

2.3.1 Continuing Professional Development of Teacher Educators

The need for addressing PD of teacher educators derives from their role in teacher education and TPD. In general, initial teacher education has been the starting point for primary and secondary school teachers to acquire and/or develop pedagogical knowledge and skills. At the same time, initial teacher education also appears to be the beginning of self-directed professional development. In fact, "teachers' educators spend much time involved with professional development of teachers. In pre-service teacher education they prepare student teachers for professional development by giving them tools for reflection and for continuous learning" (Smith, 2003:202).

Smith (2003:202) introduces the importance of PD of teacher educators, arguing that “teacher educators know much about professional development and how to help others to develop professionally”. The researcher continues asking a provocative question concerning PD of teacher educators: “What do we know about how teacher educators develop?” The answer to this question would appear to be crucial for understanding the tendency or the reluctance towards PD among teacher educators.

Teacher educators are co-responsible for the learning of their student teachers. Therefore they themselves have to update their content knowledge. To do so, they have to be engaged in continuous professional development. Commenting on this idea, Smith (2003:203) continues by saying that “a danger in teacher education is fossilization”. It is difficult to change well-established teacher education programmes, even though the educational field that benefits from the services is in a constant process of change. This fossilization can take place especially in autonomous teacher education institutions, where they have total responsibility for the programmes provided. In Mozambique, where teacher education is greatly centralised, resistance to change in teacher education colleges can occur as isolated cases, mainly due to weakness of the management of the education system or, yet, shortage of financial resources, learning materials and knowledge and skills.

However, in spite of the teacher educator responsibilities already mentioned, most teacher educators have not been formally prepared for the activities they are performing. Many of those who are in the profession have been teachers, and in general hold a higher education certificate. However, they do not have had any preparation for facilitating learning (Smith, 2003) or teaching in higher education institutions. Similar situations happen in Mozambique, where teacher educators for primary school teachers are people that have graduated to be a teacher in secondary education, but have never facilitated learning before, not even at the level which they were prepared for (Ministério da Educação, 2004).

2.4 MAIN FACTORS INFLUENCING TEACHERS' CONTINUING PROFESSIONAL DEVELOPMENT

The domains involving the teacher's task previously referred to require that teachers be engaged in CPD programmes since facilitating learning "is forever an unfinished profession. Thus, professional development is intrinsic to the vocation of teaching. By its very nature, teaching is never complete, never conquered, always being developed, always changing" (Grundy & Robinson, 2004:146). In line with this statement, there are crucial factors that influence TCPD such as policies, changes in curriculum, teacher education, economy, academy, innovation and technology. Consequently the field of TCPD has been a matter of permanent discussion and intervention at all levels where both learners' learning and teachers' professional learning are the central focus of the activity, namely at school, district, provincial and central level. Professional development has also been an urgent topic on the agendas of MINED and NGOs working in the educational field. As an immediate result, the majority of TCPD programmes are government- and donor-driven (Christie et al., 2004:169).

2.4.1 Policies Influencing Teachers' Continuing Professional Development

Policies leading to CPD are frequently related to standards to be followed by teachers and their respective teacher assessment procedures, expansion of education and learners' academic achievement. For instance, policy driven CPD in developed countries like Australia (Grundy & Robinson, 2004) and the United States of America (Fullan, 2001) mostly aims to promote CPD, which allow teachers to bring about a set of standards established by a national board. As an example, this author writes that in the United States of America, the National Board of Professional Teaching Standards (NBPTS) describes domains for certified teachers. Those standards are also considered assessment procedures and are referred to as beliefs of values that teachers should demonstrate (NBPTS, 1993.). South Africa serves as an example of a developing country aiming at TCPD, as incorporated in *The National Policy Framework for Teacher Education and Development in South Africa*. Teachers are encouraged to perform in schools the roles for educators established in the *Norms and Standards for Educators* (Department of Education, 2006:16). In some developing countries

like Mozambique, the immediate post-independence policies on expansion of education opportunities, with emphasis on primary education, poses the need for TCPD programmes, mainly for teachers without professional education.

Rodrigues (2005:1) claims that besides pedagogy and innovation, politics is one of the origins of the debates and interventions on CPD and she goes on to say the following concerning the politics-driven professional development

The responsibility for teacher professional development has shifted over the decades as politicians, policy makers and political activities decide on the nature and location of review and determine who should have and hold the authority to accredit and evaluate.

In this regard Mozambique is no exception. Examples are expanded education opportunities put into practice through international policies concerning free primary education, such as Universal Primary Education (UNDP Mozambique, 2004-2011), Education for All (UNESCO, 2000), and the Millennium Development Goals (UNDP Mozambique, 2011) for primary education. On the other hand, there is the government's concern about the low academic achievement in schools, and the consequent need for improvement of pass rates and the standards attained by learners. Programmes fostered under such policies bring about the necessary shift in teacher education and TCPD. According to the Commission for Africa (2005), the success of Education for All by 2015 requires significant attention to teacher professional development. These policies change the focus on mutual assistance at school level to a cooperative approach at ZIP or Resource Centre. It is also a change from seminars and workshops to the recent emphasis on pedagogical journeys.

Rodrigues (2005:3) indicates three distinct factors that drive TCPD. She refers to the context of developed countries where provinces/districts and even schools embrace significant autonomy concerning teacher qualifications, teacher education programmes, curriculum, assessment, professional development, etc. However, in Mozambique, like in many other developing countries, with a highly centralised educational system as well as a politics-driven orientation, the distinction between politics, pedagogy and innovation is to some

extent very difficult to perceive. Pedagogy and innovation also follow a politics-driven orientation. With respect to the impact of politics, pedagogy and innovation on TCPD, a clear distinction can probably be noticed between public and private schools or institutions for teacher education.

In Mozambique the immediate post-independence politics on citizens' equality, the policies on equal access to education and the required changes in the curriculum from the colonial education to the National System of Education posed the need for urgent and rapid teacher professional development with the aim of accommodating the new national perspectives on education. From 1975 educational policies, strategies, circulars, and even policy makers' recommendations have led to different activities or TCPD programmes. In this regard, activities such as *assistência mútua* (coaching of teachers by teachers from the same school through classroom observation), studies and planning at ZIP level, ZIP re-vitalization programmes (Hoppers, 1998:233) and regional teacher resource centres (Hoppers, 1998:232). On promoting TCPD, more recently, a significant investment on the 'pedagogical journey' – a programme based on a strong focus on methodologies on facilitating learning in Grades 1 and 2 (Ministério da Educação e Cultura, 2008) is weekly running throughout the country.

In my opinion, 'pedagogical journey' seems to have two critical weaknesses. On the one hand it is the issue of "access to information" suggested by Fullan (2001:58). The majority of primary schools and ZIPs are located in rural areas with a great lack of expertise. In these contexts there are insufficient and dispersed knowledge-based and examples of good practices. On the other hand, the issue is related to the combined causes of low achievement in Grades 1 and 2 that are not understood in the same manner among teachers and other educators. While teachers refer to aspects like large classes, learning material, time, and do not feel fully committed, other educators mainly refer to teacher qualification. This different perspective on analysing learner achievement brought Hopkins et al. (1994:18) to the conclusion that "although policies set the directions and provide a framework, they do not and cannot determine outcomes".

Two reasons in particular seem to me to be related to the shortcoming of most of these initiatives. The first one has to do with the overall conceptualisation of TCPD in the global

strategy for teacher education, which perceives teachers as workers who should be developed instead of being supported in their attempts to develop themselves. Consequently the initiatives to change the scenario of deficient reading and writing skills among learners enrolled in the lowest grades of primary education are content-driven and follow a top-down orientation, in terms of objectives, content and approaches (Ministério da Educação e Cultura, 2008). Moreover, the TCPD models used have a low focus on the learning needs of the individual teacher and are fragile in the sense that they do not deliberately promote teachers' responsibility for their own CPD.

This illustrates what Day and Sachs (2004:9) state with reference to the top-down orientation on TCPD, saying that outsiders that look at classroom practice assume that teachers lack knowledge and skills. As a consequence, a set of learning units or content are planned and included in in-service training and development. Fullan (2001:15) comments on the inadequacy of a top-down orientation in the following way: "In-service education or ongoing staff development – explicitly directed at change – has failed in most cases, because it is ad hoc, without continuity and unconnected to any plan for change".

The second reason is contextual. TCPD is delivered to all teachers in the country without taking into consideration contextual aspects like teacher preparation. The majority of teachers do not have a sufficient pedagogical basis concerning facilitating learning in the lowest grades of primary education. This weakness limits the chance for teachers to attain the total of objectives that are established in such TCPD programmes.

The successive approaches that focus both on the structure and the provision of TCPD, aiming at the improvement of the teachers' pedagogical knowledge and skills, have not been a complete success since there is a weak capacity of pedagogical competency at school and ZIP level. This weakness is mainly a consequence of a lack of attention for or an insufficient preparation during initial teacher education of primary education matters (Ministério da Educação, 2004:14).

The 2004-2015 strategy for teacher education is based on studies and consultancy reports of the sectors that are concerned with teacher education and it incorporates the strategy designed for the 2002-2004 period (Ministério da Educação, 2004:3). The latter strategy is more comprehensive than the former one and it embraces initial teacher education and TCPD.

The MEC implemented an in-depth institutional reform on teacher education, attempting to enhance the level of education provided. In doing so, from 2007 onwards, all teacher education colleges only receive graduates from Grade 10 and the course for which the entry level used to be Grade 7 has stopped (Ministry of Education and Culture, 2007).

In many African countries TCPD is part of the overall structure of teacher education. However, as Christie et al. (2004:169) indicate, the policies do not clearly distinguish teacher education from TCPD. In this regard TCPD is pointed out by the MEC of Mozambique within the context of the improvement of the quality of teacher education in the *Estratégia para a Formação de Professores – 2004-2015 – Proposta de Políticas* (Teacher Education Strategy – 2004-2015 – Policies Proposal) (Ministério da Educação, 2004). In this document there is no specific topic regarding TCPD; only the *Plano de Implementação da Estratégia para a Formação de Professores – 2004-2015* (Implementation of Teacher Education Plan – 2004-2015) describes some indicators and activities to be carried out (Ministério da Educação, 2004).

Regarding the statement of Moon (2007) about unqualified or under-qualified people who are currently facilitating learning, my comment is that TCPD in developing countries should be the first priority on the education sector's agenda. The main reason for this is the weak qualification of the newly prepared teachers on top of the number of unqualified teachers already in the profession, coming from accelerated models of teacher education programmes. On defining the qualities of a professional teacher, the National Board for Professional Teaching Standards (2002.) describes a list of five core positions that the teacher should reveal, namely:

- *Teachers are committed to learners and their learning*
The teachers significantly contribute to making knowledge accessible to all learners and to providing opportunities to acquire and/or develop competences, acting on the beliefs that all learners can learn. They care for all learners and recognise differences in learning paces. The teachers use practices informed by learning theories.

- *Teachers know the subjects and how to facilitate learning in those subjects*
The teachers have significant understanding of the subjects and develop critical thinking of the students. They are aware of learners’ background, adjust their practices according to the view of the real situation of the class and assign appropriate remedial tasks.

- *Teachers are responsible for managing the monitoring of learners’ learning*
Teachers adapt the learning unity sequence, repeating or improving learning tasks, without prejudice of the curriculum, in order to ensure effective assessment of class achievement.

- *Teachers think systematically about their practice and learn from professional experience*
The teachers are involved in lifelong learning and critically examine what they and their learners do.

- *Teachers are members of learning communities*
The teachers work with fellow teachers or with professional groups dealing with similar subjects and/or fields (adapted from National Board for Professional Teaching Standard, National Office, 2002).

Darling-Hammond (2006:20) states that “although many people believe that anyone can teach – or, at least, that knowing a subject is enough to allow one to teach it well – the evidence strongly suggest otherwise”. These factors have significant impact on TCPD since teachers have an array of roles to play as educators, as the next sub-section outlines.

2.5 TEACHER ROLES

For the purpose of this study the term ‘teacher’ means educator and these two terms are used interchangeably since both refer to the teaching profession. Therefore it is important to define ‘teacher’ aiming at providing consistence within the available literature. Teacher has been defined in various ways. These include “a person whose job is teaching in a school: a history/science, etc. teacher” (Wehmeier, McIntosh, Turnbull & Ashby, 2005).

The teacher is the one who teaches. In other words, from an instructional perspective, the teacher is that person who accomplishes different roles to facilitate learning. Facilitating learning is a widely used term in teachers’ effectiveness and teachers’ quality studies to describe the teachers’ pedagogic practices in the classroom. The focus here is on the procedures that the teachers select and on how they organise the facilitation of learning. As Hopkins et al. (1994:52) claim, facilitating learning is the skill that “has the most demonstrable impact” on learners’ learning. Further on Hopkins (2001:71) argues that the quality of the facilitation of the learning process is a crucial focus point to evaluate academic achievement as it reflects the teachers’ skills to promote effective learning for their learners.

Facilitating learning is a complex activity due to the number of tasks and roles of the teacher and the variety of locations where the facilitation takes place (Scheerens & Bosker, 1997:20). The National Staff Development Council (NSDC) (2006:1) advocates that to respond to this demand, teacher professional development initiatives can provide opportunities to teachers to acquire and/or develop their subject knowledge, their command of instructional methods and their understanding about learning. For the purpose of this study these assumptions give a deeper insight into the design of my research instruments as I want to obtain the teachers’ background during the baseline analysis.

Gagné (1985:2) claims that learning is “a change in human disposition or capability that persists over a period of time and is not simply ascribable to processes of growth”. The importance of learning is portrayed by Mizell (n.d.:22) when claiming that to promote learning, the main concern among teachers and education managers should change from what

teachers are able to teach to what learners should learn. This statement implies planning of the learning opportunities and aligns with Smith and Ragan (1999) who claim that learning has to be carefully planned and assessed, taking into consideration the learners' learning needs and the tasks to be realised. As William, Lee, Harrison and Black (2004:49) suggest an "increased use of formative assessment (or assessment for learning) leads to higher quality learning".

Corroborating Hopkins et al. (1994) who note that learners' learning is the most visible impact of the teacher's work, I consider that it is of importance to discuss what implications teacher roles have for learning.

Early in this section I refer to the teacher as the one who accomplishes different roles. Teacher roles can be described in different ways by learners, parents and people in the educational field and even by teachers themselves (Biddle, 1997:499). Biddle (1997:500) continues saying that "similar disparities of coverage may be detected among scholars who have addressed 'the role of the teacher'; many authors have expressed ideas about this subject, presuming agreement which is simply not true".

On reviewing recent research on teacher roles, Biddle (1997:500) distinguishes three comprehensive categories, namely roles concerned with social position, with teacher behaviours and with expectations assumed for teachers.

Role theory begins to be a topic of scientific study when scientists in the social field develop the understanding that in social life people perform roles just as actors in the theatre do. As a result of this insight, (Biddle, 1997:501) considers three different major contributions

For Ralph Linton (an anthropologist), role theory was a means for analyzing social systems, and roles were conceived as 'the dynamic aspects' of social positions (or 'statuses') that are recognised in societies. In contrast, George Herbert Mead (a social philosopher) viewed roles as the coping strategies that individuals evolve as they interact with other persons and spoke of the need for understanding others' perspectives ('role taking') as a requisite for effective social interaction. And Jacob Moreno (a psychologist) saw roles as the habitual

tactics that are developed by persons within primary relationship and argued that an imitative behaviour ('role playing') was a useful strategy for learning new roles.

From these concepts and others that are generated in recent studies – also from a different perspective – Biddle (1997:501) distinguishes three basic role concepts: *Role as a social position*, *Role as a characteristic behaviours* and *Role as expectations*. Table 2.4 summarises Biddle's (1997:502-503) approach to teacher role concepts.

| Basic Role Concepts | Nature | Focus | View/assumption about teachers/ indicators |
|-----------------------------------|--------------------|--|--|
| Role as a social position | Occupational roles | Structural characteristics of the teacher's identity | Teachers are members of recognised positions Composition of the teacher population Function accomplished by teachers Development of identity for teachers Status of teaching profession Condition for entry in the profession |
| Role as characteristic behaviours | Behavioural roles | Teacher behaviours in the work context | Teachers' behaviour in the classroom or school Teachers' behaviour in the social and political arena Teachers' contribution to the tasks of education Joys and difficulties faced by teachers |
| Role as expectations | Affective roles | Expectations held for teachers | Teachers' expectations Education managers' expectations Society's expectations Teachers' beliefs, preferences, attitude, values and tasks |

Table 2.4: Role concepts (adapted from Biddle, 1997:502)

The above mentioned role concepts are viewed in an independent way. In this respect, Biddle (1997:502) admits that none of these three concepts for teacher role has precedence over or preclude the others, but each “represents a facet of the complexities that embed the teacher, and each is capable of generating information for educators, scholars, and others concerned with education”.

Biddle's discussion is not concerned with teacher roles. Rather his discussion focuses on the role concepts and how to sort out the different teachers' roles that have been discussed by other authors.

According to Du Toit (2007:1) the *Norms and Standards for Educators* indicates that there are seven roles for all educators to be put into practice in a comprehensive manner, i.e., all the roles are equally important. This South African education policy document describes seven educator roles. Here the interpretation is that educators encompass teachers and those who have the responsibility of facilitating learning such as teacher and adult educators. The *Norms and Standards for Educators* describes the *roles*, their associated set of *applied competences* (norms) and *qualifications* (standards) for the development of educators. It also establishes key strategic objectives for the development of learning programmes, qualification and standards for educators. Accordingly the roles to be performed are listed and detailed in Table 2.5. I also describe another set of roles (Table 2.6) which teachers should play while offering learning opportunities.

| Role | Indicators to be demonstrated |
|---|--|
| Learning mediator | Learning mediation according to learners' needs including special education needs Construction of appropriate learning environments Effective communication showing recognition of and respect for the differences of others Sound knowledge of subject content and various principles, strategies and resources appropriate for a specific context |
| Interpreter and designer of learning programmes and material | Understanding and interpretation of learning programmes Originality on design of learning tasks Identification of the requirements for a specific context of learning and select and prepare suitable text and visual resources for learning Effective selection, sequencing and pace of the learning to the differing needs of the subject/learning area and learner |
| Leader, administrator and manager | Appropriate decisions to the level Manage learning in the classroom Efficient accomplishment of classroom administrative duties Participation in school decision making structures |
| Scholar, researcher and lifelong learner | Effective diagnosis of problems affecting learning Achievement of ongoing personal, academic, occupational and professional growth through pursuing reflective study and research |

| Role | Indicators to be demonstrated |
|--|---|
| Community, citizenship and pastoral role | <p>in her/his learning area, in broader professional and educational matters, and in other related fields</p> <p>Promotion of a critical, committed and ethical attitude towards developing a sense of respect and responsibility towards others, one that upholds the constitution, and promotes democratic values and practices in schools and society</p> <p>Ability to develop a supportive and empowering environment for the learner and respond to the educational and other needs of learners and fellow educators</p> <p>Supportive relationship with parents and other key persons and organisation based on a critical understanding of community, cultural and environmental development issues</p> |
| Assessor | <p>Understanding of assessment of learners' learning as an essential feature of the facilitating of learning</p> <p>Understanding of the purposes, methods and effects of assessment; ability to provide helpful feedback to learners</p> <p>Effective design and management of both formative and summative assessment in a way that is appropriate to the level and purpose of the learning and meeting the requirements of accrediting bodies</p> <p>Detailed records and diagnostics of assessment</p> <p>Understanding of the correct interpretation and use of assessment results as a way to feed the improvement of learning programmes</p> <p>Assessment of individual learners, showing that their learning has been achieved</p> <p>Analysis of individual learners, showing that their learning has been achieved</p> |
| Learning area/subject/discipline/phase specialist | <p>Having a thorough base of knowledge, skills, values, principles, methods, and procedures that are relevant to the discipline, subject, learning area, phase of study or professional or occupational practice</p> <p>Knowledge and – where appropriate, research and management – about different approaches to facilitating learning, and how these approaches may be used in ways that are appropriate to the learners and the context</p> <p>Understanding of the knowledge appropriate to the specialism</p> |

Table 2.5: Teacher roles and specific indicators to be demonstrated

The roles for educators described in the *Norms and Standards for Educators* merge levels of both competences and qualifications in the sense that they indicate what an educator should know and be able to do. Although the roles include a significant part of the educator roles, with respect to Mozambican context, I add two roles concerning the inherent follow-up that the teaching profession involves. The additional roles are indicated in Table 2.5.

| Role | Indicators to be demonstrated |
|---------------------------|---|
| Learning promoter | Construction of permanent motivation environment Sound communication showing friendship Supportive dialogue on learners achievement |
| Attendance monitor | Monitoring of learners' presence in class showing specific follow-up of potential drop-out learners Monitoring of learners' presence in class showing sensitiveness on gender issues |

Table 2.6: Additional teacher roles

In analysing the role concepts and the roles for educators, I think that both are of value to be taken into consideration in the teaching profession, since it is important to ensure that the different dimensions of the profession have been considered. Therefore, I agree with Biddle's view in the sense that the role concepts approach is the starting point for a description of what the teacher's role will be. In other words, role concepts are concerned with the nature of the roles, whereas the roles for educators specify the substance of each one of the roles. Moreover, I think that, apart from professional characteristics, what are the most visible roles (*teachers' behaviour in the work context*), are the three concepts encompass the affective dimension of the teaching profession.

Around the Mozambican primary schools, there are a significant number of teachers who have often been appointed to facilitate learning in Grades 1 and 2 for many years. Such group of teachers could be prepared to build a body of phase or grade specialists at school level due to their experience.

2.6 CHANGE NEEDED IN PROFESSIONAL DEVELOPMENT

According to Fullan and Hargreaves (1992), the focus on the relationship between teacher professional development and educational change begins to be a matter of discussion in the late 1970s. In Mozambique teacher professional development has also been related to educational change. This change mainly refers to curriculum change, new teacher education

models, mainstream of inclusive education and gender perspectives in education. The shortcoming of those changes is that the teachers do not have time to share their knowledge, nor to reflect on the ways to implement the new knowledge and skills at classroom level. Darling-Hammond and McLaughlin (1995:2) support this statement in that “teachers need opportunities to ... connect new concepts and strategies to their own unique context”

Educational changes to be implemented at classroom level have often been introduced via CPD, involving teachers, school principals, head teachers and pedagogical technicians at district level up to central level. As Fullan (2001:38) notes, “educational change involves ‘change in practice’ and leads to innovation”. Fullan (2001:39) goes on to discuss the dimension of change and its simultaneous aspects

Innovation is multidimensional. There are three at least three components or dimensions at stake in implementing any new program or policy: (1) the possible use of new revised materials, (instructional resources such as curriculum materials or technologies), (2) the possible use of new teaching approaches (i.e., new teaching strategies or activities), and (3) the possible alternation of beliefs (e.g., pedagogical assumptions and theories underlying particular new policies or programs).

Fullan (2001) uses educational change or innovation in education with a similar meaning. Throughout my study I pay attention to innovation and to the assumption of doing things different and better. I attempt to place the teachers and their classroom practice at the centre of professional development activities.

There is a need for innovative TCPD models. However, it is essential that the process leading to implementation – what Fullan (2001:53) defines as “initiation” – takes into consideration a set of factors affecting that initiation:

- Existence and quality of innovations
- Access to innovation
- Advocacy from central administration
- Teacher advocacy

- External Change Agents
- Community pressure/Support/Apathy
- New policy-funds (federal/state/local)
- Problem-solving and bureaucracy orientations.

(Fullan, 2001:53-65)

McLaughlin (1990:13) supports this stance in that there are key factors to be taken into consideration at a policy and at a practice level. This researcher summarises the factors that he names “interpretations”, in the following way:

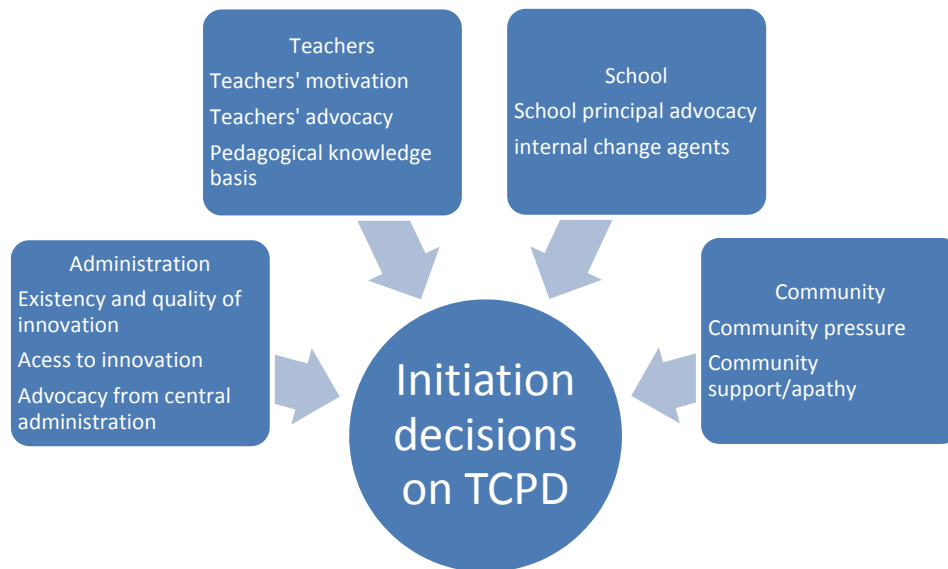
- The significance of teachers’ initial motivation to participate in a PD project
- The role of external consultants
- The structures available to provide resources and support for teachers’ professional growth.

In the context of developing countries like Mozambique, due to the shortage of qualified teachers at school level, it is possible to identify the following factors as identified by Fullan (2001):

- teacher motivation
- internal change agents at school or ZIP level
- school principal advocacy.

In this sense the factor associated with the initiation of TCPD should be categorised into four categories, namely administration, teachers, school and community. Figure 2.3 shows a visual representation of the factors.

Figure 2.3: Factors associated with initiation of continuing professional development (adapted from Fullan, 2001:54)



2.7 MODELS OF TEACHER CONTINUING PROFESSIONAL DEVELOPMENT

For the past twenty years, the literature on professional development for teachers all over the world has described a vast range of models and approaches to TCPD. This is due to

a shift in the rhetoric of teacher training and development from one in which individual teachers have been able to choose at will from 'smorgasbord' of (mainly) short one-shot workshops and lectures, to one in which lifelong learning is regarded as essential mandatory part of teacher's needs .

(Day & Sachs, 2004:8)

The approaches to CPD vary as the PD itself does, since “various writers offer typologies of CPD, but each starts from its own assumption and adopts its own focus” (Bolam & McMahon, 2004:52). For instance, some show a preference for the underpinning “conceptions of knowledge associated with teachers’ learning and development” and come to describe a set of models (Day & Sachs, adapted from Cochrane-Smith & Lytle, 1999); others

put the focus on the purpose of the model, regarding the process leading to teachers' professional learning (Kennedy, 2005); other researchers describe typologies of CPD, stressing the teachers' roles and responsibility (Christie et al., 2004:171). On his turn, Thiessen (1992:85-86) refers to orientations and conditions to classroom-based teacher development. Other authors instead elaborate on a model for a specific syllabus or subject (Jamissen & Phelps, 2006; Boud & McDonald cited by Zuber-Skerritt, 1992:164) differentiate between models taking into consideration the type of work undertaken by the unit staff. Hargreaves (1994) indicates a model in which the emphasis is on a "symbolic relationship" between individual teachers and the education needs. Cunningham cited by Mushayikwa and Lubben (2009:377) argues that this variety of argumentations is an indication that professional development is a complex practice and cannot easily and linearly be explained as a cause and effect process.

Summing up the above assumptions of CPD, I agree with Christie et al. (2004) who approach CPD taking into consideration the teachers' roles and responsibility and Day and Sachs (2004) who emphasise the knowledge-in-practice generated by teachers at classroom level. My option is based on the intention to answer the research questions of this study.

2.8 TYPOLOGIES OF CPD

In consideration of the teachers' role in the process of activities aiming at CPD, Christie et al. (2004:173) discuss two typologies of CPD, namely the teacher as technician and the teacher as reflective practitioner. Here they move from top-down initiatives for TCPD, where teachers are simply viewed as "work-force" to accomplish the institutional needs to an innovative approach of learner-centred orientation.

| Teacher role | CPD responsibility | CPD basis | CPD Approach | CPD outcomes |
|-------------------------|--------------------------|------------------|--------------|---------------------------|
| Technician | Institutions and systems | Teacher 'defect' | Reductive | Professional requirements |
| Reflective practitioner | The personal domain | Teacher 'growth' | Holistic | Lifelong learning |

Table 2.7: Typologies of continuing professional development (adapted from Christie et al., 2004:171)

In reference to the teacher’s roles in CPD programmes Fullan (2001:255) sustains the argument that a significant number of professional development courses or even programmes have little or no impact since the topics as well as the content have been selected by people other than the teachers. This is the case where professional development courses are totally designed by education sectors at district, province, and central level and even by NGOs. The main concern here is a global topic or methodology related to a specific subject and there is no consideration how the individual teacher has been experiencing the process of facilitating learning.

In discussing CPD, Kennedy (2005) describes the characteristics of nine models of TCPD and asserts that “it is not suggested that the models will or should stand alone”. The models are organised into three categories, according to the purpose of the model, whether its basic function is to prepare teachers for the implementation of educational changes, or to involve the teachers in a “liberating form of professional enquiry” (McNiff & Whitehead, 2006:8). Kennedy (2005:248) identifies a transitional model, as shown in Table 2.7

| Model of Continuing Professional Development | Purpose of the Model |
|--|----------------------|
| The training model | Transmission |
| The award-bearing model | |
| The deficit model | |
| The cascade model | Transitional |
| The standard-based model | |
| The coaching/mentoring model | |
| The community of practice model | |
| The action research model | Transformative |
| The transformative model | |

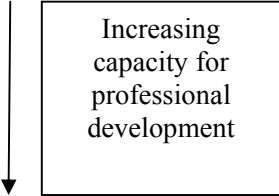


Table 2.8: Spectrum of continuing professional development models (Kennedy, 2005:248)

It seems to me that the models discussed by Kennedy (2005) clearly stress two positions or assumptions by claiming both the underpinning knowledge acquired and/or developed by teachers and the extent to which teachers take responsibility for their own CPD. In addition, the knowledge acquired via transmission reflects (mainly from a deficit model) a traditional view on the learning process, in which the teacher/expert is the one who knows everything and the learner just has to listen. The limitation of this model is outlined by Day and Sachs

(2004:9), arguing that at the outset of this model is the assumption that “teachers needed to be provided with something (knowledge, skills) which they did not already have”. The above mentioned two positions appear to be a claim for the need to change from a traditional view on PD and teaching to a more participative and innovative one.

Zuber-Skerritt (1992:219) consistently refers to the inadequacy of traditional methods founded on the transmission of knowledge and skills, arguing that “Traditional methods of manager and academic staff training, based on transmitting knowledge and skills from expert to novice, using the most effective presentation techniques, have been shown to be unsatisfactory in recent times.”

Besides the identification and comparison of CPD models, Kennedy (2005:247) proposes a framework for the analysis of CPD models in general, consisting of five questions:

- What types of knowledge acquisition does the CPD support?
- Is the principal focus on individual or on collective development?
- To what extent is the CPD used as a form of accountability?
- What capacity does the CPD allow for supporting professional autonomy?
- Is the fundamental purpose of the CPD to provide a means of transmission or to facilitate a transformative practice?

In the table below CPD models adapted from Kennedy (2005:248) are outlined.

| Models | Responsibility | Characteristics | Aims |
|--|---|--|--|
| Training model | Experts Institutions | Skills-based Technocratic view of teaching | Acquiring competences |
| Award-bearing model | Institutions | Academic view of CPD Completion of programmes or studies | Mark of quality assurance |
| Deficit model | Institutions | Remediation | Eliminating deficit Improvement of performance Competent performance |
| Cascade model | Institutions | Skills-based Knowledge-focused Technician's view of teaching | Acquiring knowledge Acquiring skills |
| Standards-based model | Institutions | Evidence-based | Professional actions |
| Coaching/Mentoring model | Mentor Mentor/Mentee | One-to-one relationship Skills-based Counselling and professional friendship Clinical supervision | Professional development Professional learning |
| Community of practice model Action research model | Mutual engagement of a group Practitioners | Mutual accountability Action-based research Participation Collaboration Practice | Professional knowledge Practitioner development Transformation |
| Transformative model | Teachers | Integration of the other models Combination of processes and conditions | Transformation |
| Self-directed model | Teachers | Teacher initiative Clinical supervision Practice | Professional development Professional knowledge |

Table 2.9: Models of continuing professional development

From the responsibilities and characteristics of the models indicated, it can be noticed that skills- and knowledge-based models are typical of top-down approaches, having a low teacher's involvement. The perception of the inadequacy of the institution-driven model with its focus on collective development is shared by Clark (1992:77) who says that it is necessary to consider the individual teacher "because each teacher is unique in important ways, it is impossible to create a single, centrally administrated and planned programme of professional development that will meet everyone's needs and desires". Accordingly, the changes or

innovations to be introduced have to take into consideration the individual teacher in order to promote participation and increase teacher advocacy.

However, the cascade model, in which a group of teachers are prepared to prepare others, apart from encompassing significant institutional responsibility, can, according to Hargreaves and Fullan (1992:3), “mitigate or even override many of these effects of top-down, ‘outside-in’ reform” but even in these circumstances the teachers have to deal with compulsory TCPD programmes and topics, which in general do not solve concrete pedagogical difficulties they face at classroom level when facilitating learning. In general, as the Mozambican education experience shows, the cascade starts at the Ministry of Education: a pedagogical team designs the programme, and organises provincial or regional sessions to prepare provincial pedagogical technicians who, in turn, will prepare district pedagogical technicians and the coordinators of Zones of Pedagogical Influence (ZIP). Following these three steps, the teachers are engaged in the TCPD programmes designed at Ministry of Education level. Usually these programmes follow a calendar also designed at central level. The cascade model has been the option in developing countries. Developing countries have in common low socio-economic and technical capacity. Therefore, the provision of TCPD to all teachers in a both professional and geographic diverse situation is still a great challenge to deal with.

Christie et al. (2004) argue that TCPD models and the expectations about it in Sub-Saharan African countries need to be understood differently than in the Western and Northern context. They go on to suggest that TCPD “needs to be understood in relation to broader issues of education, the state and development” (Christie et al., 2004:167). Corroborating this claim, it seems to me that teacher education institutions have to provide substantial qualifications to student-teachers so as to be effective learning facilitators. Then TCPD will serve to deepen the knowledge and skills previously acquired throughout initial teacher education. This perspective will be replacing the nature of current teacher education models that do not ensure basic knowledge and skills to facilitate learning in primary education.

From the perspective of the previous discussion, it appears to be of value to pay more attention to initial teacher education, which promotes self-directed professional development

in all contexts, in general, and particularly in developing countries due to the costs that TCPD require and the large number of teachers and the great shortage of human material and financial resources. Then self-directed professional development seems to be the model which takes into consideration adult learning and individual teacher's needs.

In attempting to demarcate concepts and explanations about TCPD, I present descriptions of self-directed professional development in the next sections of this study.

2.9 SELF-DIRECTED PROFESSIONAL DEVELOPMENT

Self-directed professional development does not mean that teachers are left alone in their individual professional learning. On the contrary, teachers should be supported through an effective learning facilitation process. Brookfield (1986:48) supports this statement by saying that no learning activity is completely self-directed or without external support or stimuli. Nevertheless, it is at the same time necessary to keep in mind that the teachers are not on the same level in terms of knowledge and skills, as they are "more diverse and unique than they are homogeneous" (Clark, 1992:77) even if they are coming from a similar academic and pedagogic background.

Van Eekelen, Vermunt & Boshuizen (2006) define self-directed professional development (SDPD) as the professional development that is led and performed by teachers' initiative. Self-directed professional development can also be understood as Self-directed Learning (SDL) performed by teachers towards their PD.

In this study, SDL is discussed in the context of adult education. Taking into account that teachers are adult people, one of the main aims in TCPD programmes should be to support teachers in developing self-directed learning skills (Brookfield, 1986:40). Thus the focus here is the process which allows adult learners to take control of what and how they are learning, with the emphasis on how they establish their learning goals, find the resources

adequate to their learning needs, take decisions concerning appropriate learning methods and have awareness of their progress (Brookfield, 1995).

According to Beitler (2005), the literature about the theory, practice and potential of SDL has been growing over the past thirty years. Throughout this period up till now researchers and writers have been defining SDL in different ways. However, what is common in such definitions is the focus on individual initiative and responsibility. Self-directed learning as Knowles, quoted by Brookfield (1986:40), argues is “a process in which individuals take the initiative in designing learning experiences, diagnosing needs, locating resources, and evaluating learning”. Accordingly, in this PAR I encouraged the PRs on analysing their classroom practices in order to identify new learning experiences, produce the appropriate learning tasks and material and identify the impact of those experiences on their CPD and learners’ learning.

2.9.1 Transformative Learning Theory

The transformative learning theory is the theoretical base that is selected for this study. This theory is used as a learning paradigm and also as an aim to be achieved by the teachers involved in this PAR study. Transformative learning refers to learning that involves revision of significant aspects of our world view of ourselves or our way of “being in the world”.

According to Guba and Lincoln (2005:183), a paradigm consists of the way in which an individual person interprets reality, that is, the essential “set of beliefs that guide action”. In other words, a learning paradigm is the individual person’s interpretation of learning.

Dirkx (n.d.) argues that “transformative learning has emerged within the field of adult education as a powerful concept of understanding how adults learn”. This author goes on to state that the meaning and the way in which transformative learning (TL) is used in promoting learning vary according to one’s perspective. In defining transformative learning, Mezirow, quoted by Cranton (1992:17), bases his understanding on the idea of reformulation.

He suggests that the reformulation of an individual's "perspective of meaning" is guided by the process of critical self-reflection. Here Mezirow sees critical self-reflection as one's assessment of her/his assumptions. This author continues by saying that "this reformulation, along with acting on the reformulation, is called transformative learning. The effort to facilitate transformative learning is called emancipatory education". Emancipator educators use appropriate strategies of facilitating learning towards their learners' personal emancipation and involve learners in activities which challenge their views, promote critical thinking and compare their own views with different worldviews. Concerning emancipatory education referred to by Mezirow, the PRs and I have been involved in planning of learning material that included learning tasks to deal with low achieving learners. This strategy significantly changed our view in relation to learners' achievement and created the ability to formulating questions with reference to learners' learning and designing remedial tasks.

Mezirow (2003) introduces the idea of understanding TL in an epistemological perspective. He refers to TL "as the epistemology of how adults learn to think for themselves rather than acting upon the assimilated beliefs, values, feelings and judgement of others". Therefore, in using TL with adult learners, it is supposed that the educator provides sufficient opportunities to learners to critically think and reflect on their personal experiences, to critically assess and confirm their own beliefs, values and feelings. From this practical experience, the learners will have their own standards to assess others beliefs, values and feelings. In this respect, when promoting CPD and basic research skills, they critically reflected on their classroom practice. The reflection stage allowed me and the PRs to look critically at the new knowledge, practice and experience and to be influenced and influence one another. The PRs changed the way in which they understood the different learning pace in the class. Such understanding guided them in providing remedial tasks for low achieving learners. To me the reflection provided new strategies in dealing with TCPD and researching classroom practices. Instead of indicating what is wrong and unproductive, I opted for more participative solutions concerning what to improve or do better.

According to Mezirow (1997:5)

transformative learning is the process of effecting change in a frame of reference. Adults have acquired a coherent body of experiences – associations, concepts, values, feelings, conditioned responses – frames of reference that define their life world. Frames of reference are the structures of assumptions through which we understand our experiences.

To substantiate the previous quotation, in this PAR the starting point towards our CPD was what we knew, did and thought regarding pedagogical practice in order to visualise what good practice should look like. Grabove (1997:89) refers to Mezirow who is also of the opinion that the ultimate goal of adults being involved in education “is reflective and transformative learning. However not all change are transformative and not all critical reflection leads to transformative learning”. Change can be attained by plain learning or assimilation of knowledge without change in the way the individual views the world and her-/himself, whereas transformation means to be aware of either own assumptions or other assumptions.

He goes on to say that transformative learning is a rational, analytical, and cognitive process and that “the concept of transformative learning is an intuitive, creative, emotional process” (Grabove, 1997:90). Grabove (1997:90) reminds us of the challenges transformative learning holds for everyone involved

Transformative learning cannot be taught; it is the learner who experiences transformative learning. Most important, facilitating and engaging in the process of transformative learning require a great deal of effort, courage, and faithfulness on the part of both the educator and the learner, because there is considerable risk and the effort may or may not result in a reward.

Although transformative learning cannot be taught, transformative educators differ from other educators since they explicitly facilitate learning for transformation purposes. They work to encourage a kind of learning that can transform an individual’s beliefs, attitudes or perception. In this process the learners also have to responsibility for the results attained, as

they should honestly explain their thinking and reasoning in order to identify their assumptions (McGonigal, 2005).

Linked to Grabove's view, Mezirow (1997:10) refers to the following

To facilitate transformative learning, educators must help learners to become aware and critical of their own and others' assumptions. Learners need to practice recognizing frames of reference and using their imagination to redefine problems from a different perspective.

This statement corroborates Grabove's stance with respect to the importance of the opportunities given to the learners to critically look at both their and others assumptions. Cranton (2002:66) identifies seven features from the steps leading to transformation in the following way:

- *An activating event* that typically exposes a discrepancy between what a person has always assumed to be true and what has just been experienced, heard, or read.
- *Articulating assumptions*, that is, recognising underlying assumptions that have been uncritically assimilated and are largely unconscious.
- *Critical self-reflection includes* questioning and examining assumptions – where they came from, the consequences of holding them, and why they are important.
- *Being open* to alternative points of view.
- *Engaging in discourse*, where evidence is weighed, arguments assessed, alternative perspectives explored, and knowledge constructed by consensus.
- *Revising assumptions and perspectives* to make them open and better justified.
- *Acting on revisions, behaving, talking, and thinking* in a way that is congruent with transformed assumptions or perspectives.

This study pays attention to the features leading to transformation, particularly to those related to an *activating event*, *critical self-reflection*, *acting on revisions*, *behaving*, *talking* and *thinking*. Throughout the PAR study the teachers are involved in discussions about their

experiences and their practice and they are encouraged to try out new alternatives in order to improve their actions.

As far as Fisher-Yoshida, Geller and Wasserman (n.d.:2) are concerned, transformative learning is driven by six dynamic issues for human resource development practitioners, namely:

- Identifying and reflecting on the key influences on one’s frame of reference or worldview
- Critical reflection
- Praxis, reflection on action
- Dialogue
- Empathy
- Intercultural appreciation.

According to Cranton (2002) there are no specific methods of facilitating learning that ensure transformative learning and she adds that critical reflection can be promoted by a provocative statement in a lecture, a story told by a fellow student, or an argument set out in an article, just as the most carefully crafted exercise would do. In the next table facets of transformative learning is detailed.

| Facets of Transformative Learning | | |
|--|--|---|
| Facets | Facilitator Activities | Learner Activities |
| An activating event | Exposing learners to events that typically show the discrepancy between what a person has always assumed to be true and what has just been experienced, heard, or read | Seeking out controversial or unusual ways of understanding |
| Articulating assumptions | Encouraging learners in describing what they believe and how they come to believe it | Articulating assumptions, that is, recognising underlying assumptions that have been uncritically assimilated and are largely unconscious |
| Critical self-reflection | Questioning her/his perspective and supporting learners’ effort to do the same Encouraging critical self-reflection, by | Questioning and examining assumptions in terms of where they came from, the consequences of holding them, |

| | | |
|---|---|---|
| | providing opportunity for learners to question their assumptions | and why they are important |
| | Modelling critical self-reflection | Describing critical incidents or experiences |
| Being open to alternative viewpoints | Setting up an environment in which critical self-reflection is a group norm Creating safe and enjoyable ways for learners to try out different points of view – ways of acting out or talking about alternatives | Being open to alternative view-points |
| Engaging in discourse | Encouraging writing | Participating in role playing, debates Engaging in discourse, where evidence is weighed, arguments assessed, alternative perspectives explored, and knowledge constructed by consensus |
| Revising assumptions and perspectives | Supporting learners on their assumption revision Interacting with each learner who is changed | Writing letters or memos from a different perspective Revising assumptions and perspectives to make them more open and better justified |
| Acting on revisions, behaving, talking, and thinking | Helping learners to do their action plans or writing down what they will do Talking with learners about what they will do after having new experiences | Acting on revisions, behaving, talking, and thinking in a way that is congruent with transformed assumptions or perspectives |
| | Running a follow-up meeting for learners to discuss how they have acted on their transformation | |

Table 2.10: Facets of transformative learning

2.9.2 Transformative Learning and Self-directed Professional Development

According to Beitler (2005) the literature about the theory, practice and potential of SDL has been growing over the past thirty years. Throughout this period up till now, researchers and writers have been defining SDL in different ways. However, what is common in such definitions is the focus on individual initiative and responsibility. Self-directed learning as Zimmerman (1990) argues is a set of activities and processes that an individual carry out

towards the acquisition of information or skills that involve personal initiative, purpose and awareness of the relationship between the process and the learning outcomes. In turn, Carver and Scheier (1981) consider that SDL is a cyclical process in which an individual is responsible for monitoring her/his learning and take further initiative in changing or not the way of learning adopted. In this sense of the previous assumptions, the activities carried out with the PRs aimed at improving their responsibility for innovative classroom practice and assessing what they learned.

Self-directed learning is applicable to the process of teacher continuing professional development (TCPD) and to the understanding of transformative learning (Mezirow, 1997) discussed in the previous section. For instances, when the learning facilitators are engaged in CPD, they use the experience already acquired to assess their own and other assumptions in order to assimilate the new experience. In the sense of the previous assumptions, the activities carried out with the PRs aimed at improving their responsibility for innovative classroom practice and assessing what they learned. In addition, having in mind that the learning facilitators are adults, I took into consideration that transformative learning is the central issue in adult education.

2.9.3 Self-regulated Learning and Self-directed Professional Development

Self-directed professional development is sustained by the understanding of self-regulated learning. The specialised literature about individually directed learning uses a variety of terms to define the process of individual learning. For instance, terms such as self-directed, self-regulated and meta-learning are used.

Self-regulated learning theory and research on self-regulated academic learning emerged in the mid-1980s with the intention to address the question how students become masters of their own learning processes. “Self-regulated learning is neither a mental ability nor an academic performance skill, but instead it refers to the self-directed process through which learners transform their mental abilities into task-related academic skills” (Zimmerman, 1986:5). This assumption is consistent with Brockett and Hiemstra (1991), who state that

SDL is a process in which an individual learner take ownership of her/his learning through a personal initiative on planning, putting into practice and evaluating the experience. In this study, the ownership of the PRs' classroom practice was the essence of the activities performed. The PRs were gradually participating in the identification of issues to be improved and potential areas for innovative practice.

“Students are self-regulated to the degree that they are metacognitively, motivationally, and behaviourally active participants in their own learning process” (Zimmerman, 1986:5). These students self-generate thoughts, feelings, and actions to attain their learning goals. More precise definitions than these, however, tend to vary according to the researcher's theoretical perspective.

The above mentioned principles of effective practice are important for my study, specifically for me as a facilitator of adult learning and a research-mentor. Accordingly, voluntary, self-esteem and self-directed learning from the side of the individual teacher are always taken into consideration.

Rodrigues (2005:128) points out that assumptions regarding teacher professional development are of intrinsic value for individual teachers. They enhance the teachers' perspectives and their feeling of ownership.

Lonsade cited by (Zuber-Skerritt, 1992:162) states that the will to change, to do things differently and better, and to do new things, comes from the individual. Taking into consideration the individual teacher's willingness, what Hargreaves (1994) names “enthusiasm”, he emphasises that it is also worthwhile to take into account the educational needs. Hence Hargreaves (1994) proposes a ‘post-technocratic’ model of PD. In this model there is a specific focus on lifelong professional learning needs, continuity and progress and reconciliation of individual teachers' learning needs with the school education and/or school needs. Still, taking into consideration this view of PD, Lonsade holds that “Management processes that build on the strengths, interests and motivation of individuals and that

recognise their professionalism, are more likely to be effective” (Lonsade cited by Zuber-Skerritt, 1992:162).

I am of the opinion that a comprehensive system of teacher support can allow to deliver qualified teachers that are taking responsibility for their own CPD.

In attempting to find a way for a participative and responsive CPD, a provocative question appears to be the point of departure: “What can we do to make professional development programmes work for professional teachers?” (Clark, 1992:77). Then he continues by answering that “we must give the responsibility for professional development to teachers themselves. This is what I mean by ‘Self-directed professional development’” (Clark, 1992:77).

Still taking into consideration the aspect of individuality, being an important feature of SDPD, Clark (1992:77) goes on to propose the “timeless” questions like: Who am I? What do I need? How can I get help?

Teachers are adult individuals and they can decide by themselves to be or not be engaged in professional learning, either in professional development programmes or in academic courses; “certainly some self-directed learners know in advance precisely what they want to achieve and how they will evaluate their attainment” (Candy, 1991:280). Therefore, in order to sustain and support such adult clarity in terms of what and how to learn and the degree of what has been learnt, TCPD should follow six principles of effective practice:

- Participation in learning is voluntary; adults engage in learning as a result of their own will.
- Effective practice is characterised by respect among participants for each other’s self-esteem. This does not mean that criticism should be absent in educational encounters.
- Facilitation is collaborative. Facilitators and learners are engaged in a cooperative enterprise.

- Praxis is at the heart of effective facilitation of learning – all are involved in a continuous process of activity, reflection upon activity, collaborative analysis of activity, new activity, further reflection and collaborative analysis, and so on.
- Facilitation aims to foster in adults a spirit of critical reflection.
- The aim of facilitation is the nurturing of self-directed, empowered adults.

(Brookfield, 1986:9-11)

Looking at the first principle, what emerges is that in working with adults, it is essential to be aware of the comment of Clark (1992:77)

no one can force a person to learn, change or grow. When adults feel that they are in control of a process of change that they have voluntarily chosen, they are much more likely to take full benefit from it than when they are coerced into a training situation in which they have little to say about the timing, the process or the goals.

In many developing countries, in-service education and training (INSET) has been the main TCPD model adopted due, on the one hand, to financial constraints and, on the other hand to a shortage of expertise to respond to the primary school teacher demand.

Although the literature on TCPD includes a variety of models of TCPD, it is mainly based on a didactic approach. In this study I follow the principles of SDPD to improve teachers' responsibility for their own PD. My option derives from the assumption that in Mozambique there is a big diversity of teachers' conditions and needs, in addition to the limitation of human and financial resources.

2.9.3.1 Principles of self-directed professional development

In the design of a SDPD model the following set of principles, which can be described as follows, should be taken into consideration:

- Write your own credo of teaching
- Start with your strengths
- Identify your learning needs
- Make your plan
- Look into your own backyard
- Ask for support
- Go first class
- Blow your own trumpet

(adapted from Clark, 1992:83)

Write your own credo of teaching

According to Clark (1992:78), the teacher's knowledge and beliefs about facilitating of the learning process, about learning, about curriculum, and about her-/himself and his/her learners have an influence on professional development. He continues and states that "our beliefs and theories define what is foreground and what is background; what to attend to and what to ignore" (Clark, 1992:78).

Start with your strengths

Clark (1992:83) argues that traditional models of PD have been negatively perceived as a result of its "focus on and compound weakness. It is grounded in a disease mode", what Kennedy (2005) called a deficit model. This stance shows that from a TCPD perspective teachers should engage in CPD starting from their existing knowledge and skills. With reference to the bigger effectiveness of starting from strengths, Wennergren and Rönnerman (2006:553) comment

In Vygotsky's view, people are continually undergoing development and change. In every situation it is possible to acquire knowledge and skills from other people in different teamwork situations. Vygotsky sees people as continuously en route to appropriating new types of learning tools, based on what they already know.

Identify your learning needs

Here, the learning needs are included in a teacher's overall professional learning process. The learning process in a SDPD perspective encompasses similar characteristics as AR does. Action research as a learning process is explained by Winter (1996:14)

[Action research] is about the nature of the learning process, about the link between practice and reflection, about the process of attempting to have new thoughts about familiar experiences, and about the relationship between particular experiences and general ideas.

Make your plan

In order to contribute to the improvement of their learning, in a certain time frame, teachers have to make a plan, since “meaning and a sense of direction and progress don't come automatically from an activity, even when it is apparently a competent activity” (Clark, 1992:80). He illustrates this requisite by using an Arabic expression “To the traveller with no destination, one road is as good as another”.

Clark (1992:80) continues and observes that teachers should “outline the ways in which they hope to become different ... and some of the possible means to those changes”. Systematic planning in a context of systematic enquiry is one of the major characteristics of action research (Kember, 2000:24) being the research paradigm in this study.

Look into your own backyard

Teachers should view the classroom context as the most privileged space for their professional development; in that way of thinking teachers learn from their learners, the subject matter, and the classroom organisation (Clark, 1992:81). Learning from one's context is one of the advantages of action research, since the practitioner investigates her/his own practice in the context where such practice is developed.

Ask for support

Clark (1992:81-82) discusses the paradox of teacher professional development: teacher development is led by an intrinsic and individual responsibility; however, individual teachers cannot develop “entirely by themselves”. They also learn a great deal from contact with many other people who are knowledgeable about and have experience (Hargreaves, 1992:216) in learning and in facilitating learning. The need for support – when carrying out professional development – was found by Kember (2000:148), when he worked with teachers involved in action research projects. He continues describing the needed support that is given by facilitators, fellow teachers, the school structure and even by the learners from the teacher’s class (Kember, 2000:172). Support from fellow and/or experienced teachers, as critical friends, can be in terms of ideas, material, critiques or appreciation of self-produced learning materials or planning. Using critical friends can provide valuable feedback. In this view critical friends are often located at the same school and are perceived as people who can provide support whenever it is needed; this does not mean that the support is provided on a regular basis.

Adhering to the idea of help and support from people from the same field when carrying out self-directed professional development seems to be paradoxical. Clark (1992:81-2) explains this paradox in the following way:

On the one hand, each teacher’s path and pattern of development is a solitary journey: I have been advocating here that we accept this, take responsibility for our own development, and make the most of it. On the other hand, there is no rule that requires us to pursue this solitary journey without any outside help. The paradox is that becoming a fully developed, autonomous individual is a process that we cannot make happen alone.

Go first class

To go first class for a teacher means that she/he respects her-/himself. Consequently, learners, colleagues, administrative body and parents will do the same (Clark, 1992:81-82).

Blow your own trumpet

Throughout the process of SDPD, teachers make public what they have been doing while aiming at their professional development (Clark, 1992:81-82).

Teacher continuing professional development is a demanding concern and “it could be said that the professional development has no fixed route and no real end, if it is seen as lifelong learning and providing the professional continuity to work in the profession” (Rodrigues, 2005:4).

2.9.3.2 Facilitating Self-directed Professional Development

The role of support and facilitation has been extensively documented in the literature concerning SDPD. However, as Brookfield (1986) notes, the concept of facilitation is new in spite of the fact that it has been used over the last century. Educators and teachers take up the facilitator’s role and as “facilitators of learning they see themselves as resources for learning, rather than as didactic instructors who have all the answers” (Brookfield, 1986:63).

In a SDPD context characterised by action research, some issues appear to be of a potential problem in the relationship between the teacher-researcher and the facilitator. Kember (2000:155-169) considers these problems as critical friends and describes a set of ten roles for a critical friend, namely as:

- financier
- project design consultant
- rapport builder
- coffee maker
- a mirror
- teaching consultant
- evaluation adviser
- research mentor
- resource provider
- deadline enforcer.

Here Kember (2000) sees critical friends in a different perspective than previously described. Critical friends are assumed as facilitators and the support is provided in a regular and planned schedule. My understanding is that the support is provided within a CPD agenda included in an AR project. In this PAR I played different roles. Owing the introductory nature of the research I had the role of research mentor. I encouraged the PRs on following AR cycles aimed at improving their practice. As a teaching consultant I influenced the PRs regarding the use of different ways for monitoring their pedagogical skills and individual learner assessment. At the same time I offered second-hand paper as resource for production of learning material. Finally, for the purposes they had defined I encouraged the PRs to determine deadlines for the attainment and verification of the results.

McNiff et al. (2003) and McNiff and Whitehead (2006) also define critical friends' roles in an AR project. Accordingly, critical friends are colleagues or co-researchers or mentors of AR who know the project and are available for ideas sharing and informal discussions on the project on a regular basis. In this PAR the activities that I carried out with the critical friends are indicated in Table 4.57.

2.10 QUALITY ASSURANCE

The term 'quality assurance' (QA) has been interpreted in a variety of ways. In spite of different interpretations, authors in this field are unanimous in relation to its origin. According to Ellis (1993), the origin of this term is partly related to manufacturing, service industry and health care. This author states that QA "is about ensuring that standards are specified and met consistently for a product or service" and the "adoption for education has been rapid and pervasive" (Ellis, 1993:3). Kietzman (2003-2009:1) also discusses QA in a manufacturing setting and defines the concept as "the process of verifying or determining whether products or services meet or exceed customer expectation. Quality assurance is a process-driven approach with specific steps to help define and attain goals".

Borrowing the Shewhart Cycle framework developed by Deming, Kietzman (2003-2009:1) describes the four steps included in the PDCA model as follows:

- *Plan*: Establish objectives and processes required to deliver the desired results.
- *Do*: Implement the process developed.
- *Check*: Monitor and evaluate the implemented process by testing the results against the predetermined objectives.
- *Act*: Apply actions necessary for improvement if the results require changes.

Here quality assurance is understood as a specific self-evaluation activity with respect to the work that one has carried out. Furthermore, PCDA steps follow similar procedures as AR cycles do. Thus, AR can be applied as a tool for quality assurance. However, as Kember (2000:20) maintains, AR is not the sole approach for carrying out quality assurance: it can be “seen as neither the best nor the only viable approach”. In this PAR study, I take into consideration the PDCA model for both evaluating my work with the teachers and for supporting the teachers to do a self-evaluation in relation to their learners.

Corroborating the previous definition, Wikipedia (2009:1) describes quality assurance as a “planned and systematic production process that provides confidence in a product’s suitability for its intended purpose It is a set of activities intended to ensure that products (goods and/or services) satisfy customer requirements in a systematic, reliable fashion”.

The QA scope in a specific field is referred to by Wikipedia (2009:1) as that quality determined by the intended users, clients or customers, not by society in general. Thus, QA in education settings can be a matter of concern not only to the education sector but also to the whole society since education is a social field. In the same way Ellis (1993:18) notes that “education certainly has a number of consumers beyond the individual student. There is the potential employer of the student and the society that may benefit from his skills”.

Harlen (1994:17) corroborates these interpretations within the industrial context by stating that QA serves to monitor the different steps of the production process, while quality control

is an instrument to remove deficient products. Yet, considering the implications of the terms *quality assurance* and *quality control*, he introduces the term *moderation* to point out at a specific view on assessment and the relative significance of quality assurance and quality control. The concept of moderation introduces the idea of reducing sources of errors such as “variation in the demand of opportunity provided by the tasks undertaken by students, differences in interpretation of performance criteria on making schemes and the intrusion of irrelevant contextual information in making judgements” (Harlen, 1994:16). The understanding of the role of assessment for QA is explicitly described by Harlen (1994) by providing “a framework for considering the pros and cons of various approaches to quality assurance and quality control”.

An analysis of QA as an instrument to verify the quality of the processes of learning and the facilitation of learning is offered by Kember (2000). This author builds classifying quality schemes, which encompass QA as one of the means to be used.

Taking into consideration the driving force of the overall QA process in education settings, three types can be distinguished, namely external QA, internal QA and self-directed QA.

2.10.1 External Quality Assurance

External QA can be described as a top-down or external driven process. In those cases, the driving force, according to Kember (2000), can be the education sector’s management, funding or accrediting bodies. He goes on to describe general QA’s characteristics as follows:

- They are imposed top-down by the education sector’s management, by funding or accrediting bodies.
- Involvement is compulsory.
- The process is through review or inspection by a higher authority – though this process is often known by the wrongly used word ‘peer review’.

- The schemes seek to establish that an acceptable standard has been met.
- The acceptable standards are established in terms of pass rates. The procedures do not include qualitative categories.
- Institutions or courses that fail to reach the acceptable standard may be punished by withholding funding or approval of courses. Teachers deemed to be below the standard, face sanctions such as non-renewal of contract or denial of tenure.
- Teachers do not provide the real information about the categories provided on verifying the acceptable standard. Teachers avoid to be punished.
- There is rarely a mechanism for offering real rewards to those institutions, courses or teachers performing far better than the minimal acceptable standard.

(adapted from Kember, 2000:6-7).

The procedures followed in a QA process in education aim at ensuring acceptable standards in teaching and learning. Although QA is the most used term, Frazer quoted by Kember (2000:6), is more in favour of using the term ‘quality control’ in spite of the implications that this term has for academics. ‘Quality control’ is also used by Ellis (1993) in attempting to clarify the nature of QA. However, he concludes that the use of ‘Quality control’ for services such as education encompasses “a more complicated notion of quality control” (Ellis, 1993:5).

In the context of this PAR, QA also includes an evaluation of the CPD process in relation to the effectiveness of the activities performed by me as researcher-mentor and by the teachers involved as practitioner-researchers. Concerning the effectiveness of CPD, Guskey (2000) distinguishes three main limitations, namely in terms of effectiveness, knowledge or changes in both teachers and learners and evaluation. The limitations are described as follows:

- Most ‘evaluation’ consists merely of summarising the activities undertaken as part of the professional development programme: what courses were attended, how many credits accrued, etc. This clearly gives no indication of the effectiveness of the activities undertaken, making this form of data collection inadequate as a means of looking at the effects of CPD.

- Where some evaluation does exist, this usually takes the form of participant satisfaction questionnaires. Obviously, this allows one to gauge whether participants consider the event to have been enjoyable and successful, but does not engage with issues such as gains in knowledge or changes in practice expected from professional development, and certainly does not evaluate whether there have been changes in learning outcomes.
- Evaluations are typically brief, one-off events, often undertaken post hoc. As most meaningful change will tend to be long-term, and many professional development activities will take place over a longer period of time, evaluation efforts need to reflect this and likewise take place over time. Evaluation will also need to be built in, to run along-side professional development activities.

(Guskey, 2000: 8-10)

2.10.2 Internal Quality Assurance

External and internal QA can incorporate evaluation procedures in order to measure the impact of CPD.

According to Muijs et al. (2004), CPD impacts on different levels. Therefore, an evaluation of the CPD should encompass the different levels related to the intended outcomes. In the line of evaluation of PD, Guskey (2002) understanding is that the impact of a PD programme can be evaluated taking into consideration five critical and interrelated levels, namely:

- *Level 1*: participants' reaction – the most frequent level and easy form of evaluative evidence, however, does not measure or ensure PD.
- *Level 2*: participants' learning from CPD – the central level to teacher effectiveness.
- *Level 3*: Organisational support and change – impacts upon motivation and sustainability of change.
- *Level 4*: Participants' use of knowledge and skills – takes place after a reasonable time, depending on the complexity of the knowledge or skills to be acquired.
- *Level 5*: Learning outcomes – the one least likely to be measured in evaluation at present, but also one of the most important since it assesses the impact on learner learning.

The five levels are interrelated, since each one is supported by the previous levels. However, the effective results attained at one level do not predict the impact at the following Guskey (2002).

Muijs et al. (2004), following both Stake (1967) and Stufflebeum (1983) expand the levels by adding two more levels to those of Guskey (2002) ones. Firstly, they indicate that the prior condition of the evaluation should be listed as the level 1, since this level comprises issues like “motivation behind and reasons for the professional development programme/activity, why the particular programme was chosen, or why it was developed in a particular way, policy backgrounds and other factors affecting the choice and development of the programme” Muijs et al. (2004:301). Secondly, the authors point out that the issue of cost-effectiveness is missing in the models they analysed.

From the literature reviewed on the evaluation of CPD, it appears that exist a wide number of levels that can be considered. For the purpose of this study from the ideas of the previously mentioned authors, I summarised the model of evaluating the impact of CPD into eight levels as shown in Table 2.10. My interpretation is in the light of the idea of the nature or characteristics of PD, with respect to andragogical (adult-centred) instruction (Díaz-Maggioli, 2004; Evaluation Toolkit, 2008), credit and non-credit PD programmes (Sugrue, 2004).

The next table details the levels of evaluating the impact of continuing professional development.

| Levels | Purpose | Methods Applied | Types of Questions/issues |
|--|---|--|--|
| Level 1: Rationale for the CPD programme | To verify the attainment of the goals of the CPD | Questionnaires | Prior condition of the evaluation <ul style="list-style-type: none"> - motivation and reasons for the PD programme/activity - justification of the particular programme - reason for developing in a particular way - policy backgrounds - other factors affecting the choice and development of the programme |
| Level 2: Participants' reaction | To verify possible prerequisites of PD | Questionnaires Personal comments Interviews | Content questions <ul style="list-style-type: none"> - Relevance of the issues addressed - Appropriateness of the material Process questions <ul style="list-style-type: none"> - Preparation of the facilitator - Suitability of the material - Suitability of methods for adult learning Context questions <ul style="list-style-type: none"> - Appropriateness of the venue - Appropriateness of the period of the academic year |
| Level 3: Participants' learning | To renew commitment of teachers as change agents To renew or extend teacher morale | Different methods according to the knowledge to be evaluated | <ul style="list-style-type: none"> - Cognitive learning - Affective learning - Behavioural learning |



| | | | |
|--|--|---|--|
| Level 4: Organisational support and change | To raise motivation To sustain change To promote organisational change | Questionnaires Document analysis Interviews Participant portfolios | <ul style="list-style-type: none"> - Alignment to organisational policies - Consideration to organisational issues like support, resources, including time, barriers to successful completion, effectiveness and culture - Condition that ensures teacher participation - Suitability to individuals' professional and personal values |
| Level 5: Participants' use of new knowledge and skills | To evaluate whether participants are using the new knowledge and skills acquired | Questionnaires Interviews Observation Video or audio tapes | <ul style="list-style-type: none"> - Explanation of activities or procedures - Innovative facilitating learning - Innovative ways of presenting learning tasks - Frequent follow-up of individual learner achievement - Continuous search for professional information |
| Level 6: Teacher reward | To evaluate personal reward | Interviews Questionnaires | <ul style="list-style-type: none"> - Incentives - Promotion |
| Level 7: Cost-effectiveness | To evaluate the cost-effectiveness of the CPD programme/activity | Audit/appraisal | <ul style="list-style-type: none"> - Cost of the programme - Benefits of the programme |
| Level 8: Learning outcomes | To assess the impact on learner learning | Testing Interviews Questionnaires | <ul style="list-style-type: none"> - Cognitive outcomes through standardised or non-standardised testing - Non-cognitive outcomes through interviews |

Table 2.11: Levels of evaluating the impact of continuing professional development (adapted from Guskey, 2002)

2.10.3 Self-directed Quality Assurance

In the Mozambican context of this study, quality assurance procedures have been focusing on teacher education institutions. In so doing, the National Institute for Development of Education (INDE) carried out studies to assess the teacher education models. The findings of these studies show the inefficacy of the teacher education curricula in the former CFPP and IMAP (Passos, & Cabral, 1989). However, the changes occurring at teacher education level will not have been informed by those findings. What led the transition from one model to another was the need to attain proposed goals in national and international commitment.

With respect to Mozambican primary schools, there is no written document about acceptable standards to be attained or the procedures to be followed when teachers do not do accordingly. However, all primary schools teachers refer to a percentage of pass rates to be achieved at the end of the academic year. On understanding the lack of formal standards and experiences in carrying out self-directed QA, it would be of great value to take into consideration that there are several teacher profiles and ways of facilitating learning as referred in Chapter 1. Owing to the lack of knowledge and experience in conducting QA among primary schools teachers, I use the advantages of teacher and school experiences on doing peer-coaching, mutual-classroom observation, and self-evaluation of their learning opportunities as recommended by Come (2009).

As Ellis (1993) notes, quality assurance is about ensuring that standards are specified and that they are met for a product or service. Therefore the provocative question at this point could be: Apart from pass-rate, what standards of education could be ensured by Mozambican teachers? This study does not set out to carry out QA. With the participation of the teachers involved in my study, I use QA procedures to both verify the impact of the activities and methods used and explore the appropriateness of AR as research paradigm for the improvement of learning, teaching and professional development (Zuber-Skerritt, 1992:1).

2.10.4 Basic Principles of Instructional Design for Professional Development Interventions

For the purpose of this study, instructional design is defined and understood within the educational context. “Instructional design refers to the systematic and reflective process of translating principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation” (Smith & Ragan, 1999:2). They continue by referring to the fact that instruction is an intentional act of facilitating learning (Smith & Ragan, 1999:2).

The term ‘design’ implies an intentional “systematic or intensive planning and ideation process prior to the development of something or the execution of some plan in order to solve a problem. Fundamentally, design is a type of problem solving” (Smith & Ragan, 1999:4). This could be considered higher order thinking that follows three main steps, namely analysis, strategy and evaluation. These steps should be combined with those that Salvia and Ysseldyke (1995) consider as important, namely:

- Planning instruction
- Managing instruction
- Delivering instruction
- Assessing instruction

Since professional development requires a great deal of time and is very costly, it cannot be based on incidental professional learning. Any professional development intervention should be planned in order to ensure mastering of professional learning outcomes and developing the full potential of everyone involved.

For optimal professional learning to result and active and interactive partnership, characterised by open academic discourse, should exist between the facilitator and the participating teachers. All participants and facilitator should contribute fully. Analogue to Du Toit (2010) this could be considered professional learning dynamics.

Factors that promote effective professional learning interventions are:

Planning

High quality professional development interventions necessitate planning and innovation. To the background of developing whole-brain teachers (Herrmann, 1996) facilitators of professional development programmes should be sensitive to accommodating by planning different types of opportunities for professional learning. In the past, planning such a learning opportunity would mean designing a structured session such as a formal training session. Planning in the new paradigm means that a broad framework is planned for in which the teacher can learn according to constructivist learning principles. This would mean that the participating teachers help in structuring the professional development intervention and professional learning opportunities as is suggested by the empirical study that forms the baseline study for this participatory action research (PAR) study. This intentional participation by completing a questionnaire by a cohort of teachers represent the five practitioner-researchers (PRs) referred to in Chapter 3. This more open approach to a professional development intervention creates an environment conducive to flexible learning and creative thinking.

Efficient facilitators therefore prepare innovatively in terms of the professional learning process (How) and what should be acquired in terms of professional learning outcomes (What). Teachers participating in a professional development programme should not only learn about applicable learning theories, but also through the application of related principles. This relates to Kolb's (cited in Du Toit, 2007) idea of experiential learning. For the facilitator it also means an experimental practice as it is related to the whole-brain learning model of Herrmann (1996) that includes an experimental aspect. Experimenting with new ideas is evidence of a facilitator's willingness to improve what he/she is doing. In the context of this PAR study it is here where the facilitator takes a role-model position.

Professional learning outcomes

An effective professional development intervention and effective scholarly discourse are supported by well formulated outcomes for professional learning. For this study such professional learning outcomes have been identified and are reflected in Table 3.3.

Creating new knowledge – based on experience

Facilitators who themselves remain lifelong learners, who are continuously expanding their professional knowledge and developing their skills, and searching for innovative ways of conducting professional practice, will experience professional fulfilment. Irrespective of how efficiently facilitators plan, prepare and present, however, more of the measures can ensure that learners learn effectively. This would include mastering of skills and developing applicable attitude, values and virtues.

With a view to creating and maintaining a dynamic and participative learning environment within a professional development intervention, facilitators should keep in mind that different factors promote effective professional learning. Facilitators should create a meaningful professional learning environment within which teachers can learn by experience to convert their theoretical knowledge into praxis. The following characteristics that influence teachers' professional learning are important:

Motivation

Motivation refers to teachers' willingness to learn as professional. That is willingness to immerse themselves in professional challenges and to venture into new professional learning experiences.

Self-discipline

Self-discipline entails teachers' purposeful planning of their professional development with adequate understanding of their own capabilities and areas where they need to develop. This implies being able to decide where, when and how professional learning is to be undertaken and completed in accordance with what is expected by a specific professional development intervention. Motivation and self-discipline go hand in hand –

motivation being prerequisite for self-discipline. The capacity for independent learning, that is required of teachers within an outcomes-based approach to professional development, demands self-discipline.

Responsibility for professional learning

The first priority for all teachers is to accept responsibility for the success of their own professional development. The foundation of this professional responsibility is self-discipline. Teachers as adult learners opposed to learners at school education level are in a situation in which they have more freedom of action and choice. This freedom requires greater responsibility for own potential development if effective professional learning is to materialize.

Effort

Individual and collaborative effort, for instance where co-operative learning is used, implies purpose, interest, and concentration. Professional Learning, in the end, consists of individual effort that cannot be acquired on behalf of the teacher by any other person.

Interest

An interest in professional development as educator underpins and promotes motivation, since interest and commitment go hand in hand. Interest fosters curiosity and directs teachers' participation, while it serves as an incentive for self-directed (self-disciplined) professional learning.

2.11 LIFELONG LEARNING

Lifelong learning (LLL) means continuing learning throughout the life span. Persons (2005:13) points out that LLL “is not the same as continuing education in the formal education system. On the contrary, LLL crosses over or ‘dissolves’ boundaries, regardless of observing subjects and courses or policy sectors”. He continues stating that “Lifelong learning is a holistic view of education and recognises learning from a number

of different environments” (Persons, 2005:13) which can provide formal, non-formal and informal learning.

In 1978 UNESCO adopted LLL as a concept to support learning at all stages in life. This concept is defined as “any learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment related perspective” (European Commission, 2001). Corroborating the personal and employment perspective, Ghosh and Sevukan (2006) support the idea that LLL is a term used to combine formal, informal and non-formal education in which people engage throughout the life in order to acquire or expand knowledge, skills and dispositions to promote well-being.

Lifelong learning can be seen as a part of formal education or as a part of informal activities or programmes. Teachers engage in CPD programmes as a part of their LLL, aiming at the improvement of knowledge, skills and competences. What is essential to consider in such programmes, according to Zuber-Skerritt (1992:219), is that the adopted model for CPD should encourage continuous development and LLL means a replacement of models of transmitting knowledge and skills.

Lifelong learning is an individual intentional endeavour, which has to be self-directed in order to respond to the learning needs. In this study, the teachers involved and myself as a mentor and researcher are lifelong learners since we were engaged, are still engaged and most probably will be in future in a problem-solving situation by both guiding and doing our investigation.

The theoretical basis considered in this theoretical framework suggests that AR is a sound paradigm for TCPD. Stringer (2004:172) makes the point that AR provides significant tools for designing relevant and effective TCPD programmes.

This study aims at exploring an intervention in primary schools teachers for taking responsibility for their CPD by investigating classroom practices and improving my own

practice as a TCPD promoter and facilitator and research mentor. From different models described in the extensive literature I have read, a holistic approach to self-directed development seems to be the model that should improve the teachers' responsibility. For this purpose, I have used AR as an interpretive paradigm which takes into consideration the physical, emotional, aesthetic, spiritual, intellectual, moral and social life of the participants (Stringer, 2004:37). The interpretive paradigm is basically concerned with a qualitative approach to research. The qualitative and the quantitative paradigms are the two paradigms currently used by researchers. These paradigms have significant differences and are used to investigate phenomena in social sciences through different procedures and purposes. The qualitative paradigm is derived from an interpretive approach to research whereas the quantitative paradigm is rooted in positivism.

Williams (2000:209) states that the interpretive paradigm and "qualitative research are sometimes used interchangeably" since both refer to qualitative dimensions of the study which do not use predictive and cause-effect hypothesis and use an interpretive approach. According to Mills (2007:29), interpretive AR starts from a researcher's personal supposition who considers that, although she/he has "professional knowledge, that may be useful in exploring the issue or problem" under study, his knowledge is incomplete and needs additional knowledge and understanding from the people affected or interested in the issue.

To sum up on the nature of research paradigms: Denzin and Lincoln (2005:22) assert that "all research is interpretive; it is guided by the researcher's set of belief and feeling about the world and how it should be understood and studied". For instance, in the quantitative paradigm the beliefs are accepted and assumed while in qualitative research the beliefs leave space for discussion and still remain controversial.

The theoretical framework attempts to provide a theoretical foundation to support the empirical evidence of the study and to present answers to the main research question, which would be valuable to me, my participants, primary school teachers in general, the MEC and other providers of teacher professional development and researchers in this

field. In Chapter 3 I include the theoretical basis and procedures that complete and substantiate the answers provided throughout the literature review.

This study focuses on individual classroom practices, on pursuing Fullan's (2001:253) and Hopkins et al.'s (1994:113) assumption, namely that PD cannot be understood as workshops and courses; PD has to be seen as a systematic process of development of habits of learning. The study also investigates the applicability of what Hargreaves and Fullan (1991:64) argue by saying that the responsibility for PD should be conferred to teachers themselves.

2.12 CONCLUSION

In this chapter I have traced the holistic theoretical framework which guided this study. In discussing the theoretical framework I referred to professional development with particular emphasis on the Mozambican experience, and evolving from the Mozambican case, I described models and typologies of CPD. Evolving from the models described, a need for new approaches of TCPD, described in Chapter 1, has emerged. Among the models described I utilised Clark's (1992) understanding of the self-directed professional development (SDPD) model on supporting the PRs and my own professional growth. This model appears to be the more feasible model for the Mozambican situation, mainly if the diversity of models of teacher education and the insufficient professional qualification among primary school teachers as exposed in Chapter 1 is taken into consideration. Furthermore, I have shown the transformative learning role in a SDPD model (Grabove, 1997; Mezirow, 1997, 2003; Cranton, 2002) and the significance of self-directed quality assurance for the improvement of CPD towards lifelong learning.

The discussion on the topics selected attempted to place the study within the existing intellectual puzzle in the field of TCPD and to understand both the factors influencing TCPD in Mozambique and the need for investigation towards a more individualised and effective intervention in TCPD. I approached this PAR within a context where

motivation for TCPD follows a deficit-model and the factors associated with initiation of CPD were not sufficiently considered. Some of these underestimated factors include teachers' motivation and advocacy, and a pedagogical knowledge base. Chapter 3 presents the research design of this study.

CHAPTER 3

PARTICIPATORY ACTION RESEARCH DESIGN

3.1 INTRODUCTION

This study qualifies as Action Research (AR) in the most widely used sense of the term, and specifically as Participatory Action Research (PAR). Kember (2000:23-24) indicates that a project should jointly fulfil three conditions to be considered an action research, and he says

Firstly, it takes as its subject-matter a social practice, regarding it as a form of strategic action susceptible of improvement; secondly, the project proceeds through a spiral of cycles of planning, acting, observing and reflecting, with each of these activities being systematically and self-critically implemented and interrelated; thirdly, the project involves those responsible for the practice in each of the moments of the activity.

Following Kember's indication, my study embraces the three required conditions above. My field of specialisation is teacher education, and more specifically, the teaching practices of primary school teachers. During the study I always negotiate the teachers' involvement in the different phases of the cycles of this PAR process.

The reason for selecting AR arises from the fact that it is an empowering design for investigation, change and improvement at work place level (Cohen, Manion & Morrison, 2000:226; McNiff & Whitehead, 2006:7; McMillan & Schumacher, 2006:414; Henning, Van Rensburg, & Smith, 2004:47); and the appropriated design for areas such as methods of facilitating learning, learning strategies, continuing professional development of teachers (Cohen et al., 2000: 226). Moreover, AR is suitable for practitioners in general without specific scientific knowledge (McNiff & Whitehead, 2006:7). Moreover, I selected AR since it improves the practitioners' practice, the understanding of the practice performed and the situation in which the practice is carried out, and at the same time AR involves the

practitioners “in all phases of planning, acting, observation and reflecting” (Carr & Kemmis, 1986:165). My perception is that the PRs and I are the ones who are affected by the issues being studied and we can learn more from one another in full involvement and participative approach. In developing AR I am explicitly showing my beliefs with respect to both my position as a research within the research process and the process of generating knowledge (Macniff & Whitehead, 2006). Accordingly, my ontological assumption is that in this study (a) I am committed to doing what I think to be better and respecting what the PRs think in relation to their points of view; (b) I want to understand what I do as a TCPD facilitator and research-mentor and what the PRs do as owners of their process of CPD; and (c) I can influence the PRs and they can also influence me throughout this study. From this stance the PRs and I are the object of this study and our practice is under scrutiny. The knowledge generated from this study will be a result of our negotiation as practitioners, since the teachers are reflective practitioners and the PRs and I are involved in a study “that seeks the development of theoretically informed practices” (McTaggart: 1997:30).

In the 1930s and 1940s, with John Collier and Kurt Lewin respectively, AR was associated with social change and social justice. Years later, in the 1950s, AR was taken up in education, specifically by the teaching profession in spite of its decline during the late 1950s in America. By that time, Steenhouse (1975) had advocated AR in Britain and Stephen Kemmis – with a participatory focus – in Australia. According to McNiff and Whitehead (2006:36) the term ‘action research’ first appeared in Martin Luther King’s speech in 1961. From there, the work of Whitehead (1976) shows the linkage of AR with the improvement of learning; John Elliot (1991) developed an AR interpretive approach and Jack Whitehead developed a self-study perspective regarding teachers being responsible for their own practice.

In 1940 Lewin was named the father of AR. From this date to the current stage of research, a variety of approaches to AR have been conceived in the context of the shift of epistemological perspectives from positivist to interpretive ones. AR is one of the research paradigms used in the social sciences and particularly in educational settings. As McNiff and Whitehead (2006:7) state, AR has become increasingly popular around the world as a form of professional learning. Kember (2000:20) refers to AR as a “research philosophy” and says,

“It is regarded as neither the best nor the only viable approach”. In the same vein, Zuber-Skerritt (1996:3) indicates that AR is recognised as an appropriate research paradigm for development in areas such as education, professional management and organisation. Accordingly, in recent decades, action research has been established as research paradigm.

My personal view is that AR is a research paradigm. My assumption is based on the following definition of paradigm: “A paradigm is a conceptual system containing basic assumptions of how the world operates” (Baronov, 2004:77). In this sense each person evolves an individual view to understand and interpret the world by creating her/his own criteria of significance of what is under investigation.

As a research paradigm, different types of AR can be distinguished according to the central aim of the study in which it is applied. Zuber-Skerritt (1996:4) describes three types of AR as Table 3.1 shows. Zuber-Skerritt (1996:4-5) connects the practitioner’s role with the type of AR. In Technical AR the practitioners work in accordance with what is planned by the researcher; in Practical AR the practitioners are encouraged to take decisions and reflect on what they do; and in emancipatory AR the practitioners are in a position to change the system or the conditions.

An array of types of action research is outlined in the following table:

| Types of Action Research | Aims | Facilitator’s Role | Relationship Between Facilitator and Participants |
|---------------------------------|---|--|---|
| 1. Technical | Effectiveness/ efficiency of educational practice Professional development | Outside ‘expert’ | Co-option (of practitioners who greatly depend on facilitator) |
| 2. Practical | As (1) above Practitioners’ understanding Transformation of Their consciousness | Socratic role, encouraging participation and self- reflection | Cooperation (process consultancy) |

| Types of Action Research | Aims | Facilitator's Role | Relationship Between Facilitator and Participants |
|---------------------------------|---|--|---|
| 3. Emancipatory | As (2) above Participants' emancipation from the dictates of tradition, self-deception, coercion Their critique of bureaucracy systematisation Transformation of the organisation and of the educational system | Process moderator (responsibility shared equally by participants) Promoter of critical conscientiousness Agent and product of the research | Collaboration Collective autonomy Collective reflection Open discussion Co-design of targets, plans Co-responsibility on answering to questions as <i>what, who, where and when</i> Co-responsibility on the conclusions and results |
| 4. Synchronic | Participants' confidence on their work Participants' awareness of their biases | | |
| 5. Participatory | Involvement of all stakeholders in the search of a solution Improvement of practices Critical analysis of the situation in which the participants work Development of high levels of motivation Empowerment to act in innovative ways Development of communities within the usual routines | Internal promoter Friendly outsider Democratic facilitator Consciousness Raiser "Cultural broker" Scholar and activist Facilitator and provider of resources Change agent | Negotiation Pre-emptive discussion Co-responsibility on action and observation Shared concern of the problem and goals Participation and collaboration Non-hierarchical relationship Engaged relationship Equal collaboration Reciprocal relationship |

| Types of Action Research | Aims | Facilitator's Role | Relationship Between Facilitator and Participants |
|--------------------------|---|--------------------|---|
| | Involvement of all stakeholders in the search of a solution | | |
| | Professional Development | Internal promoter | Collaboration |
| 6. Asset-based AR | Involvement of all stakeholders using their assets | | Collaboration |
| 7. Collaborative | Improvement of their own actions | | |

Table 3.1: Types of action research and their main characteristics (adapted from Zuber-Skerritt, 1996:4)

From the above types of AR I have chosen participatory action research (PAR) to promote teachers' continuing professional development (TCPD) and improve my own practice. My choice first took into consideration a workable definition of AR as

a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview (...) It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities.

(Reason & Bradbury, 2001:1)

Early in this chapter I described how this study could be situated in an AR paradigm. Thus, having indicated the types of AR in Table 3.1, I selected PAR as the appropriate type owing to its explicit participative nature and socially-engaged approach to generate knowledge.

Participatory AR is a stem of the endeavour to bring the research to lay individuals “through opinion makers such as Oprah Winfrey, Larry King and Ted Koppel” and the last kind of critical ethnographer comprises activists who performed social movements (Foyle & Valenzuela, 2005:220). The activities carried out in that framework in an education field McTaggart (cited by Foyle & Valenzuela, 2005) designated them as PAR. In this type of AR, there is an emphasis on authentic and democratic participation (Mouton & Babbie, 2001), as a result of a participant driven research since it focus on the PR’s interest, concerns and willingness to participate in the different steps of the project. Therefore the participants involved in a PAR should initiate, benefit, be represented, legitimate and be accountable as elements to guide successful PAR (Kaupapa Māori, quoted by Denzin & Lincoln, 2005; De Vos, 2005). In applying these criteria effectively throughout the research process, “empowering knowledge is created” (Denzin & Lincoln, 2005:35). In the present study I took into consideration those criteria and I tried to involve the six PRs in all processes of the development of the case studies.

The distinction between PAR and the other types of AR relies on the degree to which the main characteristics are taken into consideration rather than on the kind of those characteristics (Wadsworth, 1998), particularly to what participative principle is concerned. Participation and collaboration between the researcher and the participants through all phases of the research are “the most distinctive feature of PAR, which informs and influences all the other characteristics of this paradigm” (Mouton & Babbie, 2001). In this study I encouraged the PRs to reflect critically on their practice as learning facilitators and me as promoter or facilitator of TCPD and research mentor. These reflections assisted us in finding out issues to be improved and in designing innovative learning tasks within the learning objectives specified for Grade 1 and 2. This PAR reflected upon and examined how classroom practice could be a potential component for research and self-directed professional development. Another distinctiveness which guided the selection of PAR on promoting TCPD is that it involves all individuals affected by the issue being studied in the search for the appropriate solution (Mills, 2007). In substantiating this feature, my study involved all learning facilitators allocated to Grade 1 at Unidade 18 Primary School in 2007.

Moreover, PAR is identified as a research that “engages people from the academy and workplace in an entirely different relationship” (McTaggart, 1997:29). In this instance the distinctions between academic and workers aimed at stressing their common tasks as practitioners and the role they play in their respective workplace (McTaggart, 1997). The researcher is simultaneously scholar and change agent. In this PAR my intention was to encourage the PRs to take responsibility for their own CPD. To do this I used my experience as lecturer of instructional analysis, as promoter of TCPD and of principles of AR.

Apart from organising AR into types, as already mentioned earlier in this chapter, Zuber-Skerritt (1996:44) organises the *CRASP model of action research for professional development* as a summary of the referred theoretical framework and says that action research is:

- *Critical* (and self critical) collaborative enquiry by
- *Reflective* practitioners being
- *Accountable* and making the results of their enquiry public
- *Self-evaluating* their practice and engaged in
- *Participatory* problem-solving and continuing professional development.

(Zuber-Skerritt, 1996:85)

The elements indicated in this model characterise the activities in my study. Throughout the planning of my work and during the observation sessions the *Critical* (and self-critical) principle was used to collaboratively improve the learning and the planning of learning opportunities. During meetings and learningshops the practitioners discussed in groups and pair the various concepts to be clarified and the learning tasks to be resolved by the learner. In this study comments and suggestions from colleagues and critical friends were incorporated in all cycles of the action research.

The *Reflective* element is also referred to by Rudolph, Taylor and Foldy (2001). These authors understand this element as an important issue when working in a group and the

nature of reflective practitioners. They argue that reflection yield a “variety of perspectives on the situation and future options that can give way for changes to help break through established procedures” (405).

With respect to this principle, the practitioners in this study were *Reflective* from the early phases of the study. They reflected on their current practices to find out innovative solutions for the problems they faced. McNiff et al. (2003:47) corroborate this principle and say that practitioners should, among others ‘pitfalls’, reflect on their current practices in order to identify aspects to be improved. In this way they form images of the way forward. At the end of the group-work, the learningshop and action research cycles there was an *Accountable* attitude, since the teachers presented their work to their colleagues within the context of planning of learning opportunities.

With respect to the *Self-evaluating* element of AR, my study comprises individual and mutual observations. Individual observation during the learning opportunities gave way for self-evaluation. In this regard McNiff et al. (2003:47) argue that practitioners should monitor what they do and evaluate the new action.

This study can be qualified as a participatory AR. Thus all plans and actions were carried out in a *participatory* perspective, aiming at problem-solving and continuing professional development. Fullan (2001:108) corroborates this component and associates it with accountability and states: “It is ... helpful to express what you value in the form of standards of practice and expectations of accountability, but only if coupled to capacity building and problem solving opportunities”. In this study the practitioners were engaged in every stage of the action research cycles.

From the diversity of the AR family, I selected PAR as I intended to facilitate improvement of the practices of primary school teachers. As Stringer (2004:33) suggests

[PAR] brings people together in a dialogue and in a productive relationship that creates a sense of community through the sharing of perspectives, the

negotiation of meaning, and the development of collaboratively produced activities, programs and projects.

Accordingly, I have the view that PAR is the process that teachers can use to promote innovative practices towards their professional development, dealing with pragmatic issues of their day-to-day professional work.

The nature of AR can also be identified looking at its major characteristics. Kember (2000:24) advocates that seven characteristics basically describe AR, stating that “action research is concerned with social practice, aimed towards improvement, a cyclical process, pursued by systematic enquiry, a reflective process, participative, determined by participants. Based on Kember’s description, I propose the following, namely that action research is:

- Concerned with social practice – specifically teaching
- Aims towards innovation
- A cyclical process
- Pursued by systematic enquiry
- A scholarly reflection
- Inclusive
- Participative
- Responsible/responsive
- Empathetic
- Determined by practitioners

(adapted from Kember, 2000:24)

Action research is concerned with social practice

Education is a social practice. Accordingly my study is about continuing professional development in an educational setting – the facilitation of the learning process in primary schools. The primary school teachers involved participated in this study working in their own work-place as suggested by Henning et al. (2004:47) and in the school’s classroom with the

learners they were responsible for – thus, in an authentic context. The teachers were concerned with both their own professional development and with the learners’ achievement, which corroborates Mills (2007:8) who states that “action research is socially responsive and takes place in a context”. Therefore, to have accessibility to the learning facilitators at their context, I provided to the school principal my credential from my work place and the ethical clearance certificate obtained from the Faculty of Education (Appendix A).

Action research aims towards innovation

The aim of this study is to facilitate the improvement of practices of primary school teachers towards innovative professional development. This aim corroborates Stringer (2004:4) who states that participants work in social situations in order to improve their own social or educational practices. In this vein Mills (2007:8) argues that AR provides opportunities for participants to improve the lives of learners and to learn more about learning, teaching and policy-making matters. McNiff and Whitehead (2006:1) state that the main reasons for carrying out AR are the improvement of learning in order to improve educational practices and the advancement of knowledge and theory related to “how things can be done and why”.

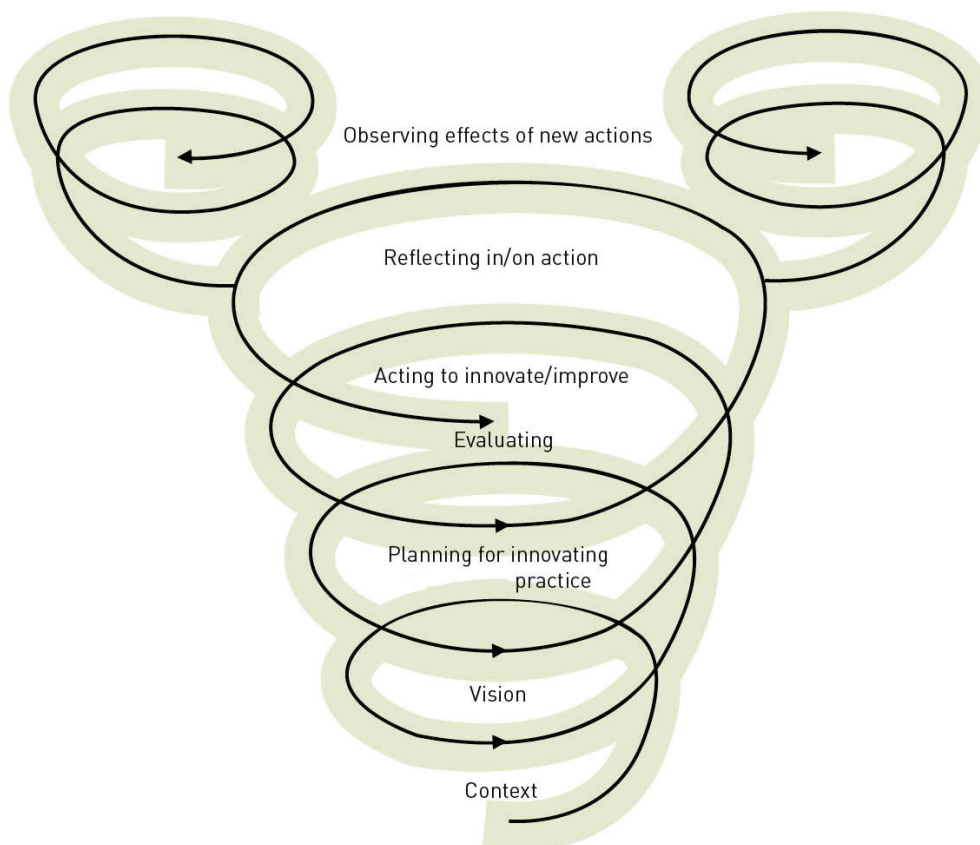
The innovative aspect of my study is the teachers’ responsibility for their own professional development. In this context I am a researcher-mentor and the teachers are practitioner-researchers. As a researcher-mentor I systematically reflected and promoted reflection on the question “How do I...?” I did this in an innovative manner by respectively conducting and performing TCPD in the environment where the teachers were working. The mentorship process and the practitioner-researchers’ activities within this study are described in Section 3.4. The improvement attained by the practitioner-researchers and me as a researcher-mentor in this PAR characterise the basis of innovative TCPD as documented in Chapter 4. The learning facilitators as practitioner-researchers improved their understanding of learning, the facilitation of learning and their classes and I improved my knowledge concerning the teachers’ culture of facilitating learning and its relation with TCPD.

Action research is a cyclical process

Action research is performed through a cyclical process. Each cycle includes four distinct and

simultaneously interrelated steps, such as *Reflecting*, *Planning*, *Acting*, and *Observing* as shown in Figure 3.1. In theory the action research cycles are distinct and each one has its specific objectives. Also, the steps in the process are distinct, as in each step specific activities are undertaken in order to attain specific objectives. However, in practice the steps are interrelated, performing an ongoing process till the objectives of the cycle have been attained. Moreover, each step includes a large part of the issues raised during the previous steps and the researcher can simultaneously perform activities related to more than one step. The following figure is a visual representation of a typical action research spiral as we find in the work of scholars such as Kember (2000:26), depicting sub-spirals and different cycles, each with its iterative steps (Du Toit, 2008 as adapted from McNiff and Zuber-Skerritt).

Figure 3.1: Schematic representation of the action research process



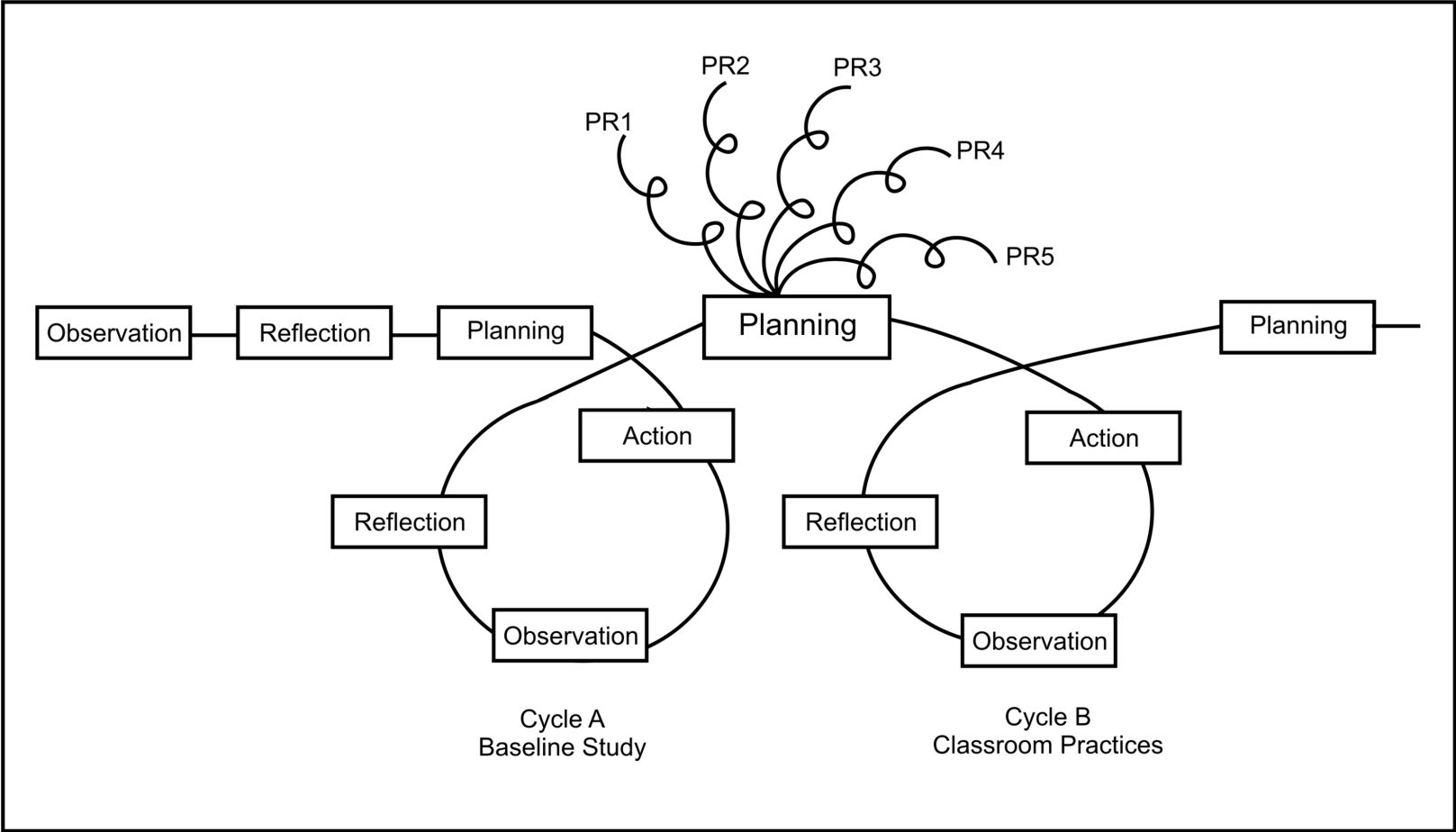
During the *Reflecting* step, the researcher carefully reflects on her educational practices and identifies her/his own problems or concerns for which she/he intends to do things better in order to solve the situation. This reflection leads to *Planning*. Planning consists of selecting the most effective activities and strategies to be put into place for the solution of the problem or concern identified in the previous phase. This step culminates in a plan of action. The designed plan is put into practice during the *Acting* phase and evaluated in the *Observing* step through evaluation and self-evaluation. A researcher can carry out as many cycles as she/he needs to solve the situation in a satisfactory way. Therefore, if the problem still remains, a new improved cycle will be implemented till the solution of the problem has been found. Kember (2000:125-6) relates AR cycles to the change in current plans and the improvement in the next cycle. The cyclical process is one of the main characteristics in an AR research study, as the practitioner-researchers perform their study throughout the cycle till they have solved the problem or concern (Stringer, 2004:10). AR is “an ongoing process since the planned result raises new questions and then it is time to begin again” (McNiff & Whitehead, 2006:9).

My study intends to investigate the provision of opportunities for reflection on educational practices and the required way forward in order to both identify the problems and try to find effective solutions. The teachers identify problems in day-to-day educational practices and I identify problems by mentoring teachers to carry out innovative practices. The cyclical nature of AR is in accordance with my study. As a researcher-mentor, I first promoted *Reflection* on how things are going in the class as a self-evaluation activity. Secondly, I discussed with practitioner-researchers what else they could do in order to improve their practices in terms of individual learning, innovative strategies of facilitating learning, curriculum and classroom management, individual learner achievement and so on. Thirdly, the practitioner-researchers and I performed the *Planning* phase; we discussed one of the problems encountered and planned the “how”, i.e. the ways to innovate and do things better as part of the *Action* step. Then, the *Observing* step took place.

On pursuing the *Observing* phase of my AR, I used observation sheets and the teachers used self-assessment sheets to observe the planned learning opportunities. This was the Cycle A of

the PAR cycles. Following this cycle, the practitioner-researchers and I performed one or more cycles since one problem and its solution led to further “hows” or options for actions. Figure 3.2 indicates the cyclical process performed in this study. It is drawn by hand (not done professionally like the other figures) to indicate that AR is not a smooth process. The visual representation of synchronic PAR cycles in this study can be summarised as depicted in the following figure:

Figure 3.2 Synchronic cyclical action research process followed



Synchronic Cyclical action research process followed

Action research is pursued by systematic enquiry

My systematic enquiry started with a literature review and classroom observation. The steps followed during the cycles are systematic and pursue a similar rigour as any other kind of research method. McNiff and Whitehead (2006:1) refer to this characteristic, saying that “action research aims to be a disciplined, systematic process”. In turn, Kember (2000:27/8) points out that observation and evaluation are systematic activities to be undertaken, made known and analysed. The systematic characteristic in this PAR study consists of collective and individual meetings, classroom observation, administration of the questionnaire, learningshops, planning and observation of learning opportunities, reflection and the planning of a new cycle performed by teachers and myself. Each cycle produces the information for the following cycle. The activities performed throughout this PAR are detailed in Chapter 4.

Appendix B provides the questionnaire administered in this study.

Action research as scholarly reflection

Reflection allows participants to think about the problems they face, going through what is actually happening, raising questions and identifying the main objectives to be achieved (Stringer, 2004:46). In my study the practitioner-researchers and I have been involved in a set of sessions to analyse the learning environment in their classes and the possible solution for the problems met in their own practices at classroom level. These sessions were followed by sessions in which were selected the subject, the problem statement and the research questions that guided their action plans for the improvement of their facilitation and the learners’ achievement. I resonate with Mills (2007:8) who argues that action research supports teachers in analysing their daily work.

At the very beginning of this study I carried out an extensive literature review on TCPD and related fields and pursued a better understanding of TCPD approaches, instructional design models and facilitating learning methodologies in primary education. I tried to find the adequate way to work with the PRs as part of my scholarly reflection. I also carried out three learningshops and compiled hand-outs to support the PR in learning about AR, instructional design and assessment.

Throughout the planning and reflection phases one of the main activities was doing an exercise that I called *looking back*. It consisted of a reflective study and investigation of the methodologies that practitioner-researchers have been using in a specific subject. For this purpose, the PRs had to do the following:

- Describe their routines in the classroom in terms of what they do to promote learning and what kind of activities the class is usually assigned to do in order to participate in an active way in their learning process.
- Reflect on their learning and monitor their TCPD by trying to find answers to the following questions:
 - How do I facilitate learning and how do I monitor my professional growth?
 - How do I innovate my facilitation of learning and how do I improve my understanding concerning classroom management, syllabus/course management and individual learner's achievement?
 - How can I contribute to my own professional development through my learning and innovative practice?
 - How can I improve my understanding and knowledge of the learning process?

The answers to these questions led PRs to the problem statement and contributed to thinking about learning facilitation and the ways in which to improve classroom practice in an innovative way.

Action research is inclusive

In this PAR study all six teachers assigned to Grade 1 in 2007 in the selected school were involved in classroom observation and the learningshops. In this way I avoided working with a part of the total number of teachers in the school and discriminating between teachers who participated and those who did not. Thus, during the baseline data collection, all teachers assigned to Grades 1 and 2 at the targeted school were approached to complete the

questionnaires. These criteria intended to “involve all relevant groups and individuals whose lives are affected by the issue investigated” (Stringer, 2004:42).

Action research is participative

Action research has been identified as participative since in general a group of individuals facing the same problem jointly carry out the investigation (Kember, 2000:28). Kember continues saying that it is also acceptable that AR can be an individual investigation or reflection on someone’s practice in order to find a solution for an individual problem; equally AR can be used when individual teachers carry out a cyclical and reflective approach to introduce a certain innovation in their own classes. With respect to the two characteristics that AR can comprise, the PAR performed in my study encompasses both group and individual investigation in the following way:

- My study encompasses five PRs and me, aiming to explore an intervention to improve the practice of primary school teachers.
- The PRs and I acted as a group in order to identify a general topic to be investigated and the possible outcomes to be achieved.
- Each PRs had an own project to introduce the planned innovation regarding the professional development and to solve problems in class.

With respect to the participative nature of AR, McTaggart (1996) argues this issue by discussing the difference between Emancipatory AR and PAR and says that the difference lies in their aspirations. He argues that in Emancipatory AR the aspiration is oriented towards the achievement of the ideal state to be achieved and the critical question is, “Are we emancipated yet?”, whereas PAR “works on criticising the current conditions, has a more or less immediate effect and attempts at concrete improvements. Its critical question is, “Are things better than they were?” McTaggart (1996:245).

All PRs participated in every stage of the study related to the classroom practices. Their engagement can be summarised in four steps, namely, building trust and empathy, gathering data from the learningshops, designing the projects and writing the final report.

Step 1: Building trust and empathy

At the outset of the study I informed the PRs about my research topic and the research questions which direct the study. This procedure allowed them to build a certain level of comfort as they thought in the beginning that I would be inspecting them or investigating what they were doing in the classroom. In addition I informed them that I would start with unstructured classroom observation as a way to gain trust from each PR gradually and that later on I would carry out a semi-structured one. The specific topic to be observed during the semi-structured classroom observation was selected by the PR and agreed upon by me after a brief discussion.

Step 2: Gathering data from the learningshop

At the end of the learningshop the PRs were asked to write down their impressions and what they had learned during the sessions. The notes that they had written increased the data that I had already gathered from the learningshop. These data were important for me in order to adjust the research design adequately according to the specific situation of the school and PR.

Step 3: Designing the projects

This study focuses on classroom practices of primary school teachers in the context of TCPD. I provided and explained this topic to the five PRs. Five of them selected Portuguese and one PR Portuguese and Mathematics as the problematic subjects. Then each one identified the more specific sub-topics in Portuguese and in Portuguese and Mathematics. After sharing my research questions with my PR, they formulated their own research question(s) to guide their professional development in the context of this study. The part in common between the five research questions is that they all aimed at the TCPD.

Step 4: Writing the final report

The final report related to the classroom practices had jointly been produced by the PRs and me. All PRs participated in a session to outline the final report. Consequently, the report contains extracts from individual PR reports.

In relation to the participative character of AR, Zuber-Skerritt (1996:4) says: “Action research is research into practice, by practitioners, for practitioners In action research all

actors involved in the research project are equal participants and must be involved in every stage of the research”.

The study was carried out at Unidade 18 Primary School in a suburban area of Maputo-Cidade, the Capital of Mozambique. Unidade 18 Primary School has a long history of carrying out pilot programmes for primary education. Earlier on its name was “Escola de Aplicação e Ensaios” (School of Application and Piloting). This school is one of the biggest schools of Maputo in terms of having a large intake in Grade 1 and with respect to learners’ attendance. It is located in the more accessible suburban surrounding Maputo-Cidade. In 2007 the school had six teachers in Grade 1 and seven in Grade 2. Since reading and writing skills are crucial in Mozambican primary education and in overall academic life, I opted to include all teachers who were in Grade 1 as PRs in order to follow their TCPD. In addition, this school was recommended to me by the Pedagogical Education Sector of Maputo-Cidade due to the location and the positive school environment with respect to teachers’ receptiveness. The school principal and his deputy for pedagogical matters were supportive and played an important role in encouraging PRs to participate actively in this study.

The process of the PRs participation in this PAR study started in January 2007 with a meeting with the principal of the Unidade 18 Primary School. The aim of the meeting was to present my plans about performing a study in his school, the objectives and the procedures throughout the study. After this meeting I invited six primary school teachers assigned to facilitate learning in Grade 1 during the academic year of 2007 to participate in this study. Following the PR agreement, letters of informed consent were sent to the Directorate of Education Maputo-Cidade and then to PRs in order to obtain informed consent. These letters were adapted from McNiff and Whitehead (2006:87-88).

One point to pay attention to is that from 2007 up to 2010 – as the study developed – the number of teachers and the grades in which they were facilitating learning changed as follows:

- Academic year of 2007: 6 teachers in Grade 1

- Academic year of 2008: 2 teachers in Grade 1
 3 teachers in Grade 2
- Academic year of 2009: 2 teachers in Grade 1
 3 teachers in Grade 2
- Academic year of 2010: 2 teachers in Grade 1
 3 teachers in Grade 2

Action research is concerned with responsibility

This PAR study encouraged each PR to become more responsible for her/his continuing professional development. First of all there was the awareness of issues that were not going well and the PRs and I took up the responsibility to acquire more knowledge in order to solve the problems found. It was a kind of co-responsiveness between each PR and me. Following the problem statement, we presented possible solutions that were tried out in the class until better actions were found. This corroborates what Henning et al. (2004:21) say

Action researchers accept the responsibility of ensuring that their lives are in order before they make judgements about other people. This means honestly critiquing their practice, recognising what is good and building on strengths, as well as understanding what needs attention and taking action to improve it.

Action research is concerned with empathy

When the practitioners have a good relationship the trust that exists among them positively influences the research progress (Stringer, 2004:40). In this regard, as a researcher-mentor, I attempted keeping up an empathetic relationship with the PRs and I accepted them as they were, with respect to their qualifications and professional occupation at school level throughout the study. This criterion also was one of the aspects that had a positive impact on the research progress during the three years of classroom observation, the learningshops and the meetings.

Action research is determined by the practitioners

The PRs are primary school teachers appointed to facilitate learning in Grades 1 and 2 as indicated in Section 1.1. In 2008 three of them continued with their learners in Grade 2 while the other two had received new classes for Grade 1.

In this PAR study the topics were decided by each teacher individually. Each of them chose a certain strategies of facilitating learning to be introduced in different subjects, such as Mathematics and Portuguese. These subjects covered most of the time that was allocated to the grades referred to above and had been a matter of concern for the teachers. The outline of my study was agreed upon by the participants in terms of the intended learning outcomes and the period to work with the PR in their classrooms. In Table 3.2 the selected topics and outcomes are specified.

| Topic | Outcomes | |
|---|--|---|
| | Practitioner-researcher outcomes | Mentor-researcher outcomes |
| Reading and writing of vowels and syllables | List the real learner difficulties | Take note of the learners' difficulties |
| | Identify what the learners need to learn | Identify what the learners need to learn |
| | | Take note of the learner difficulties |
| Reading and writing of vowels and syllables Writing the numbers 3, 4 and 7 | Plan learning opportunities | Assist the planning of learning opportunities incorporating exercises to solve the learner difficulties |
| | Incorporating innovative exercises to solve the learner difficulties | |
| | Facilitate learning | Take note of the improvement made and/or the correction to be introduced. |
| | List the achievement attained | |
| | List the remaining teacher or learner difficulties | Take note of the outcomes to be introduced in TCPD intervention |

Table 3.2: Topics and outcomes identified

The process described in the table above form together the action research philosophy.

The entire process of the practitioners' involvement in determining the topic and the outcomes in this PAR study is documented in section 3.4.

The reason why AR is seen as the most appropriate design for the improvement of education derives from its principles and characteristics. In the context of this study I adopted the term *characteristics* since it is the most appropriate term for the process performed by the participants.

3.2 ACTION RESEARCH PHILOSOPHY

As discussed by Carr (2006) the form of *a priori* theoretical knowledge is what is usually understood as philosophy, and the theoretical rationale is referred to as methodology. From this understanding it is worth mentioning that firstly, the methodology selected by a researcher derives from a specific research philosophy recognised to be applicable to her/his worldview or value choices better. Secondly, the research philosophy serves to improve the selected research methods, to avoid inappropriate use of methodologies and methods (Crossan, n.d.). Therefore AR researchers, as other researchers do, base their methodology on a particular philosophy.

The philosophical issues concerning mixed methods have been a matter of extensive debate with different positions; for example, one asserts that the paradigms have vast differences and cannot be mixed; another position argues that the difference among paradigms does not obstruct the combination since each paradigm is independent; a further stance defends the difference among paradigms; however, there is no incompatibility on combining them (Tashakkori & Teddlie, 2010). This stance is usually taken by AR researchers.

In doing research, qualitative and quantitative paradigms are the two approaches that researchers currently use, either exclusively or jointly, to find out the answer(s) to question(s) regarding the reality and to create knowledge. The option for one or other paradigm is mostly influenced by the purpose of the research (Henning et al., 2004). Moreover, the option also relies on the “epistemological position” (Henning et al., 2004:1). The difference between a qualitative paradigm and the quantitative paradigm has to do with the “quest for understanding and for in-depth inquiry”. A qualitative paradigm focuses on the qualities of

entities, events, and processes and a quantitative paradigm emphasises statistical data and focuses on variables and the cause-effect between them (Denzin & Lincoln, 2005). In a quantitative paradigm “people must respond by choosing a predetermined set of scaled responses” (Henning et al., 2004:1), whereas in a qualitative paradigm “studies usually aim for depth rather than ‘quantity of understanding’ (Henning et al., 2004:3). In this respect, AR philosophy is intended to offer a methodology that can combine quantitative and qualitative paradigms, although it mainly uses a qualitative paradigm.

| Philosophical Assumptions and Characteristics | Quantitative Paradigm (positivist) | Qualitative Paradigm (Anti-positivistic/interpretive) |
|--|--|--|
| Ontological | Reality is objectively determined | Reality is subjective and multiple, as seen by participants in the study |
| Epistemological | Epistemological roots in positivism Researcher distinguish herself or himself and the subject being studied | Epistemological roots in phenomenology Researcher attempts to reduce distance between herself or himself and that being studied |
| Purpose | To test predictive and cause-effect hypothesis | To examine behaviours, qualities, characteristics, or properties of a phenomenon for better understanding an explanation |
| Methodological | The researcher uses deductive logic. | Researcher uses inductive logic. Researcher uses a wide range of methods and techniques |
| Data collection | Data are gathered systematically | Date determined by information and observation |
| Component of analysis | The component of analysis is a set of variables which form a whole | The component of analysis is holistic and concentrate on relationship between elements, the ways people interact and the context |
| Research instruments | Questionnaires | The researcher is the main instrument and makes meaning of from her/his engagement in the project |
| Types of data | Quantitative data | Qualitative data |

Table 3.3: Differences between quantitative and qualitative paradigm (adapted from Cresswell, 2007 and Fouché & Delpont, 2005).

The AR philosophy embedded in this study is that the study objects comprise teachers’ educational practices, the way in which they understand their practices and the realistic conditions in which they are working (Carr & Kemmis, 1986:180). For this reason the PRs

were invited and encouraged to select a topic that was related to their day-to-day educational practice.

In the same way I as facilitator had the professional development intervention as practice, and I had to understand that practice and the realistic and authentic conditions I had to work in.

When integrated with all the theoretical perspectives that are discussed in this study, and other that might be relevant in an adult professional learning context it becomes clear that the multi-dimensional nature of the intervention, it becomes evident that the AR philosophy adopted for this study should reflect that. The AR philosophy therefore includes a self-regulated, visionary, transformative, emancipatory, holistic stance.

My action research philosophy also includes innovative thinking and constructing new meaning. My constructing of new meaning is based on the epistemological point of view that action research is a constructivist approach to professional learning. Based on this I have constructed a new action research model. For the purpose of executing this PAR study, I followed a ‘Synchronic Cyclical Action Research Model’ (Du Toit, 2006) as depicted in the Figure 3.2. In this model I am the researcher-mentor and my participants are practitioner-researchers, since they and I are co-researchers and participate in all stages of the process. Each practitioner-researcher is part of a unique case study and designed her/his action research projects cycles from one of the planning phases of my study. These projects’ designs encompassed a slow process of discussion on possible innovative areas and topics, planning, classroom observation, learningshops, readings and schedule negotiation. The synchronic cyclical action research model integrates the practitioner-researchers’ projects.

3.3 RESEARCH DESIGN

In Chapter 1 I refer to the purpose of this study which is designed to support primary school teachers in taking responsibility for their CPD and to improve my own practice. Therefore

the data gathered in this PAR study are used to explore an intervention for TCPD. Because of the qualitative nature of my study it is based on an interpretive framework that leads to an understanding of the phenomena and events in its social context (Henning et al., 2004:20). In qualitative research researchers collect data in real settings, interpret phenomena interacting with the participants in order to describe and analyse “actions, beliefs, thoughts and perceptions” (McMillan & Shumacher, 2006:23) whereas the positivist research paradigm emphasises objectivity and numerical and statistical data. Accordingly, this study adopts an interpretive paradigm to understand the teachers’ practices and to improve both the teachers’ responsibility for their own professional development in their classroom context and my own practice.

3.3.1 The Action Research Model

This study intends to be a specific space for teachers’ participation. It gives them ample opportunity to reflect on their practices as well as to take responsibility for their own continuing professional development. For this purpose I designed a model of action research that I called a *Synchronic Action Research Model*. The model encompasses the AR cycles described by Kember (2000:28) as a basis to organise the whole study and comprises the AR cycles carried out by the practitioner-researchers and me from the early phase of the study.

The *Reflecting* step plays an important role in this PAR in providing the potential areas for innovative practices to my PR and me. Thus, by reflecting on what our practices and routines are, we find out which are the topics to focus on, the outcomes to be attained, the problems affecting TCPD and the ways forward in terms of appropriate strategies for facilitating learning and a feasible intervention for TCPD. Consequently, to sustain the *Reflecting* step in my PAR, I apply the six statements of the “Credo for reflective practice” described by Osterman and Kottkamp cited by Mills (2007:10) in the following way, namely:

- *Everyone needs professional growth opportunities* – the study provided to my PRs and me a set of opportunities to deal with different ways of understanding and analysing classroom practices towards TCPD.

- *All professionals want to improve* – the teachers' participation was voluntary and followed the subject topics in which they wanted to innovate their practices.
- *All professionals can learn* – the teachers participated in learningshops as a training method on the specific issues of their participation in this PAR study.
- *All professionals are capable of assuming responsibility for their own professional growth and development* – the practitioner-researchers decided on their own problem statement or concern and the time to start the project's design and implementation.
- *People need and want information about their own performance* – the teachers participated in self- and mutual evaluation sessions.
- *Collaboration enriches professional development* – the practitioner-researchers participated in plenary group sessions and in small group meetings.

All these statements above about reflective practice are embodied in my study.

3.3.2 Data Collection Plan

The sample of this study comprises two groups of teachers. The first group includes the respondents to the questionnaire and the second one the practitioner-researchers who participated in the action research cycles.

In order to select respondents for the questionnaire 1 028 teachers were taken from three geographical Zones of Mozambique, namely North, Central and South among a population of 19 609 teachers teaching in Grades 1 and 2 in the academic year of 2007. The intention was to identify an available as well as a feasible sample in terms of geographical location as McMillan and Schumacher (2006:125) suggest since it would have been a time-consuming and very expensive task to travel throughout the entire country. Therefore, I have chosen a convenience sample.

The practitioner-researchers were identified in one school in a suburban area of Maputo-Cidade where the classroom observation was carried. In this school all teachers facilitating learning in Grade 1 in the academic year of 2007 were involved in the action research. Each teacher's practice was an individual case study.

Taking into account that the questionnaire was "newly-constructed", it was piloted in a similar group of teachers before the real administration of the questionnaires in the study took place as proposed by Delpont (2005:171-2). This pilot test aimed to ascertain the reliability of the questionnaire.

Qualitative data are used for a deeper understanding of the events in my PAR study and to obtain insight into the practitioner-researchers' practices, whereas quantitative data are essentially utilised to get baseline data about teachers' academic profiles and their experiences with professional development. For data collection through questionnaires quantitative forms of data analysis are used. In Chapter 4 the action research process is presented in detail.

Mozambique's administrative division encompasses 11 provinces, including Maputo-Cidade, the capital, which has the status of a province. In order to obtain the population size, i.e. the number of teachers in Grades 1 and 2, I asked the provincial directorates of education by fax or telephone call. In the cases of Maputo Province and Maputo-Cidade the number of teachers was provided by the district directorates. The reason why I had to ask information from provinces and districts is the lack of statistical data with respect to teachers appointed to each grade at the Directorate of Planning at the Ministry of Education. The data available in the statistics document refer to the total number of teachers in primary or secondary education. In addition the districts had to ask to each primary school the number of teachers allocated to Grade 1 and 2. Consequently the process was slow, taking 5 months, more precisely, from March to August 2007. This process delayed the sampling and the schedule of the study.

I personally delivered the questionnaires to the schools. This strategy allowed the teachers to complete them according to their availability. Grades 1 and 2 teachers follow almost the same timetable in the country – classes begin at 10:30 and end at 13:30. For this reason it was impossible to meet all of them at school, due to the distance from one school to another. Meeting a group of teachers in a certain school without disturbing classes meant to be late at the following school. For that reason the majority of the questionnaires were delivered with supportive participation of the principals or head teachers. The time to complete the questionnaire was negotiated with the head teachers and varied from four to six days.

To deliver the questionnaires by hand I faced the limitation indicated by Delport (2005:168), therefore, the study incorporated no more than two districts. Once the questionnaires were delivered I started going back to schools to collect them. Because some teachers completed the questionnaire on time, I returned to schools three days after the distribution, even before the planned date, mainly to appreciate the teachers' effort.

The questionnaire was administrated under the written permission of provincial and district directors. In this regard, to access the sample, a consent process was conducted to the provincial and district directorate, principals and to respondents participating in this study. Table 3.4 specifies the composition of the sample.

| Zone | Provinces | Population | Sample |
|---------------|------------------|-------------------|---------------|
| Northern Zone | Cabo Delgado | 2 806 | 146 |
| | Nampula | 6 153 | 336 |
| Central Zone | Zambézia | 4 996 | 270 |
| | Sofala | 2 454 | 117 |
| South Zone | Maputo | 1 597 | 76 |
| | Maputo-Cidade | 1 603 | 83 |
| Total | | 19 609 | 1 028 |

Table 3.4: Geographical distribution of the sample

In Maputo-Cidade, the schools and teachers involved in the pilot study were not part of the final sample of this study.

The criteria that were used to decide about the teachers to be selected at school level in each of these provinces were the following:

- Teachers who were teaching in Grade 1 or 2;
- Teachers who had participated on at least one in-service teacher education programme from 2004 to 2007.

3.4 ACTION RESEARCH CYCLES

My PAR includes a set of in and out of classroom activities, namely learningshops, questionnaires, classroom observation, planning of learning opportunities, learning opportunities, and collective and individual discussions. After the learningshops the cyclical processes basically consisted of observation, problem statement, planning, action, observation and reflection. The cyclical process stopped when the practitioners had achieved their purpose.

This PAR study used qualitative and quantitative research methods to collect data as already mentioned in Section 3.3. In this triangulation, mainly qualitative data, sustained by quantitative data, were collected. Before starting the data collection at schools I acquired a credential from the Dean of the Faculty of Education to certify who I was.

To begin with I carried out collective and individual meetings with the five PRs in order to present my research proposal and invite them to join me in this study. Attempting to realise what Eisner (1991:214) named “truly informed consent” and Fullan (1991) calls “shared understanding”, I had another meeting with the practitioners with the intention of assuring their free commitment and their clear understanding of the study. I organised this meeting before the start of the study activities which they and I would have to perform such as facilitating learning and the observation of it, planning of learning opportunities, participation in learningshops and designing projects for action research in their classes. At this stage of

my PAR, the PRs gave only their oral agreement since written permission from the Directorate of Education of Maputo-Cidade had to be presented to the school principal.

The oral agreement from the PRs was followed by written permission from the Directorate of Education of Maputo-Cidade (Appendix C), the informed consideration of the Directorate of Distrito Urbano n^o. 2 and a letter to the school principal (Appendix D). Besides these procedures I sent a letter to each PR to obtain her/his consent which culminated in written consent from the PR. Appendix E provides an example of the letters sent to PRs. This is accounted for within the ethical clearance certificate obtained from the Faculty of Education (Appendix A).

3.5 A MIXED-METHODS APPROACH

This is an exploratory study and a mixed-methods approach comprising qualitative and quantitative research methods was used to gather data, “recognising that all methods have their limitations as well as their strengths” (Johnson & Turner, 2003:299). A mixed-methods approach applies a variety of research methods and seeks to reduce the limitation of exclusively using one method (Patton, 2002:307). The use of mixed-methods allows the triangulation of data collected through different methods. This approach is adequate for this study since AR is implemented in a specific situation/setting and mainly gathers qualitative data through classroom observation. Qualitative data are gathered through classroom observations and descriptions of the main events. Observation sheets were used for classroom observation. Semi-structured questionnaires (Cohen et al., 2000:247) with open-ended questions (Cohen et al., 2000:287) I intended to capture numerical data and more expanded and specific information about TCPD. The questionnaire also gave me the possibility to gather data about the teachers’ background in terms of personal information. I also intended to get clarity on teachers’ thinking and beliefs about teaching, learning and TCPD in order to build baseline data. The questionnaires provided significant quantitative and qualitative preliminary data.

On gathering data I approached each practitioner-researcher's practice as single case. Given the nature of the study, which is designed to comprehend TCPD in the context of classroom practices, it basically follows a qualitative approach. However, within the context of my PAR, I also gathered quantitative and qualitative data through a questionnaire aiming at understanding the trend on TCPD and building a baseline analysis. The respondents are teachers facilitating learning in Grades 1 and 2. In Table 3.6 the research methods used in this study to collect data are specified.

| Research Questions | Methods | | | | | | |
|---|-------------------|-----------|------------|-------------|-------------|----------------|------------------------|
| | Literature review | Text anal | Policy doc | Learn shons | Pilot study | Question-naire | Classroom observat-ion |
| How can teachers in 1 st and 2 nd grades be supported to improve their practices by taking responsibility for their own professional development? | √ | √ | √ | √ | √ | √ | √ |
| How do Grade 1 and 2 teachers take responsibility for monitoring their own professional development? | √ | | √ | √ | √ | √ | √ |
| What kind of intervention could be developed to support teachers to take responsibility for monitoring their own professional development? | √ | | √ | √ | √ | √ | √ |
| How can elementary principles of action research, instructional design and assessment support teachers to monitor their own professional development? | √ | √ | | √ | √ | √ | √ |

Table 3.5: Relationship between research question and methods of data collection

I approached each data collection method used in this study in two ways. First of all, the method is used as a method, properly so called, to allow me to collect the data I needed in order to answer the research questions in the study. Secondly, I use the method as a main topic for the activities to be performed throughout the cycles. Consequently, the method or the topic can be applied in one or more cycles or even in more than one step of the cycles. I

often carried out activities within each of the steps in the cycle (*Reflecting, Planning, Acting and Observing*). However, sometimes I introduced two parallel or simultaneous steps, as “the four steps will all be present, but there will often be overlaps between them and a shifting back and forth” (Kember, 2000:27). At the end of the activities carried out within the cycles I performed reflection on both the process and the data collected. The cycles closed with a joint discussion with the PR, except in the cycle related to the literature review.

3.5.1 Literature Review

Although I had done a preliminary literature review in the first phase of the study, I continued reading about my topic while doing action research to support the problem being investigated. The literature consulted includes official documents such as the following:

- National Education Policy and Strategies for Implementation
- Strategic Plan of the Ministry of Education and Culture
- Law of the National System of Education
- National Strategy for Teacher Education (initial teacher education and teacher professional development)
- Syllabus for Teacher Education: Pedagogy and Action Research.

The documents analysed comprise official texts of educational institutions and pieces of materials (McMillan & Schumacher, 2006:356) for primary education, initial teacher education and teacher professional development for this level. This includes syllabi and textbooks, teachers’ guides, lesson plans to find out to what extent teachers’ responsibility on their CPD is documented. The purpose of this strategy to study documents and to collect artefacts was to gather descriptive data (McMillan & Schumacher, 2006:358) associated with teachers practice.

3.5.2 Classroom Observation

The systematic enquiry involving the PRs started with classroom observations in May 2007 after the meetings for informed consent. Classroom observation is the main method used in this study since it provides data from ‘live’ situations (Cohen et al., 2000:305; McMillan & Schumacher, 2006:358). As an external/outsider person for the normal classes, I carried out unstructured and semi-structured observations in the beginning. Later on the structured observations were carried out from 2008 up to 2009.

At the beginning of each academic year I had to meet the school principal, the pedagogical deputy and each PR to reconfirm my intention that I wanted to continue working with them in my PAR. What is important to note in this PAR study is that classroom observation took three years in the schools. During this period classroom observation was time-consuming. First of all, in 2007, a period of five months was used mainly to build trust and empathy between each PR and me. Secondly, the PRs were responsible for one class and they normally had to run their classes without external observation apart from performing their projects in the context of my study. In addition there were a significant number of assessment days during the trimester and two and three weeks of school holidays at the end of the trimester and semester respectively. In the third place, five months later, the month of September was a period dedicated to the final assessment in primary education and not recommended for external activities. In the end I had to inform my intention to observe classes in advance.

3.5.2.1 Unstructured and semi-structured classroom observation

Unstructured classroom observation

I carried out unstructured and semi-structured classroom observation for 3 months. Due to the time constraints of the PRs, I observed three learning opportunities (lessons) from each of the five PRs in this period. All PRs facilitated learning in the same shift, from 10:30 up to 13:30, and they used to come ten to five minutes before the beginning of their classes and left precisely when their shift ended. The PRs and I agreed in advance on the day and the learning

opportunity to be observed. Unstructured classroom observations helped me to reflect on the learning opportunities and they gave me information about the questions raised in my study (Cohen et al., 2000:305). But besides this more scientific gain, these observations encouraged me to go on with the purpose of my study, namely supporting teachers to monitor their professional development. In these learning opportunities the PRs facilitated learning according to the structures learnt at teacher education institutions and the rules provided at school level.

At the outset of the unstructured classroom observation, the PRs thought that I would present rigid critiques on their methods of facilitating learning as I was coming from the university with experience in primary education. This PR anxiety ended when they heard my first comment at the end of each classroom observation, showing that I, essentially, listened to and discussed with the PRs what they thought about their role during the learning opportunity and what could be potential innovative areas for their CPD. Therefore, from this stage on, the comments on the learning opportunities were no longer a cause of anxiety for PRs.

Semi-structured classroom observation

Having observed four learning opportunities from each PR during unstructured classroom observation, PRs and I began to select parts of the learning opportunities to be observed. For this purpose I asked them to prepare a list of topics or issues that could be areas for innovative practices and conducted individual meetings. In these meetings the PRs' list and my own list were discussed, planned and scheduled for a period of two weeks. The learning material related to the topic or issues was discussed. The preferable topics were Portuguese and Mathematics.

The following table shows the outcomes of these observations.

| Classroom observation | Times | Topic | Outcomes |
|------------------------------|--------------|---|---|
| Unstructured | 4x6 PR | None | PRs feel comfortable with my presence in the classroom PRs gain trust regarding me and my activities I understand PR routines and monitoring of their learners' learning I am aware of potential areas for TCPD |
| Semi-structured | 4x6 PR | Monitoring of PR learning Reading and writing Mathematics | PR demonstrate their responsibility on their own CPD Teachers identify problems and topics for their CPD PRs select activities to solve problems PRs identify topics for their CPD PRs identify specific problems in reading and writing syllables PRs and I identify specific skills they have to develop in order to solve problems in reading and writing syllables PRs and I prepare specific tasks to solve problems in reading and writing syllables PRs and I prepare reflections on the outcomes attained PRs identify specific problems in reading and writing numbers PRs and I identify specific skills they have to develop in order to solve problems in reading and writing numbers PRs and I prepare specific tasks to solve problems in reading and writing numbers PRs and I prepare reflections on the outcomes attained |

Table 3.6: Outcomes of unstructured and semi-structured classroom observation

3.5.2.2 Structured classroom observation

From May 2008, following the learningshop on Action Research, April/June 2009, classroom observations began to follow standardised patterns and observation sheets were introduced. Appendix D provides the observation sheets. In an attempt to increase data collected from different perspectives, I used sheets for PRs self-assessment (Appendix E) and sheets for my observation. The content and feasibility of the observation sheets were previously discussed and adapted to the context of this PAR study. The purpose of structured observation was to gather information regarding the facilitating of learning and the learning processes in Grades

1 and 2 towards the PRs' CPD in a systematic way. During the learning opportunities I monitored what teachers and learners did and recorded episodes of practice such as supportive intervention and the routines at classroom level to build a picture of the learning process. As a result of the structured observation each teacher carried out self-evaluation and listed topics for innovative practices.

“All teachers are by definition curriculum developers in that they select, sequence, organize, plan, deliver, and evaluate their students' learning experience” (Díaz-Maggioli, 2004:9). However, in this primary school like in any other, curriculum development is not flexible and teachers have little autonomy in what they do in their classrooms. Teachers mainly follow a school schedule planned for all the teachers in the same grade.

3.5.3 Learningshop

I use the term ‘learningshop’ (Copley, 2009) instead of workshop. The replacement of learningshop for workshop deals with the importance given to the processes that each one implies. While the workshop stresses the work carried out by the participants in order to create and/or develop knowledge, attitudes and pedagogical skills, learningshop stresses the learning achieved by the participants. Learningshop was used as a method to engage the five primary school teachers to participate in this PAR study. Collaboration among participants is one of the characteristics of AR in order to make “for risks, authentic research with multiple perspectives and voices” (Cohn & Kirkpatrick, 2001:149).

The learningshop, apart from giving learning opportunities, helped to improve the collaboration among the teachers, since working in groups was the main technique used. The teachers participated in three learningshops, namely on action research as a tool for professional development, instructional analysis to promote learning and assessment and learner achievement.

3.5.4 Case Study

For the purpose of this study, I adopted the use of case study due to two main reasons. The first one is related to the interpretive qualitative design of this participatory action research (PAR) study. In exploring an intervention to improve the practices of primary school teachers, the study reports the activities performed throughout the PAR cycles as an effort to understand the situation in its uniqueness as particular context and the interactions there (Patton, 1985:1). The second reason is concerned with my attempt to promoting self-directed professional development (SDPD) among the practitioner-researchers (PRs).

I regard case study as the most appropriate way to conduct the self-directed professional (SDPD) embedded in this PAR study, since “case studies are anchored in real life and can provide rich detailed accounts of phenomena. The case study permits an in-depth examination of factors that explain present status and that influence change over time” (Ary, Jacobs, Razavieh & Sorensen, 2006:457). During this study, the practitioner-researchers (PRs) and I were engaged in authentic classroom planning and practices and learningshop situations aimed at providing both better understanding of classroom practices and opportunities to learn from those practices.

Various authors refer to case study as a way to do qualitative research. Henning et al. (2004:41) and McMillan and Schumacher (2006) refer to it as a format for research design; Berg (2001:225) states that case study is a method; Merriam and Associates (2002:8) and Creswell advocate that it is an approach; Hancock and Algozzine use both terms saying that it can be named as design or as approach. Cohen et al. (2007) consider case study as one of the styles of educational research. In turn, Stake (2005) simply regards case study as a common way to do qualitative research. He goes on by saying that

Case study is not a methodological choice but a choice of what is to be studied. If case study research is more humane or in some ways transcendent, it is because the researchers are so, not because of the methods. By whatever methods, we choose to study the case we could study it analytically or holistically, entirely by

repeated measures or hermeneutically, organically or culturally, and by mixed methods – but we concentrate, at least for the time being, on the case.

(Stake, 2005:443)

Although the referred authors use different classifications to refer to case study, all of them agree that case study is a way to understand a problem or an issue using a case as particular illustration.

From the previous assumptions I take the view that case study is an approach which involves different methods or sources of information. “Case studies may employ multiple methods of data collection and do not rely on a single technique. Testing, interviewing, observation, review of documents and artefacts, and other methods may be used” (Ary et al., 2006:458).

A case study approach is used to obtain an in-depth understanding of an event, situation or phenomenon. Therefore, I regarded each PR as a single case to be investigated. As a researcher-mentor (RM), I had the opportunity to observe each teacher involved as PR and to describe the process of self-directed professional development. Henning et al. (2004:41) refers to case study as design “employed to gain an in-depth understanding of the situation and meaning for those involved”.

In reference to the involvement referred to Henning et al. (2004), this study allowed me, as a RM, to holistically follow the PRs. In other words, I took part in the teaching practice of the teachers I described and also learned from it. As Zuber-Skerritt (1992:104) states, “learning is not a partial functioning, such as cognition or perception, but it involves the integrated functioning of the total organism, such as thinking, feeling, perceiving and behaving”. With respect to the PRs, they had been involved as teachers and as researchers. They were involved in every stages of the study, either in planning or in the production of the material used in remedial tasks context. They were also involved in the production of the tools applied, such as the observation sheets and the questionnaires administrated in the evaluation step of the teacher continuing professional development (TCPD) component.

The meaning of the self-directed professional development (SDPD) component embedded in this study was captured from my dual role. First of all, I was acting as a RM by encouraging and supporting teachers to do research in order to improve learners' learning. In addition, I tried to promote TCPD through participatory action research (PAR).

I chose case study as the appropriate approach due to the following characteristics:

- It is concerned with a rich and vivid description of events relevant to the case.
- It provides chronological narratives of events relevant to the case.
- It blends a description of events with the analysis of them.
- It focuses on an individual actor or groups of actors, and seeks to understand their perceptions of events.
- It highlights specific events that are relevant to the case.
- The researcher is integrally involved in the case.
- An attempt is made to portray the richness of the case in writing up the report.

(Hitchcock and Hughes, in Cohen et al., 2007:253)

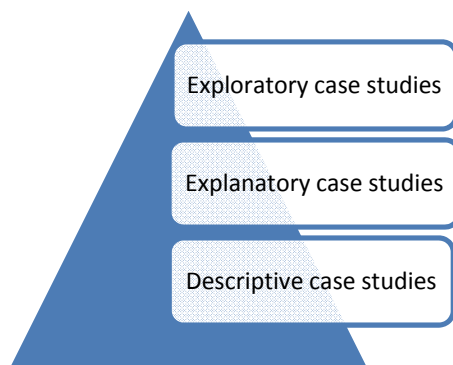
These characteristics are suitable not only to the case study approach I have adopted to follow the SDPD of my PRs, but also to the action research (AR) paradigm guiding this study. Since each PR is involved in his/her SDPD, I regarded each one as a single case. Figure 3.3 is a visual representation of the relationship among AR as a paradigm, case study as an approach and the SDPD as the stage of professionalism to be achieved by the PRs.

Figure 3.3: Visual representation of the relationship among action research, case study and self-directed professional development



According to several authors (Yin, 1994; Stake, 1995; Winston, 1997) there are different types of case studies, depending on the researcher's purposes and number of people comprising the cases. These comprise intrinsic, instrumental and collective case study. Another distinction of types of case study refers to the variety of designs that can apply case study. Following this understanding, case study can be exploratory, explanatory and descriptive (Winston, 1997). These three approaches are represented in Figure 2.4.

Figure 3.4: Case study design types



In the next table types of case studies are outlined.

| | Types of Case Studies | Focus | Purpose | Theoretical Foundation |
|--------------------------|---|---|---|-------------------------------|
| Research approach | Exploratory case study | The case | To prelude to large social scientific research To pilot other studies or research questions To support more comprehensive research To examine new or little understood phenomena | Theory building |
| | Explanatory case study | Causal studies | To examine a plurality of influences | Theory building |
| | | Complex studies of organisations or communities | | Testing theories |
| | Descriptive case study | | | Theory building |
| Research purpose | Intrinsic case study | The case has an intrinsic interest | To understand a particular case | |
| | Instrumental case study | The case has a secondary interest | To provide insight into an issue or to redraw a generalisation | Theory building |
| | | A set of case studies | | |
| | | Particular and general interest | To support and to facilitate the understanding of something else To combine various research purposes | |
| Collective case study | A set of similar or dissimilar case studies | To understand a larger collection of cases | Theory building | |

Table 3.7: Case study design types

Like other research approaches, case study has strengths and weakness to be taken in consideration. Cohen, Manion and Morison (2007:256) explain these in the following way:

Strengths

- The results are more easily understood by a wide audience (including non-academics) as they are frequently written in everyday, non-professional language.
- They are immediately intelligible; they speak for themselves.
- They catch unique features that may otherwise be lost in large scale data (e.g. survey); these unique features might hold the key to understanding the situation.
- They are strong on reality.
- They provide insights into other, similar situations and cases, thereby assisting interpretation of other similar cases.
- They can be undertaken by a single researcher without needing a full research team.
- They can embrace and build in unanticipated events and uncontrolled variables.

Weaknesses

- The results may not be generalised except where other readers/researchers see their application.
- They are not easily cross-checked; hence they may be selective, biased, personal and subjective.
- They are prone to problems of observer bias, despite attempts made to address reflexivity.

The previous mentioned strengths of the case study approach, mainly regarding the possibility to provide insights into other similar cases and the strong capacity to observe the reality being studied are considered in this study. I take into consideration the current teacher education models in Mozambique and the similarities among the learning environment in primary schools. Each case study of this PAR study is a “social unit” or, in other words, a “unit of analysis” (Merriam, S. B. & Associates, 2002:8). I approach each PR as a single phenomenon.

3.6 QUESTIONNAIRE

As mentioned in Section 3.5 the questionnaire was one of the data collection methods used in this study. The questionnaire was designed to determine what opportunities for professional development teachers have had and their opinion about the professional development programmes in which they had participated in, especially about the extent to which such programmes have been useful. The questionnaire also covered issues related to both academic and professional qualifications, teachers' roles, the planning of learning opportunities, learning facilitation, instruction, assessment and monitoring of learning.

The study applied semi-structured questionnaires (Cohen et al., 2000:247-8) with open-ended questions (Cohen et al., 2000:287). The questionnaire also gave me the chance to gather data about the teachers' background in terms of personal information. I also intended to get clarity on teachers' thinking and beliefs about teaching, learning and TCPD in order to build baseline data.

3.6.1 Designing the Questionnaire

The questionnaire used in this study was developed by me. My starting point was to do a literature review related to empirical studies, mainly about professional development and action research. Having developed a theoretical basis I improved my knowledge that I had acquired throughout my experience as a primary school teacher, writer of textbooks and teachers' guides, pedagogical supervisor, facilitator of teacher professional development programmes and as lecturer of instructional design. The first version of the questionnaire was written in English and after that translated into Portuguese, given that my respondents are Portuguese speakers. On translating the questions I noticed that the questions did not use the terms that the teachers use when they refer to their activities at school level. Therefore the English version was rewritten in order to incorporate the real vocabulary used by teachers.

The questionnaire was revised by the supervisor and by statisticians from STATOMET, Department of Statistics, University of Pretoria, in order to ensure the relevance of the questions, to design the appropriate layout, to define the sample size and the codification of the variables (V). Apart from questions on the respondents' background, open-ended questions, multiple choice and ordinal questions were included. Table 3.8 describes the intended purpose of each question.

After concluding the first Portuguese version of my questionnaire, I discussed it with two colleagues from the Ministry of Education and Culture and two experienced primary school teachers. I also asked comments on concepts and questions included in the questionnaire.

The questionnaire includes questions about biographical data of the respondents as introduction and background information. Biographical data also served as a basis for the completion of the questionnaire. This information was collected through closed form in an attempt to individualise the questionnaire. As I did so, each respondent answered about her/his age and experience. This procedure allowed each teacher to be regarded as an individual. However, in order to analyse the data more accurately, biographical information from each of the Variables 4 to 8 was gathered in groups.

| | Question/item | What the Questions/items Intended to Determine |
|---|--|--|
| 1 | Respondent number | To identify each respondent and to determine the number of respondents |
| 2 | What is the name of your school? | To identify the each school of the sample and to determine the number of schools involved |
| 3 | In which school do you teach? | To identify the provinces participating in the study |
| 4 | What is your gender? | To identify the gender of the participants |
| 5 | What is your age? | To identify the age of the respondents |
| 6 | What is the highest level of academic education you have achieved? | To determine the priority given to Grades 1 and 2 in terms of the academic level of the teachers allocated |
| 7 | What is the highest level of professional qualification you have achieved? | To determine the priority given to Grades 1 and 2 in terms of the qualifications of the teachers allocated |
| 8 | How many years of teaching experience do you have? | To determine if experienced teachers are allocated to Grades 1 and 2 |

| | Question/item | What the Questions/items Intended to Determine |
|----|--|---|
| 9 | How many shifts are you currently teaching per day at each school? | To determine the Grade 1 and 2 teachers' overload |
| 10 | How many hours, on average, do you spend on lesson planning per week? | To determine the minimum and maximum time used for planning of learning opportunities (lessons) |
| 11 | How many formal short-in-service education programmes have you attended from 2004 to 2007? | To determine whether Grades 1 and 2 teachers attended short in-service education programmes since the implementation of the new curriculum. |
| 12 | Indicate the two most valuable topics that have been focused on in the in-service education programmes that you have attended | To determine whether the focused topics have been interesting and useful |
| 13 | To what extent do you think that these programmes in general were useful in improving your professional learning? <i>(Mark 1 answer only)</i> | To determine whether the in-service education programmes have improved teachers' professional learning |
| 14 | Indicate two areas in which you made improvements after participating in in the in-service education programmes | To assess the previous response |
| 15 | What do you think should be the emphasis of in-service education programmes? <i>(Mark 1 answer only)</i> | To determine the preferable focus |
| 16 | Consider the statements below. Indicate the 1 st , 2 nd , and 3 rd in order of importance for you as aims of an in-service education programme <i>(Indicate 3 priorities only)</i> | To determine what teachers consider important |
| 17 | Consider the statements below. Indicate the 1 st , 2 nd , and 3 rd in order of importance what should be typical of an in-service education programme <i>(Indicate 3 priorities only)</i> | To determine what characteristics teachers consider as a priority |
| 18 | Consider the examples below. Indicate the 1 st , 2 nd and 3 rd in order of preference of an in-service education programme you prefer <i>(Indicate 3 priorities only)</i> | To determine the type of in-service education preferred |
| 19 | Consider the examples below. Indicate the 1 st , 2 nd and 3 rd in order of importance the factors that an in-service education programme should be sensitive to <i>(Indicate 3 priorities only)</i> | To determine what factors are considered priorities |
| 20 | Indicate your preference in terms of the duration of in-service education programme <i>(You may mark one or more answers)</i> | To determine the medium duration of in-service education programmes |

| Question/item | What the Questions/items Intended to Determine |
|---------------|--|
| 22 | To determine the types of acknowledging continuing professional development |
| 23 | To determine the importance given to teacher roles |
| 24 | To determine what issues prioritise when planning learning opportunities (lessons) |
| 25 | To determine the way in which teachers assess individual learners |
| 26 | To determine whether individual learners' achievement is analysed |
| 27 | To determine the usefulness of analysing individual learners' achievement |
| 28 | To determine whether teachers pay attention to underachieving learners |
| 29 | To determine whether teachers have updated information about underachieving learners |
| 30 | To determine the preferred procedures to acknowledge continuing professional development |

Table 3.8: Intention of the questions/items

3.6.2 Piloting the Questionnaire

It is of crucial importance to test a self-developed questionnaire before it is being administered in the main study (Delport, 2005:171-2). The pilot study was carried out with the head teacher's permission. Therefore, before piloting the questionnaire, I had informed in advance the teachers and their head teacher about the nature of the research and the pilot study's objectives. The aims of the pilot study were to test the questionnaire in order to get feedback on the following aspects (Cohen et al., 2000:239; McMillan & Schumacher, 2006:202):

- Time needed to complete the questionnaire

- Understanding of language in terms of concepts and terminology
- Understanding the questions.

The respondents were also asked to write their comments on the entire questionnaire.

The pilot study involved 20 volunteer-teachers in Maputo-Cidade and the Province of Maputo, including teachers with similar profiles as the teachers from the schools that participated in this PAR study. The schools were selected taking into consideration the time and cost constraints in going to the schools to deliver and collect the completed questionnaires. The respondents had chosen when and where to complete the questionnaires.

The pilot study was preceded by meeting with colleagues and experienced primary school teachers to ask comments on concepts and questions included in the questionnaire. These meetings were particularly helpful with respect to questions about assessment. My colleagues and experienced teachers said that the questionnaire incorporates relevant questions about teachers and learning facilitation. Another comment was that the questionnaire was embedded in professional components of the teaching profession. This aspect had posed uncertainty in one of the critical friends who doubted whether teachers would seriously complete the questionnaire. Before piloting the questionnaires I sent letters to the principals of each school and to the respondents asking permission for their participation in the pilot study. I had informed the school principal in advance about the nature of the study and the pilot study objectives.

To carry out the pilot study I delivered the questionnaires by hand to schools. This strategy allowed me to approach each respondent and to inform them about the conditions under which they would be completing the questionnaire. They completed the questionnaire according to their availability.

3.6.3 Administration of the Questionnaire

The questionnaire was administrated with the written permission of provincial and district directorates. For this purpose I had sent the directors letters to obtain informed consent. The letters to school principals and to all teachers involved in the study were delivered along with the questionnaire when they were approached to take part in this study.

In an attempt to find teachers who had participated in at least one TCPD programme, I started the administration of the questionnaire in the last academic trimester.

To complete the questionnaires, the respondents were free to choose when and where to do that. Other aspects taken into consideration were the academic calendar for the learner assessment, the final examination and the political events at provincial, district and school level. The following table reflects the questions asked and the purpose of each from the administered questionnaire.

3.7 LIMITATIONS OF THE STUDY

This PAR study has three major limitations. The first one has to do with the sample for the baseline data collection in the selected provinces. There were constraints to reach teachers from a diversity of schools in urban, suburban, rural and deep rural areas to complete the questionnaire. This situation was caused by limited time and financial limitations. Therefore the respondents were identified according to the proximity of the schools to the capital of the province, and consequently teachers from deep rural areas were not included. To allow as many teachers as possible to complete the questionnaire, both the distribution and the collection of the questionnaires took longer in suburban than in urban areas.

The second constraint is related to time management during the completion of the questionnaire, the learningshop and classroom observation in the selected school. ‘Learningshop’ in the context of this study refers to workshops on professional development

offered by me and another specialist. In this respect, to complete the questionnaires, the tight primary school calendars and the overfull timetables for lesson planning and other pedagogical and political activities running at school or at ZIP or even district levels were serious obstacles. Therefore the limitation of time was taken into account and the teachers freely chose when to complete the questionnaire. In relation to learningshop and classroom observation, owing to the previous limitations, the practitioner-researchers had little time to spend on the research and this fact, on the one hand, restricted the time to visit the practitioner-researchers in their classes, as much as action research implies, and other hand, delayed the learningshop schedule.

At the outset of this study the fact that I was from the university was also a limitation. The teachers thought that I was observing class in order to note down what they did in the classroom regarding the implementation of the syllabus and the learning tasks recommended in the textbook for further report to the Ministry of Education and other education sectors. Therefore only one teacher out of the six approached teachers promptly accepted to take part in this study and the remaining teachers said that they would have to think about it. In order to have more teachers I held more individual and collective meetings. After some sessions the teachers comprehended the nature of the study and were willing to participate.

3.8 VALIDITY AND TRUSTWORTHINESS

The debate on the nature and use of validity in qualitative research are not consensual among authors and researchers in educational and social research. The term validity is attributed to the degree which an instrument measure what is expected to measure (Pietersen & Kobus, 2007). In this sense, it seems that at the outset this criterion of measurement of instrument is applicable to the present study as a whole, since I worked in an interpretive or qualitative paradigm which privileges an understanding of the social life of the participants. Taking a more practical view, Kvale (1989) as quoted by Reason and Bradbury (2001:447), stresses the fact that there is a significant endeavour on fitting the features of AR into “a traditional discourse about validity whose concerns have little to do with those of action research.

However, there is a common sense that the rigour in action research can be increased by combining quantitative instruments with qualitative ones (Boarda, 2001; Feldman, 2007). Moreover, the repetition of the cycles between reflection and action can yield and increase the validity of the findings (Heron & Reason, 2001) since throughout the cycles the researcher and participants share ideas, monitor the project, discuss and built consensus and improve the project.

In order to address validity, Cohen et al. (2007:133) refer to it as a requirement for both quantitative and qualitative research”. Validity is concerned with the appropriateness of the instruments used to gather data. Therefore, it is viewed as “the degree to which the interpretations have *mutual meanings* between the participants and the researcher” (McMillan & Schumacher, 2006:324). In this respect, I sent letters requesting the participation of the teachers and individual agreement. The letters present the nature, the objectives and the contents of the study. With respect to the PRs, I explained in detail the action research study. In addition, my supervisor and official statisticians from the University of Pretoria assisted me on refining the questions. Then, the new version of the questionnaire was discussed with experienced primary school teachers and pedagogical technicians from the Ministry of Education and Culture. To enhance validity of the questionnaires, I carried out a pilot study and the results were used on improvement of the questions. Pietersen & Kobus (2007) state that the use of validity in the human science appears to be challenging due the significant inference with quantitative research.

Another term also related to the measurement of instruments in research settings is termed as reliability. In quantitative research, reliability and validity are concerned with the research instruments and form essential part of this research paradigm (Nieuwenhuis, 2007). Validity refers to accurateness of the research instruments while reliability refers to the degree of its replicability. Therefore, in research setting is common the use of quantitative and qualitative instruments – triangulation – in order to increase validity and reliability (Nieuwenhuis, 2007). I followed the reliability criterion by piloting the questionnaire. Although the number of respondents was comprised by only twenty learning facilitators the findings of pilot study offered an estimation of its reliability (McMillan, & Schumacher, 2010). After the

modification of questions and terminology suggested by the respondents I felt that the questionnaire seemed to cover other probable learning facilitators.

To replace the controversial use of the terms validity and reliability (Winter, 2000), Denzin and Lincoln (2005) suggest terms like credibility, transferability, dependability, and confirmability. This understanding is consistent with Lincoln and Guba (1985) who regard criteria like credibility, confirmability and dependability closed to the validity one. Credibility matches the extent of what the researcher achieve what her/he proposed to do; in turn, confirmability and dependability have to do with audit. Besides, Lincoln and Guba (1985:316) propose the concept of trustworthiness arguing that “there can be no validity without reliability” since the occurrence of validity ensure the existence of reliability.

In recent years, as far as 2001, Reason and Bradbury (2001:447), pointing out to the importance of issues of validity in AR, refer to questions that the researcher individually and in relation to PRs should ask, namely: “am I doing good work? and are we doing good work?” towards a “more reflexively practical questions about the work of action research”. This can be demonstrated through an effective participation of the PRs in all steps of the research project. In this PAR, the “practical questions” were observed in the course of the cycles and during the feedback of the PRs and the research-mentor evaluation. Table 4.55 and Table 4.56, respectively show the question rose. It was also taken into consideration in working with critical friends, as shown in Table 4.57 regarding the summary of the activities performed in this PAR. The critical friends include my colleagues from the Department of Teacher Education and Curriculum Studies at the Eduardo Mondlane University, Pedagogical University, pedagogical technician from the Ministry of Education, a school principal and experienced teachers.

As presented by McNiff & Whitehead (2006), to describe, explain and theorise on the effect that a given action is in a specific context is the aim of AR. In having this in mind, internal validity discussed by Cohen (2007), can be applicable to AR. In action research validity and trustworthiness refer to the process of setting up the reasons why the findings are credible and trustworthy (McNiff & Whitehead, 2005:91). The reasons why the findings of my study

are credible and trustworthy rely mainly on two aspects. First of all, on the topic: in this study the intention was to explore instead of apply an intervention for TCPD in a new approach in Mozambique. The second aspect refers to the fact that the evidences from the PAR cycles, with regard to self-monitoring by teachers of CPD, will generate findings that can be useful for my own practice, for the teachers involved, for the MEC and other teacher professional development providers and for researchers in this field. The third aspect is that the findings generated through the research questions in this study show the adaptability of self-directed professional development stated by Clark (1992:78-83) in the Mozambican context.

3.9 ETHICAL CONSIDERATIONS

This study followed the Ethical Code of the Faculty of Education of the University of Pretoria. An application for ethical approval of this study was submitted to and approved by the Research Ethics Committee of the Faculty (Appendix C). A copy of the research data gathered during this study is archived at the Department of Humanities Education.

This study also followed the ethical considerations described by Zuber-Skerritt (1996:16), Winter (1996:16-17) McNiff et al. (2003:49-52) and McNiff & Whitehead (2005:34-36) summarised in the following subsections.

Negotiating access

A letter was sent in advance to all provincial and district directorates, to school principals and teachers involved and written permission to do the research was obtained. All participants and respondents had been informed about the purpose of their involvement, what they were expected to do and their right to withdraw from the study if they did not want to continue. Information about the use of the findings from this PAR study was provided to all respondents and participants.

Protection of my participants

The questionnaire is anonymous and confidential. The final report ensures the confidentiality of the respondents as well as of schools. All participants and respondents received the ethic statements. With respect to the data obtained from the PAR cycles, permission for both using and reporting the information and pictures was obtained.

Protecting myself from subjectivity

Due to my experience with educational issues such as the TCPD programmes and other capacity-building initiatives and with the learning process itself in Mozambique, I had to avoid bias. Therefore, I asked comments and suggestions from critical friends and colleagues during different phases of this study.

Further ethical considerations

Being from the university and my ‘outsider’ position as a researcher were issues that were taken into consideration. For exploring the intervention by the active participation of the target group, only their available time during school hours was used. Therefore the calendar of the learningshops and all activities carried out in the context of this study were carefully presented and discussed in advance with school principals and later on negotiated with the involved teachers.

3.10 CONCLUSION

This chapter offers the participatory action research design by discussing the research philosophy, the methods used, the research process and the limitations of the study. Further, I paid attention to validity and trustworthiness and ethical considerations.

In an attempt to justify the study, I have provided an AR a research paradigm (Zuber-Skerrit, 1996), its characteristics and different types of AR. In discussing AR characteristics I tried to place the study within the understanding of Kember (2000) and Henning et al. (2004), McNiff and Whitehead (2006) and Mills (2007) among others.

The description of the methods used throughout the baseline analysis and the classroom practices privileged individual classroom practices (Hopkins, 1994; Fullan, 2001) and the placement of TCPD in the hands of the teachers themselves (Hargreaves & Fullan, 1991) by means of a self-directed professional development (Clark, 1992). The description of the empirical study is provided in Chapter 4.

CHAPTER 4

EMPIRICAL STUDY

4.1 INTRODUCTION

The purpose of this chapter is to provide the main results and findings obtained through the study. In this chapter I present the results and findings of the empirical research in the progression of my aim to explore an intervention for improving the practice of primary school teachers operating at school level within the context of their daily pedagogical and classroom practice.

Following the methodology indicated in Chapter 3, the study comprises two comprehensive Participatory Action Research (PAR) cycles performed from 2007 to 2010. The reasons why this study has been performed through four academic years is the cyclical, participative, inclusive and reflective nature of action research (AR) (Kember, 2000) and the requirement to fit the study into the context of the practitioner-researcher's schedule. First of all there was a need to carry out along with the PRs a set of unstructured classroom observations, meetings, learningshops and planning sessions aiming at creating a sound relationship and a common understanding about the study among the school principal, the PRs and me. In addition, since one of the basic characteristics of AR is to be determined by practitioners, I pursued both the structure of the annual calendar for primary schools, Zone of Pedagogical Influence and, with particular attention, the calendar in the school where the study took place. While doing so, I took into consideration the period of the year in which planning and short-term professional development is usually carried out; the weeks of the trimester where classroom observation and administration of questionnaires are feasible, without disturbing normal classroom practices and the individual schedule of each practitioner-researcher (PR) and respondents at school with his/her class.

My recount starts with information regarding the PRs and the respondents. This part is followed by an overview of the PAR cycles. The subsequent parts of the chapter document and discuss the results and findings of the empirical research. The account is

sustained by a representation of the cycles that demonstrates relevant events in Table 4.57. Furthermore, statistical data and/or visual representation illustrate the data in pertinent cases.

4.2 THE PRACTITIONER-RESEARCHERS AND THE RESPONDENTS

The practitioner-researchers of this PAR study were five primary school teachers facilitating learning in Grades 1 and 2 from 2007 and 2010 as stated in Chapter 3. This number of teachers refers to the total number of teachers, 3 female and 2 male, allocated to Grades 1 and 2 during the academic year of 2007 at the Unidade 18 Primary School. At the outset of this study, the PRs had similar academic and professional qualifications. They entered teacher education colleges holding a junior secondary education certificate and attended the 10+2 model of teacher education. After the conclusion of teacher education, they continued their studies and had already completed the senior secondary education. Moreover, they had different experiences with respect to years of facilitating learning in primary education. Table 4.1 illustrates the characteristics of the PRs.

| Practitioner-researcher | Sex | Age | Academic qualification | Professional qualification | Years of experience | Number of INSEP attended |
|-------------------------|-----|-------|------------------------|----------------------------|---------------------|--------------------------|
| 1 | F | 31-40 | Sen Sec Ed | IMAP | 3-5 | 1-5 |
| 2 | M | 31-40 | Sen Sec Ed | IMAP | >10 | >5 |
| 3 | F | 31-40 | Sen Sec Ed | IMAP | >10 | >5 |
| 4 | M | 41-50 | Sen Sec Ed | IMAP | >10 | >5 |
| 5 | F | 31-40 | Sen Sec Ed | IMAP | >10 | >5 |

Table 4.1: Characteristics of the practitioner-researchers

Legend

F = Female; M = Male; Sen Sec Ed = Senior Secondary Education; IMAP = *Instituto do Magistério Primário*

As many as 1 028 teachers facilitating learning in Grades 1 and 2 responded to the questionnaire. The respondents were identified in 135 urban and suburban schools from

the following provinces: Cabo Delgado, Nampula, Zambézia, Sofala, Maputo and Maputo-Cidade.

4.3 OVERVIEW OF THE PARTICIPATORY ACTION RESEARCH PROCESS

This section provides an overview of the 2 comprehensive cycles of the Participatory Action Research (PAR) undertaken in this study. The cycles are identified as Cycle A and B and the central activity in which I was engaged is used to name the cycle. Each cycle combines minor cycles including the 5 case studies that I had developed with the PRs. The two comprehensive cycles could be explained as follows:

Cycle A mainly comprises the activities performed in order to obtain a baseline analysis before the commencement of the classroom activities aiming at improving the PR practices. This includes findings from un-, semi-structured classroom observation, learningshops, questionnaires, policy document analysis and other methods used to collect data and data from classroom practices. My recount in this cycle includes the general context in which the study took place, the process of administering the questionnaires and the information obtained from the cycle as a whole and from the questionnaires as a particular method of data collection.

Cycle B is the main part of the empirical study carried out with the PRs. The cycle consists of the recount of biographical information about the PRs and the respondents and I have experienced and learnt about innovative practices that can lead to self-directed professional development. Each PR forms one case study. So, in 2007 the study comprised five case studies. The case studies include the project design, planning of learning opportunities, structured classroom observation, reflection aiming at raising concern on innovative classroom practices and the scaffolding derived from it. To me scaffolding consisted of reflection, literature review, text analysis, analysis of policy documents and asking critiques from colleagues and teachers. This forms part of the discussion with the PRs and the results of the discussion were incorporated in the next planning and classroom practices as a means of scaffolding.

From 2008 to 2010 only five teachers continued participating in the study. The one who opted out was attending a higher education course at Eduardo Mondlane University. Her participation became unfeasible for two reasons. The first is that her timetable at the university coincided with the period of normal classes for Grades 1 and 2 at the school in the morning shift. Therefore she was appointed a new grade and shift in the afternoon. The second reason is that to me it was impracticable to conciliate mornings and afternoon classroom observation with my duties in my workplace. Cycle B also comprised evaluation of the teacher continuing professional development (TCPD) carried out throughout this PAR study.

I approached each cycle with particular attention to the literature review and critiques from primary school teachers and colleagues whose task is concerned with primary education to get a better understanding of what I was doing. Accordingly, I got critiques on the first version of the questionnaire, the pilot study and from the collected data.

The systematic enquiry in this PAR study was characterised by a great empathy for the teachers as respondents and as PRs. I have approached them to engage in the project and appreciated the time they needed to participate in the study. I started with classroom observation in April 2007 and ended in March 2010 with the assessment and evaluation in the context of quality assurance and evaluation of the TCPD.

The activities carried out in each academic year are represented by the respective year and the sequence of activities are organised according its order in the study. However, the activities did not take place in a linear and orderly manner from one step to the next, since during the period, in which a certain activity took place, some overlap and move back occurred within a particular cycle due to the less tidy of the steps in the AR cyclical process. For example, some classroom observation sessions occurred along with the pilot study and the administration of the questionnaires. Throughout the cycles the PRs and I collected data and reflected on the process of the PRs and my own CPD in this PAR study. In Table 4.57 the summary of these PAR cycles comprising the activities performed, the purpose, the outcomes and relevant participants involved within the respective comprehensive cycle (A & B) is organised according to the academic year are specified.

4.4 FINDINGS OF THE CYCLE A OF OVERARCHING ACTION RESEARCH PROCESS

The Cycle A encompasses the main results and findings of the unstructured and semi-structured classroom observation, the analysis of policy documents, the pilot study of the research questionnaire and the baseline of this study which consists of the results and findings of the questionnaires.

The context

The methods adopted in Cycle A of this study confined me to two similar and at the same time different contexts to work in. The first context was the primary school in which classroom observation took place, the Unidade 18 Primary School, and the second one encompasses the 134 schools from the six provinces where I administrated the questionnaires. These contexts were similar as both were primary schools. However, they were different since at Unidade 18 Primary School, I spent three years working with the PRs, the principal and pedagogical deputy, while at the other schools I just went to deliver and collect the research questionnaires and I did not develop extended working relationships with the teachers and the school principals and pedagogical deputies.

Unidade 18 Primary School is located approximately 1 kilometre from the Maputo International Airport, at the airport village, in a suburb of Maputo City.

I started Cycle A with classroom observation in April 2007. As an external person to the normal classes, to begin with I carried out unstructured observation and later on the structured ones. Moreover, unstructured classroom observation allowed me to be familiarised with the PR and the class and vice-versa. In these sessions the teachers followed their usual plans and the comments on the learning opportunities were not a concern. This stage involved the five teachers facilitating learning in Grade 1 classes in 2007 at the Unidade 18 Primary School in Maputo City. The purpose of including all teachers at school level was to avoid discriminating against or another teacher from the same grade. However, in 2008 one of them left the project since she was attending a higher education course in the same period. This number of teachers allowed a

collaborative, critical and self-critical study in relation to the problems and concerns regarding their own practice (Zuber-Skerritt, 1996:3; Cohen et al., 2000: 229).

At the school there were no sufficient desks for the learners and the majority were seated on the cement floor. In one of the classrooms there were many damaged desks in the back.

The learning environment changed significantly from 2007, my first year of fieldwork at the Unidade 18 Primary School, to 2008. In 2007, although there were not enough desks for learners, chairs and desks for the teachers, all classes had at least a room and a blackboard. In 2008 the school faced complex changes. The school was being renovated and most of the learners were housed under trees since the damaged roof, windows and doors were removed. To make things worse, there were insufficient blackboards to be used out of the classroom. In addition, due to the shortage of places to allocate to each class, the teachers used to work in pairs with the respective class under the same tree during the next academic trimesters. After the renovation all classrooms had desks and chairs.

The following sub-sections summarise the activities and the findings of Cycle A of this PAR study.

4.4.1 Unstructured Observation

Planning

The planning for unstructured classroom observation consisted of the arrangement with the five teachers in order to establish a feasible schedule for my observation. We agreed on two procedures. Firstly, the PRs would facilitate learning following the usual planning used at school level. Secondly, I would be focusing on a particular part of the learning opportunity, as I would be observing the entire teaching practice during three months. This duration had not been established in advance. It was motivated by the empathy felt at this stage.

Action

During unstructured classroom observation I observed the teacher-learner interaction. I did not use any kind of observation sheet. I used only a notepad to register my observation and comments. At the end of each classroom observation the teachers were always expecting critiques from me saying what aspects of the learning opportunity were right or wrong. I promoted a discussion on what they thought what could be the potential areas for innovation in both their continuing professional development and improvement of the learners' learning. This activity was particularly useful for providing a wide idea of teachers' responsibility regarding their own professional development.

Observation

At the outset of classroom observation there were feelings of uncertainty with respect to what I would do with my notes from the observed learning opportunities. The teachers thought that I would critique them severely and report them to the various sectors which are responsible for school management and inspection. Therefore I realised that the PR concern was to select the topic to be observed with great care. In doing so, in some cases, they changed the subject, the topic or the timetable and frequently asked my opinion concerning the learning opportunity. However, I propagated a discussion on what they thought about what should be improved. Classroom observation at this stage allowed me to be the PR and the class to be familiarised with my presence in the classroom. The PRs followed their usual plans and began not to worry about my comments. The following extracts of the conversation with the PR illustrate what occurred during the period dedicated to unstructured classroom observation.

Since classroom observation also means an intrusion into the activities going on in class, I could not observe all the learning opportunities of each teacher on one day. Another constraint was that I could not observe all five PRs on the same day, as all of them were allocated to the morning classes from 10:35 up to 13:35. The PRs always complained in relation to the time they had for their classes as a result of the large amount of content selected for Grade 1. My role in this discussion was to encourage them to feel comfortable when working with learners and try to ignore my presence in class.

I found that the PRs gradually began feeling comfortable during classroom observation. I also found that the main problems with learners' learning were justified by the class size, the textbooks, the academic calendar and the prescribed learning units sequence indicating the days and time for each topic. Driven by these weaknesses raised by the PRs, another finding was the lack of remedial activities. PRs continually complained about the lack of time to carry out learning tasks aiming at individual learner support apart from the prescribed content. In additions I found that there was no learning material apart from the textbook. The PRs used to copy the learning tasks indicated in the textbook on the blackboard in order to solve the tasks step by step and jointly with the class. Having solved a set of tasks, the PRs then indicated the tasks that the learners would individually execute.

The PRs often do not follow the timetable and the prescribed learning tasks for a specific day of the trimester due to inspection control. They could be in trouble if the inspection found different topics or learning tasks than those prescribed in both the timetable and the learning unit. Another finding is that the PRs did not have teacher guides that steer the learning opportunities.

An important aspect to note is that during this stage of the study all PRs demonstrated a high level of cooperation in the data collection process.

Reflection

Unstructured classroom observation helped me to reflect in two directions. On the one hand I reflected on the TCPD model that could support teachers towards improved and innovative classroom practices. I thought that it was urgent to adopt a new model for PD programmes or activities at school level in order to complement the pedagogical skills provided by teacher education institutions. Such essentially school-based PD, probably led by the school principal or her/his deputy, could be the first form of TCPD. Then, the organisations and education sectors which are currently providing TCPD programmes can play a supportive role. On the other hand, I reflected on the draft of the questions raised in my questionnaire on reflecting on the observed learning opportunities and the time and human resources to be involved in TCPD.

4.4.2 Semi-structured Observation

Planning

After my reflection on the learning opportunities from the five PRs during unstructured classroom observation I decided to introduce semi-structured observation and I proposed to them to pay attention to specific issues or learning tasks they wanted to improve or innovate. The topics selected were mostly related to subjects like Portuguese and Mathematics, as in that period of the academic year the main concern in Grade 1 was methods of facilitating learning of initial writing and reading skills, concept writing and reading numbers. Other topics included learners' participation and the need PRs feel to eliminate the use of responses in chorus. The next table presents the topic selected.

| Practitioner-researchers | Portuguese | Mathematics | Other |
|---------------------------------|--|-------------------------------|--------------------------------------|
| PR1 | Writing and reading skills – capital and small letters | Concretisation of calculation | |
| PR2 | Writing and reading skills – capital and small letters; handwriting and printed letters | | Collective responses |
| PR3 | Writing and reading skills – capital and small letters; handwriting and printed letters | | |
| PR4 | Improvement of learner participation in calculation, mental calculation; verifying pre-requisites, concretisation of calculation | | Improvement of learner participation |
| PR5 | Writing and reading skills | | |

Table 4.2: Topic selected for semi-structured classroom observation

Having selected the topics, each PR and I planned the course of the learning opportunity to be observed. In an attempt to overcome the shortage of learning materials I provided examples of learning materials and pieces of paper that could be used by the PR to produce the needed learning material for the planned and subsequent learning opportunities. The observation sheets to be used were also jointly identified.

Action

Classroom observation focused on the topics selected by the PR and on the observation sheets jointly prepared. I took notes related to PRs' procedures on approaching the selected topics and learning materials. The learning material which we jointly prepared was the unique one used during the class since the school did not have any kind of means that could allow the PR to reproduce specific learning material for the planned learning objectives.

Observation

Classroom observation was time-consuming. This technique took a total of three months in Cycle A to attain a climate in which the PRs and I could participate in this study with a minimum of anxiety. Further, I had to set intervals between observation sessions aiming at allowing the PRs to work normally with their classes without any external interference. Another constraint was the time available to analyse the learning opportunities after observation.

Reflection

The discussion of the learning opportunities illustrated above suggests that in spite of individual differences, this study should take into consideration the following aspects:

- Academic and professional qualifications
 - The PRs held the highest qualification provided by teacher education institutions.
 - During teacher education the teachers did not have the opportunity to deepen the methods of facilitating learning in the different subjects in primary school.
- Planning of learning opportunities
 - Planning of learning units took place every two weeks on Saturdays.
 - The sequence of learning units was established by the group of teachers allocated to Grade 1.
 - The teachers strictly followed the learning units.

- Individual planning mostly included what was established during the learning opportunity.

- Learning tasks and material
 - All teachers used the books adopted by the Ministry of Education.
 - The PRs followed the same steps and procedures indicated in the text book when facilitating writing, reading and numbering.
 - The learning tasks assigned to learners were the same in all classes as the PRs strictly followed the textbook and the planning carried out at school level. Only one of the PRs diversified learning tasks.
 - The teachers did not have ways to produce complementary learning materials.

- Time
 - The compulsory timetable at school forced teachers to be dedicated to the learning opportunities for a given period only.
 - Discussions and meetings should be planned for the Saturdays when the group of teachers in Grade 1 were planning the units.
 - Short individual or collective meetings could take place before or after the schooling day.
 - Learningshops should be planned for the breaks between the trimesters or semesters.

Reflection on the above mentioned aspects helped me to understand, on the one hand, the impact that traditional professional development programmes have on individual teachers and on the other hand, the motivation teachers have regarding innovative practices. As a result I went back to the draft of the questionnaire and reviewed the issues related to the preferences for in-service education programmes, hours of planning per week and assessment of individual learning. I suggested objects that could be used as learning materials and considered the possibility of providing basic materials like used paper and pens.

The reflection on this step was useful on continuing the literature review on TCPD and selecting critical friends and the policy documents to consider in this study.

4.5 DEDUCTIONS FROM POLICY DOCUMENTS

Before beginning and throughout the activities with the teachers, respondents and practitioner-researchers (PRs) I studied policy documents from the Ministry of Education (MoE), such as the Education Sector Strategic Plan, Strategy for Teacher Education and TCPD, National Education Policy and other relevant documents related to teacher education and TCPD. These documents are used as sources on understanding both the importance and the foreseen actions that put into practice the legislation on TCPD.

As discussed in previous chapters in Mozambique TCPD is one component of the whole teacher education policy and strategy. Therefore there is a slight difference between the terms used to describe TCPD through in-service education programmes, at school or ZIP level, and in-service education programmes through attendance of initial teacher education in colleges or via distance education. Furthermore, there is no specific content referring to the TCPD in the table of contents in the document on Strategy for Teacher Education – 2004-2015. The lack of a particular topic on strategies for TCPD appears to be an indication of the insufficient clarity about what TCPD should be in order to raise teachers' motivation in participating in the programmes run by the MoE.

In analysing the Education Sector Strategic Plan I noticed that the foreseen national programmes for professional development of all teachers facilitating learning at different levels of education, including teacher educators, are not fully implemented. However, I noticed an increased awareness of the process of initial reading and writing skills through the *Jornadas Pedagógicas* programme that I refer to in Chapter 1. This programme is still used as emergency procedures as only teachers from the lowest grades in primary education are involved in solving specific educational problems. Moreover, the issue of TCPD continues to be the responsibility of a ZIP in collaboration with schools, teacher education colleges and provincial and district directorates supported by pedagogical technician from the ME.

The main finding from policy documents indicates that in spite of the importance given to TCPD, it is still a constraint to be dealt with. Professional development programmes, encompassing content knowledge and pedagogical skills, have to be considered a priority

either for teachers appointed without professional qualifications and for the majority who are holding a teacher education certificate. Therefore, taking into consideration the large number of teachers in primary education, approaches to TCPD should primarily consider the responsibility of the school and the involvement of the individual teacher.

4.6 FINDINGS OF THE PILOT STUDY

This section reports the findings of and reflection on the pilot study questionnaire as discussed in chapter 3. The pilot study utilised as baseline analysis, as referred to earlier in this study, involved 20 volunteer respondents from two provinces. Of these, 12 respondents were from Maputo-Cidade and 8 from the Province of Maputo. I launched the pilot study thinking that the respondents could answer and return the questionnaires within a period of a week. However, after agreeing on the date to collect the questionnaires, five out of the 18 were returned later due to different reasons. The reasons indicated by the teachers were related to lack of time or forgetfulness to answer the questionnaire. Therefore I had to approach the respondents three times in order to collect the questionnaires and 5 out of the 18 questionnaires collected were returned after 10 days.

Eighteen questionnaires (90%) were returned. Notwithstanding the duration of the pilot study process, the return rate was satisfactory. I understood the delay on answering the questionnaires as a direct result of the pressure that the teachers in Maputo face from the frequent requests from students from higher education institutions to answer questionnaires and/or to be interviewed. Additionally I interpreted the delay as demanding an additional activity to be performed by the teachers. Some teachers answered the questionnaires at the school.

Time needed to complete the questionnaire

In general the teachers completed the questionnaires in 35 minutes. They commented on the time, pointing out that they had many things to do at school during the normal timetable. Actually the teachers did not refer to the number of questions but rather to time. This comment convinced me of the time I would need to deliver and collect the

questionnaires. However, I took the risk of depending on the respondents' availability and on identifying a large number of schools due to the possibility of a low return rate per school.

Understanding of concepts and terminology

Visual learning, fact-based learning and emotional learning were indicated as unclear, under-utilised and unusual concepts in their day-to-day practice.

Understanding the questions

The majority of the respondents understood the questions. However, in question 10 the uncertainty was on the calculation of the hours, they spend on planning of learning opportunities as the practice in primary schools is to have collective and individual planning. Collective planning took place every two weeks among teachers from the same grade in order to sequence the learning content and units. Then, based on the collective plan, each teacher plans the learning opportunities for her/his class.

As the planning of learning opportunities is a crucial component for the facilitation of learning, I reflected on getting more accurate answers from my sample.

General comments on the questionnaire

One of the findings of teachers' comments on the questionnaire referred to question 6. The variables did not include the latest initial teacher education programmes run by government and the private sector. Another comment was that the issues presented in the questionnaire were interesting and related to their profession and classroom practices. The constraint was that they did not have time to spend on completing the questionnaire. This proved that reading habits are still a problem among teachers. They also commented on the language used. They said that the questions should be asked more informally. Apart from the general comments the respondents raised the following issues:

The highest professional qualification achieved

The options should include the latest teacher education programmes introduced in public and private institutions.

Formal short in-service education programmes attended

Although all respondents answered the question, a percentage indicated that instead of “the last four years” it is better to indicate the period “from 2004 to 2007”. Another comment was that all short in-service education programmes were formal. I decided to maintain the word “formal” in order to distinguish short in-service education programmes that were organised by the school/ZIP or other institutions.

Other important teacher roles

The majority of the teachers were of the opinion that the list of teacher roles was exhaustive and complete.

The pilot study of the baseline analysis provided valuable information towards the improvement of the questions. On revising the questionnaire, questions 4 and 11 were re-written, more teacher education programmes were included and the options *visual learning*, *fact-based learning* and *emotional learning* were removed. At this stage of this PAR, I got the impression that the respondents of the pilot study wanted to participate in the study but the problem was to find time to read the question and statements. This comment came when I was approaching one of the volunteer respondents, before observing the questionnaire. I encouraged them, saying that the study aimed at exploring interventions to support primary school teachers and she could complete the questionnaire when they were available in the following week.

From the pilot study I realised that a percentage of respondents would need more than a week to complete the questionnaire. Therefore significant information from the pilot study was related to the need for paying more attention to teachers’ motivation and time to complete the questionnaire. Then, apart from the written consent from each teacher, I had to inform the respondents that they would have at least one week to complete the questionnaire in order to avoid disturbing their daily duties. Additionally they were informed that they could choose where they wanted to answer to the questions, which questions they wanted to answer and the dates on which they wanted to return the questionnaire to me. Deliberately I took the risk of maintaining the number of questions as, according to my observation, the matter of TCPD can be scrutinised within a cycle comprising initial teacher education. Therefore the questionnaire included issues about

both academic and professional qualifications, opportunities for and opinions concerning continuing professional development, planning of learning opportunities, teaching and learners' assessment.

As part of a baseline analysis, the questionnaire broadly generated relevant data essentially concerned with positive and negative aspects of the respondents' teaching practice. I divided the positive aspects in three dimensions. The first was the importance given by teachers to their CPD in the context of in-service teacher education programmes, through events organised at local level – district, ZIP or school level – aiming at the improvement of their professional skills. The second dimension was related to the role that self-reflection and investigation of educational practices plays towards professional development. The last one was the teachers' perception of the process of facilitating learning, learning and learner assessment. The negative aspects dealt with the limitations indicated by the respondents in the pilot study.

4.7 FINDINGS OF QUESTIONNAIRE

4.7.1 Administration of the Questionnaire

I began the administration of the questionnaires in September 2007 by delivering the questionnaires to each of the 135 schools in the sample. As a convenience sample, the number of the identified schools depended on the number of respondents to be involved. All teachers from the 135 schools were approached to answer the questionnaire. In total approximately 3 000 teachers were approached and they were free to decide to participate in the study. Therefore, in each province I approached as many schools as necessary to reach the identified sample group of teachers.

The majority of teachers in Grades 1 and 2 followed the same timetable in the country: classes began approximately at 10:30 am and ended at 13:30 as mentioned in Chapter 3. As I was planning to deliver the questionnaires to my sample before the beginning of the shift or at its end, I started delivering the questionnaires from 06:15 in the morning. As I did so, I met the respondents from at least 4 groups of teachers before the beginning of the

shift and the remaining 2 from neighbouring schools at the end of the shift. I left the questionnaires and the letters and recommendations for the respondents whom I could not meet due to class timetables with the school principal, or the pedagogical deputy and some cases with the grade delegate.

Although I had negotiated with the respondents the date to collect the questionnaires, the collection was still a time-consuming process. In this respect the collection varied from schools that completed them in one to three days and those that only completed the questionnaires after three follow-up telephone calls or visits in more than two weeks. In some cases it was necessary to resend the questionnaires to some groups of respondents.

As many as 1 028 questionnaires were administered from a population of 19 609 primary school teachers facilitating learning in Grades 1 and 2 at a total of 135 schools. The schools' participation was also determined by time and cost constraints referred to in Chapter 3. The schools participating in this study were from the provincial capital, suburban areas surrounding the capital and close districts. Table 3.9 displays the geographical distribution of the sample.

Administering the questionnaire was both a time consuming task mainly due to the following reasons:

- According my observation, the majority of teachers did not have a reading culture; they read just what is strictly necessary. Then to complete the questionnaire meant one more reading task. This delayed the completion, and consequently the return and collection of the questionnaires. In one of the school, one teacher said: *I am a Portuguese language teacher, but I do not like to read.*
- The teachers do not feel motivated to complete questionnaires due to the lack of continuity and feedback from researchers who had approached them.
- One teacher's comment was that the teachers used to provide information but no changes took place in their profession.

In an attempt to save time I asked the school principals their support to collect the questionnaires according to the teachers' pace on completing the questionnaires.

Additionally I provided my contact details that could be used by the teachers. The principals were supportive and monitored the process in order to maximise the response rate.

The delivery and return process was strongly influenced by the academic, social and political agendas at the province, district and the school level. The teachers and their learners in certain occasions had been involved in activities that were not compatible with my visit to schools. For example, the schools had numerous compulsory assessment tasks, social events, visits from government members and significant teacher absenteeism. In this study teacher absenteeism was the most prominent reason for delaying the return and collection of the questionnaires.

I came to understand that there is an array of marginal events and reasons, including the absenteeism referred to, that had been disrupting normal classes. The learning facilitators dedicate less time than the proposed in the syllabus for the learning opportunities and do not have I interpreted this as an issue that negatively influenced performing individual teacher responsiveness to CPD. I got the impression that apart from the previous mentioned weaknesses, the duration of the school day, which comprises approximately four hours, aggravated by the lack of curriculum management skills among the teachers, had a detrimental effect on self-directed professional development based on reflection of all teachers. However, as I mentioned previously in this chapter, I found a strong support and commitment from the principals and the deputy in all visited schools and from provincial and district directors.

Despite the limitations faced during the administration of the questionnaires, the process was rewarding since the real context in which the learning facilitation process takes place came to the surface. Another reward was the principals' comments on the questionnaire. They indicated the relevance of the questions and showed their interest in using the content of the questionnaire for conducting their activities with the teachers.

4.7.2 Results and Findings of Questionnaire

Having administered all questionnaires I started the process of capturing data. I coded the responses and the Department of Statistics at the University of Pretoria proceeded to data entry by introducing the data in SPSS. Then all the questionnaires were returned to me for data cleaning in order to verify the correspondence between the data from each questionnaire and the data entry. Following this procedure, the Department of Statistics performed the running frequencies to look for missing cases and consistence analysis and produced the output of the questionnaire. The results and findings in this section are, in general, presented in the following order:

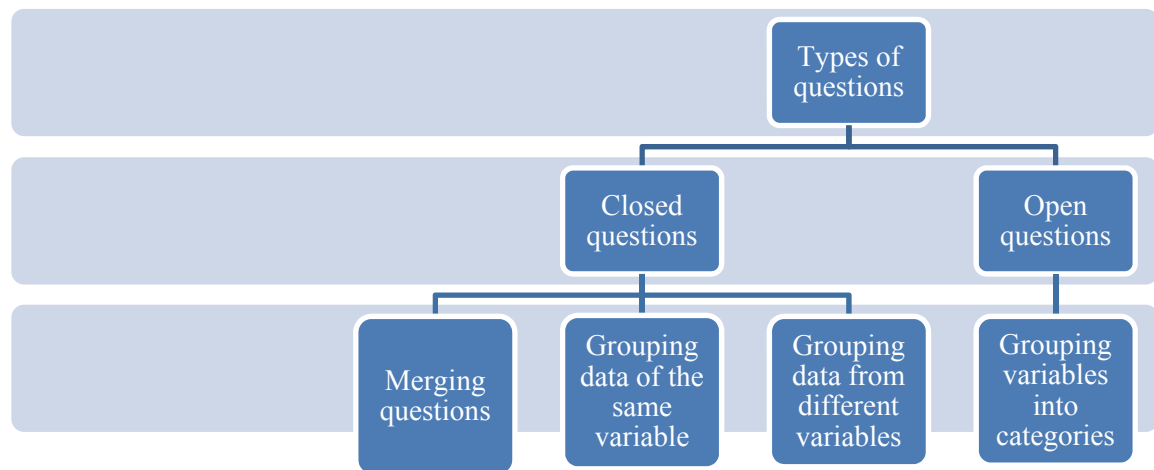
- A title related to the variable.
- The question from the questionnaire that the data answer.
- The presentation/provision of the three major results from the highest to the lowest.
- An explanatory discussion of the results.
- Statistical results from the whole sample by province or professional qualifications organised in tables and or graphs/charts/visual representations derived from the data.
- Statistical comparison among variables.

The data were analysed in depth. In doing so I decided to disaggregate the data by province and by professional qualification to obtain the frequency analysis of the responses. I carried out the frequency analysis to determine how many respondents answered the questions or selected a certain option presented in the questionnaire. In doing so all data were disaggregated by province in order to get a global picture with respect to the information gathered through the questionnaires in each province involved in this study. The data were also disaggregated according to professional qualification in order to obtain the pertinent relationship between professional qualification and a specific variable of this study questionnaire.

The analysis of the questionnaire comprised 64 variables (V) included in 30 questions. From these, 27 were closed questions/items and 3 were open-ended questions. Therefore I

decided to carry out two different analyses aiming at the interpretation of the statistical data. One of the analyses is related to the quantitative data. This analysis mostly follows the order of the presentation indicated above. The second type of analysis is concerned with the qualitative data gathered from the open-ended questions/items. The analysis here comprises the discussion of statistical data from the entire sample. I discuss the findings of each one of the categories. Owing to the nature of the data I opted for 4 different criteria of grouping the V in order to attain different purposes. Figure 4.1 below is a visual representation of the criteria used for the discussion of the data.

Figure 4.1: Types of criteria for the discussion of the data



Criterion 1: Merging data of different categories

This criterion was used to increase the consistency of the data when the lesser frequency represents a low percentage. The categories with low frequency were merged with the previous ones. Consequently the variable (V) with new categories was converted into a new variable (VV).

Criterion 2: Grouping data of the same variable (V) of closed question

In these questions teachers were asked to indicate their first, second and third choice from a set of given options.

Question 16: Consider the examples below. Indicate the 1st, 2nd and 3rd in order of importance for you as aims of an in-service education programme. The 1st option was coded as V20, the 2nd as V21, and 3rd as V22.

Question 17: Consider the examples below. Indicate the 1st, 2nd and 3rd in order of what should be typical of an effective in-service education programme. The 1st option was coded as V23, the 2nd as V24, and 3rd as V25.

Question 18: Consider the examples below. Indicate the 1st, 2nd and 3rd in order of preference of an in-service education programme that you prefer. The 1st option was coded as V26, the 2nd as V27, and 3rd as V28.

Question 19: Consider the examples below. Indicate the 1st, 2nd and 3rd in order of the factors that an in-service education programme should be sensitive to. The 1st option was coded as V29, the 2nd as V30, and 3rd as V31.

In analysing the data, the number of teachers participating in this study (1028) was multiplied by the number of options included in the respective question. Accordingly, the first variable (V20; V23; V26; V29) of each of the above-mentioned questions includes the option indicated as the 1st choice by the teachers; the second variable (V21; V24; V27; V30) includes the option indicated as the 2nd choice, and the 3rd variable (V22; V25; V28; V31) includes the option indicated as the 3rd choice. Each respondent was supposed to indicate three options as response to the question.

As a result of the grouping criteria, on providing the total data in the statistics table, in the column indicated for total data, I refer rather to the total number of responses obtained instead of the number of respondents. More details of the grouping strategies are provided in the discussion of the respective variables.

Criterion 3: Grouping data of the same variable (V) of closed question

The questions demanded the respondents to indicate their preference in the indicated issues. To answer to the question the respondents were free to choose one or more of the options indicated. In order to discuss the results of V32 to V37 (question 20) and V38 to

V44 (question 21), like in criteria 2, the number of teachers participating in this study (1 028) were multiplied by the number of options included in the respective question. Similarly, I refer rather to the total number of responses obtained instead of the number of respondents.

Criterion 4: Grouping into five broad categories the variable (V) of the same open-ended question

The open-ended questions required the teachers to indicate information or suggestions. Therefore, as Table 4.3 shows, the 2 V of the same open question (Variables 14 & 15; Variables 17 & 18; Variables 62 & 63) were grouped into 5 categories. Each category combines related information or suggestions. My discussion then focuses on the frequencies in each category created for the variables.

Due to the amount of information gathered from V14 and V15, V17 and V18, V63 and V64, on the one hand, and to increase clarity, the results of typical of an effective in-service education programme factors that an in-service education programme should be sensitive to variables were analysed by province. This strategy provides a reader-friendly reading of the findings in each of the categories.

The discussion by category comprises the responses of the whole sample from the highest to the lowest, following the sequence of the priority given by the respondents. The percentages indicated for each province refers to the percentage within the province.

| | Question 12 Variables 14 and 15 | Question 14 Variables 17 and 18 | Question 30 Variables 62 and 63 |
|-------------------|--|--|--|
| Categories | Curriculum | Curriculum | Financial |
| | Methods of facilitating learning | Methods of facilitating learning | Academic |
| | Assessment | Assessment | Pedagogical |
| | Professional development | Administrative tasks | Library and Research |
| | Others | Others | Award and Certificate |

Table 4.3: Categories for analysis of the open questions

4.7.3 Statistical Findings Regarding Gender

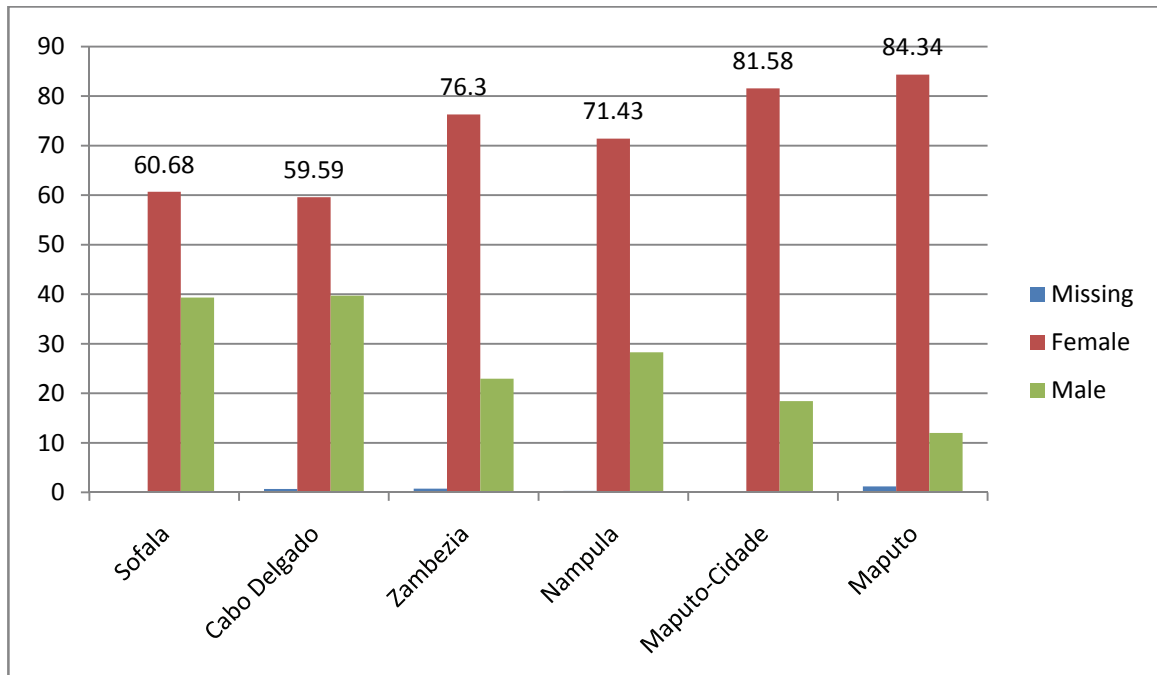
Question 4: What is your gender?

The results displayed in Figure 4.2 indicate that out of the total number of teachers participating in this study (1 028), 736 (71.8%) are female and 287 (27.92%) are male. The other 5 teachers (0.49%) did not answer to the question about gender. The data show that there are more female than male teachers facilitating learning in Grades 1 and 2. However, data from the MINED show that in 2007 there were 53 055 teachers facilitating learning in primary schools. From those 18 527 (34.92%) were female and 34 528 (65.08%) were male (Ministry of Education, 2007).

The prevalence of male teachers was typical in the country, except in Maputo and Maputo-Cidade where, in 2007, the percentage of female and male teachers were 53.55% and 66% respectively. I interpreted the frequency of more female respondents, in two ways. Firstly, primary education comprises five grades and the study only involved teachers from two of them. Secondly, I think that there is a general preference to appoint female teachers for Grades 1 and 2. Regarding this interpretation, the sample of this study is an example. From 2007 to 2008 this PAR study included 4 female and 2 male teachers, and from 2008 to 2010 it included 3 female and 2 male teachers. My third interpretation is that I am convinced that female teachers are the group of teachers that returned the most questionnaires.

The gender of teachers from the provinces who participated in this study varies from province to province. In this study, Maputo is the province with a greater percentage of female teachers, followed by Maputo-Cidade and Zambézia. The statistics on gender representation according to province are illustrated below in a bar graph.

Figure 4.2: Provincial representation of the teachers according to gender



4.7.4 Statistical Findings Regarding Age

Question 5: What is your age?

The age of the teachers appears to have to do with the overall expansion of education to all citizens from 1975 and particularly to the policy on teacher education. Consequently, from that year, more and more young individuals had achieved grades 7 and 10 and attended teacher education programmes or were appointed as teachers without teacher education certificates. Therefore the ages represented in Table 4.4 ranges from 18 years to more than 51 years. As Table 4.4 shows, 382 (37.16%) teachers at the age of 21-30 are an indication that in Grades 1 and 2 the teachers are predominantly young. These results also suggest that those teachers were educated under the more recent models of teacher education and appointed to Grades 1 and 2.

| Province | Frequency % | Missing | Age of the Teachers | | | | | Total |
|---------------|----------------|---------|---------------------|-------|-------|-------|-------|--------|
| | | | 18-20 | 21-30 | 31-40 | 41-50 | 51+ | |
| Sofala | Frequency | 1 | | 41 | 38 | 27 | 10 | 117 |
| | % | 0.85 | | 35.04 | 32.48 | 23.08 | 8.55 | 100.00 |
| Cabo Delgado | Frequency | 2 | 2 | 62 | 53 | 18 | 9 | 146 |
| | % | 1.37 | 1.37 | 42.47 | 36.30 | 12.33 | 6.16 | 100.00 |
| Zambézia | Frequency | 3 | 3 | 94 | 78 | 77 | 15 | 270 |
| | % | 1.11 | 1.11 | 34.81 | 28.89 | 28.52 | 5.56 | 100.00 |
| Nampula | Frequency | 2 | 7 | 140 | 91 | 82 | 14 | 336 |
| | % | 0.60 | 2.08 | 41.67 | 27.08 | 24.40 | 4.17 | 100.00 |
| Maputo-Cidade | Frequency | 6 | | 8 | 27 | 24 | 11 | 77 |
| | % | 7.89 | | 10.53 | 35.53 | 31.58 | 14.47 | 100.00 |
| Maputo | Frequency | 1 | | 37 | 17 | 16 | 12 | 83 |
| | % | 1.20 | | 44.58 | 20.48 | 19.28 | 14.46 | 100.00 |
| Total | Frequency | 15 | 12 | 382 | 304 | 244 | 71 | 1 028 |
| | % | 1.46 | 1.17 | 37.16 | 29.57 | 23.74 | 6.91 | 100.00 |

Table 4.4: Provincial representation of the teachers according to age

4.7.5 Academic Qualifications of the Teachers

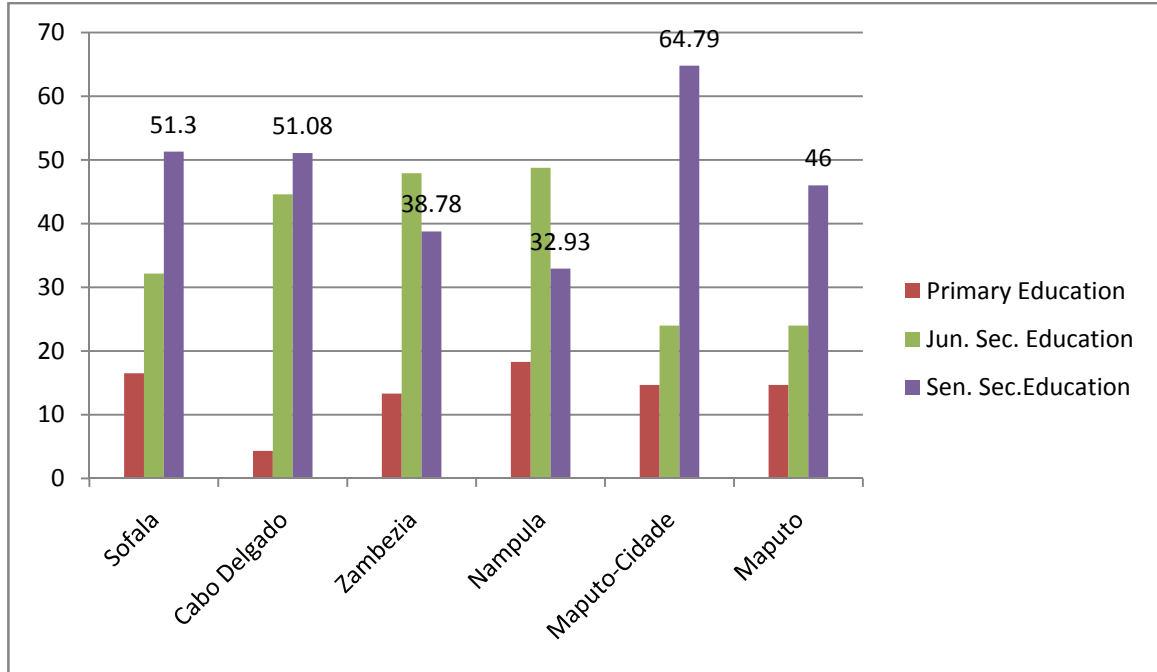
Question 6: What is the highest level of academic education you have achieved?

As many as 1 021 (97.3%) teachers answered the question about academic qualification and 27 (2.63%) did not. The data show that the level of academic qualification of the teachers varies from Primary to Higher Education. This denotes that there are primary school teachers who hold academic certificate higher than the required for primary education. In this respect table 4.5 illustrates that 432 (42.02%) teachers have achieved senior secondary education, 419 (40.76%) junior secondary education and 140 (13.62%) primary education, while only 10 (0.97 %) had achieved higher education. This frequency and percentage is not included in Figure 4.3.

Statistical data displayed in Figure 4.3 indicate that the highest academic level achieved was held by teachers from Maputo-Cidade (64.79%), followed by Maputo (61.33%) and Sofala (51.30%). As stated in Chapter 3, the respondents from all provinces that took part in this study were identified in the capital, suburban areas and district next to the capital. In these contexts there are more secondary schools and facilities for the provision of evening classes. Therefore these figures meet the current situation in terms of opportunities for teachers living in towns or in suburban areas to complete secondary and

higher education. In Maputo-Cidade the capital of the country, there exist more opportunities than in any other provincial capitals.

Figure 4.3: Distribution of the academic qualifications according to province



The values of the Chi-square tests on the comparison of the academic qualifications of the teachers from the six provinces are represented in the table below.

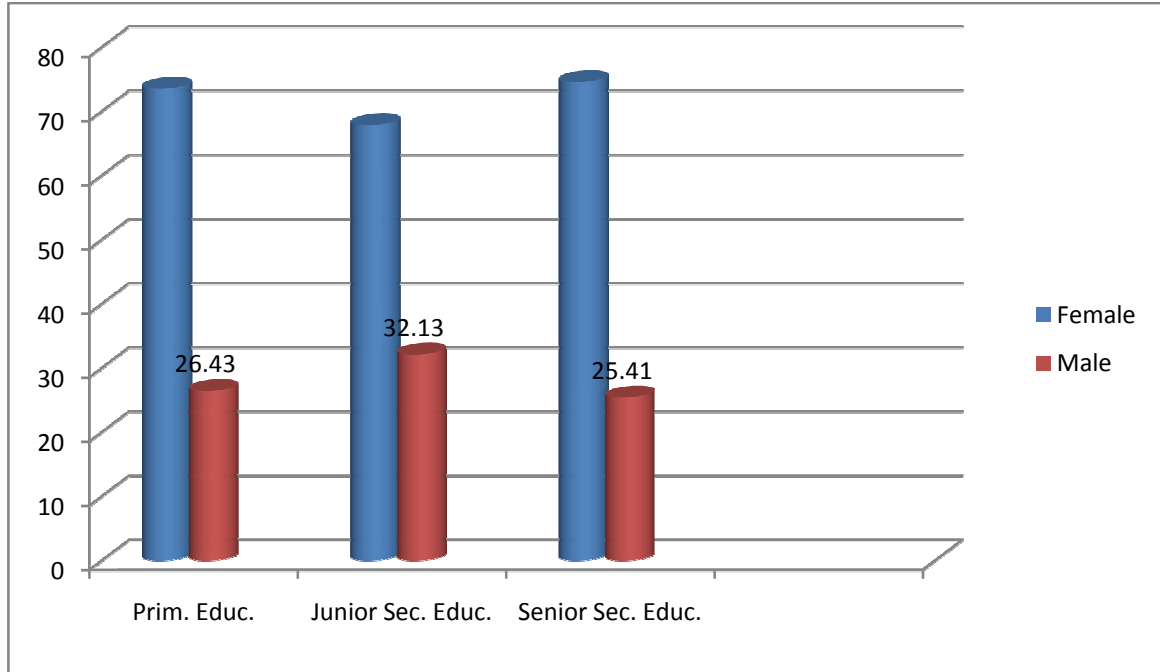
| Statistics | DF | Value | Probability |
|-----------------------------|----|---------|-------------|
| Chi-square | 10 | 60.9338 | <.0001 |
| Likelihood Ratio Chi-square | 10 | 65.7164 | <.0001 |
| Mantel-Haenszel Chi-square | 1 | 0.2263 | 0.6343 |
| Phi Coefficient | | 0.2480 | |
| Contingency Coefficient | | 0.2407 | |
| Cramer's v | | 0.1753 | |

Table 4.5: Statistics of academic qualifications of teachers from the six provinces

The academic qualifications of teachers from this study vary significantly ($X^2 = 60.93$, $p = <0.05$). There is a statistical relationship between academic qualifications and provinces participating in this study. In provinces like Maputo-Cidade and Maputo, more than 60% hold senior secondary education certificates, while in provinces like Zambézia, in the centre and Nampula in the north, less than $\frac{1}{3}$ hold the same degree. These results seem to be explained by the level of economic development which is higher in Maputo-Cidade,

the capital of the country, than in other provinces. As you go from south to north the level of education decreases.

Figure 4.4: Comparison of academic qualifications according to gender



The values of the Chi-square tests on the comparison of the academic qualifications of the participating teachers from the six provinces by gender are represented in the table below.

| Statistics | DF | Value | Probability |
|-----------------------------|----|--------|-------------|
| Chi-square | 2 | 5.0163 | 0.0814 |
| Likelihood Ratio Chi-square | 2 | 4.9330 | 0.0824 |
| Mantel-Haenszel Chi-square | 1 | 1.0285 | 0.3105 |
| Phi Coefficient | | 0.0713 | |
| Contingency Coefficient | | 0.0711 | |
| Cramer's v | | 0.0713 | |

Table 4.6: Statistics of academic qualifications according to gender

The academic qualifications of teachers from this study do not vary significantly ($\chi^2 = 5$, $p = >0.05$). There is no statistical relationship between academic qualifications and gender among the teachers participating in this study. It seems that the government policy on gender equity is being successful. For instance, in the academic year of 2007 out of the 359 510 learners enrolled in junior secondary education, 43.24% were female, while in 2004 out of the 199 015 learners 41.26% were female.

4.7.6 Professional Qualifications of the Teachers

Question 7: What is the highest level of professional qualification you have achieved?

The majority of teachers who answered to this question have the minimal requirement to facilitate learning in primary education according to the current patterns for teacher education in Mozambique. I wanted to determine whether teachers appointed to Grades 1 and 2 are appropriately qualified for primary education according to the current patterns for teacher education in Mozambique. The results in Table 4.7 indicate that 351 (34.14%) teachers obtained the IMAP or ADPP certificate, 35 (3.40%) obtained the IMP or MP certificate, and 379 (36.87%) the CFPP certificate and 244 (23.74%) indicated that they had no professional qualification. These results show that there were more teachers with CFPP certificates than with the other models of certifying teachers. This result is consistent with the figures of the Ministry of Education, which show that in 2007, 40% of primary school teachers were certified by the former CFPP model of teacher education (Ministry of Education and Culture/National Directorate of Planning and Cooperation, 2007). As referred in Chapter 1 this model provided initial teacher education programme during three years courses to candidates who held Grade 7 certificate.

| Province | Frequency % | Professional Qualification | | | | | | Total |
|---------------|----------------|----------------------------|---------------------|-------|-------------|----------------|---------------------|--------|
| | | Missing | No Qualification | CFPP | IMP & MP | IMAP & ADPP | Higher Education | |
| Sofala | Frequency | 1 | 21 | 51 | 4 | 37 | 3 | 117 |
| | % | 0.85 | 17.95 | 53.59 | 3.42 | 31.62 | 2.56 | 100.00 |
| Cabo Delgado | Frequency | | 65 | 65 | 3 | 12 | 1 | 146 |
| | % | | 44.52 | 44.52 | 2.05 | 8.22 | 0.68 | 100.00 |
| Zambézia | Frequency | 7 | 69 | 68 | 7 | 119 | | 270 |
| | % | 2.59 | 25.56 | 25.19 | 2.59 | 44.07 | | 100.00 |
| Nampula | Frequency | 1 | 81 | 155 | 13 | 84 | 2 | 336 |
| | % | 0.30 | 24.11 | 46.13 | 3.87 | 25.00 | 0.60 | 100.00 |
| Maputo-Cidade | Frequency | 2 | | 19 | 5 | 49 | 1 | 76 |
| | % | 2.63 | | 25.00 | 6.58 | 64.47 | 1.32 | 100.00 |
| Maputo | Frequency | 1 | 8 | 21 | 2 | 50 | | 83 |
| | % | 1.20 | 9.64 | 25.30 | 2.41 | 60.24 | | 100.00 |
| Total | Frequency | 12 | 244 | 379 | 35 | 351 | 7 | 1 028 |
| | % | 1.17 | 23.74 | 36.87 | 3.40 | 34.14 | 0.68 | 100 |

Table 4.7: Professional qualifications of the teachers as represented per province

Legend

CFPP = *Centro de Formação de Professores*; IMP = *Instituto Médio Pedagógico*; MP = *Magistério Primário*; IMAP = *Instituto de Magistério Primário*; ADPP = *Ajuda Dinamarquesa de Povo para Povo*.

It would be of value to take into consideration that out of 53 055 primary school teachers in 2007, 21 311 (40.16%) did not attend initial teacher education (Ministry of Education and Culture/DPC, 2007:18). This institution also indicates that from those who have attended initial teacher education, as many as 19 163 (36.11%) attended CFPP after having concluded Grade 7. Another issue to consider is that the figures from the Ministry of Education and Culture/DPC show that the 7 235 (13%) of teachers with IMAP certificates are the second model in terms of certificates held by teachers in primary education.

Grades 1 and 2 are the foundation for the lowest primary education as they provide and/or develop language and calculation skills. The incidence of teachers from IMAP, ADPP, IMP and MP in Grades 1 and 2 can be interpreted as an indication of the great concern from schools to the MEC to improve learning in lower primary education, essentially with respect to reading and writing skills and Mathematics. However, due to the shortage of qualified teachers, teachers from CFPP and those without any qualification are still being appointed in Grades 1 and 2, mainly in provinces like Sofala, Cabo Delgado and Nampula.

A comparison of professional qualifications among the teachers from the 6 provinces indicates that Maputo and Maputo-Cidade have the highest percentage of qualified teachers from higher education and from IMAP/ADPP and IMP/MP. Conversely those provinces have the lowest percentage of CFPP. The Province of Maputo and Maputo-Cidade are neighbouring provinces and the same happens with the capitals which are also close. The capital of Maputo-Cidade, Maputo-Cidade, is 8 kilometres from Matola, the capital of Maputo. This suggests to me that, combined with the opportunities to attend secondary schools previously mentioned, the teachers from these provinces take advantage of the diversity of teacher education programmes provided in both towns.

Although the inclusion of higher education courses had been indicated in Maputo-Cidade during the pilot test, an examination of Table 4.7 denotes a shortage of teachers certificated by higher education in that province. This clearly suggests that, in primary schools, highly qualified teachers are not appointed to Grades 1 and 2.

Comparing the percentage of academic qualifications with professional ones, in the whole sample and by province and gender, I found little differences in the data displayed in Table 4.5 (academic qualifications) and 4.8 (professional qualifications). Such differences suggest that a percentage of teachers, having completed the professional qualification they need to be appointed as a primary school teacher, continue their education and increase their academic level. In such cases, with respect to the statistical data represented in Table 4.7, one can assume that the 36.87% of teachers with CFPP certificates have passed junior secondary education. A similar interpretation could be offered for the 37.54% from IMAP/ADPP or IMP/MP. Additionally, the results from junior and senior secondary education could include the academic level of teachers with no qualification (23.74%). Of the 0.97% who hold higher education certificates 0.68% have a professional qualification. This suggests that when the teachers cannot enrol in teacher education institutions, they attend other higher education programmes provided by private institutions.

On considering the statistical data specified in Table 4.5 and 4.8, it becomes clear that the majority of primary school teachers from this study were waiting for opportunities to be enrolled in the next level of academic or professional education and have achieved these levels.

| Professional Qualification | Frequency % | Gender | | Total |
|----------------------------|-------------|--------|-------|--------|
| | | Female | Male | |
| No qualification | Frequency | 169 | 73 | 242 |
| | % | 69.93 | 30.17 | 100.00 |
| CFPP | Frequency | 242 | 136 | 378 |
| | % | 64.02 | 35.98 | 100.00 |
| IMP/MP | Frequency | 25 | 10 | 35 |
| | % | 71.43 | 28.57 | 100.00 |
| IMAP/ADPP | Frequency | 286 | 64 | 350 |
| | % | 81.71 | 18.29 | 100.00 |
| Higher education | Frequency | 3 | 4 | 7 |
| | % | 42.86 | 57.14 | 100.00 |
| Total | Frequency | 725 | 287 | 1 012 |
| | % | 71.64 | 28.36 | 100.00 |

Table 4.8: Frequency of the professional qualification of teachers according to gender

The values of the Chi-square tests on the comparison of the professional qualifications of the teachers from the six provinces by gender are represented in the table below.

| Statistics | DF | Value | Probability |
|-----------------------------|----|---------|-------------|
| Chi-square | 4 | 31.5269 | <.0001 |
| Likelihood Ratio Chi-square | 4 | 32.2949 | <.0001 |
| Mantel-Haenszel Chi-square | 1 | 15.7233 | <.0001 |
| Phi Coefficient | | 0.1765 | |
| Contingency Coefficient | | 0.1738 | |
| Cramer's v | | 0.1765 | |

Table 4.9: Statistics of professional qualification according to gender

The professional qualification of teachers from this study vary significantly ($\chi^2 = 31.52$, $p = <0.05$). In this study there is a statistic relationship between professional qualification and gender. Males tend to be predominant in the old model of teacher education, like CFPP, while females tend to dominate in the new model like IMAP. As is the case in academic qualifications, the government policies on education have been encouraging female participation in teacher education, not only as an opportunity for girls' professional qualifications but also as a strategy to increase the number of female teachers. The assumption is that by increasing the number of female teachers the attendance of girls will be increased with special incidence in rural areas. This will accomplish the Mozambican government goals with respect to gender equity at all levels of education.

4.7.7 Years of Experience in Facilitating Learning

Question 8: How many years of teaching experience do you have?

Table 4.10 illustrates the years of experience in facilitating learning. From the sample of this study it is evident that 370 (35.99%) have more than 10 years experience, 259 (25.19%) have 3-5 and 220 (21.40%) 6-10 years of experience. Of the 1 028 as many as 35 (3.4%) did not answer to the question. The teachers who had 1 year of experience were 85 (8.27%) and those with 2 years of experience were 59 (5.74%). With reference to the years of experience in facilitating learning, I found it of crucial importance to present all

data from the sample as facilitating learning in Grades 1 and 2 requires specific pedagogical skills.

| Province | Frequency % | Missing | Years of Teaching Experience | | | | | Total |
|---------------|----------------|---------|------------------------------|------|-------|-------|-------|--------|
| | | | 1 | 2 | 3-5 | 6-10 | 10+ | |
| Sofala | Frequency | 1 | 5 | 6 | 39 | 20 | 46 | 117 |
| | % | 0.85 | 4.27 | 5.13 | 33.33 | 17.09 | 39.32 | 100.00 |
| Cabo Delgado | Frequency | 6 | 8 | 6 | 57 | 36 | 33 | 146 |
| | % | 4.11 | 5.48 | 4.11 | 39.04 | 24.66 | 22.60 | 100.00 |
| Zambézia | Frequency | 6 | 3 | 15 | 75 | 49 | 95 | 270 |
| | % | 2.22 | 11.11 | 5.56 | 27.78 | 18.15 | 35.19 | 100.00 |
| Nampula | Frequency | 17 | 38 | 31 | 67 | 76 | 107 | 336 |
| | % | 5.06 | 11.31 | 9.23 | 19.94 | 22.62 | 31.85 | 100.00 |
| Maputo-Cidade | Frequency | 2 | 1 | 1 | 6 | 11 | 55 | 76 |
| | % | 2.63 | 1.32 | 1.32 | 7.89 | 14.47 | 72.37 | 100.00 |
| Maputo | Frequency | 3 | 3 | | 15 | 28 | 34 | 83 |
| | % | 3.61 | 3.61 | | 18.07 | 33.73 | 40.96 | 100.00 |
| Total | Frequency | 35 | 85 | 59 | 259 | 220 | 370 | 1 028 |
| | % | 3.4 | 8.27 | 5.74 | 25.19 | 21.40 | 35.99 | 100.00 |

Table 4.10: Teaching experience of the teachers

Data from the 6 provinces involved in this study indicate that there were 85 (8.27%) teachers facilitating Grades 1 and 2 in their first year of employment. In total 59 (5.74%) teachers were appointed in their second year of working. The data suggest that the schools preferably appoint the less experienced teachers to Grades 1 and 2. In addition, in relation to the newly appointed teachers, the difference between the percentages can be understood as an indication that in the second year of employment the teachers are appointed to other grades rather than Grades 1 and 2.

4.7.8 Shifts Currently Taught per Day at the School

Question 9: How many shifts at each school you are currently teaching per day?

In primary schools all teachers have at least one class, even those who have pedagogical duties. As can be observed in Table 4.11, of the 1 028 who took part in this study, 852 (82.88%) teachers had only one shift at their own school, 162 (15.7%) had 2 shifts, 8 (0.78%) had 3 shifts and as few as 6 (0.58%) had 4. From question 9, I intended to determine the teachers' overload since Grades 1 and 2 are supposed to be demanding in

terms of planning of learning opportunities, production of learning materials and facilitating learning.

| Province | Frequency % | Number of Shifts at Own School | | | | Total |
|---------------|----------------|--------------------------------|----------|---------|----------|--------|
| | | 1 Shift | 2 Shifts | 3Shifts | 4 Shifts | |
| Sofala | Frequency | 102 | 15 | | | 117 |
| | % | 87.18 | 12.82 | | | 100.00 |
| Cabo Delgado | Frequency | 139 | 4 | | 3 | 146 |
| | % | 95.21 | 2.74 | | 2.05 | 100.00 |
| Zambézia | Frequency | 188 | 81 | 1 | | 270 |
| | % | 69.63 | 30.00 | 0.37 | | 100.00 |
| Nampula | Frequency | 301 | 27 | 5 | 3 | 336 |
| | % | 89.58 | 8.04 | 1.49 | 0.89 | 100.00 |
| Maputo-Cidade | Frequency | 69 | 5 | 2 | | 76 |
| | % | 90.79 | 6.58 | 2.63 | | 100.00 |
| Maputo | Frequency | 53 | 30 | | | 83 |
| | % | 63.86 | 36.14 | | | 100.00 |
| Total | Frequency | 852 | 162 | 8 | 6 | 1 028 |
| | % | 82.88 | 15.76 | 0.78 | 0.58 | 100.00 |

Table 4.11: Number of shifts currently taught per day at the school

Comparing the number of shifts among the 6 provinces, the results show that in provinces such as Maputo and Zambézia there are more teachers facilitating learning in 2 shifts.

| Province | Frequency % | Number of Shifts at the Additional School 1 | | | Total |
|---------------|----------------|---|---------|----------|--------|
| | | Missing | 1 Shift | 2 Shifts | |
| Sofala | Frequency | 111 | 6 | | 117 |
| | % | 99.87 | 5.13 | | 100.00 |
| Cabo Delgado | Frequency | 138 | 8 | | 146 |
| | % | 94.52 | 5.48 | | 100.00 |
| Zambézia | Frequency | 250 | 19 | 1 | 270 |
| | % | 92.59 | 7.04 | 0.37 | 100.00 |
| Nampula | Frequency | 318 | 17 | 1 | 336 |
| | % | 94.64 | 5.06 | 0.30 | 100.00 |
| Maputo-Cidade | Frequency | 80 | 3 | | 76 |
| | % | 96.39 | 3.62 | | 100.00 |
| Maputo | Frequency | | 53 | 30 | 83 |
| | % | | 63.86 | 36.14 | 100.00 |
| Total | Frequency | 970 | 56 | 2 | 1 028 |
| | % | 94.36 | 5.45 | 0.19 | 100.00 |

Table 4.12: Shifts currently taught per day at the additional school 1

The data concerning the shifts currently taught per day at the additional school 1 (V10) show that 970 (94.36%) teachers did not mark this option. The results suggest that the respective teachers had no shifts at the additional school 1.

| Province | Frequency % | Number of Shifts at the Additional School 2 | | | Total |
|---------------|----------------|---|---------|----------|--------|
| | | Missing | 1 Shift | 2 Shifts | |
| Sofala | Frequency | 116 | | 1 | 117 |
| | % | 99.15 | | 0.85 | 100.00 |
| Cabo Delgado | Frequency | 145 | | 1 | 146 |
| | % | 99.32 | | 0.68 | 100.00 |
| Zambézia | Frequency | 268 | 1 | 1 | 270 |
| | % | 99.26 | 0.37 | 0.37 | 100.00 |
| Nampula | Frequency | 336 | | | 336 |
| | % | 100.00 | | | 100.00 |
| Maputo-Cidade | Frequency | 76 | | | 76 |
| | % | 100.00 | | | 100.00 |
| Maputo | Frequency | 83 | | | 83 |
| | % | 100.00 | | | 100.00 |
| Total | Frequency | 1024 | 1 | 3 | 1 028 |
| | % | 99.61 | 0.10 | 0.29 | 100.00 |

Table 4.13: Shifts currently taught per day at the additional school 2

Table 4.13 represents the results of the number of shifts which the 1 028 teachers of the sample had at additional school 2. Of these, 1 024 (99.61%) did not mark the option, and 3 (0.29%) indicated that they had 3 shifts and as few as 1 (0.10%) indicated that she had 1 shift. The answers missing in V11 indicate 0 additional shifts. The 1 024 respondents have no shifts in additional school 2. I launched this study thinking that a percentage of teachers in towns and surrounding districts, particularly in Maputo-Cidade and Maputo, had more than 1 shift at their own school owing to the shortage of teachers in primary education. Furthermore, I thought teachers worked in more than one school in order to increase their income and obtain means to afford their academic and/or professional qualification.

4.7.9 Hours Spent on Lesson Planning per Week

Question 10: How many hours, on average, do you spend on lesson planning per week?

In the academic year of 2007 the teachers from all public schools in Mozambique used to carry out joint planning every two weeks as part of curriculum development at school level and mutual support among the teachers. The teachers carried out this activity organised in groups of grades on Saturdays during sessions of 2-4 hours, according to a schedule previously established in each district or province. I intended to obtain information about the time used for the planning of learning opportunities (lessons). In

total 370 (35.99%) said that they spend 1-5 hours on lesson planning, while 292 (28.40%) spend 6-10 hours and 274 (26.65%) spend more than 10 hours. Table 4.14 provides the statistical data of the hours, in average, spent on lesson planning per week.

| Province | Frequency % | Missing | Hours spent on Lesson Planning per Week | | | Total |
|-------------------|----------------|---------|---|-------|-------|--------|
| | | | 1-5 | 6-10 | 10+ | |
| Sofala | Frequency | 43 | 33 | 37 | 117 | |
| | % | 4 | 36.75 | 28.21 | 31.62 | 100.00 |
| Cabo | Frequency | 3.42 | 63 | 30 | 39 | 146 |
| Delgado | % | 14 | 43.15 | 20.55 | 26.71 | 100.00 |
| Zambézia | Frequency | 9.59 | 133 | 67 | 48 | 270 |
| | % | 22 | 49.26 | 24.81 | 17.78 | 100.00 |
| Nampula | Frequency | 8.15 | 71 | 122 | 111 | 336 |
| | % | 32 | 21.13 | 36.31 | 33.04 | 100.00 |
| Maputo- Cidade | Frequency | 9.52 | 36 | 15 | 17 | 76 |
| | % | 8 | 47.37 | 19.74 | 22.37 | 100.00 |
| Maputo | Frequency | 10.53 | 24 | 25 | 22 | 83 |
| | % | 12 | 28.92 | 30.12 | 26.51 | 100.00 |
| Total | Frequency | 14.46 | 370 | 292 | 274 | 1 028 |
| | % | 92 | 35.99 | 28.40 | 26.65 | 100.00 |

Table 4.14: Hours on average spent on lesson planning per week

4.7.10 Number of In-Service Education Programmes Attended From 2004-2007

Question 11: How many formal short in-service education programmes have you attended from 2004 to 2007?

Table 4.15 illustrates that the majority of teachers, 712 (69.26%), attended 1-5 in-service education programmes (INSEP) whereas 171 (23.64%) attended more than 5 in-service education programmes and 73 teachers (7.10%) did not answer the question. The number of INSEP attended indicated by the teachers from 2004-2007 suggests that there was at least one programme per year to prepare the teachers on matters of learning facilitation. The data provide a clear indication that teachers attended a significant number of PDPs presented by the provinces and district supported by the National Institute for Development of Education and the Ministry of Education to ensure the introduction of the new curriculum for basic education in 2004. These programmes include objectives, content knowledge and pedagogical skills. During the INSEP, the central activity consisted of the presentation of the new content and syllabus and practising the new approaches to facilitating learning. From 2004 PDPs on the new curriculum continued

being a priority for the next academic years, mostly during the break between the trimester and semester. The data also suggest that INSEP appear to play an important role in complementing the pre-service education provided by teacher education colleges. The importance of INSEP is increased in the Mozambican educational context, where pre-service education takes place during one academic year. Therefore INSEP appears to be one of the best opportunities teachers have for the acquisition and/or development of specific particularities of the process of facilitating learning. Table 4.15 presents the results related to INSEP attended.

| Province | Frequency % | In-service Education Programmes Attended | | | |
|---------------|----------------|--|-------|-------|--------|
| | | Missing | 1-5 | 5+ | Total |
| Sofala | Frequency | 1 | 80 | 36 | 117 |
| | % | 0.85 | 68.38 | 30.77 | 100.00 |
| Cabo Delgado | Frequency | 8 | 118 | 20 | 146 |
| | % | 5.48 | 80.82 | 13.70 | 100.00 |
| Zambézia | Frequency | 8 | 210 | 52 | 270 |
| | % | 2.96 | 77.78 | 19.26 | 100.00 |
| Nampula | Frequency | 49 | 163 | 124 | 336 |
| | % | 14.58 | 48.51 | 36.90 | 100.00 |
| Maputo-Cidade | Frequency | 3 | 63 | 10 | 76 |
| | % | 3.95 | 82.89 | 13.16 | 100.00 |
| Maputo | Frequency | 4 | 78 | 1 | 83 |
| | % | 4.82 | 93.98 | 1.20 | 100.00 |
| Total | Frequency | 73 | 712 | 171 | 1 028 |
| | % | 7.10 | 69.26 | 23.64 | 100 |

Table 4.15: Number of in-service education programmes attended from 2004-2007

4.7.11 Two Most Valuable Topics

Question 12: Indicate the two most valuable topics that have been focused on in the in-service education programmes which you attended.

Table 4.16 displays the data regarding the most valuable topics that have been focused on in the INSEP that the teachers have attended. In this regard the teachers participating in this study were asked to mention the two most valuable topics. Since the question includes two variables (V14 & V15), I got two topics from each respondent. Therefore, to accommodate this procedure statistically, the sample size (1 028 respondents) was multiplied by two. Consequently the total frequencies to be considered for the responses is 2 056.

I formulated this question to elicit teachers' perception concerning to the topics focused on in the INSEP they have participated in during the past four years. The teachers' perceptions with regard to those topics indicate 982 (60.73%) responses related to methods of facilitating learning, 320 (19.79%) to curriculum, 153 (9.46%) indicated other topics than those directly related to educational practices, 109 (6.74%) indicated assessment, 53 (3.28%) indicated professional development and there were 439 (21.35%) omitted responses. The discussion on the most valuable topics mentioned by the teachers participating in this study, from the highest to the lowest percentages, follows in Table 4.16

| Province | Frequency % | The Two Most Valuable Topics | | | | | Total |
|---------------|----------------|------------------------------|-------|--------|----------|-------|--------|
| | | Curr | MFL | Assess | Prof Dev | Other | |
| Sofala | Frequency | 41 | 105 | 6 | 1 | 27 | 180 |
| | % | 22.78 | 58.33 | 3.33 | 0.56 | 15.00 | 100.00 |
| Cabo Delgado | Frequency | 69 | 164 | 9 | 2 | 5 | 249 |
| | % | 27.71 | 65.86 | 3.61 | 0.80 | 2.01 | 100.00 |
| Zambézia | Frequency | 91 | 226 | 20 | 38 | 59 | 434 |
| | % | 20.97 | 52.07 | 4.61 | 8.76 | 13.59 | 100.00 |
| Nampula | Frequency | 76 | 387 | 58 | 12 | 36 | 569 |
| | % | 13.36 | 68.01 | 10.19 | 2.11 | 6.33 | 100.00 |
| Maputo-Cidade | Frequency | 16 | 40 | 16 | 0 | 12 | 84 |
| | % | 19.05 | 47.62 | 19.05 | 0.00 | 14.29 | 100.00 |
| Maputo | Frequency | 27 | 60 | 0 | 0 | 14 | 101 |
| | % | 26.73 | 59.41 | 0.00 | 0.00 | 0.87 | 100.00 |
| Total | Frequency | 320 | 982 | 109 | 53 | 153 | 1 617 |
| | % | 19.79 | 60.73 | 6.74 | 3.28 | 9.46 | 100.00 |

Table 4.16: Frequency of the two most valuable topics according to province

Legend

Curr = Curriculum; MFL = Methods of facilitating learning; Assess = Assessment; Prof dev = professional development

Methods of facilitating learning

Methods of facilitating learning guide the teachers in selecting or producing learning materials. On considering methods of facilitating learning, the teachers pointed out general and specific aspects of this topic. In relation to general aspects, they referred to the knowledge and skills acquired on planning learning opportunities, classroom practices and improvising learning materials by using local resources. With regard to specific aspects, they mentioned subjects such as Mathematics, Portuguese and Science.

With regard to Mathematics, the teachers mostly indicated methods of facilitating learning of numbers, progressive and regressive counting and calculation. When referring to Portuguese, the teachers mainly indicated methods of facilitating learning of initial reading and writing skills, reading and interpretation of texts and the relationship between image and text. In relation to Sciences (Natural Sciences, Social Sciences and Integrated Sciences) they mentioned the methods of facilitating learning, environment and ecosystems. The responses to question 12 are summarised in Table 4.17.

I came to understand that the majority of responses (60.73%) represented in Table 4.16 indicate clearly that the methods of facilitating learning are related to what teachers are doing. Therefore they regard them as the most valuable topics. Additionally, methods of facilitating learning were the main, and sometimes the unique topic of CPD activities and/or programmes and of supervision and inspection led by the MINED and provincial and district directorates. Furthermore, the findings suggest that, on the one hand, the professional qualification currently provided does not meet the teachers' needs concerning methods of facilitating learning and, on the other hand, the teachers are aware of the weaknesses of the qualification obtained.

Curriculum

The 320 (19.79%) responses about curriculum covered matters such as curriculum transformation and curriculum development. On referring to curriculum transformation, the process carried out by INDE which culminated in the implementation of the new curriculum, the teachers listed topics like curriculum implementation, the process of curriculum transformation itself and local curriculum as one of the innovations introduced by the new curriculum since 2004. The responses concerning curriculum development comprise what the teachers had learned with respect to sequencing learning units. Regarding the findings about curriculum, I got the impression that the teachers were interested in the new changes in education.

Other

The responses covered issues such as HIV/AIDS, gender and health, hygiene and safety. In relation to HIV/AIDS, the respondents referred to both discussions and current sensitisation at local and national level about HIV/AIDS and the prevention of the

disease. The responses include gender equity and girls' education and dropout among girls. With respect to health, hygiene and safety the responses comprise *saúde escolar* (procedures to ensure good health of the learners) and malaria.

Assessment

In lowest primary education, Grades 1-5, there are 3 approaches to assess, namely diagnostic, formative and summative assessment. Formative assessment is the main approach used to verify the quality of the learners' learning. This approach uses a variety of tools to collect information according to the nature of the learning and the context in which the learning occurred (MEC-Moçambique, 2008).

The main issues indicated by the teachers included the meaning of assessment, the types of assessment, how to assess the learner and define the learner record. The responses indicated in Table 4.16 suggest that, apart from the knowledge and skills provided by teacher education colleges to the student-teachers and by the programmes provided to those who enter in the teaching profession without a professional qualification, regular PDPs provided by ZIPs and other providers do focus on learner assessment. Although only 109 (6.74%) of responses selected assessment as the most valuable topic, the issues raised mostly comprise areas of concern about learning in lower primary education. In this respect it is important to note that learners in lowest primary education show low performance when assessed against the outcomes specified by the grade. This weakness in Mozambican education is related to a variety of factors, including assessment conducted by under-qualified teachers.

Professional development

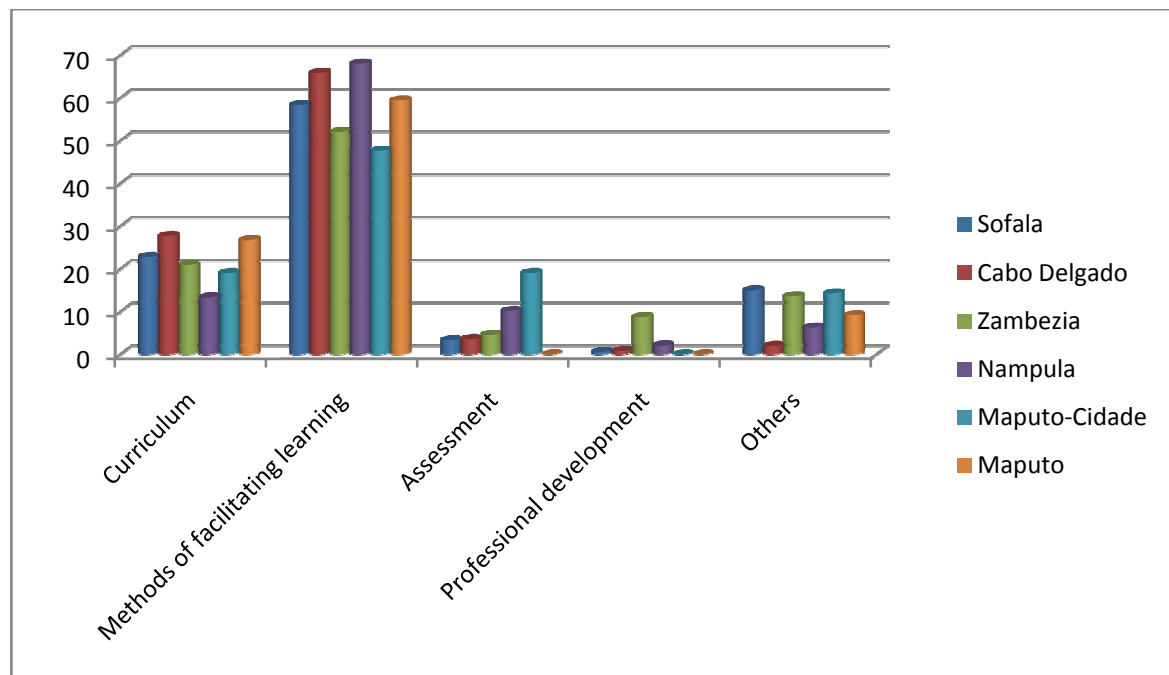
The results displayed in Table 4.16 indicate that 53 (3.28%) of teachers participating in this study said that professional development was the most valuable topic throughout the in-service education programmes they participated in from 2004 to 2007. From this perspective the issues of professional development derived from the responses are broadly related to what teachers focus on when facilitating learning and specific behaviours that enable and guide the teaching profession. Therefore the responses related to professional development mainly included pedagogical knowledge, syllabus design and the analysis of the learners' achievement. Regularly at school or ZIP level teachers discuss the level of

accomplishment of the syllabus to ensure that the learning opportunities embrace the content established for the period of the academic year. The teachers have to mention the content of the syllabus and the related pages from the textbook as a component of curriculum management. Looking at the responses, it appears that this activity has been of great relevance for teachers' professional development. Another topic mentioned in the responses was the teacher profile. Teacher profile is still an undecided component of the teaching profession in Mozambique owing to the variety of teacher qualifications. However, there is some consensus in terms of the need to be professionally qualified and ethical issues of the teaching profession.

Regarding the most valuable topics indicated in Table 4.17 it should be of value to note the great difference among the findings. This clearly suggests that methods of facilitating learning are the most preferred topic for the PDP.

A comparison of the results within each province indicates that the most valuable topics vary from province to province. Figure 4.5 illustrates the two most valuable topics according to province:

Figure 4.5: Representation of the two most valuable topics according to province



| Category | Response | Frequency |
|--|--|-----------|
| Curriculum | Curriculum transformation | 283 |
| | The process of curriculum transformation | |
| | Implementation of the new curriculum | |
| | Learner-centred approach | |
| | The new subjects and content | |
| | Introduction of bilingual education | |
| | (Semi-)automatic promotion | |
| | Local curriculum | |
| | The basic kit of learning material | |
| | Reintroduction of pre-school | |
| Methods of Facilitating Learning | Curriculum development | 36 |
| | Sequencing learning units | |
| | Methods of facilitating learning | 593 |
| | Improvement of the quality of teaching and learning | |
| | Improvement of pedagogical practices | |
| | Teaching methods/methodologies | |
| | Planning of learning opportunities | |
| | Improvement of the learning process | |
| | Teaching in large classes | |
| | Teaching multiple grade classes | |
| | <i>Aula modelo</i> (“standard” learning opportunity) | |
| | Working with disabled children | |
| | Elaboration: teachers and learners | |
| | Microteaching | |
| | Improvising learning material using local resources | |
| | CRESCER | |
| | Inclusive education | |
| | Methods of Facilitating Mathematics | 95 |
| | Counting – progressive and regressive counting | |
| | Numeracy | |
| | Maths pace | |
| | Geometry | |
| | Sum, subtraction, multiplication and division | |
| Mental calculation | | |
| Methods of Facilitating Portuguese | 254 | |
| Graphics | | |
| Initial reading and writing skills | | |
| Vowels, phonetics combination and letters | | |
| Introduction of the alphabet | | |
| Reading and interpretation of texts | | |
| Relationship between image-text | | |
| Spelling | | |
| Speaking | | |
| Methods of Facilitating (Integrated) Sciences | 47 | |
| Environment | | |
| Ecosystem | | |
| Natural Sciences | | |
| Social Sciences | | |

| | | |
|---|--|-----|
| Assessment | Assessment | 109 |
| | Types of evaluation | |
| | Assessment for a quality learning | |
| | What does assessment mean? | |
| | How to assess the learner | |
| Professional Development | How to define learner records | |
| | Accomplishment of the syllabus | 53 |
| | Improvement of my knowledge in the pedagogical field | |
| | Analysis of learners' achievement | |
| | Analysis of the trimester | |
| | Teacher profile | |
| Administrative tasks | Administrative tasks | 15 |
| | Fulfilment of maps | |
| | School management | |
| Gender issues | Gender issues | 28 |
| | Dropout among girls | |
| | Gender equity/girls' education | |
| | Teaching on gender perspective | |
| Health and hygiene and safety in streets | Health and hygiene and safety in streets | 22 |
| | General health issues | |
| | Malaria | |
| Other | HIV/AIDS | 57 |
| | (Debates) about HIV/AIDS | |
| | The teacher and HIV stigma | |
| | How to prevent HIV/AIDS | |
| | How to live with a positive HIV | |
| | | |
| Research | Research | 4 |
| | Research methods | |
| | Techniques for data collection | |
| Human rights and democracy | Human rights and democracy | 8 |
| | Right to education | |
| | Street children | |
| | Dropout | |
| Environmental education | Environmental education | 10 |
| | | |

Table 4.17: Summary of the most valuable topics

4.7.12 Usefulness of In-Service Education Programmes

Question 13: To what extent do you think that these programmes, in general, were useful in improving your professional learning?

As indicated in Table 4.18, in general the respondents said that the INSEP were very useful in improving their professional learning. A total of 603 (58.66%) said that the programmes were very useful, 308 (29.96%) said that they were useful, 50 (4.86%) said that they were not very useful or useless. Although 67 (6.52%) of the teachers did not answer the question, when joining the percentages of responses of the options very useful (58.66%) and useful (29.96%), the result shows that the rate of usefulness was 89.62%. I interpreted this result as an indication of the relevance of INSEP for the teachers.

| Province | Frequency % | Missing | The Extent of Usefulness | | | Total |
|-------------------|----------------|---------|--------------------------|--------|--|--------|
| | | | Very useful | Useful | Quite useful/ Not very useful/ Useless | |
| Sofala | Frequency | 3 | 69 | 29 | 16 | 117 |
| | % | 2.56 | 58.97 | 24.79 | 13.68 | 100.00 |
| Cabo Delgado | Frequency | 6 | 97 | 37 | 6 | 146 |
| | % | 4.11 | 66.44 | 25.34 | 4.11 | 100.00 |
| Zambézia | Frequency | 5 | 142 | 110 | 13 | 270 |
| | % | 1.85 | 52.59 | 40.74 | 4.81 | 100.00 |
| Nampula | Frequency | 19 | 216 | 94 | 7 | 336 |
| | % | 5.68 | 64.29 | 27.98 | 2.08 | 100.00 |
| Maputo- Cidade | Frequency | 17 | 42 | 14 | 3 | 76 |
| | % | 22.37 | 55.26 | 18.42 | 3.95 | 100.00 |
| Maputo | Frequency | 17 | 37 | 24 | 5 | 83 |
| | % | 20.48 | 44.58 | 28.92 | 6.02 | 100.00 |
| Total | Frequency | 67 | 603 | 308 | 50 | 1 028 |
| | % | 6.52 | 58.66 | 29.96 | 4.86 | 100 |

Table 4.18: Frequency of the extent to which in-service education programmes were useful according to province

4.7.13 Areas in Which the Teachers Made Progress

Question 14: Having participated in in-service education programmes, indicate two areas in which you made progress.

The table which follows, Table 4.19, displays the data of the areas in which the teachers have made progress. With reference to question 14, the teachers participating in this study were asked to indicate two areas in which they made progress. Since the question includes two variables (V14 & V15), I got two topics from each respondent. Therefore, to accommodate this procedure statistically, the sample size (1 028 respondents) was multiplied by two. Then the total frequencies to be considered for the responses are 2 056.

The teachers' perception with respect to the two areas in which they made progress varies substantially. In total 927 (64.55%) responses included methods of facilitating learning, 167 (11.63%) included curriculum, 163 (11.35%) indicated assessment, 134 (9.32%) other topics and 45 (3.13%) included administrative tasks. There were 620 (30.15%) negative responses. In this regard they mentioned as the most valuable topics issues such as current sensitisation about HIV/AIDS and environmental education at local and national level. When compared with the most valuable topics, the findings indicate that professional development was replaced by administrative tasks.

The representation of the areas in which the teachers have made progress follows in Table 4.19.

| Province | Frequency % | Two Most Valuable Topics | | | | | Total |
|---------------|----------------|--------------------------|-------|--------|----------|-------|--------|
| | | Curr | MFL | Assess | Prof dev | Other | |
| Sofala | Frequency | 10 | 103 | 2 | 3 | 21 | 139 |
| | % | 7.19 | 74.10 | 1.44 | 2.16 | 15.11 | 100.00 |
| Cabo Delgado | Frequency | 39 | 145 | 35 | 5 | 2 | 226 |
| | % | 17.26 | 64.16 | 15.49 | 2.21 | 0.88 | 100.00 |
| Zambézia | Frequency | 43 | 211 | 36 | 28 | 74 | 392 |
| | % | 10.97 | 53.83 | 9.18 | 7.14 | 18.88 | 100.00 |
| Nampula | Frequency | 53 | 367 | 78 | 8 | 17 | 523 |
| | % | 10.13 | 70.17 | 14.91 | 1.53 | 3.25 | 100.00 |
| Maputo-Cidade | Frequency | 8 | 45 | 8 | 0 | 8 | 69 |
| | % | 11.59 | 65.22 | 11.59 | 0.00 | 11.59 | 100.00 |
| Maputo | Frequency | 14 | 56 | 4 | 1 | 12 | 87 |
| | % | 16.09 | 64.37 | 4.60 | 1.15 | 13.79 | 100.00 |
| Total | Frequency | 167 | 927 | 163 | 45 | 134 | 1 436 |
| | % | 11.63 | 64.55 | 11.35 | 3.13 | 9.33 | 100.00 |

Table 4.19: Frequency of the areas in which teachers made progress

Legend

Curr = Curriculum; MFL = Methods of facilitating learning; Assess = Assessment; Prof dev = professional development

Methods of facilitating learning

Methods of facilitating learning provide and/or deepen teachers' content knowledge and professional skills in order to manage the syllabus and specific subject methods. In addition they offer skills for classroom management. At school and ZIP level methods of facilitating learning approaches include providing learning materials for the different steps of the learning opportunity. Thus the high percentage of responses referring to

methods of facilitating learning was the topic in which the teachers had made progress. The first interpretation is that there is a weakness of the methods of facilitating learning, either as a result of the shortage of teacher education programmes in teacher education colleges, or from the activities carried out to provide professional skills to newly appointed teachers without professional qualifications as stated in Chapter 1. This weakness is reflected on the low mastery of methods of facilitating in Grades 1 and 2. The second interpretation is associated with the relevance of the topic to the teachers' practices. It appears that the teachers apply the acquired and/or developed knowledge and skills in their classes and make progress. The third interpretation is that PD has an impact on daily classroom practices.

Curriculum

In Mozambique the curriculum outcomes such as educational aims and objectives, school programmes for each grade, teachers' guides and some learning materials are centrally established and provided by the Ministry of Education. At micro-level such as at school and ZIP level, the teachers have little responsibility for curriculum development in terms of learning units. This is often done by the teachers in groups for grades. They have to sequence the learning units and indicate the learning tasks to be performed by the learners during the next two weeks and propose learning materials. After agreement has been reached among the teachers with respect to the units, each teacher is responsible for her/his own lesson plan and learning material.

The responses associated with curriculum point to curriculum as one of the most valuable (15.52%) considerations. The findings suggest that it is likely that curriculum issues are approached as information that has to be provided to the teachers rather than as a set of knowledge and skills to be used towards the improvement of classroom practices.

Assessment

The positive impact of assessment topics incorporated in PDPs is reflected in the percentage of responses included by the teachers. The difference between the percentages of responses (5.30%) represented in Table 4.19 and the percentage of responses represented in Table 4.20 (7.93%) is an indication that even though a certain group of teachers did not indicate assessment as one of the most valuable topics, they made

progress in this topic. Furthermore, the data suggest that assessment is a topic to be included in more PDP in order to improve teachers' knowledge and skills for learner assessment.

Other

Educational activities associated with local or national issues such as health and hygiene, gender equity, new endemic disease and environment sometimes feature at school. These activities involve the teachers and they are responsible for facilitating learning regarding these topics. These topics improve the teachers' knowledge and, to some extent, the classroom practices, in the sense that the knowledge acquired helps the way in which teachers approach those topics or related issues. The percentage of responses on other topics (6.52%) suggests that they have a positive impact on teacher professional development.

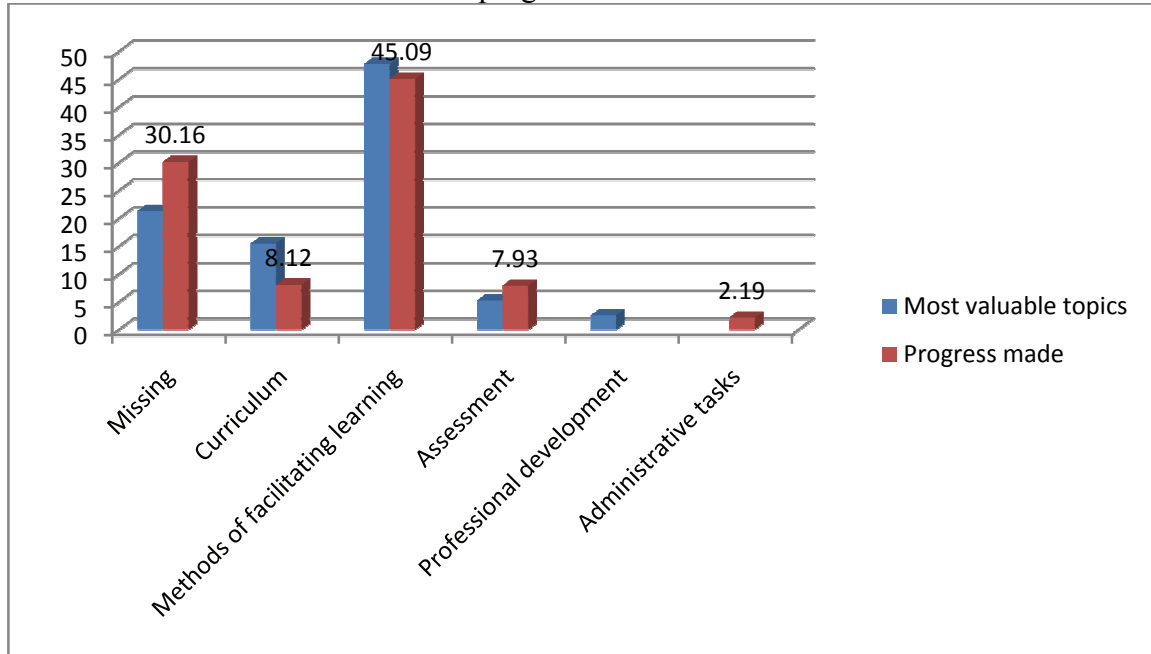
Administrative tasks

The General Regulation of Basic Education (REGEB) defines for all schools a set of 28 documents which form the *Escrituração Escolar* (School Book keeping). Eighteen of them are books and the other 10 are in the form of application forms. Apart from the application and book-keeping, teachers discuss the regulation in primary education concerning the functioning of primary schools, assessment, the teaching profession and other documents sent by the provincial directorate and the Ministry of Education.

Figure 4.6 below contains data regarding the most valuable topics and the progress made. When comparing the findings of the two areas in which teachers made progress and the two most valuable topics represented in Figure 4.6, the data indicate a higher percentage of missing responses in areas in which teachers made progress (30.16%) than for the two most valuable topics (21.35%). I interpreted the no response as an indication that teachers did not make progress after attending INSEP or, at least, did not find a specific classroom practice that had been directly influenced by INSEP. The area of methods of facilitating learning (MFL) continues to be indicated with a higher percentage of responses with 45.09%. The rates received in these variables show, on the one hand, the frequency of MFL throughout INSEP, and on the other hand, the relevance of that topic for the

teachers and the impact on facilitating learning. This means that teachers feel that MFL is a priority in INSEP for a successful classroom practice.

Figure 4.6: Comparison of percentages on the most valuable topics and the topics in which the teachers made progress



For the difference between the most valuable topic (15.52%) and progress made (8.12%) on curriculum issues, I had a positive interpretation. The first interpretation is that topics on curriculum comprise issues to be put into practice when facilitating learning and issues to be acquired as information about curriculum implementation. Curriculum issues were useful in terms of new information acquired with respect to the new subjects and new approaches to facilitating learning, bilingual education, the way in which to approach the local curriculum and other innovations introduced by the new curriculum from 2004.

Looking at Figure 4.5 the percentages on assessment indicate a lower percentage (5.30%) for this topic as the most valuable one than assessment as the topic in which the teachers made progress (7.93%). In relation to these results, my understanding is that facilitating learning, mainly in Grades 1 and 2, includes a large component of assessment while the teacher and learners approach the content in order to attain the specified objectives for the learning opportunity. In these grades each step of the learning opportunity is a mixture of feedback and new learning content. In this sense the results on assessment create the

impression that the topic on assessment was incorporated within the topic on MFL. The topic on assessment was rated lower.

With respect to the category on professional development the results shown in Figure 4.5 lead to a similar interpretation as the category on curriculum. Professional development was indicated as the most valuable topic (2.58%) and no response was obtained indicating this category as the topic in which the teachers made progress. It appears that the topics on PD during in-service education programmes were of an informative nature with no direct relationship to classroom practice. Conversely, administrative tasks had more to do with practical issues to be implemented at classroom level. As a result it was rated as the area in which teachers made progress (2.19%) and no response was obtained indicating this category as the most valuable topic.

The category on other topics obtained a higher percentage as the most valuable topic (7.44%) than the area in which the teachers made progress (6.52%). Others include a variety of topics as indicated in Table 4.20. These results suggest that most of the topics included in the calendar and activities of INSEP aim at empowering teachers with useful information, knowledge and skills. Therefore, the other topics or areas still represent preferred content to be approached during INSEP.

Table 4.20 bellow illustrates a summary of the topics mentioned by the teachers.

| Category | Response | Frequency |
|--|--|-----------|
| Curriculum | Curriculum transformation | 123 |
| | The new curriculum | |
| | Implementation of the new curriculum | |
| | Learner-centred approach | |
| | New subjects | |
| | Classroom practices on bilingual education | |
| | Local curriculum | |
| | (Semi-)automatic promotion | |
| | Curriculum development | 41 |
| | Sequencing units | |
| Defining objectives | | |
| Improvising learning materials using local resources | | |
| Basic kit of learning material | | |

| | |
|---|---|
| Methods of Facilitating Learning | <p>Methods of facilitating learning 592</p> <p>Improvement in the pedagogical field and classroom practices</p> <p>Improvement of teaching and learning process</p> <p>Acquiring knowledge to improve the learners' learning</p> <p>Improvement of the teacher quality</p> <p>Teaching in large classes</p> <p>Teaching multiple grade classes</p> <p>Working group (how to organise)</p> <p>Remedial learning tasks</p> <p>Working with disabled children</p> <p>OSUWELA project</p> <p>CRESCER Network</p> <p>Raising learner motivation/How to motivate the learner</p> <p>Planning of learning opportunities</p> <p>Use of local languages in teaching and learning</p> <p>Use of learning material and educational games</p> <p>Micro-teaching</p> <p>Inter-disciplinary</p> <p>Methods of facilitating mathematics 90</p> <p>Pace of the Mathematics learning</p> <p>Sum, subtraction, multiplication and division</p> <p>Mental calculation</p> <p>Counting</p> |
| Methods of Facilitating Learning | <p>Methods of Facilitating Portuguese 201</p> <p>Bilingual education</p> <p>Teaching methodology of Portuguese/how to teach</p> <p>Analytic-synthetic method</p> <p>Graphics and calligraphy</p> <p>Teaching methodology of initial reading and writing</p> <p>Reading and interpretation</p> <p>Teaching and learning of a letter/ Introduction of a new letter</p> <p>How to interpret images</p> <p>Introduction of the alphabet</p> <p>Speaking methodology</p> <p>Methods of Facilitating (Integrated) Sciences 53</p> <p>Natural Sciences</p> <p>Integrated sciences</p> <p>Physical Education 8</p> |

| | | |
|--|---|-----|
| Assessment | Assessment | 163 |
| | Types of evaluation | |
| | How to design a test | |
| | Learning and assessment | |
| | How to assess the learner | |
| | Continuing/systematic assessment | |
| | Regulation of assessment | |
| Programme evaluation | | |
| Adminis- trative tasks | Fulfilment of assessment maps | 45 |
| | Administrative tasks | |
| | Study of regulations in primary education | |
| Other | Research | 8 |
| | Direct observation | |
| | Parent involvement in the school | 8 |
| | Gender issues | 12 |
| | Dropout among girls | |
| | Girls' enrolment | |
| | Conflict management | 4 |
| | Improvement of knowledge | 9 |
| | Health and hygiene and safety in streets | 24 |
| | Health in schools | |
| How to prevent diseases | | |
| Malaria | | |
| Pulverisation and use of mosquito nets | | |
| HIV/AIDS | 71 | |
| How to prevent HIV/AIDS | | |

Table 4.20: Summary of the topics in which the teachers made progress

4.7.14 Emphasis of In-Service Education Programmes

Question 15: What do you think should be the emphasis of in-service education programmes?

Table 4.21 indicates the teachers' preference in terms of emphasis of INSEP. The option regarding *rectifying the teachers' weaknesses* was indicated by 638 (62.06%) teachers as the preferred emphasis of in-service education programmes. The second most indicated was *developing the teachers' strengths*, by 349 (33.95%). In total 41 (3.99%) teachers

did not answer the question. I included this question to find out what should be the starting point in carrying out a PDP. This means that the intention was to know whether teachers prefer a PDP which directly focuses on their weakness or, on the contrary, prefer to begin by focusing on what teachers actually know and, from it, the PDP embraces activities. As indicated in Table 4.21, the majority of teachers indicated that they prefer to be involved in a PDP that rectifies weaknesses, which might be an indication of areas that need improvement. This suggests that this approach is customary in PD and teachers are familiar with it. Furthermore, by being familiarised with such an approach, the 33.95% responses indicate that there also exists a perception among teachers that PDPs could be designed taking into consideration what the teachers know.

| Province | Frequency % | Emphasis of In-service Education Programmes | | | |
|---------------|----------------|---|------------------|-------|--------|
| | | Missing | Dev. Teach. Str. | RTW | Total |
| Sofala | Frequency | 3 | 44 | 70 | 117 |
| | % | 2.56 | 37.61 | 59.83 | 100.00 |
| Cabo Delgado | Frequency | 5 | 35 | 106 | 146 |
| | % | 3.42 | 23.97 | 72.60 | 100.00 |
| Zambézia | Frequency | 9 | 92 | 169 | 270 |
| | % | 3.33 | 34.07 | 62.59 | 100.00 |
| Nampula | Frequency | 9 | 130 | 197 | 336 |
| | % | 2.68 | 38.69 | 58.63 | 100.00 |
| Maputo-Cidade | Frequency | 10 | 26 | 40 | 76 |
| | % | 13.16 | 34.21 | 52.63 | 100.00 |
| Maputo | Frequency | 5 | 22 | 56 | 83 |
| | % | 6.02 | 26.51 | 67.47 | 100.00 |
| Total | Frequency | 41 | 349 | 638 | 1 028 |
| | % | 3.99 | 33.95 | 62.06 | 100.00 |

Table 4.21: Emphasis of in-service education programmes

Legend

Dev. Teach. Str. = Developing the teachers' strengths; RTW = Rectifying the teachers weaknesses

4.7.15 Aims of an In-Service Education Programme

Question 16: Consider the examples below. Indicate the 1st, 2nd and 3rd in order of importance for you as aims of an in-service education programme.

The tables which follow, Table 4.22, Table 4.23 and Table 4.24 display, respectively, the 1st, 2nd and 3rd in order of importance the aims of an INSEP indicated by the teachers participating in this study. The results indicated in Table 4.22 below show that 370

(41.7%) teachers indicated *increase the quality of learners' learning* as the 1st aim of an INSEP. The results displayed in Table 4.22 show that 290 (32.26%) indicated that the 2nd aim of an in-service education programme is to *improve pedagogical practices*. Lastly, the results displayed in Table 4.22 indicate that 371 (41.59%) indicated *allow experience sharing among teachers* as the 3rd aim. In total, there were 362 (11.74%) no responses to this question. These results clearly suggest the main aims of PD at ZIP level. In these ZIP meetings teachers used to present the problems they faced in their practice and discussed with fellow teachers the better strategies to solve them. Another aim of those meetings was to improve the teachers' subject knowledge and professional skills and to share the best practices experienced in each school of the ZIP.

Improving learners' learning was the fundamental aim of any in-service education programme. Therefore, looking at the results from question 16, I understood that the ZIP and other INSEP had been providing opportunities for teachers to improve learners' learning. Additionally, the responses indicated that the teachers acknowledged the advantages of the diversity of PDP providers in Mozambique.

| Professional Qualification | Freq % | Aims of an In-service Education Programme | | | | | Total |
|----------------------------|--------|---|-------|-------|-------|-------|--------|
| | | IQoLL | IPP | ETSN | SCTG | AEST | |
| No qualification | Freq | 87 | 54 | 12 | 27 | 46 | 226 |
| | % | 38.50 | 23.89 | 5.31 | 11.95 | 20.35 | 100.00 |
| CFPP | Freq | 149 | 73 | 11 | 47 | 60 | 340 |
| | % | 43.82 | 21.47 | 3.24 | 13.82 | 17.65 | 100.00 |
| IMP/MP | Freq | 15 | 6 | 1 | 3 | 4 | 29 |
| | % | 51.72 | 20.69 | 3.45 | 10.34 | 13.79 | 100.00 |
| IMAP/ADPP | Freq | 116 | 56 | 26 | 35 | 66 | 299 |
| | % | 38.80 | 18.73 | 8.70 | 11.71 | 22.07 | 100.00 |
| Higher education | Freq | 3 | 1 | 2 | 0 | 1 | 7 |
| | % | 42.86 | 14.29 | 28.57 | 0.00 | 14.29 | 100.00 |
| Total | Freq | 370 | 190 | 52 | 112 | 177 | 901 |
| | % | 41.07 | 21.09 | 5.77 | 12.43 | 19.64 | 100.00 |

Table 4.22: Aims of an in-service education programme – improving learning

Legend

Freq = Frequency; IQoLL= Increase the quality of learner's learning; IPP = Improve pedagogical practices; ETSN = Expand teachers subject knowledge; SCTG = Standardised content to be taught in each grade; AEST = Allow experience sharing among teachers.

Based on Chi-square tests on participating teachers' comparison of professional qualification by increase the quality of learners learning, the following can be deducted: The opinions of teachers participating in this study with respect to the aims of an in-service education programme do not vary significantly ($X^2 = 22.7926$, $p = >0.05$). There is no statistic relationship between professional qualifications and the view that to *increase the quality of learners learning* is the first aim of an in-service education programme. Teachers with no qualifications and those from the levels of professional qualifications referred to the same aim. It seems that the level of professional qualifications does not impact on the view of the aim of an in-service education programme.

| Professional Qualification | Freq % | Aims of an In-service Education Programme | | | | | Total |
|----------------------------|--------|---|-------|-------|-------|-------|--------|
| | | IQoLL | IPP | ETSN | SCTG | AEST | |
| No qualification | Freq | 36 | 77 | 38 | 45 | 30 | 226 |
| | % | 15.93 | 34.07 | 16.81 | 19.91 | 13.27 | 100.00 |
| CFPP | Freq | 37 | 118 | 59 | 75 | 51 | 340 |
| | % | 10.88 | 34.71 | 17.35 | 22.06 | 15.00 | 100.00 |
| IMP/MP | Freq | 1 | 11 | 8 | 6 | 2 | 28 |
| | % | 3.57 | 39.29 | 28.57 | 21.43 | 7.14 | 100.00 |
| IMAP/ADPP | Freq | 38 | 81 | 58 | 90 | 38 | 298 |
| | % | 12.75 | 27.18 | 17.11 | 30.20 | 12.75 | 100.00 |
| Higher education | Freq | 1 | 3 | 0 | 3 | 0 | 7 |
| | % | 14.29 | 42.86 | 0.00 | 42.86 | 0.00 | 100.00 |
| Total | Freq | 113 | 290 | 156 | 219 | 121 | 899 |
| | % | 12.57 | 32.26 | 17.35 | 24.36 | 13.46 | 100.00 |

Table 4.23: Aims of an in-service education programme – according to qualification

Legend

Freq = Frequency; IQoPL= Increase the quality of learners' learning; IPP = Improve pedagogical practices; ETSN = Expand teachers subject knowledge; SCTG = Standardised content to be taught in each grade; AEST = Allow experience sharing among teachers

Based on Chi-square tests the opinion of teachers participating in this study with respect to the second aim of an INSEP does not vary significantly ($X^2 = 22.1551$, $p = >0.05$). There is no statistic relationship between professional qualifications and the view that to *improve pedagogical practices* is the second aim of an INSEP programme. In this study only teachers certificated by IMAP/ADPP indicated a different aim of INSEP. In addition, teachers certificated by higher education institutions rated *standardised content to be taught in each grade* at the same level.

| Professional Qualification | Freq % | Aims of an In-service education Programme | | | | | Total |
|----------------------------|--------|---|-------|-------|-------|-------|--------|
| | | IQoLL | IPP | ETSN | SCTG | AEST | |
| No qualification | Freq | 52 | 18 | 23 | 44 | 87 | 224 |
| | % | 23.21 | 8.04 | 10.27 | 19.64 | 38.84 | 100.00 |
| CFPP | Freq | 64 | 38 | 35 | 58 | 144 | 339 |
| | % | 18.88 | 11.21 | 10.32 | 17.11 | 42.48 | 100.00 |
| IMP/MP | Freq | 7 | 1 | 3 | 3 | 14 | 28 |
| | % | 25.00 | 3.57 | 10.71 | 10.71 | 50.00 | 100.00 |
| IMAP/ADPP | Freq | 60 | 40 | 30 | 42 | 122 | 294 |
| | % | 20.41 | 13.61 | 10.20 | 14.29 | 41.50 | 100.00 |
| Higher education | Freq | 2 | 0 | 1 | 0 | 4 | 7 |
| | % | 28.57 | 0.00 | 14.29 | 0.00 | 57.14 | 100.00 |
| Total | Freq | 185 | 97 | 92 | 147 | 371 | 892 |
| | % | 20.74 | 10.87 | 10.31 | 16.48 | 41.59 | 100.00 |

Table 4.24: Aims of an in-service education programme – improving pedagogical practice

Legend

Freq = Frequency; IQoLL= Increase the quality of learners' learning; IPP = Improve pedagogical practices; ETSN = Expand teachers subject knowledge; SCTG = Standardise content to be taught in each grade; AEST = Allow experience sharing among teachers

Based on Chi-square tests the opinion of teachers participating in this study with respect to *allow experience sharing among teachers* as an aim of an in-service education programme does not vary significantly ($X^2 = 13.0303$, $p = >0.05$). There is no statistic relationship between professional qualifications and the view that to *allow experience sharing among teachers* is the third aim of an in-service education programme. In this study teachers with no qualifications and those from the levels of professional qualifications included in this study referred to the same aim. It seems that the level of professional qualifications does not impact on the view of the third aim of an in-service education programme.

4.7.16 Typical Characteristics of an In-Service Education Programme

Question 17: Consider the examples below. Indicate the 1st, 2nd and 3rd in order of what should be the typical of an effective in-service education programme.

In total, as Table 4.25 presents, 698 (22.63%) teachers indicated *based on effective pedagogical practices* as the first typical of an effective INSEP. The second was to *ensure regular follow-up of classroom practices* 693 (22.47%) and the third was to *promote continuity INSEP* 582 (21.53%). In total there were 327 (31.8%) no responses.

Pedagogical practices along with methods of facilitating learning were referred to as the most valuable topic (V14 & 15) and the priority in most INSEP in Mozambique in order to overcome the limitation of the teacher education programmes and the no attendance of professional courses. However, the follow-up and continuity were great constraints.

| Province | Frequency % | Typical Characteristics of an In-service Education Programme | | | | | Total |
|---------------|----------------|--|-------|--------|-------|-------|--------|
| | | BEPP | PILM | PCINEP | ERFCP | EAEP | |
| Sofala | Frequency | 90 | 35 | 77 | 86 | 60 | 351 |
| | % | 25.86 | 10.06 | 22.13 | 24.71 | 17.24 | 100.00 |
| Cabo Delgado | Frequency | 110 | 40 | 109 | 117 | 56 | 438 |
| | % | 25.46 | 9.26 | 25.23 | 27.08 | 12.96 | 100.00 |
| Zambézia | Frequency | 201 | 87 | 176 | 177 | 141 | 810 |
| | % | 25.70 | 11.13 | 22.51 | 22.63 | 18.03 | 100.00 |
| Nampula | Frequency | 215 | 90 | 216 | 216 | 94 | 1008 |
| | % | 25.87 | 10.83 | 25.99 | 25.99 | 11.31 | 100.00 |
| Maputo-Cidade | Frequency | 40 | 16 | 32 | 44 | 23 | 238 |
| | % | 25.81 | 10.32 | 20.65 | 28.39 | 14.84 | 100.00 |
| Maputo | Frequency | 42 | 28 | 54 | 53 | 32 | 249 |
| | % | 20.10 | 13.40 | 25.84 | 25.36 | 15.31 | 100.00 |
| Total | Frequency | 698 | 296 | 664 | 693 | 406 | 3 084 |
| | % | 25.32 | 10.74 | 24.08 | 25.14 | 14.73 | 100.00 |

Table 4.25: Typical characteristics of an effective in-service education programme

Legend

BEPP = Based on effective pedagogical practices; PILM = Promote improvising of learning material; PCINEP = Promote continuity of INEP; ERFCP = Ensure regular follow-up of classroom practices; EAEP = Ensure assessment by experienced persons

4.7.17 Preference for an In-Service Education Programme

Question 18: Consider the examples below. Indicate the 1st, 2nd and 3rd in order of preference of an in-service education programme that you prefer.

The data relating to teachers' preferences of INSEP are represented in Table 4.26, 4.28 and 4.29 below, indicating, respectively, the 1st, 2nd and 3rd in order of preference of in-service education programme. In Table 4.26, the results show that 335 (36.53%), teachers prefer *regular meetings* as the 1st model of an INSEP. the results displayed in Table 4.28 show that 360 (39.43%) indicated *peer observation* as the 2nd preferred model. Lastly, the results displayed in Table 4.29 indicate that 340 (37.28%) teachers indicated *classroom observation* as the 3rd preferred model.

Regular meetings are carried out by teachers from the same grade in order to discuss topics related to their classroom practices. Other types of meeting take place at ZIP level among teachers from different schools subdivided into groups or cycles or grades, and sometimes as whole groups of grades. Peer observation consists of observation carried out between teachers from the same grade according to a schedule previously established at a school. In turn, classroom observation consists of observation carried out by the deputy principal or by the grade delegate. Peer observation was the most widely used practice in primary schools as a model of professional development. The 3rd option of classroom observation suggests that, actually, the teachers prefer to be observed by fellow teachers rather than by the deputy principal and by the grade delegate as they feel that they are in the presence of someone who is in the same position.

| Qualification | Freq % | Preference for In-service Education Programme | | | | | | | Total |
|------------------|-----------|---|-------|-------|------|-------|------|-------|--------|
| | | RM | RD | PO | Sup | CO | W/S | R/Ss | |
| No qualification | Freq | 83 | 25 | 34 | 13 | 61 | 13 | 0 | 239 |
| | % | 36.24 | 10.92 | 14.85 | 5.68 | 26.64 | 5.68 | 0.00 | 100.00 |
| CFPP | Freq | 141 | 29 | 60 | 9 | 90 | 19 | 0 | 348 |
| | % | 40.52 | 8.33 | 17.24 | 2.59 | 25.86 | 5.46 | 0.00 | 100.00 |
| IMP/MP | Freq | 11 | 5 | 7 | 1 | 5 | 1 | 0 | 30 |
| | % | 36.27 | 16.67 | 23.33 | 3.33 | 16.67 | 3.33 | 0.00 | 100.00 |
| IMAP/ADPP | Freq | 100 | 34 | 61 | 6 | 80 | 23 | 0 | 304 |
| | % | 32.89 | 11.18 | 20.07 | 1.97 | 26.32 | 7.57 | 0.00 | 100.00 |
| Higher education | Freq | 0 | 1 | 2 | 0 | 2 | 0 | 1 | 6 |
| | % | 0.00 | 16.67 | 33.33 | 0.00 | 33.33 | 0.00 | 16.67 | 100.00 |
| Total | Freq | 335 | 94 | 164 | 29 | 238 | 56 | 1 | 917 |
| | % | 36.53 | 10.25 | 17.88 | 3.16 | 25.95 | 6.11 | 0.11 | 100.00 |

Table 4.26: Professional development by regular meetings

Legend

Freq = Frequency; RM = Regular meetings; RD = Regular dialogue; PO = Peer Observation; Sup = Supervision; CO = Classroom Observation, W/S = Workshop/Seminar; R/Ss = Reading/Self-study

Chi-square tests on participating teachers' comparison of professional qualifications by regular meeting revealed the following.

| Statistics | DF | Value | Probability |
|-----------------------------|----|----------|-------------|
| Chi-square | 24 | 172.8517 | <.0001 |
| Likelihood Ratio Chi-square | 24 | 32.9900 | 0.1043 |
| Mantel-Haenszel Chi-square | 1 | 1.0724 | 0.3004 |
| Phi Coefficient | | 0.4342 | |
| Contingency Coefficient | | 0.3982 | |
| Cramer's v | | 0.2171 | |

Table 4.27: Comparison of professional qualifications by regular meeting

The opinions of teachers participating in this study with respect to regular meetings vary significantly ($X^2 = 172.8517$, $p = <0.05$). There is a statistical relationship between professional qualifications and the view that to *meet regularly* is the first preferred model of an INSEP. It seems to be consistent with what is currently happening in primary schools. Teachers participate in group grade meetings every two weeks in order to plan and sequence learning units. In this study only the teachers with higher education qualifications indicated different models of an INSEP.

| Qualification | Freq % | Preference on In-service Education Programme | | | | | | | Total |
|------------------|--------|--|-------|-------|-------|-------|------|------|--------|
| | | RM | RD | PO | Sup | CO | W/S | R/Ss | |
| No qualification | Freq | 32 | 22 | 92 | 34 | 47 | 2 | 0 | 229 |
| | % | 13.97 | 9.61 | 40.17 | 14.85 | 20.52 | 0.87 | 0.00 | 100.00 |
| CFPP | Freq | 37 | 38 | 158 | 46 | 55 | 11 | 1 | 37.90 |
| | % | 10.69 | 10.98 | 45.56 | 13.29 | 15.90 | 3.18 | 0.29 | 100.00 |
| IMP/MP | Freq | 6 | 3 | 13 | 4 | 3 | 1 | 1 | 30 |
| | % | 20.00 | 10.00 | 43.33 | 13.33 | 10.00 | 3.33 | 0.00 | 100.00 |
| IMAP/ADPP | Freq | 50 | 47 | 96 | 48 | 49 | 11 | 1 | 302 |
| | % | 16.56 | 15.56 | 31.79 | 15.89 | 16.23 | 3.64 | 0.33 | 100.00 |
| Higher education | Freq | 2 | 0 | 1 | 1 | 2 | 0 | 0 | 6 |
| | % | 33.33 | 0.00 | 16.67 | 16.67 | 33.33 | 0.00 | 0.00 | 100.00 |
| Total | Freq | 127 | 110 | 360 | 133 | 156 | 25 | 2 | 913 |
| | % | 13.91 | 12.05 | 39.43 | 14.57 | 17.09 | 2.74 | 0.22 | 100.00 |

Table 4.28: Professional development by peer observation

Legend

Freq = Frequency; RM = Regular meetings; RD = Regular dialogue; PO = Peer Observation; Sup = Supervision; CO = Classroom Observation, W/S = Workshop/Seminar; R/Ss = Reading/Self-study

| Qualification | Freq | Professional Development by Classroom Observation | | | | | | | |
|------------------|------|---|------|-------|-------|-------|-------|------|--------|
| | | RM | RD | PO | Sup | CO | W/S | R/Ss | Total |
| No qualification | Freq | 31 | 17 | 29 | 44 | 80 | 27 | 1 | 229 |
| | % | 13.54 | 7.42 | 12.66 | 19.21 | 34.93 | 11.79 | 0.44 | 100.00 |
| CFPP | Freq | 47 | 20 | 38 | 44 | 143 | 51 | 1 | 344 |
| | % | 13.66 | 5.81 | 11.05 | 12.79 | 41.57 | 14.83 | 0.29 | 37.72 |
| IMP/MP | Freq | 2 | 1 | 3 | 7 | 12 | 5 | 0 | 10 |
| | % | 6.67 | 3.33 | 10.00 | 23.33 | 40.00 | 16.67 | 0.00 | 100.00 |
| IMAP/ADPP | Freq | 45 | 25 | 46 | 46 | 103 | 37 | 1 | 303 |
| | % | 14.85 | 8.25 | 15.18 | 15.18 | 33.99 | 12.21 | 0.33 | 100.00 |
| Higher education | Freq | 0 | 1 | 0 | 3 | 2 | 0 | 0 | 100.00 |
| | % | 0.00 | 16.6 | 0.00 | 50.00 | 33.33 | 0.00 | 0.00 | 100.00 |
| Total | Freq | 125 | 64 | 116 | 144 | 340 | 120 | 3 | 912 |
| | % | 13.71 | 7.02 | 12.72 | 15.79 | 37.28 | 13.16 | 0.33 | 100.00 |

Table 4.29: Professional development by classroom observation

Legend

Freq = Frequency; RM = Regular meetings; RD = Regular dialogue; PO = Peer Observation; Sup = Supervision; CO = Classroom Observation, W/S = Workshop/Seminar; R/Ss = Reading/Self-study

4.7.18 Factors that an In-Service Education Programme should be Sensitive to

Question 19: Consider the examples below. Indicate the 1st, 2nd and 3rd in order of the factors that an in-service education programme should be sensitive to.

The results indicated in Table 4.30 below show that 855 (31.24%) respondents indicated teaching methods as the 1st factor that an in-service education programme should be sensitive to, 784 (28.64%) indicated examples of case studies as best practice, 550 (20.09%) respondents indicated methods of facilitating adult learning. The majority of professional development activities are conducted at ZIP level by fellow teachers or pedagogical teams from the different education sectors. I intended to assess the importance the teachers attach to methods of facilitating adult learning in professional development activities. When comparing the percentage of responses that indicate teaching methods (31.24%) and the percentage of responses that indicate methods of facilitating adult learning (20.09%), my interpretation is that the majority of teachers are

not aware that the principles of facilitating learning for adults should be taken into consideration during continuing professional development programmes.

| Province | Frequency % | Factors Concerning an In-service Education Programme | | | | |
|-------------------|----------------|--|-------|------------------------|-------|--------|
| | | Teaching methods | MFAL | Individual learning | ECSBP | Total |
| Sofala | Frequency | 107 | 82 | 58 | 98 | 345 |
| | % | 31.01 | 23.77 | 16.81 | 28.41 | 100.00 |
| Cabo Delgado | Frequency | 136 | 75 | 92 | 126 | 429 |
| | % | 31.70 | 17.48 | 21.45 | 29.37 | 100.00 |
| Zambézia | Frequency | 242 | 147 | 170 | 223 | 782 |
| | % | 28.30 | 26.73 | 31.02 | 28.44 | 100.00 |
| Nampula | Frequency | 256 | 159 | 162 | 240 | 817 |
| | % | 7.69 | 18.66 | 19.48 | 16.86 | 100.00 |
| Maputo- Cidade | Frequency | 48 | 35 | 31 | 42 | 156 |
| | % | 30.77 | 22.44 | 19.87 | 26.92 | 100.00 |
| Maputo | Frequency | 66 | 52 | 35 | 55 | 208 |
| | % | 31.73 | 25.00 | 16.83 | 26.44 | 100.00 |
| Total | Frequency | 855 | 550 | 548 | 784 | 2 737 |
| | % | 31.24 | 20.09 | 20.02 | 28.64 | 100.00 |

Table 4.30: Factors that an in-service education programme should be sensitive to according to province

Legend

MFAL = Methods of facilitating adult learning; ECSBP = Examples of case studies of best practices

4.7.19 Preference Regarding the Duration of an In-service Education Programme

Question 20: Indicate your preference in terms of the duration of an in-service education programme.

Table 4.31 displays the results of the preferences regarding the duration of an INSEP. Each statement contains two components, namely the duration of the INSEP – 1-5 days – and the expected activity after the INSEP. My intention was, apart from the duration in terms of days, to determine whether the teachers are aware of the relevance of follow-up and reflection on what they have done after the INSEP. Otherwise they indicated that they preferred follow-up providing results from the INSEP which they had participated in.

Question 20 has 6 variables. This question asked the teachers to mark one or more variables. Therefore my expectation was to obtain 6 168 responses by multiplying the 6 variables by 1 028 teachers participating in this study. From the total, 447 (7,25%) respondents indicated 5 days with follow-up providing concrete results, 400 (6.49%) indicated 5 days with follow-up of reflection after 3 months and 298 (4,83%) indicated 2 days with follow-up providing concrete results. As Table 4.31 illustrates, the main component privileged in an INSEP is duration.

| Province | Frequency % | Preference on Duration of In-service Education Programme | | | | | | |
|---------------|----------------|--|--------|--------|--------|--------|--------|--------|
| | | 1d+Ref | 2d+Ref | 5d+Ref | 1d+Res | 2d+Res | 5d+Res | Total |
| Sofala | Frequency | 13 | 26 | 54 | 28 | 30 | 56 | 207 |
| | % | 6.28 | 12.56 | 26.09 | 13.53 | 14.49 | 27.05 | 100.00 |
| Cabo Delgado | Frequency | 24 | 30 | 61 | 45 | 51 | 89 | 300 |
| | % | 8.00 | 10.00 | 20.33 | 15.00 | 17.00 | 29.67 | 100.00 |
| Zambézia | Frequency | 37 | 73 | 116 | 45 | 64 | 113 | 448 |
| | % | 8.26 | 16.29 | 25.89 | 10.04 | 14.29 | 25.22 | 100.00 |
| Nampula | Frequency | 47 | 114 | 119 | 103 | 108 | 120 | 611 |
| | % | 7.69 | 18.66 | 19.48 | 16.86 | 17.68 | 19.64 | 100.00 |
| Maputo-Cidade | Frequency | 4 | 12 | 21 | 4 | 24 | 30 | 95 |
| | % | 4.21 | 12.63 | 22.11 | 4.21 | 25.26 | 31.58 | 100.00 |
| Maputo | Frequency | 8 | 14 | 29 | 8 | 21 | 39 | 95 |
| | % | 6.72 | 11.76 | 24.37 | 6.72 | 17.65 | 32.77 | 100.00 |
| Total | Frequency | 113 | 269 | 400 | 233 | 298 | 447 | 1 780 |
| | % | 7.47 | 15.11 | 22.47 | 13.09 | 16.74 | 25.11 | 100.00 |

Table 4.31: Preference on duration of an in-service education programme

Legend

- 1d+Ref 1 day with follow-up of reflection after 3 months
- 2d+Ref 2 days with follow-up of reflection after 3 months
- 5d+Ref 5 days with follow-up of reflection after 3 months
- 1d+Res 1 day with follow-up providing concrete results
- 2d+Res 2 day with follow-up providing concrete results
- 5d+Res 5 days with follow-up providing concrete results

From an analysis of the results displayed in Table 4.31, the teachers' opinion with respect to preference on duration of an in-service education programme is indicated in the following order from the highest to the lowest:

- 5 days with follow-up providing concrete results

- 5 days with follow up of reflection after 3 months
- 2 days with follow-up providing concrete results
- 2 days with follow up of reflection after 3 mounts
- 1 day with follow-up of reflection after 3 months
- 1 day with follow-up providing concrete results

These results show that, in general, teachers prefer longer in-service education programmes to short ones. Since most INSEPs discuss methods of facilitating learning and learning content, these results are consistent with the findings of question 12 (V14 & V15) and question 14 (V17 & V18). The teachers indicated methods of facilitating learning as the most valuable topic and also the topics in which they made progress after attending an INSEP. In general, the results displayed in Table 4.31 underscore, in addition to the duration of the INSEP, the importance conferred by the teachers to questions like: *What follows?* The teachers preferred concrete results to reflection as a means of closing a set of activities within an INSEP context.

With reference to the preference for follow-up providing concrete results, the results yielded in the question are consistent with what is expected from professional development providers after having conducted an INSEP. The teachers participating in such programmes are supposed to demonstrate concrete results in their classroom practices and especially regarding the learners' achievement.

4.7.20 Contribution to Own Continuing Professional Development

Question 21: How could you contribute to your own continuing professional development?

Question 21 has 7 variables. To respond to the answer, the teachers were asked to mark one or more variable. Therefore my expectation was to obtain 7 196 responses by multiplying the 7 variables by 1 028 teachers participating in the study. The results displayed in Table 4.32 show that from the total, 680 (23.70%) respondents indicated moving from CFPP to IMAP/ADPP or from IMAP/ADPP to Higher Education as the preferred contribution for their own continuing professional development; 560 (19.52%)

indicated the option taking responsibility for my own continuing professional development, while 520 (18.12%) indicated participating in ZIP meetings. Another 4 327 (60.13%) responses were not indicated by the teachers as preferable ways to contribute to their own continuing professional development. Table 4.32 suggests that the majority of the teachers preferred continuing professional development via increasing of the level of professional qualification. This preference is consistent with the first criteria for improvement in the teacher career (Ministry of Education, 2008). However, individual efforts and ZIP support, almost with similar importance, are also realised for continuing professional development.

| Province | Freq | Contribution to own Continuing Professional Development | | | | | | | |
|---------------|------|---|-------|------|-------|-------|-------|-------|--------|
| | | TR | Mon | Wait | DevHL | ZIP | Acad | Prof | Total |
| Sofala | Freq | 67 | 32 | 11 | 49 | 66 | 37 | 70 | 332 |
| | % | 20.18 | 9.64 | 3.31 | 14.76 | 19.88 | 11.14 | 21.08 | 100.00 |
| Cabo Delgado | Freq | 100 | 55 | 16 | 71 | 84 | 39 | 104 | 469 |
| | % | 21.32 | 11.73 | 3.41 | 15.14 | 17.91 | 8.32 | 22.17 | 100.00 |
| Zambézia | Freq | 159 | 74 | 21 | 112 | 117 | 68 | 184 | 735 |
| | % | 21.63 | 10.07 | 2.86 | 15.24 | 15.92 | 9.25 | 25.03 | 100.00 |
| Nampula | Freq | 153 | 94 | 28 | 137 | 189 | 100 | 252 | 953 |
| | % | 16.05 | 9.86 | 2.94 | 14.38 | 19.83 | 10.49 | 26.44 | 100.00 |
| Maputo-Cidade | Freq | 38 | 16 | 1 | 35 | 26 | 19 | 33 | 168 |
| | % | 22.62 | 9.52 | 0.60 | 20.83 | 15.48 | 11.31 | 19.64 | 100.00 |
| Maputo | Freq | 43 | 22 | 2 | 45 | 38 | 25 | 37 | 212 |
| | % | 20.28 | 10.38 | 0.94 | 21.23 | 17.92 | 11.79 | 17.45 | 100.00 |
| Total | Freq | 560 | 293 | 79 | 449 | 520 | 288 | 680 | 2 869 |
| | % | 19.52 | 10.21 | 2.75 | 15.65 | 18.12 | 10.04 | 23.70 | 100.00 |

Table 4.32: Contribution to own continuing professional development

Legend

TR = Taking responsibility for my own CPD; Mon = Monitoring my own CPD; Wait = Waiting to be trained; DevHL = Developing habits of learning; ZIP = Participating in ZIP meetings; Acad = Attending the following academic level; Prof = Moving from CFPP to IMAP/ADPP or from IMAP/ADPP to Higher Education

As can be seen in Table 4.32, the results show that the teachers' opinion with respect to the contribution to their continuing professional development was indicated in the following order from the highest to the lowest:

- Moving from CFPP level to IMAP/ADPP or from IMAP/ADPP to Higher-Education
- Taking responsibility for my own continuing professional development
- Participating in ZIP meetings
- Developing habits of learning
- Monitoring/controlling my own continuing professional development
- Attending the following academic level
- Waiting to be trained

4.7.21 Recognition of Continuing Professional Development

Question 22: How do you think should continuing professional development be recognised?

In Mozambique there are a significant number of providers of professional development programmes as indicated in Chapter 1 and different ways of their recognition. The responses represented in Table 4.33 indicate that 484 (47.08%) of the teachers think that continuing professional development should be recognised through credit points for progression in the professional career, 359 (3.92%) through certificates/diplomas from college or university, while 112 (10.89%) teachers think that CPD points should be periodically awarded. Another 59 (5.74%) did not answer the question. Since the overall impression is that INSEP is not being appropriately recognised by means of improvement in the teachers' career and salary, I included this question in the questionnaire aiming at determining the teachers' perception concerning other ways of recognition. Actually the teachers prefer the certificates, the main way currently used in Mozambique, followed by credit points as the most preferred ways of recognition. The assumption here is that the existing recognition is acceptable. However, it will be of value to create organisational conditions to confer credit points for teachers participating in a specific INSEP.

| Province | Frequency % | Recognition of Continuing Professional Development | | | | | Total |
|-------------------|----------------|--|----------------|-------------------------|-------------|------------------|--------|
| | | Missing | Not awarded | Periodically Awarded | Certificate | Credit points | |
| Sofala | Frequency | 7 | 2 | 17 | 37 | 54 | 117 |
| | % | 5.98 | 1.71 | 14.53 | 31.62 | 46.15 | 100.00 |
| Cabo Delgado | Frequency | 6 | | 12 | 72 | 56 | 146 |
| | % | 4.11 | | 8.22 | 49.32 | 38.36 | 100.00 |
| Zambézia | Frequency | 10 | 4 | 25 | 101 | 130 | 270 |
| | % | 3.70 | 1.48 | 9.26 | 37.41 | 48.15 | 100.00 |
| Nampula | Frequency | 26 | 3 | 38 | 103 | 166 | 336 |
| | % | 7.74 | 0.89 | 11.31 | 30.65 | 49.40 | 100.00 |
| Maputo- Cidade | Frequency | 7 | 3 | 9 | 17 | 40 | 76 |
| | % | 9.21 | 3.95 | 11.84 | 22.37 | 52.63 | 100.00 |
| Maputo | Frequency | 3 | 2 | 11 | 29 | 38 | 83 |
| | % | 3.61 | 2.41 | 13.25 | 34.94 | 45.78 | 100.00 |
| Total | Frequency | 59 | 14 | 112 | 359 | 484 | 1 028 |
| | % | 5.74 | 1.36 | 10.89 | 34.92 | 47.08 | 100 |

Table 4.33: Recognition of continuing professional development

4.7.22 Opinion about Teacher Roles

Question 23: Consider the following teacher roles. Indicate your opinion about each one of these roles.

The teachers' perception of teacher roles is provided in Table 4.34. The inclusion of the seven teacher roles in this questionnaire aimed at determining the teachers' perception of the roles illustrated in the listed statements. Owing to the equal relevance assigned to all teacher roles in the teaching profession, I decided to represent all options indicated by the respondents. The results show that there are more *yes* than *no* options. However, the *leader, administrator and manager* role had the highest *no* options.

The teachers' opinion concerning the teacher roles was indicated in the following order from the highest to the lowest:

- Teacher as a learning mediator
- Scholar, researcher and lifelong learner
- Community, citizenship and pastoral role
- Learning area/subject/discipline/phase specialist
- Assessor

- Interpreter and designer of learning programmes and materials
- Leader, administrator and manager.

In spite of the differences among the roles, in terms of percentage achieved, I interpreted the teachers' options as a positive understanding of their roles. The low percentage regarding the role of *Interpreter and designer of learning programmes and materials* among the roles indicated with *yes* appears to be related to the current situation in Mozambique. Learning programmes and the most of the learning materials are provided by the MEC or NGO's foreign governmental institution. The low percentage on the options *leader, administrator and manager* suggests that there is a lack of teachers' understanding of this role as a role related to their pedagogical and administrative responsibilities at classroom level. For instance, teachers usually complete a set of maps related to their learners' attendance and achievement mainly at the end of a trimester and semester.

| Variables | Teacher role | Response | Freq | Percentage |
|-----------|---|----------|-------|------------|
| V46 | Learning mediator/facilitator | Missing | 124 | 12.06 |
| | | No | 22 | 2.14 |
| | | Yes | 882 | 85.80 |
| V47 | Interpreter and designer of learning programmes and materials | Missing | 444 | 43.19 |
| | | No | 260 | 25.92 |
| | | Yes | 324 | 31.52 |
| V48 | Leader, administrator and manager | Missing | 467 | 45.43 |
| | | No | 321 | 31.23 |
| | | Yes | 240 | 23.35 |
| V49 | Scholar, researcher and lifelong learner | Missing | 341 | 33.37 |
| | | No | 75 | 7.30 |
| | | Yes | 612 | 59.53 |
| V50 | Community, citizenship and pastoral role | Missing | 359 | 34.92 |
| | | No | 97 | 9.94 |
| | | Yes | 572 | 55.64 |
| V51 | Assessor | Missing | 430 | 41.63 |
| | | No | 130 | 12.65 |
| | | Yes | 468 | 45.53 |
| V52 | Learning area/subject/discipline/phase specialist | Missing | 388 | 37.34 |
| | | No | 153 | 14.88 |
| | | Yes | 487 | 47.37 |
| Total | | | 7 196 | 100.00 |

Table 4.34: Teachers' opinion regarding teacher roles

“Teacher as a Learning Mediator” was selected as the most important teacher role. Tables 4.34 - 4.40 display the teachers’ opinion according to professional qualifications.

| Professional Qualification | Frequency % | Response | | Total |
|----------------------------|-------------|----------|--------|--------|
| | | No | Yes | |
| No qualification | Frequency | 5 | 206 | 211 |
| | % | 0.56 | 23.04 | 23.60 |
| CFPP | Frequency | 10 | 332 | 342 |
| | % | 1.12 | 37.14 | 38.26 |
| IMP/MP | Frequency | 0 | 30 | 30 |
| | % | 0.00 | 100.00 | 3.36 |
| IMAP/ADPP | Frequency | 7 | 298 | 305 |
| | % | 0.78 | 33.33 | 34.12 |
| Higher education | Frequency | 0 | 6 | 6 |
| | % | 0.00 | 100.00 | 0.67 |
| Total | Frequency | 22 | 872 | 894 |
| | % | 2.46 | 97.54 | 100.00 |

Table 4.35: Teachers’ opinion with respect to the role of learning mediator

| Professional Qualification | Frequency % | Response | | Total |
|----------------------------|-------------|----------|-------|--------|
| | | No | Yes | |
| No qualification | Frequency | 72 | 77 | 149 |
| | % | 12.41 | 13.28 | 25.69 |
| CFPP | Frequency | 102 | 125 | 227 |
| | % | 44.93 | 55.07 | 39.14 |
| IMP/MP | Frequency | 4 | 15 | 19 |
| | % | 0.69 | 2.59 | 3.28 |
| IMAP/ADPP | Frequency | 79 | 102 | 181 |
| | % | 13.62 | 17.59 | 31.21 |
| Higher education | Frequency | 3 | 1 | 4 |
| | % | 0.52 | 0.17 | 0.69 |
| Total | Frequency | 260 | 320 | 580 |
| | % | 44.83 | 55.17 | 100.00 |

Table 4.36: Teachers’ opinion with respect to the role of interpreter and designer of learning programmes and material

| Professional Qualification | Frequency % | Response | | Total |
|----------------------------|-------------|----------|--------|--------|
| | | No | Yes | |
| No qualification | Frequency | 93 | 51 | 144 |
| | % | 16.67 | 9.14 | 25.81 |
| CFPP | Frequency | 127 | 87 | 214 |
| | % | 22.76 | 15.59 | 38.35 |
| IMP/MP | Frequency | 9 | 7 | 16 |
| | % | 1.61 | 1.25 | 2.87 |
| IMAP/ADPP | Frequency | 91 | 89 | 180 |
| | % | 50.56 | 49.44 | 32.26 |
| Higher education | Frequency | 0 | 4 | 4 |
| | % | 0.00 | 100.00 | 0.72 |
| Total | Frequency | 320 | 238 | 558 |
| | % | 57.35 | 42.65 | 100.00 |

Table 4.37: Teachers’ opinion with respect to the role of leader, administrator and manager

| Professional Qualification | Frequency % | Response | | Total |
|----------------------------|-------------|----------|--------|--------|
| | | No | Yes | |
| No qualification | Frequency | 15 | 160 | 175 |
| | % | 8.57 | 91.43 | 25.74 |
| CFPP | Frequency | 28 | 232 | 260 |
| | % | 10.77 | 89.23 | 38.24 |
| IMP/MP | Frequency | 0 | 24 | 24 |
| | % | 0.00 | 100.00 | 100.00 |
| IMAP/ADPP | Frequency | 31 | 187 | 218 |
| | % | 14.22 | 85.78 | 32.06 |
| Higher Education | Frequency | 0 | 3 | 3 |
| | % | 0.00 | 100.00 | 100.00 |
| Total | Frequency | 74 | 606 | 680 |
| | % | 10.88 | 89.12 | 100.00 |

Table 4.38: Teachers' opinion with respect to the role of scholar, researcher and lifelong learner

Chi-square tests on participating teachers' comparison of professional qualifications according to the role of scholar, researcher and lifelong learner revealed that the professional qualifications of teachers from this study do not vary significantly ($\chi^2 = 6.7685$, $p = >0.05$). There is no statistical relationship between the professional qualifications and the role of scholar, researcher and lifelong learner among the teachers participating in this study. Although all teachers holding IMAP/ADPP and Higher Education certificates have selected the option *yes*, it seems that a lack of or different professional qualifications do not have an impact on the teachers' opinion about the role of scholar, researcher and lifelong learner.

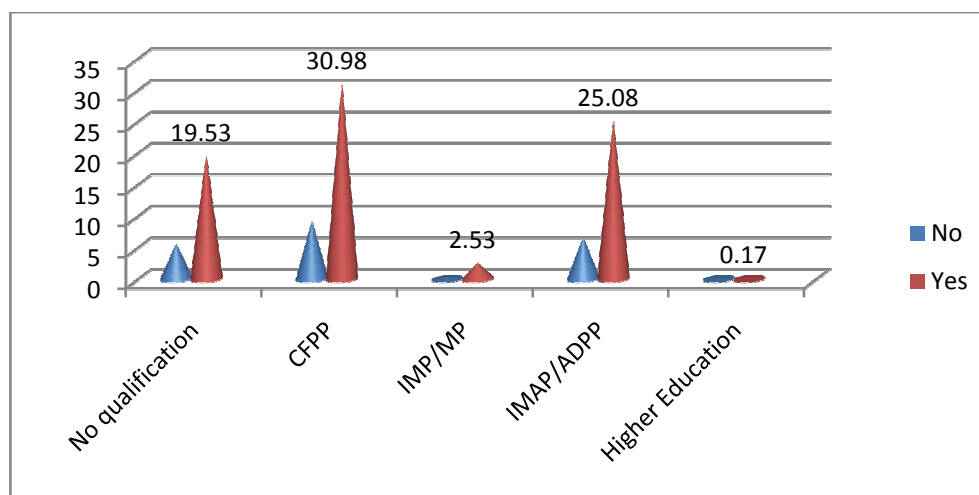
| Professional Qualification | Frequency % | Responses | | Total |
|----------------------------|-------------|-----------|-------|--------|
| | | No | Yes | |
| No qualification | Frequency | 28 | 147 | 175 |
| | % | 4.22 | 22.17 | 26.40 |
| CFPP | Frequency | 47 | 207 | 254 |
| | % | 7.09 | 31.22 | 38.31 |
| IMP/MP | Frequency | 1 | 18 | 19 |
| | % | 0.15 | 2.71 | 2.87 |
| IMAP/ADPP | Frequency | 21 | 193 | 214 |
| | % | 3.17 | 29.11 | 32.28 |
| Higher education | Frequency | 0 | 1 | 1 |
| | % | 0.00 | 0.15 | 0.15 |
| Total | Frequency | 97 | 566 | 663 |
| | % | 14.63 | 85.37 | 100.00 |

Table 4.39: Teachers' opinion with respect to the role of community, citizenship and pastoral role

| Professional Qualification | Frequency % | Response | | Total |
|----------------------------|-------------|----------|-------|--------|
| | | No | Yes | |
| No qualification | Frequency | 33 | 116 | 149 |
| | % | 5.56 | 19.53 | 25.08 |
| CFPP | Frequency | 54 | 184 | 238 |
| | % | 9.09 | 30.98 | 40.07 |
| IMP/MP | Frequency | 2 | 15 | 17 |
| | % | 0.34 | 2.53 | 2.86 |
| IMAP/ADPP | Frequency | 39 | 149 | 188 |
| | % | 6.57 | 25.08 | 31.65 |
| Higher education | Frequency | 1 | 1 | 2 |
| | % | 0.17 | 0.17 | 0.34 |
| Total | Frequency | 129 | 465 | 594 |
| | % | | | 100.00 |

Table 4.40: Teachers' opinion with respect to the role of assessor

Figure 4.7: Teachers' opinion with respect to the role of assessor



| Professional Qualification | Frequency % | Responses | | Total |
|----------------------------|-------------|-----------|--------|--------|
| | | No | Yes | |
| No qualification | Frequency | 37 | 133 | 170 |
| | % | 21.76 | 78.24 | 100.00 |
| CFPP | Frequency | 49 | 200 | 249 |
| | % | 19.26 | 80.32 | 100.00 |
| IMP/MP | Frequency | 2 | 18 | 20 |
| | % | 10.00 | 90.00 | 100.00 |
| IMAP/ADPP | Frequency | 64 | 130 | 194 |
| | % | 32.99 | 67.01 | 100.00 |
| Higher Education | Frequency | 0 | 2 | 2 |
| | % | 0.00 | 100.00 | 100.00 |
| Total | Frequency | 152 | 483 | 635 |
| | % | 23.94 | 76.06 | 100.00 |

Table 4.41: Teachers' opinion with respect to the role of learning area/subject/discipline/phase specialist

| Statistics | DF | Value | Probability |
|-----------------------------|----|---------|-------------|
| Chi-square | 4 | 14.4155 | 0.0061 |
| Likelihood Ratio Chi-square | 4 | 14.8148 | 0.0051 |
| Mantel-Haenszel Chi-square | 1 | 7.3715 | 0.0066 |
| Phi Coefficient | | 0.1507 | |
| Contingency Coefficient | | 0.1490 | |
| Cramer's v | | 0.1507 | |

Table 4.42: Chi-square tests on participating teachers' comparison of professional qualification according to the role of learning area/subject/discipline/phase specialist

The professional qualifications of teachers from this study do not vary significantly ($\chi^2 = 14.4155$, $p = <0.05$). There is no statistical relationship between professional qualifications and the role of learning area/subject/discipline/phase specialist among the teachers participating in this study.

4.7.23 Opinion on Issues to Consider Regarding Planning Lessons

Question 24: Consider each statement below and indicate your opinion on the issues to consider when planning lessons.

The teachers' perceptions in relation to issues to consider when planning of learning opportunities are provided in Table 4.43. My intention was to determine the issues that teachers take into consideration when planning learning opportunities and their understanding of instruction. The results show that 182 (17.70%) respondents strongly disagree that instruction aims to identify the learning problems of individual learners, 132 (12.84%) strongly disagree that instruction must be based on knowledge of psychology, and 105 (10.21%) strongly disagree that planning should cover both immediate and long term goals. Furthermore, 723 (70.33%) respondents agree/strongly agree that instruction aims at supporting the learning of individual learners, 648 (63.04%) agree/strongly agree that planning should cover both immediate and long term goals and 638 (62.06%) agree/strongly agree that instruction must be based on knowledge of psychology. Regarding the neutral and missing responses, the results indicate that the design of instruction involves analysis; design and evaluation are the issues that received more neutral responses – in total 118 (11.48%).

Comparing the percentage (58.27%) of agree/strongly agree responses with the strongly disagree/disagree responses (7.30%), the results show a large difference. The results suggest that the teachers have positive perceptions of the issues to consider when planning learning opportunities. The original data with the frequencies of teachers' roles according to province were maintained in order to provide a complete picture.

| Variable | Statement | | Respondents' Opinions | | | |
|----------|---|------|-----------------------|----------------------------|---------|----------------------|
| | | | Missing | Strongly Disagree/Disagree | Neutral | Agree/Strongly Agree |
| 53 | Instruction aims to support the learning of individual learners | Freq | 187 | 76 | 42 | 723 |
| | | | 18.19 | 7.39 | 4.09 | 70.33 |
| 54 | Instruction aims to identify learning problems of individual learners | Freq | 207 | 182 | 89 | 550 |
| | | % | 20.14 | 17.70 | 8.66 | 53.50 |
| | | | % | | | |
| 55 | Planning should cover both immediate and long term goals | Freq | 185 | 105 | 90 | 648 |
| | | % | 18.00 | 10.21 | 8.75 | 63.04 |
| 56 | Instruction must be based on knowledge of psychology | Freq | 191 | 132 | 67 | 638 |
| | | | 18.58 | 12.84 | 6.52 | 62.06 |
| 57 | Design of instruction involves analysis, design and evaluation | Freq | 236 | 75 | 118 | 539 |
| | | % | 22.96 | 7.30 | 11.48 | 58.27 |

Table 4.43: Issues to consider when planning lessons

Looking at the results mentioned above, the teachers' opinions concerning the issues to consider when planning learning opportunities indicate that they agree/strongly agree about the following issues listed from the highest to the lowest:

- Instruction aims to support the learning of individual learners
- Planning should cover both immediate and long term goals
- Instruction must be based on knowledge of psychology
- Instruction aims to identify learning problems of individual learners
- Design of instruction involves analysis, design and evaluation

It is of value to note that the issue *design of instruction and evaluation* received more neutral responses.

4.7.24 Regularity of Individual Learner Assessment

Question 25: How often do you assess individual learners in terms of learning achieved? Table 4.44 displays the results of the regularity of individual learner assessment in terms of learning achieved. From the total as many as 697 (67.80%) teachers indicated that they assess individual learners every day, 259 (25.00%) assess once or more a month, and 46 (4.47%) assess never/once a year/once a semester/once a trimester.

The chapter on evaluation from the General Regulation of the Basic Education establishes that assessment is a component of educational practice, which if being analysed provides significant feedback regarding the learning and facilitating the learning process (MEC-Mozambique, 2008:57). In addition to that, this document refers to the regularity of assessment tasks, establishing continual, trimestral and annual assessment. Continual activity aims to identify the learning achieved by learners and plans remedial procedures for each learner. This question was designed to determine whether the teachers assess individual learners and the regularity of these assessment tasks. From Figure 4.44 one will notice that the teachers assess individual learners every day. In this case, assessment means the corrections they do in the learners' exercise books by marking the correct and wrong answers. This is positive in terms of the fact that the majority of the teachers (67.80%) indicate that they assess individual learners every day. The results related to the assessment carried out once or more a month (25.00%) provides evidence that a percentage of teachers assess the learners more times than the trimestral established assessment in order to identify the level of the learners' learning – as expected by the Ministry of Education (MEC-Moçambique, 2008:62). Although the calendar of the majority of assessment tasks is decided at school level, my intention was to obtain information with respect to individual learner assessment, and subsequent analysis and recording in the continual assessment context set out in no.3 of Article 68 of the General Regulation of the Basic Education (MEC-Moçambique, 2008:61). According to my observation the results do not provide accurate information concerning what the teachers participating in this study actually did. Usually teachers outline the learning tasks to the class and wait for the learners to perform. When the learners have finished the indicated learning tasks they get up and form a queue to show the teacher what they have done. Then, the teacher corrects the answers. In this context teachers do not have time to assess

individual learners every day during the normal class timetable. Therefore, my interpretation also is that I did not phrase correctly the question and it did not yielded to what I wanted to determine.

| Province | Frequency % | Frequency of Individual Learner Assessment | | | | Total |
|-------------------|----------------|--|---|----------------------------|-----------|--------|
| | | Missing | Never/ Once a year/Once a Semester/ Once a trimester | Once or more a Month | Every day | |
| Sofala | Frequency | 6 | 6 | 28 | 77 | 117 |
| | % | 5.13 | 5.13 | 23.93 | 65.81 | 100.00 |
| Cabo | Frequency | 2 | 8 | 48 | 88 | 146 |
| Delgado | % | 1.37 | 5.48 | 32.88 | 60.27 | 100.00 |
| Zambézia | Frequency | 2 | 13 | 61 | 194 | 270 |
| | % | 0.74 | 4.81 | 22.59 | 71.85 | 100.00 |
| Nampula | Frequency | 11 | 13 | 95 | 217 | 336 |
| | % | 3.27 | 3.87 | 28.27 | 64.58 | 100.00 |
| Maputo- Cidade | Frequency | 4 | 2 | 11 | 59 | 76 |
| | % | 5.26 | 2.63 | 14.47 | 77.63 | 100.00 |
| Maputo | Frequency | 1 | 4 | 16 | 62 | 83 |
| | % | 1.20 | 4.82 | 19.28 | 74.70 | 100.00 |
| Total | Frequency | 26 | 46 | 259 | 697 | 1 028 |
| | % | 2.53 | 4.47 | 25.00 | 67.80 | 100.00 |

Table 4.44: Regularity/frequency of individual learner assessment in terms of learning achieved

| Professional Qualification | Frequency % | Responses | | | Total |
|-------------------------------|----------------|---|----------------------------|-----------|--------|
| | | Never/ Once a y/Once a s/ Once a semester | Once or more a month | Every day | |
| No qualification | Frequency | 17 | 84 | 140 | 241 |
| | % | 7.05 | 34.85 | 58.09 | 100.00 |
| CFPP | Frequency | 14 | 99 | 257 | 370 |
| | % | 3.78 | 26.76 | 69.46 | 100.00 |
| IMP/MP | Frequency | 1 | 8 | 24 | 33 |
| | % | 3.03 | 24.24 | 72.73 | 100.00 |
| IMAP/ADPP | Frequency | 22 | 66 | 261 | 339 |
| | % | 3.54 | 19.47 | 76.99 | 100.00 |
| Higher Education | Frequency | 0 | 2 | 5 | 7 |
| | % | 0.00 | 28.57 | 71.43 | 100.00 |
| Total | Frequency | 44 | 259 | 687 | 990 |
| | % | 4.44 | 26.16 | 69.39 | 100.00 |

Table 4.45: Regularity/frequency of individual learner assessment in terms of learning achieved

Based on Chi-tests regarding the frequency with which teachers assess individual learners in terms of leaning achieved vary significantly ($X^2 = 31.52, p = <0.05$) there is a statistical relationship between professional qualifications and the frequency of individual learner assessment. Higher qualified teachers tend to assess more than less qualified teachers. It seems that the higher qualified the teachers are the more they are aware of individual learner assessment.

4.7.25 Analysis of Individual Learners' Achievement

Question 26: How often do you analyse individual learners' achievement?

In table 4.46 below 504 (50.81%) teachers said that they analyse individual learners' achievement every day, 302 (30.44%) analyse once or more a month and 167 (16.83%) analyse once a trimester. As in question 25 it appears that the teachers mostly refer to everyday control of the learners' exercise books.

| Professional Qualification | Frequency % | Analysis of individual learner's achievement | | | | Total |
|----------------------------|-------------|--|------------------|----------------------|-----------|--------|
| | | Never/ Once a year/ Once a Semester | Once a trimester | Once or more a month | Every day | |
| No qualification | Frequency | 5 | 40 | 71 | 126 | 242 |
| | % | 2.07 | 16.53 | 29.34 | 52.07 | 100.00 |
| CFPP | Frequency | 9 | 69 | 105 | 187 | 370 |
| | % | 2.43 | 18.65 | 28.38 | 50.54 | 100.00 |
| IMP/MP | Frequency | 1 | 1 | 13 | 20 | 35 |
| | % | 2.86 | 2.86 | 37.14 | 57.14 | 100.00 |
| IMAP/ADPP | Frequency | 4 | 56 | 110 | 168 | 338 |
| | % | 1.18 | 16.57 | 32.54 | 49.70 | 100.00 |
| Higher education | Frequency | 0 | 1 | 3 | 3 | 7 |
| | % | 00.00 | 14.29 | 42.86 | 42.86 | 100.00 |
| Total | Frequency | 19 | 167 | 302 | 504 | 992 |
| | % | 1.92 | 16.83 | 30.44 | 50.81 | 100.00 |

Table 4.46: Analysis of individual learners' achievement by teacher qualification

Similarly the responses to the question interrelated to the analysis of individual learners' achievement by professional qualification, seems to be associated to the professional qualification that the respondents held. The more qualified the respondents are the more they are likely to analyse the learners' achievement, although primary school teachers

holding a higher education certificate did not necessarily attended higher education for primary education.

| Province | Frequency % | Missing | Analysis of individual learner's achievement | | | | Total |
|-------------------|----------------|---------|---|---------------------|----------------------------|--------------|--------|
| | | | Never/ Once a year/ Once a Semester | Once a trimester | Once or more a month | Every day | |
| Sofala | Frequency | 2 | 3 | 13 | 26 | 73 | 117 |
| | % | 1.71 | 2.56 | 11.11 | 22.22 | 62.39 | 100.00 |
| Cabo Delgado | Frequency | 3 | 3 | 35 | 34 | 71 | 146 |
| | % | 2.05 | 2.05 | 23.97 | 23.29 | 48.63 | 100.00 |
| Zambézia | Frequency | 1 | 5 | 42 | 77 | 145 | 270 |
| | % | 0.37 | 1.85 | 15.56 | 28.52 | 53.70 | 100.00 |
| Nampula | Frequency | 9 | 5 | 59 | 111 | 152 | 336 |
| | % | 2.68 | 1.49 | 17.56 | 33.04 | 45.24 | 100.00 |
| Maputo- Cidade | Frequency | 6 | 2 | 5 | 30 | 33 | 76 |
| | % | 7.89 | 2.63 | 6.58 | 39.47 | 43.42 | 100.00 |
| Maputo | Frequency | 3 | 1 | 13 | 26 | 40 | 83 |
| | % | 3.61 | 1.20 | 15.66 | 31.33 | 48.19 | 100.00 |
| Total | Frequency | 24 | 19 | 167 | 304 | 514 | 1.028 |
| | % | 2.33 | 1.85 | 16.25 | 29.57 | 50.00 | 100.00 |

Table 4.47: Frequency of analysis of individual learners' achievement by province

The results displayed in Table 4.47 indicate that Sofala presents respondents with the highest percentage (62.39%), followed by Zambézia (53.70%) and Cabo Delgado (48.63%). Given the role that the analysis of individual learners' achievement plays in overall academic achievement this data seems to be, in general, associated with the low achievement in Grades 1 and 2. I included this question to find out whether the respondents monitor the learning process.

4.7.26 Use of Analysis of Individual Learners' Achievement

Question 27: What do you use the information of the analysis for?

Table 4.48 illustrates that 380 (38.85%) teachers indicated that they use the information of the analysis of individual learners' achievement to improve teaching, 264 (26.99%) indicated that they reflect on teaching and 174 (17.79%) to improve planning. My intention was to determine the implication that the analysis of individual learners' achievement has for subsequent learning opportunities. Additionally I intended to

understand how individual learner assessment can directly or indirectly contribute to continuing professional development.

Looking at these results, the interpretation is that the process of facilitating learning is clearly teacher-centred, since only 124 (12.68%) teachers indicated that the information of the analysis is used to support the learner. The positive aspect is that as few as 36 (3.50%) teachers indicated that they use the information of the analysis for the purpose of generating marks.

| Professional Qualification | Freq % | Use of Analysis of Individual Learner's Achievement | | | | | Total |
|----------------------------|--------|---|--------------|------------------------|--------------------|--------------------|--------|
| | | Supporting learners | Giving marks | Reflecting on teaching | Improving planning | Improving teaching | |
| No qualification | Freq % | 29 | 7 | 61 | 35 | 108 | 240 |
| | | 2.97 | 0.72 | 6.24 | 3.58 | 11.04 | 24.54 |
| CFPP | Freq % | 54 | 12 | 96 | 69 | 132 | 363 |
| | | 5.52 | 1.23 | 9.82 | 7.06 | 13.50 | 37.12 |
| IMP/MP | Freq % | 5 | 3 | 6 | 9 | 11 | 34 |
| | | 0.51 | 0.31 | 0.61 | 0.92 | 1.12 | 3.48 |
| IMAP/ADPP | Freq % | 33 | 14 | 101 | 58 | 128 | 334 |
| | | 3.37 | 1.43 | 10.33 | 5.93 | 13.09 | 34.15 |
| Higher education | Freq % | 3 | 0 | 0 | 3 | 1 | 7 |
| | | 0.31 | 0.00 | 0.00 | 0.31 | 0.10 | 0.72 |
| Total | Freq % | 124 | 36 | 264 | 174 | 380 | 978 |
| | | 12.68 | 3.68 | 26.99 | 17.79 | 38.85 | 100.00 |

Table 4.48: Use of analysis of individual learners' achievement by professional qualification

When comparing the percentages of responses by professional qualification, the results from Table 4.48 indicate that the respondents certified by a medium level of professional qualification (IMAP/ADPP and IMP/MP) tend to have the highest percentage with respect to the use of analysis of individual learners' achievement on improving teaching. However, due to the limited academic and professional skills provided by secondary and teacher education, respectively, teachers' continuing professional development should continue paying attention to learners' assessment.

| Province | | Use of Analysis of Individual Learner's achievement | | | | | | |
|---------------|-----------|---|---------------------|--------------|------------------------|--------------------|--------------------|--------|
| Province | Frequency | Missing | Supporting learners | Giving marks | Reflecting on teaching | Improving planning | Improving teaching | Total |
| | % | | | | | | | |
| Sofala | Frequency | 5 | 11 | 4 | 39 | 18 | 40 | 117 |
| | % | 4.27 | 9.40 | 3.42 | 33.33 | 15.38 | 34.19 | 100.00 |
| Cabo Delgado | Frequency | 4 | 18 | 4 | 25 | 30 | 65 | 146 |
| | % | 2.74 | 12.33 | 2.74 | 17.12 | 20.55 | 44.52 | 100.00 |
| Zambézia | Frequency | 6 | 15 | 9 | 69 | 51 | 120 | 270 |
| | % | 2.22 | 5.56 | 3.33 | 25.56 | 18.99 | 44.44 | 100.00 |
| Nampula | Frequency | 12 | 58 | 12 | 91 | 47 | 116 | 336 |
| | % | 3.57 | 17.26 | 3.57 | 27.08 | 13.99 | 34.52 | 100.00 |
| Maputo-Cidade | Frequency | 8 | 11 | 4 | 22 | 13 | 18 | 76 |
| | % | 10.5 | 14.47 | 5.26 | 28.95 | 17.11 | 23.68 | 100.00 |
| Maputo | Frequency | 3 | 13 | 3 | 21 | 16 | 27 | 83 |
| | % | 3.61 | 15.66 | 3.61 | 25.30 | 19.28 | 32.53 | 100.00 |
| Total | Frequency | 38 | 126 | 36 | 267 | 175 | 386 | 1028 |
| | % | 3.70 | 12.26 | 3.50 | 25.97 | 17.00 | 37.75 | 100.00 |

Table 4.49: Use of analysis of individual learners' achievement by province

Similarly, the results displayed in Table 4.50, show the tendency of a more teacher-centred approach in provinces like Cabo Delgado (44.52%), Zambézia (44.44%) and Nampula (34.52%). However, there is no large difference among the six provinces applicable to this study. The use of analysis of individual learners' achievement for the purpose of learner support indicates that Nampula shows the highest percentage (34.52%), followed by Maputo (15.66%) and Maputo-Cidade (14.47%). In the same way, this data set appears to be related to low achievement in Grades 1 and 2.

In terms of reflecting on teaching, the data set indicates that Sofala presents respondents with the highest percentage (33.33%), followed by Maputo-Cidade (28.95%) and Cabo Nampula (27.8%). Given the role that the analysis of individual learners' achievement plays in overall academic achievement this data set seems to be, in general, associated with the low achievement in Grades 1 and 2. I included this question to find out whether the respondents monitor the learning process.

4.7.27 Regularity of Provision of Instruction to Prevent Early Underachievement

Question 28: How often do you provide instruction to prevent early underachievement?

Table 4.50 displays the results of the regularity of provision of instruction specifically to prevent early underachievement. In this regard the table shows that as many as 816 (83.01%) teachers indicated that they provide instruction once or more a month, 115 (11.70%) and 52 (5.29%) provide never/once a year/once a semester. As previously mentioned, the chapter on evaluation from the General Regulation of the Basic Education establishes that the purpose of continual assessment is to identify the learning achieved by learners and plan remedial procedures for each learner. In this sense, provision of instruction could be one of the procedures. The frequencies of this variable suggest that at least the teachers indicate to their class the learning tasks recommended in the learner textbooks.

| Professional Qualification | Frequency % | Regularity of Provision of Instruction to Prevent Early Underachievement | | | Total |
|----------------------------|----------------|--|---------------------|----------------------------|--------|
| | | Never/ Once a year/Once a Semester/ | Once a trimester | Once or more a month | |
| No qualification | Frequency | 14 | 37 | 189 | 240 |
| | % | 1.42 | 3.76 | 19.23 | 24.42 |
| CFPP | Frequency | 18 | 46 | 303 | 367 |
| | % | 1.83 | 4.68 | 30.82 | 37.33 |
| IMP/MP | Frequency | 4 | 2 | 28 | 34 |
| | % | 0.41 | 0.20 | 2.85 | 3.46 |
| IMAP/ADPP | Frequency | 16 | 28 | 291 | 335 |
| | % | 1.63 | 2.85 | 29.60 | 34.08 |
| Higher education | Frequency | 0 | 2 | 5 | 7 |
| | % | 0.00 | 0.20 | 0.51 | 0.71 |
| Total | Frequency | 52 | 115 | 816 | 983 |
| | % | 5.29 | 11.70 | 83.01 | 100.00 |

Table 4.50: Regularity of provision of instruction to prevent early underachievement by professional qualification

Statistical data displayed in Table 4.50 indicate that the majority of the respondents who answered to this question provide instruction to prevent early underachievement once or more a month, particularly in the incidence of those certified by CFPP (30.82%), followed by IMAP/ADPP (29.6%) and those without a professional qualification (19.23%). Similarly to the other topics on assessment, higher qualified respondents do not

necessarily show the best practices. My interpretation is that the respondents do not provide trimester assessment opportunities by their own initiative, since in Mozambican primary schools, the end of the trimester used to be the occasion for assessment and feedback to learners and parents. These assessment tests are compiled by a group of teachers of the same grade and distributed to all teachers. This procedure does not allow for an individual teacher to assess his/her particular class. Therefore, the assumption here is that, apart from the learning tasks that teachers assign to learners, the teachers do not design tests and the learners have few opportunities to learn.

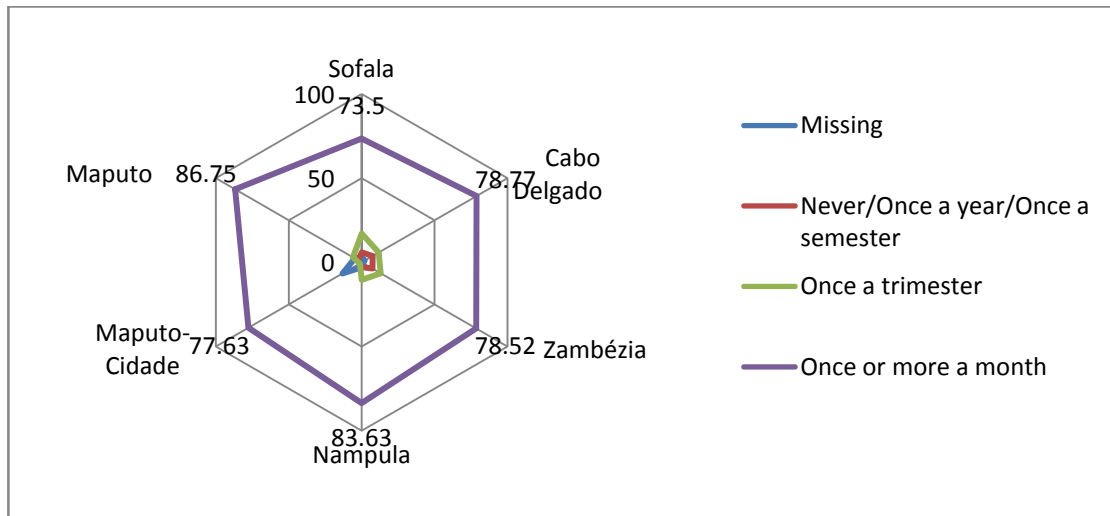
| Province | Frequency % | Provision of Instruction to Prevent Early Underachievement | | | | Total |
|---------------|----------------|--|-------------------------------------|------------------|----------------------|--------|
| | | Missing | Never/ Once a year/Once a Semester/ | Once a trimester | Once or more a month | |
| Sofala | Frequency | 4 | 7 | 20 | 86 | 117 |
| | % | 3.42 | 5.98 | 17.09 | 73.50 | 100.00 |
| Cabo Delgado | Frequency | 3 | 11 | 17 | 115 | 146 |
| | % | 2.05 | 7.53 | 11.64 | 78.77 | 100.00 |
| Zambézia | Frequency | 3 | 20 | 35 | 212 | 270 |
| | % | 1.11 | 7.41 | 12.96 | 78.52 | 100.00 |
| Nampula | Frequency | 10 | 10 | 35 | 281 | 336 |
| | % | 2.98 | 2.98 | 10.42 | 83.63 | 100.00 |
| Maputo-Cidade | Frequency | 10 | | 1 | 59 | 76 |
| | % | 13.16 | | 1.32 | 77.63 | 100.00 |
| Maputo | Frequency | 4 | 2 | 5 | 72 | 83 |
| | % | 4.82 | 2.41 | 6.02 | 86.75 | 100.00 |
| Total | Frequency | 34 | 52 | 117 | 825 | 1 028 |
| | % | 3.31 | 5.06 | 11.38 | 80.25 | 100.00 |

Table 4.51: Provision of instruction to prevent early underachievement by province

Table 4.51 illustrates the provision of instruction to prevent early underachievement according to province. In this table, Maputo shows the highest percentage (86.75%), followed by Nampula (83.63%) and Cabo Delgado (78.77%). With respect to the provision of instruction during a trimester, Sofala indicates the highest percentage (17.09%) followed by Zambézia (12.96%) and Cabo Delgado (11.64%). As can be observed, in general, the results suggest that there is more incidence of monthly remedial instruction than in a trimester. This is evidence that the teachers only assign the periodical assessment included in the learning material and those established by the school.

The data captured in Table 4.51 are visually represented in Figure 4.7 below.

Figure 4.8: Visual representation of instruction to prevent early underachievement



4.7.28 Regularity of Writing Reports about Potential Underachieving Learners

Question 29: How often do you write a report about potential underachieving learners?

The results displayed in Table 4.52 indicate that 676 (69.19%) teachers participating in this study write reports about potential underachieving learners once a trimester, 201 (20.57%) write once a month while 42 (4.30%) write once a year or once a semester. This question was included to elicit whether the teachers keep records in terms of notes related to underachiever learners, aiming at follow-up and provision of remedial instruction. The results suggest that the teachers only write the compulsory report required at the end of the trimester.

| Professional Qualification | Frequency % | Regularity of writing report about potential underachieving learners | | | | | Total |
|----------------------------|-------------|--|-------------|-----------------|------------------|--------------|--------|
| | | Never | Once a year | Once a semester | Once a trimester | Once a month | |
| No qualification | Frequency | 5 | 18 | 8 | 151 | 54 | 236 |
| | % | 2.12 | 7.63 | 3.39 | 63.98 | 22.88 | 100.00 |
| CFPP | Frequency | 3 | 12 | 17 | 249 | 86 | 367 |
| | % | 0.82 | 3.27 | 4.63 | 67.85 | 23.43 | 100.00 |
| IMP/MP | Frequency | 1 | 1 | 1 | 22 | 6 | 31 |
| | % | 3.23 | 3.23 | 3.23 | 70.97 | 19.35 | 100.00 |
| IMAP/ADPP | Frequency | 7 | 11 | 16 | 247 | 55 | 336 |
| | % | 2.08 | 3.27 | 4.76 | 73.51 | 16.37 | 100.00 |
| Higher Education | Frequency | 0 | 0 | 0 | 7 | 0 | 7 |
| | % | 0.00 | 0.00 | 0.00 | 100.00 | 0.00 | 100.00 |
| Total | Frequency | 16 | 42 | 42 | 676 | 201 | 977 |
| | % | 1.64 | 4.30 | 4.30 | 69.19 | 20.57 | 100.00 |

Table 4.52: Regularity of writing report about potential underachieving learners

Table 4.52 displays the data concerning the regularity of writing reports about potential underachieving learners by professional qualification. The data related to trimester reports show that all respondents certified by higher education (100%), followed by those certified by IMAP/ADPP (73.51%) and IMP/MP (70.97%) have a noticeable preference of trimester assessment. The results are consistent with the procedures in primary schools with respect to assessment according to the calendar.

4.7.29 Teachers' Suggestions about Acknowledgement of Continuing Professional Development

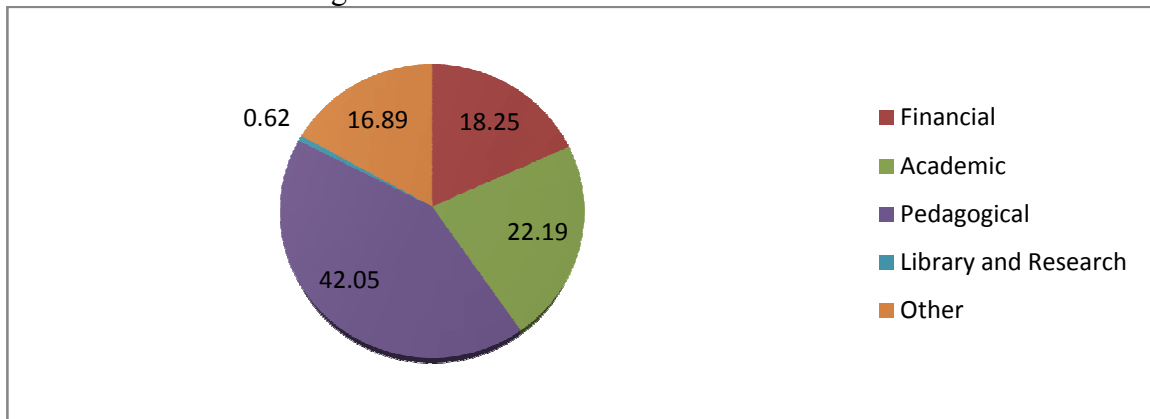
Question 30: What suggestions do you have to improve the acknowledgment of teachers' continuing professional development from educational sectors?

The figure that follows below, displays the data of the suggestions for acknowledging teachers' continuing professional development (TCPD). As many as 682 (42.05%) respondents included pedagogical issues, 360 (22.19%) included academic issues, 296 (18.25%) included financial issues, 274 (16.89%) included other issues. On considering other issues, the respondents included matters like awards, certification, acknowledgment of the teacher's work, regulation and learning materials; 10 (0.62%) included library and research while 434 (22.11%) did not respond to the question.

This question aimed at collecting information regarding suggestions for the improvement of acknowledgement of TCPD. The reason for including this question at the end of the questionnaire was, on the one hand, to obtain from the respondents individual suggestions about the acknowledgement of CPD. I included this question expecting that the respondents would generate a variety of suggestions for CPD to be acknowledged in terms of financial incentives, promotion in the career and certificates. Apart from these suggestions, the respondents indicated library, research and a large diversity of suggestions beyond my expectations.

The following pie-chart represents the suggestions indicated by the teachers for the improvement of the acknowledgement of continuing professional development by educational sectors.

Figure 4.9: Representation of the suggestions for the improvement of the acknowledgement of CPD



Pedagogical issues

Pedagogical issues were indicated as the first suggestion for the acknowledgement of professional development programmes (PDPs). Pedagogical issues included in the responses mainly embrace PDP matters which positively impact on classroom practices. In primary education, most of the PDP activities took place at ZIP level, essentially aiming at improving professional skills of all teachers or for teachers from a specific grade. In some circumstances these programmes did not include all teachers due to the large number of teachers appointed for the grade. Regarding pedagogical issues, the teachers pointed out that education sectors should carry out seminars for professional development throughout the academic year, mainly at the end of the trimester in order to improve content knowledge and professional skills. These findings led to two interpretations. The first interpretation is that teachers consider that PDP positively influences their profession. Therefore the responses indicate the need for improving specific areas, such as content knowledge and professional skills. The second interpretation is that PDP has not been a continued activity. An example of the lack of continuity is the suggestion for more opportunities to participate in PDP activities.

Academic issues

With respect to academic issues, the responses include the provision of bursaries, opportunities to increase the level of academic and professional qualifications and the increase of the number of teacher education colleges. The findings clearly illustrate the teachers' willingness to improve their academic and professional qualifications. This aspect is consonant with the difference found between the academic (V6) and professional

(V7) qualifications of the respondents. To be enrolled in the next level of professional qualification usually implies holding a higher academic qualification than the one needed as a requirement for the position. By progressing in terms of knowledge and professional skills the teachers also make improvement in their professional career. I became aware of the teachers' motivation to achieve the next academic or professional level within the context of expansion of education opportunities in Mozambique.

Financial

There are 2 modalities that allow a teacher to progress in their career and increase her/his salary (Ministry of Education and Culture, 2009). One modality is designated vertical progression and the other one is horizontal progression. In the first one, the teacher progresses according to the period of service in the profession. In the second modality the teacher can progress by achieving a higher level of academic and/or professional qualification than that currently held. The increase in salary obtained through the second modality is most significant.

Other suggestions indicated are seminars with financial incentives and loans for housing. These findings suggest that CPD have not been taken into consideration in the teachers' careers. Consequently the teachers are permanently looking for opportunities to be enrolled in the next academic or professional level in order to improve their salaries.

Other

As many as 274 (11.33%) respondents included other issues as suggestions for the acknowledgment of CPD. Of these, acknowledgement of the teacher's work, learning material, regulation, awards, certification and parents' involvement had the highest frequency.

Library and research

The majority of primary schools do not have facilities to accommodate a library. For this and other reasons libraries, or even complementary books, are still concerns. In total, as few as 10 (0.49%) respondents referred to the provision of libraries and opportunities to carry out research as a suggestion for acknowledging CPD. This suggestion is an indicator that there is a shortage of libraries in primary schools for daily academic activities.

Further, after having participated in CPDPs, the teachers feel the need for material that would make possible the implementation of the new knowledge and skills.

Table 4.53 below summarises the responses distributed into categories as stated in section 4.2.

| Category | Response | Frequency |
|--|---|-----------|
| Financial | Promotion in the career/changing the category | 296 |
| | Increasing the salary | |
| | Salary on time | |
| | Seminars with financial incentives/payment | |
| | Loans for housing | |
| Academic | Increase the academic level | 360 |
| | Teacher education should be continuous to improve teaching | |
| | Increasing the number of teacher education colleges | |
| | Increasing the duration of teacher education | |
| | The education sector should provide bursaries | |
| | Increasing the level of professional qualifications | |
| | Providing adequate teacher education | |
| | Appointing qualified teachers in Grades 1 and 2 | |
| | Building more teacher education colleges | |
| | Increasing professional qualification in teacher education colleges | |
| | Provision of teacher education through distance education | |
| | Provision of opportunities to attend teacher education courses | |
| | Promoting mutual support and collaboration among teachers | 682 |
| Presenting seminars for pedagogical updating to improve teaching | | |
| Pedagogical | Professional development should be continued/TCPD | |
| | Improving the curriculum for primary education | |
| | Trimester seminars/throughout the year | |
| | Semester seminars at the beginning of the year | |
| | Carrying out short term TCPD at school or ZIP level | |
| | More professional development to improve content knowledge | |
| | Promoting experience sharing with other provinces | |
| | Promoting experience sharing among teachers | |
| Libraries & research | Libraries and Research | 10 |
| | Libraries at schools | |
| | Promotion of knowledge | |
| | Promotion of research | |
| Other | Award | 21 |
| | Awards for the most dedicated teachers Praise teachers with much experience | |
| Other | Certification | 9 |
| | Certificate from an institution or university Providing certificates from teacher education institutions | |

| | |
|---|-----|
| Regulation | |
| Regulation of class size to reduce the number of learners | 37 |
| Class size should be regulated to allow better control | |
| Regulation on CPD and transparency on the selecting teachers for PD | |
| Eliminating automatic promotion | |
| Learning material | 83 |
| Improving learning material | |
| Provision of learning material according to learning content | |
| Provision of sufficient material for teachers and learners | |
| Availability of learning material on time | |
| Improvements (on) | 109 |
| Acknowledgement of the teacher work by society | |
| Improving infrastructure/classroom | |
| Improving working conditions | |
| Improving social conditions | |
| More attention from the Ministry of Education side | |
| Moral support | |
| Effective control and teacher evaluation | |
| Parent involvement | 25 |
| Promotion of respect among community and teacher (CD) | |
| Promotion of parent collaboration | |

Table 4.53: Summary of the suggestions for the acknowledgment of continuing professional development

4.7.30 Reflection on the Questionnaire

The use of questionnaire, as part of the Cycle A, aimed at providing a baseline analysis of the topic under study as already stated in Chapter 3. For this purpose, informed by the literature review and my own experience, the major issues which involve TCPD and classroom practice were identified and considered. In doing so, the central questions/items of the questionnaire comprise the next issues:

- academic and professional qualification;
- experiences on and opportunities for CPD;
- models of TCPD;
- individual contribution for own professional development;
- teacher roles; and
- procedures concerning individual learner assessment.

In designing the questionnaire I viewed the mentioned questions/items as the probable internal factors that, at classroom level, influence individual learning facilitator on taking responsibility on her/his own CPD. Therefore, I launched to administration of the questionnaire having in mind that the questions/items I have identified as being crucial one will provide substantive data to inform the Cycle B of this PAR. Consequently, is worth mentioning that the findings of the questionnaire provided an understanding in the domains of:

- motivation and contribution for continuing professional development
- preference for topics for continuing professional development
- preference for models of continuing professional development
- preferred ways to contribute to their own professional development
- impact of the different levels of professional qualifications on the teachers' perception of the teachers' roles and assessment

In addition the findings shows insignificant impact of the level of professional qualifications on the teachers' perception of the teachers' roles and deficient monitoring of individual learner achievement.

Regarding the weakness on monitoring of individual learner achievement is worth mentioning that the responses to Question 25 from the questionnaire (*How often do you assess individual learner in terms of learned achieved?*) showed lack of accordance with the practise in Grades 1 and 2 and my own observation. I interpreted this fact as a direct consequence of the wrong way in which I phrased the question. Nevertheless, the set of responses on monitoring of individual learner achievement provided important data to be taken into consideration on the PAR.

The diversity of responses given by the respondents regarding the topics that have been focused on in the in-service education attended (Question 12: *Indicate the two most valuable topics that have been focused on in the in-service education programmes that you have attended.*) confirmed that each teacher has specific needs and interests. This result informed my practice as promoter of TCPD and the importance of a self-directed

professional development model. Therefore, while working with the PRs, the main strategy was to facilitate learning according to what they need to improve and innovate.

From this understanding and the observations throughout the administration of the questionnaires, I took the risk of delaying the beginning of the second cycle of the PAR process. To begin with I designed the first learningshop to familiarise the PRs with basic issues on Action Research (AR).

According to my observation during the administration of the questionnaire, the teachers strictly stayed in the school during the period they have to be in the classroom with the class for the learning facilitation. Every two weeks they engaged in planning with fellow teachers from the same grade. This planning takes approximately four hours. Frequent collective assessment sessions at schools also were one of my observations as being the reason for the reduced length of opportunities offered to learners to learn. When comparing the time that the learners actually had for effective learning opportunities and the time devoted to assessment, I observed that this task takes up a large part of the academic year. Likewise, considering the current notion of assessment as an integral part of the facilitating learning (widely substantiated by literature), specific school day dedicated to assessment would not take place as often as it does. Another observation is concerned with effective school days that the learners have. Due to many cases of teachers' absenteeism and marginal events at local level, the days allocated for the academic year are significantly reduced.

The overall process of piloting and administration of the questionnaires provided useful inputs to my intention in exploring an intervention for improving the practices of primary school teachers through PAR. Thus the reflection on all processes developed an awareness of the difficulties I would have of both observing learning opportunities and involving the PRs in extra-classroom and/or extra-school activities in. Despite this experience, I took the risk on delaying the beginning of the second cycle of the PAR process. To begin with I designed the first learningshop to familiarise the PRs with basic issues on AR.

The sample used was not representative of all Mozambican teachers' experience and availability. Owing the limitations already referred to in Chapter 3 the respondents engaged in this study had been facilitating learning in towns and suburban areas. This situation gave them more opportunities to progress regarding their academic and professional qualifications which are the established way to progress in the teaching career, and consequently in the salary categories. Therefore, the conclusion that the respondents preferred to move from CFPP to IMAP/ADPP or from IMAP/ADPP to higher education was an indication that CPD by means of PAR to improve pedagogical practices would not be simple task to hold in Maputo-Cidade.

At the end of the reflection on the questionnaires is worth mentioning that since the literature review up to the analysis of the data gathered improved the way I understand TCPD. The literature reviewed provided different perspectives of the nature, the influential factors the diversity of approaches and models of TCPD which expanded the view in which I can schedule a PD programme. With respect to the data, I come to realise how learning facilitators understand their roles as educators, specifically concerning monitoring individual learner learning and provision of remedial tasks. This improved my practice in the sense that I understood and experienced transformation in my usual practice of motivating ownership of pedagogical practice.

4.8 LEARNINGSHOPS

The learningshops followed the period devoted to semi-structured classroom observation. The PRs participated in three learningshops, namely on “Action Research for Professional Development”, “Instructional Analysis to Promote Learning” and “Assessment and Learners Achievement”. After classroom observation, I did not think the PRs would fully appreciate individual action research projects due to the overall working condition, like suitable classrooms, lack of blackboards, learning materials, desks for teachers and learners, time of the school day and the time that teachers are at school. Instead the PRs could apply elementarily action research procedures. I took the risk of promoting action research or action research procedures which can develop habits of continuously asking questions about one's practice. Led by my observation as a supervisor and facilitator of

in-service education programmes, another risk I took was to encourage the PRs to look at the facilitating learning beyond the usual constraints raised mainly by teachers in Grades 1 and 2, such as:

- overcrowded classes
- overcrowded curriculum
- inappropriate system of education
- predominance of learners who do not speak Portuguese as a mother tongue
- semi-automatic promotion
- lack of study habits among the learners
- insufficient parent support.

In order to overcome the constraints mentioned above, I intended to encourage the PRs to question and critically look at what they were doing to promote learning and what they could do better.

As stated earlier in this chapter, the PRs hold senior secondary education and IMAP certificates, as academic and professional qualifications respectively, at the outset of this study. Consequently, according to the teacher education curriculum, they were familiarised with research methods in education. Based on this fact, I launched into the learningshop on action research thinking that the PRs would acquire specific information, knowledge and skills concerning a research method that they could use in the classroom and that propagated continuing professional development. By participating in this learningshop, each PR could use the previous sensitivity to educational research and find useful tools for systematically asking her-/himself questions such as:

- What can I do to ...?
- What can I improve ...?
- What can I do better ...?
- How can I elaborate innovative learning tasks in order to motivate my learners ...?
- How can I support (a specific learner) to learn better?

- How/where can I obtain more knowledge/skills/learning material to improve the learning opportunities?

In this regard the learningshops were designed to attain the following purposes, namely to:

- look at essential tools and to harmonise the language to be used in the study
- prepare the teachers to take part in the PAR cycles
- discuss with the teachers ways for their CPD in the context of their educational practices
- contribute to the improvement of knowledge and skills on research methods
- contribute to the teachers' growth and my own CPD
- understand the participating teachers' awareness with respect to CPD.

As can be seen in the visual representation of the activities performed in this PAR cycles (Table 4.57), the research process was not linear. A number of activities took place simultaneously. This is the case in the three learningshops which took place while the administration of the questionnaires was still in progress. This overlap allowed me to use data from the questionnaires already completed. For instance, reading/self-study was the least preferred part of in-service education programmes of the respondents. Thus, in order to take into consideration this disadvantage, the learningshop sessions were carefully translated and the hand-outs reduced to the bare essentials.

As previously stated, one of the purposes of the learningshop was to contribute to the teachers' growth and my CPD. For this purpose I decided to leave the PRs to their own devices for 2-3 months in order to create opportunities to practise and implement what they had experienced or learned during the learningshop sessions. After that I met the PRs for following-up and reflection on the professional learning achieved. I asked about their impressions about the learningshops. Another intention of the meeting held was to provide space for analysis of the learningshops taking into consideration their practice after the new experiences. Thus, the PRs presented their impressions and spoke about what they had learned and after the learningshops I wrote a short report on it. Appendix F provides the report.

The learningshop process is described in the following sub-sections of this study.

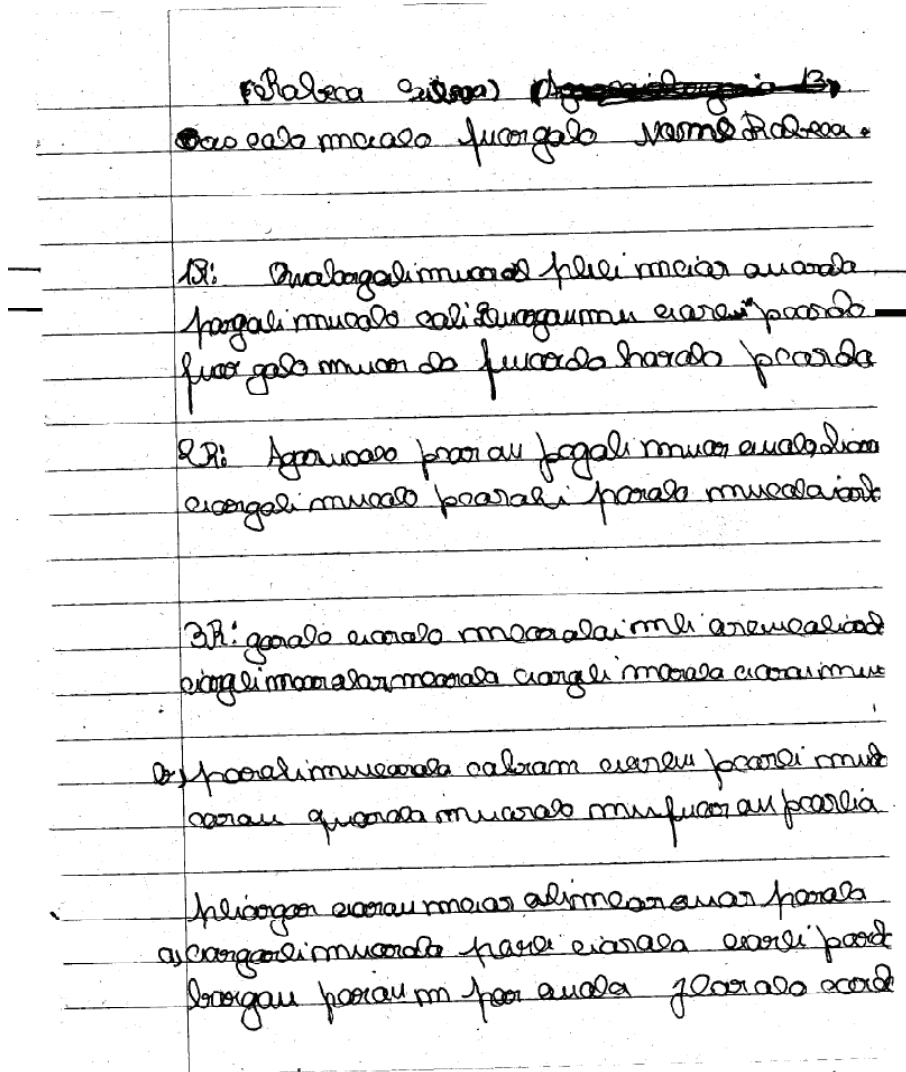
4.8.1 Methodology Used for the Learningshops

The participants of the learningshops were the 5 teachers involved in this PAR study as practitioner-researchers and me. To carry out this part of the study, the dates and the schedule were planned with the agreement of each teacher and permission from the deputy principal of the school was obtained. To avoid overloading the teacher during their holidays between trimester 1 and 2, the sessions of the learningshop took place only in the morning for five hours. The first learningshop was conducted by Dr Du Toit, my supervisor, with my support at the Eduardo Mondlane University. The following 2 were conducted by me at Unidade 18 Primary School.

I began the learningshops informed by understanding of both adult and transformative learning. My intention was to provide opportunities for professional learning that they could immediately apply to their daily practice by reflecting and critically thinking about what is done to facilitate learning in Grades 1 and 2. Therefore, during the learningshops, the prevailing methods were discussion in small groups and presentations in plenary related to what they had experienced as primary school teachers and the experiences from the sessions. In doing so, after or preceding presentations, the teachers were usually invited to in groups or individually, present their reflections, comments or ideas and possible applicability of what was being discussed. In pertinent cases, the PRs planned learning opportunities.

My experience of primary education achievement in subjects like Portuguese and Mathematics, and according to my observation reinforced the need for encouraging the PRs to reflect critically on what they were doing and what they could improve. For instance, in one of the provinces I got an extreme example of a learner in grade 5 who, apart from the name, could not write understandable words that I could use as case study. The following extract is what the learner wrote:

Photo image 1: Learner's writing



The text is written in Portuguese. However, I could not translate since the segments (words) did not make any sense. The learner only indeterminately joined letters from the beginning until the end of the text. This example shows that the learner did not acquire the writing skills establish for Grade 1 and she/he successively passed from one grade to another up to Grade 5. None of the learning facilitators supported the learner by means of remedial tasks on reading. This limitation in terms of the learning process gave me the impression that the learning facilitators who the learner had did not feel responsibility for the learner achievement. Another impression is that the learning facilitators do not master appropriate methods neither for facilitating learning nor for recovering learners to find out a possible solution.

The probable limitations in terms of methods of facilitating learning supposed previously, is aggravated by the low level of reading skills among the learning facilitators'. For instance, in the context of the Southern and Eastern African Consortium for Monitoring Education Quality II (SACMEQ II), the study related to Mozambique showed that in upper primary education (PE 2nd level – Grades 6 & 7), the learning facilitators' test was similar to the learners' test (Passos, 2009).

4.8.1.1 Learningshop on action research

The purpose of the learningshop on Action Research was to:

- present an action research approach as a method for investigation
- present an action research approach as a tool for professional development
- promote reflection on the need for innovative practice in the context of continuing professional development
- discuss with the PRs possible actions to be carried out to monitor their educational practices towards their own CPD.

The learningshop on action research took place on 16th and 17th April 2008. Dr Du Toit conducted the sessions in one of the rooms of the Faculty of Education at Eduardo Mondlane University, since at the Unidade 18 Primary School there were no classrooms available, nor facilities for a PowerPoint presentation. In order to overcome the language constraints among the teachers, the presentations and the hand-outs provided during the learningshop were translated by me.

The topic and content of the learningshop were presented as a working proposal for the sessions and the PRs. Dr Du Toit designed the sub-topics aimed at guiding the discussion and future study and implementation of action research projects. The topics of the learningshop comprised issues such as:

- Teacher responsibilities
- Teacher's roles
- Leadership role

- Old and new paradigm of facilitating learning – with a focus on whole brain learning as innovative idea
- Traditional research
- Action Research
- Critical reflection
- Possible theoretical framework for the research project
- Project design.

Photo image 2: Learningshop on action research



Dr Du Toit conducted the AR learningshop in a friendly and humoristic way – as part of demonstrating the principles of whole brain (Herrmann in Du Toit, 2006) methods of facilitating of learning. He *inter alia* used coloured cards and asked the PRs to select the first and the last one to show how people have different characteristics and learning preferences. In order to improve the participation of the PRs in their professional learning they were invited to discuss with the neighbour colleague the cards selected. During the entire session the PRs were invited to present their own ideas and experiences on the issues being discussed. They discussed about their experiences as learners in the past, having teachers with different styles of teaching and expressed their feelings concerning them. Then, to complete the reflection on their teachers they were invited to say what kind of teacher they were. This created the background for all sessions of the learningshop.

The PRs had the opportunity to elaborate on their own examples, ask questions and add comments on what was being discussed – demonstrating learner-centeredness.

Following the learningshop, I provided all hand-outs prepared by Dr Du Toit and translated into Portuguese to the PRs. I also provided a kit of hand-outs on practical issues of action research in order to expand information related to the process of doing action research and the basic steps for designing an action research project.

I found, in general, a high motivation among the PRs throughout the learningshop sessions. They were interested in the presentation and the proposed task and discussions and one of the comments by PR2 was that “...before [the seminar] I talked more than the learners in the classroom and after the seminar, I began to give more time or more opportunities to the learner to learn”. PR5 said that “I learned the teacher role in the classroom (...) and how to work with learners who have different learning disabilities”.

Reflection on and analysis of the learningshop on action research

After the learningshop the PRs took much to decide about the drafting of the projects. When I visited them in July I noticed that they did not feel confident to start with a project for their professional development. One of them said: “We are still learning how to do it”. My first impression was that, on the one hand, they felt unsure of what to include in the

project. Having noticed this hesitation, I provided a handout on practical issues on action research, translated and adapted from McNiff and Whitehead (2002) in the book *Action Research – Principles and Practice* (2nd ed). Then, I designed a form to be completed by the PR with information on the desired project to overcome the constraints faced. The form included suggestions on the issues that they mentioned while drafting the project. After that I analysed the objectives and the content of the form with one of my critical friends. The second impression follows the first. I thought that the PRs did not have habits of doing wide-ranging tasks other than individual and/or collective planning of learning opportunities and facilitating learning in classes. Moreover, designing the AR project would mean one more activity, aggravated by the complex working conditions at the school.

At this stage of this PAR I confirmed the importance of developing teachers' competences through both emphasis and development of the teachers' strengths. When designing and developing the learningshop, Dr Du Toit provided practical and scientific knowledge starting from what the practitioner-researchers (PRs) knew. This approach improved my own practice on conducting CPD in the sense that the PRs should know the "what", "when" and "why" of the innovative practices and the scientific foundation of their classroom practices. For instance, as can be seen in Table 4.54, the PRs reported that they worked in a known context; however, they mentioned the new knowledge acquired.

Reflection on the learningshop on AR helped me to better understand educational change as a slow process and the unforeseen time that it can take due to the number of factors involved in a change process. This was particularly valuable for planning and observing the next learningshop. Following the learningshop I tried to observe some learning opportunities but this was not feasible since the PRs felt uncomfortable, owing to the conditions in which they were working with the learners during the period of the school renovation. Each PR class comprised 60-65 learners and by that time two teachers shared the same space under a tree to facilitate learning.

In July 2008, I as a research-mentor (RM) generated a discussion with the PRs on the learningshop. They made comments on the new experience and wrote a report. The table that follows, illustrates extracts of what the PRs pointed out.

| Question | PR1 | PR2 | PR3 | PR4 | PR5 |
|-------------------------------------|---|---|--|---|---|
| How did you find the learning-shop? | The topics were not new. They were related to our work. However, I obtained new experiences. | The topics were approached with certain naturally as they were not new and related to our work. We got more experiences and developed our profession. | The learningshop was very useful since we learned many important things related to our professional life. The learningshop was totally useful | The learningshop was important because it allowed me to increase my level toward my professional development. I obtained more experiences with respect to the teaching and learning process I appreciated the effort by Dr Pieter du Toit, with the collaboration of Mrs Cristina Tembe. This process should be continued and permanent | The learningshop approached a variety of topics that enriched my work during the 2 nd trimester. The learningshop was part of my continuing and permanent learning. It would have more seminars in order to improve my practice. |
| What were the most valuable issues? | <ul style="list-style-type: none"> - Experiential learning - constructive learning - professional development - teachers' responsibilities and tasks - teachers roles - relationship between contents and objectives - learning opportunity - action-research | <ul style="list-style-type: none"> - Experiential learning - Constructive learning - Professional development - teachers' responsibilities and tasks - teachers roles - relationship between contents and objectives - learning opportunity - action-research | <ul style="list-style-type: none"> - Learning opportunity - relationship between content and objectives | | <ul style="list-style-type: none"> - Types of learning - Experiential learning - constructive learning - teacher role in the classroom -learner role -how to work with learner with different learning disabilities - how to motivate the learner - how assess the level of understanding - how to elaborate learning tasks for underachieving learners - how to asses learners with visual and writing difficulties |



| | | | | | |
|--|---|--|---|---|--|
| <p>What did you learn/ acquire from the learning-shop?</p> | <p>I learned about professional development, learning opportunities and action research</p> | <p>The topics were not new, were issues related to our work. What we gained was more experience.</p> <p>Learning opportunity: This topic refers to a learner-centred approach. The learner should be the learning centre and all activity. All activities should be learner-centred.</p> | <p>I used to facilitate learning using a teacher-centred approach, where the teacher speaks more than the learner.</p> <p>The relationship between learning content and learning objectives; we improved skills on</p> <ul style="list-style-type: none"> - objectives statement - sequencing objectives - relationship among objectives | <p>Remedial learning: I had the opportunity to acquire skills that allow me to work with under-achieving and low disciplined learners</p> | |
| <p>What innovative changes did you introduce in your practice?</p> | | <p>Before the learningshop, I talked more than the learner in the classroom. After the learningshop, I began to give more time or more opportunities for learning.</p> | <p>In this learningshop we gained new experiences: We have to use a learner-centred approach. The learner should have more opportunities to learn.</p> | <p>I do not have specific changes due to the working conditions during the two trimesters when the school was being renovated.</p> | |

Table 4.54: Qualitative feedback regarding the learningshop on action research

4.8.1.2 Learningshop on basic issues of instructional design

The learningshop on basic issues of instructional design took place in one of the classrooms at the Unidade 18 Primary School, from July 21 to 22 during the school holidays following the 2nd academic trimester. The objective of this learningshop was to apply Gagné's (1972) instructional design model to the planning of learning opportunities for the first two weeks in grades 1 and 2. The outcomes of the learningshop were jointly identified with the PRs in order to take into consideration the planning recommended at the school and Gagné's instructional events.

Action

The learningshop consisted of three parts, namely introduction to instructional design model, sequencing two learning units and planning of respective learning opportunities. I organised each part of the learningshop considering presentation, discussions and production of examples of what had been discussed. I subdivided the PRs into two groups, according to the grade they taught. Such grouping, allowed the PRs to develop discussions and planning in a real setting.

I began the session promoting a discussion on common terms such as education, lesson, instruction, learning and learning opportunity in order to obtain the PRs' understanding of these terms with respect to facilitating learning. Apart from these concepts, Bloom's taxonomy was reviewed and specified with concrete learning activities and outcomes.

Photo image 3: Learningshops on instructional design and assessment





Following the first discussion, I presented instructional design as a process that encompassed analysis, design, development, implementation and evaluation and after that we explored the ways to adapt the learning objectives and content of the learning unit previously provided in this learningshop. Furthermore, the PRs used elaborate examples of innovative proposals. At this stage I combined group discussion and planning, traditional direct teaching and group presentation. I basically used a flipchart and blackboard to support the interaction with the PRs. Since I made reference to the teacher as a “learning mediator” and “interpreter and designer of learning programmes and materials”, I also reviewed the teachers’ roles presented during the learningshop. I reinforced this activity with a discussion on how to prevent underachievement and I encouraged the PRs to pay more attention to underachieving learners.

Observation

At the outset of the learningshop I felt that the PRs were motivated to participate. I also felt that from the first learningshop in April to July, when this second learningshop took place, the PRs had developed the ability to interpret learning disabilities. Another realisation at this stage of the PAR was that the PRs used more learner-centred approaches. In this respect it was more frequent to hear from them about the need for curriculum management, taking into consideration the learning pace of a specific group of learners.

From the discussion of the terms about facilitating the learning process, I found that the translation of the term *instruction* into Portuguese gave a different meaning. Instruction was understood as education and knowledge instead of a process; instruction=instrução; teaching, knowledge acquired (Costa & Melo, 1992).

Throughout the learningshop I found interest in and willingness to change. However, the PRs frequently complained about the timetable, the extensive syllabus and the class size.

4.8.1.3 Learningshop on basic issues of assessment

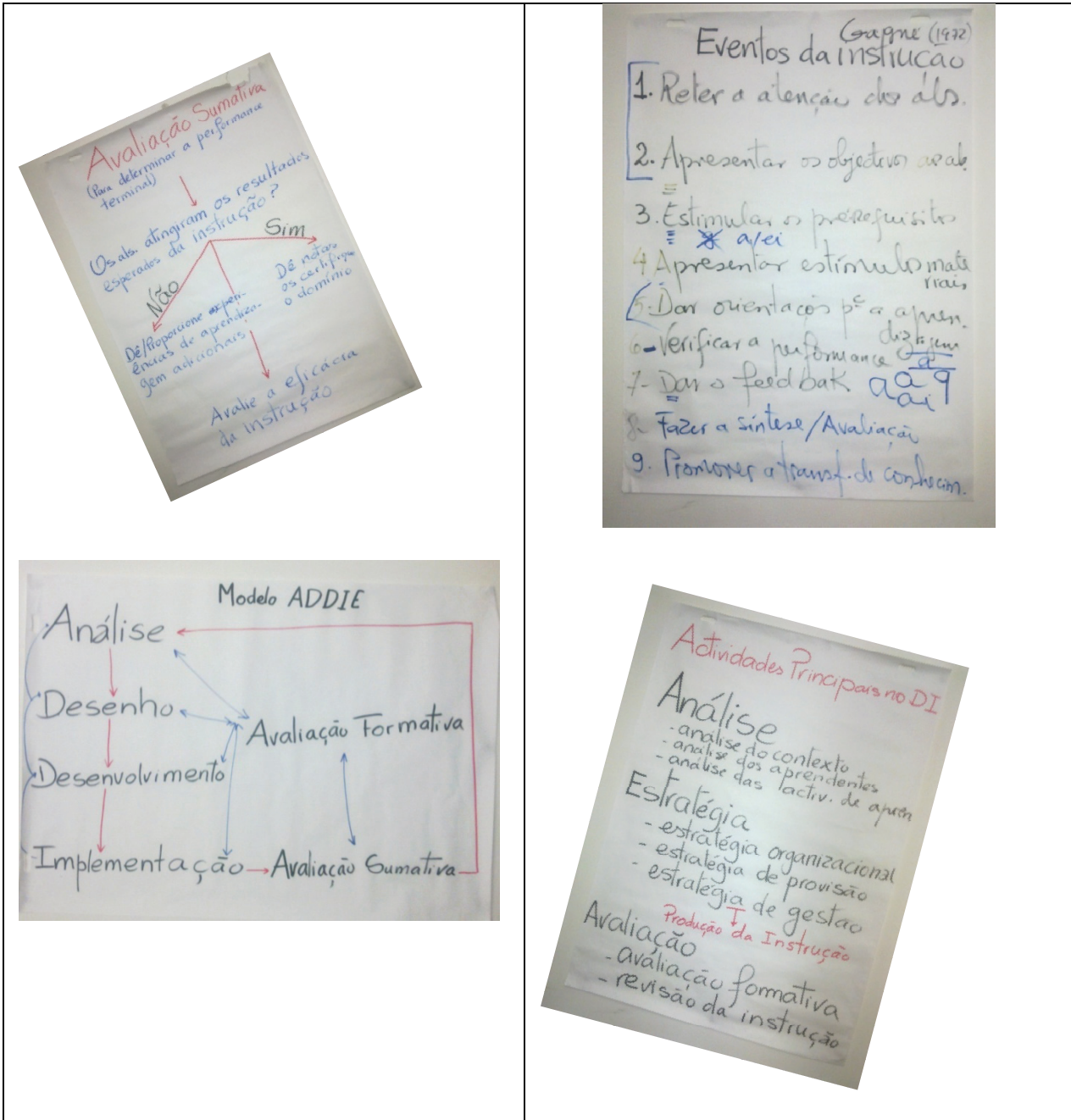
Learningshops on basic issues of assessment were also conducted by me at the primary school during the same school holiday period. The results of the learningshops were used to design learning activities and assessment, with emphasis on the monitoring.

The outcomes of the learningshop were identified in order to:

- describe practical and common learning problems among learners in Grades 1 and 2
- try ways for better understanding of the problem from a psychological point of view and knowledge of specific subject methodology
- design learning activities and monitor strategies to solve the problem
- discuss the working group's role in lower primary education with specific emphasis on Grades 1 and 2.

The results of the learningshop reflected the teachers' commitment to monitor their learners' achievement. The teachers would pay particular attention to those who show insufficient skills in language and Mathematics. Another result was the design of lesson plans, including monitoring activities.

Photo image 4: Flip-chart notes



4.9 OVERVIEW OF THE REPORT FINDINGS OF THE SECOND CYCLE OF THE ACTION RESEARCH PROCESS

This section summarises the main findings of Cycle B of this PAR study. In this cycle each PR designed and developed ideas for her/his action research project as a practical implementation

of the knowledge and skills acquired and/or developed during the learningshops. Thus, this cycle includes a set of cycles carried out by me and the PRs from July 2008 to April 2010. The length of the cycle had to do with the aim of this PAR study as stated in Chapter 1. My intention was to provide opportunities for TCPD based on individual teacher planning. Therefore, as indicated in Chapter 3, each teacher was approached as a single case study. This strategy basically consisted of:

- the design of individual projects;
- the provision of information related to facilitating learning process;
- the discussion and suggestions of innovative learning tasks;
- classroom observation;
- reflection after a two month period.

I launched the practitioner-researcher AR projects after the activities carried out throughout classroom observation and learningshops in Cycle 1 of this PAR study, expecting that the PRs would reflect on specific parts of their learning facilitation and/or the learners' learning. Consequently they would introduce innovations in the process of learning facilitation and in the learning tasks assigned to the class. Although the PRs reported that they had learned and improved their knowledge and skills, the period which followed the learningshops did not provide significant evidence in terms of a written AR project. At this time I continued with the administration of the questionnaires in the Northern provinces and the PRs continued with the process to try to accommodate the new experiences.

In an attempt to overcome the hesitation among the PRs to write the AR projects, I designed one page scaffolding so that the PR would complete it with possible content for the desired project. I designed the form in order to provide ideas of basic components in a simple AR project related to a single issue that could be performed in a short period of time. In addition the form aimed at both improving and exemplifying the hand-outs provided during the learningshops. The provision of the form was immediately followed by a discussion of the components of the form. To develop the discussion with each PR, I took the risk of having a less participative approach. In this case the discussion mostly followed a “mentor-centred” approach due to my urgency of completing the projects and the time the PR would need to finalise them. The delay on designing the research projects, gave me the impression that the

PRs did not have so much time to dedicate to written work out of the joint session. Hence, to overcome this difficulty I decided to plan a joint session for whatever written outcome or design of learning material.

The account of the observation and reflection during Cycle B is presented in the following subsections.

4.9.1 The Practitioner-Researchers' Participatory Action Research Projects

As stated earlier, the PRs were provided with a form that indicated basic issues to be taken into consideration in an AR project. Following this procedure each PR and I scheduled the activities for classroom observation. We selected and planned specific parts of a learning opportunity to be observed and produced learning material for learning of vowels and diphthongs. The learning material aimed at providing learners a diversity of visual representations of the letters to be studied. Additionally, the use of learning material was an innovative way of presenting the learning content as aligned with learning objectives. Due to the shortage of paper at school we used the back of paper already used, provided by me.

I experienced that the PRs did not have habits of producing and using learning material other than the learners' textbooks when facilitating learning of reading and writing.

To begin with, the PRs completed a short questionnaire related to their identity, academic and professional qualifications and the current class and the ones they had in 2007 and in 2008.

Classroom observation began to follow standardised patterns and observation sheets for self- and external assessment were introduced. The content and feasibility of the observation sheets were previously discussed with the PR. As a result one of the observation sheets was not adopted owing to its inappropriateness. It was based on technologies unavailable at school level and followed complex steps. However, the PRs were interested in the types of objectives referred to in Bloom's taxonomy in the different episodes of a learning opportunity. The purpose of structured observation was to gather numerical data in a systematic way about the facilitating of learning and learning processes in Grades 1 and 2. As a result of the structured observation each teacher carried out self-evaluation and topics for innovative practices were

identified. During the learning opportunities, as a researcher-mentor, I monitored what teachers and learners did and took notes of the practices such as supportive interventions and the routines at classroom level in order to build a picture related to monitoring of the learning process.

4.9.2 The Case Studies of Practitioner-Researchers' Continuing Professional Development

In Chapter 3 I refer to the five case studies included in this PAR. Each teacher's practice was a single case study. Consequently I developed five case studies and I numbered each one. Case Study A encompasses activities carried out with PR1, Case Study B encompasses activities carried out with PR2, and so on. The purpose of each case study was to observe the diversity of ways of continuing professional development among the five PRs involved in this exploratory study. It is of value to note that at the outset of this part of the study, I was not confident about how each case study would develop. However, from 2009 I found the interest and collaboration of all PRs more realistic. The PRs constituted an appealing group since, to some extent they represented the respondents of the questionnaire administered in Cycle A. The group comprised mostly female teachers and held IMAP certificates, the current model of professional qualification. Additionally, the PR group included 2 out of the 3 age groups of this study and had different experiences of the learning content and classroom management.

As part of my initial planning in Cycle B, I tried to understand the context in which the PRs facilitate learning and the content of their projects. The PRs and I analysed the case study and planned the next steps. In order to support the PR project, I provided paper (A4) and one permanent marker and recommended the use of what they found applicable from the learningshop and other experiences from this PAR study and scheduled the classroom observation period. Afterwards we continued our journey of continuing professional development (CPD). The PR put into practice her/his project by planning and facilitating innovative learning opportunities. I, in my turn, performed the subsequent steps of this PAR.

Following the purpose towards the exploration of an intervention for improving the practice of primary school teachers through a TCPD of this PAR indicated in Chapter 1, I did not intend to work on methodologies of facilitating learning in a specific subject. My intention was to provide opportunities for the acquisition and/or development of knowledge and skills, and to observe each case study afterwards. In describing the activities carried out by a certain PR with her/his learners, I would interchangeably use the term teacher to refer to the PR. I launched the five case studies informed by transformative learning theory and case study method within a self-directed professional development context.

The environment which I worked in was a challenge to me since the PRs had:

- overcrowded syllabi
- only three hours per day in the class
- no schedule, during the week, for other pedagogical tasks other than facilitating learning
- school activities or professional development programmes assigned by the ZIP or the school for the break of the trimester
- planning sessions only every two weeks.

This being so, the time available extended the case studies despite the interest demonstrated by the PRs. The following sub-sections summarise examples of the steps and the respective activities performed in each case study.

4.9.2.1 Case study A

Context

Case study A includes my AR cycles with PR1. This PR was the youngest teacher of the group and also the least experienced one. Her participation in 2008 activities was limited since she had given birth and stayed out of the class on maternity leave for three months. Her class comprised sixty learners who were in Grade 1, starting their academic journey. She loved first-graders and said that “*according to my experience many learners enter school with no notions and they will learn everything with me*”. Additionally, commenting on what to be in a classroom meant to those learners, she said that it was important to be aware “*that it is the first contact with reality*”, the school environment. PR1 felt confident in what she was doing and

could do in order to guide the process of the acquisition of reading and writing skills that her learners were initiating in 2009. Thus she added, *“Therefore, as I am experienced, I have to use my tools very well”*.

The important issue in this case was the fact that PR1 was aware of her limitation concerning methods of facilitating learning and showed willingness to learn. She preferred participating in a working group and support sessions with fellow teachers before guiding innovative learning tasks in her class. In this regard she: *“In my intervention, I talked to my colleagues and we found that the learner does not have yet ability to hold the pencil. Thus I have to closely work with the learner on his/her site using the appropriate material. Then I improve the work. However it is not easy) I want to learn how to improve learning and find strategies in order to facilitate learning to other learners in other classes”*.

Problem

PR1 identified as first problem to be the following: *“The concrete problem of my learners is to join the consonants to the vowels, the diphthong and syllables. The learners do not have many problems in reading them separately”*. Once the problem was clear for PR1, she identified the research objective and said that *“I want to investigate in the field of reading”*.

Challenges

In this research study, the PR included the participation of fellow teachers and discussed with them the challenges she was facing and would continue facing throughout the research, and listed them as follows:

- the learners did not know to handle a pencil
- some learners did not have the appropriate learning materials (pencil, rubber, textbook and exercise book)
- the time established for each learning unit (section of content) was short
- the class size (60 learners) complicated following-up all learners.

Probable solution

In an attempt to solve the problem, PR 1 prepared learning material and suggested: *“I want to bring posters to write the letters on. If I do not have so many materials, I can even use coal to*

write the letters. Later on the learners can write with their fingers on the desks". The use of learning material other than the learner textbook was not frequent in her classroom practice. Producing and using alternative learning material to present learning content and tasks would mean an innovation for PR1 and, in this respect, she commented saying, *"It is more difficult element to me"* than the usual practices *"and I like the challenge very much"*. I encouraged her to persist in experimenting with innovative ways of supporting the learning opportunities for reading and writing. Having decided to produce learning material, she thought that *"to solve the problem, first of all, when distributing the learners in the classroom, I have to put the low achieving learner with the intelligent one, assign more copies and working groups"*.

She had many expectations from this study and listed more probable solutions and continued saying that *"I have to praise those who are performing well in order to encourage the underachieving learners by talking in the class. To assign to learners more learning tasks in the exercise book. To provide remedial tasks during the free period or on Saturdays at school. To maintain informed the parent and the pedagogical deputy."*

Cycle 1

Action

I performed the *Action* step by suggesting and engaging PR1 in the production of types of learning material for acquisition and consolidation of reading and writing skills to be used with the learners. I used direct teaching since the activity seemed to be innovative itself and the time available was restricted. The learning material corresponded to both additional and innovative learning tasks. Thus, instead of showing the letters to all learners using the learner textbook, the PR1 used the A4 cards with letters.

Observation

During this step I attempted to determine whether PR1 had the skill of using the learner textbook and the innovative learning material she had prepared. This aim could determine what the PR1 could do with the information, knowledge, skills, attitude, values and virtues obtained from the professional development intervention and future CPD programmes. As a result I observed little evidence of knowledge and practice with respect to management and the use of the advantages of this kind of learning material. The cards were used at the beginning of the learning opportunity as a strategy for revising the learning content already studied. This strategy

was repeated with changes in terms of duration that it took and the number of learners asked for reading and writing tasks on the cards and blackboard.

The remedial learning tasks provided by PR1 to the learners did not attain the objective set since there were no specific procedures to differentiate between remedial learning tasks for those learners who had not acquired reading and writing skills yet and those provided for revising learning content. The cards were presented to the class and read by selected learners among the low achieving ones. Some of them read and wrote and others were not able to read or to write.

Reflection

Reflecting on the activities carried out during the previous steps of this cycle, mainly on those related to the observation step, I found insufficient skills with respect to the production of supportive learning material for facilitating writing and reading skills. In addition, I found a lack of knowledge of procedures when using complementary or supplementary learning material and the role they play in a specific part of the learning opportunity. These weaknesses mainly refer to the use of the cards in remedial tasks and in a large class context. Furthermore, the cards were not used to support individual or groups of learners. The conciliation of both, the textbook and the cards, was one of the weaknesses and suggested a practice that should be an issue to be re-considered in the next cycle.

I interpreted this as a direct consequence of an excessive concentration on the learning tasks indicated in the learner textbook. PR1 was particularly concerned with the accomplishment of the learning tasks indicated in the textbook. Therefore, in our joint planning step, apart from suggesting learning material, PR1 and I approached the use of cards with letters as part of the methodology of facilitating learning of vowels and syllables. In so doing the part of the learning opportunity related to remedial tasks would be approached as an introduction and initiation to the study of vowels and syllables, paying special attention to the sound identification and its graphic representation. The learning tasks for low achieving learners would be carefully guided as an initial one in order to provide appropriate learning pace and confidence in this group of learners. This procedure could allow the learners to master and acquire reading and writing techniques.

I hoped that the discussion of my reflection with PR1 would provide elements for self-directed professional development (SDPD). I confirmed what I had observed during my previous classroom observations in other schools with respect to low achieving learners – actually the learners lack effective opportunities for learning. My own professional learning at this stage also included the need for significant support of SDPD as the short teacher professional development intervention did not provide sufficient knowledge and pedagogical skills to form both a base for classroom practices and the subsequent reflection on that. PR1, like many other teachers, is not aware of the limitations of their classroom practice. Therefore, she does not know what to do towards the improvement of the learners' achievement and her own professional learning.

Cycle 2

Action

In this step I focused on the production and use of cards with letters and on ways to improve reading and writing skills. I concentrated on remedial learning tasks in an attempt to deal with the weaknesses of the previous cycle. Thus the learning tasks specifically addressed those underachieving learners who could not read nor write all vowels yet. The cards included only small, coloured letters in handwriting. Afterwards we planned the part of the learning opportunity that would include the use of the cards.

Observation

At the outset of the learning opportunity the learners were seated in the usual groups of two and three. To begin with, PR1 reorganised the groups in the class and moved some learners in order to have groups with different levels of achievement. The mixed groups aimed at providing support for the low achieving learners. These learners were permanently encouraged by the teacher and supported by fellow learners who could already read and write. In this learning opportunity the cards were used in remedial tasks and revisions. As a remedial task, PR1 followed procedures of the initial study of vowels and syllables.

I found in general an intensive enjoyment among all learners during the use of cards with letters since they were frequently asked to read and/or to write on the blackboard. Sometimes they went to complete the task assigned by the teacher. This strategy took 15 minutes of the 45 minute class time scheduled by the school. The positive outcome of the strategy is that I

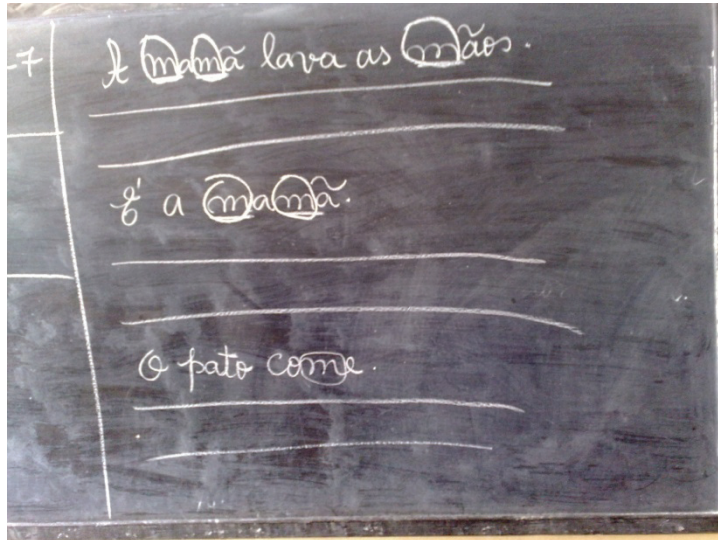
observed that more and more learners could read and write at least the vowels, diphthongs and syllables. As innovative procedure, the cards were maintained on the wall of the classroom.

Reflection

The experience I gained from the process followed in Cycle 2 suggests that PR1 could design her continuing professional development (CPD) based on short action research (AR) cycles. PR1 demonstrated interest and engagement in starting from the analysis of what she was doing and what she could do better in order to promote learning. At the end of the cycles I also noticed that the emphasis was on learning instead of teaching and the learner was placed at the centre of the overall process of facilitating learning. According to my observations, the interest and the engagement demonstrated by PR1 from 2007 to 2010 are important factors for CPD. However, it is important to note that it is necessary to follow up to improve the methods of facilitating learning she used and to strengthen the willingness to learn she showed. This follow-up will be important since PR1 was the less experienced among the PRs and she demonstrated insufficient ability on identifying the weaknesses of her learning opportunities and the probable remedial tasks. To do so she needed significant support from me. Although she was able to identify problems in learners' learning she needed indications on what to do in order to improve the situation. To some extent she had been supported by fellow teachers from the same grade during the planning sessions. However, I found that the support that they had provided did not solve the main constraints she had as the group also had limitations in terms of pedagogical knowledge and skills relating to the model of initial teacher education attended. The probable solution could be a support from outsider expertise that would present a set of sessions to fill the gaps from the model used.

I believe that PR1 can develop SDPD as it is based on individuals willing to learn and improve. However, as in SDPD she has to reflect on what she is doing and find out or look for support to improve the situation; a follow-up will play a significant role. Chapter 5 details the support to be provided to primary school teachers at school level.

Photo image 5: Teacher's writing on board



The image above represents a remedial learning task on the letter “m”.

4.9.2.2 Case study B

Context

Case study B includes my AR cycles with PR2. In 2008 he had 65 learners. In his class five learners were repeating Grade 1. He was the coordinator of Cycle 1 (Grades 1 and 2). In 2007 and 2008 he was responsible for all teachers facilitating learning during the 2nd shift (from 10:30 to 13:30) and acted as football referee in the teachers' championship. This extra-curricular activity took place on Saturdays and, sometimes, delayed his participation. He was convinced that *“in order to attain good learner achievement it was necessary to know about the learner's sociability, by conversing with the parents or other people of the family”*. The class size was one of the constraints faced by PR2. However, he thought that *“the teacher should find time to have to better know his learners and assure learning material, textbooks, pencils, and notebooks are available”*. Thinking of learning material he added by saying that *“the teacher should not forget his own learning material”*.

As part of his CPD, PR2 traced objectives related to monitoring of reading and writing with respect to vowels and reading and writing skills in Grade 1. With respect to his professional learning he said that *“in this study I hope to improve my skills concerning monitoring learners' learning, by using several activities and strategies and applying innovative pedagogical*

practices.” More precisely, he hopes “that at the end of cycle the learners can read and write vowels and diphthongs; read and write consonants and phonetics combinations; read and interpret small texts.”

Problem

Practitioner-researcher 2 considered that reading and writing in Grade 1 are the basis of learners’ reading and writing skills. He identified two main problems, namely that “*the learners confuse the vowels; the learners memorise the letters.*”

Challenges

No challenge was presented by PR2.

Probable solution

The probable solution raised by PR was to assign diversified learning tasks on reading of diphthongs, syllable and short words.

Cycle 1

Action

From the beginning of the study, PR2 was the most critical teacher. The AR cycle began in April 2009 when he actually realised that my work was not about observing what the teachers are doing in the classroom as an external control measure, but that it was about creating opportunities for his professional development. The class had already studied the vowels. However, there were learners who could not read and write them. The remedial tasks assigned to learners took place at the beginning and during the learning opportunity. As others PRs did, PR2 used the blackboard with letters like the following:

| | | | | |
|----------|------------|------------|--------------|---------------|
| <i>a</i> | <i>o i</i> | <i>o i</i> | <i>p</i> | <i>Maputo</i> |
| | <i>u</i> | <i>u a</i> | <i>a t m</i> | <i>Beira</i> |

The learners read the letter “a” in different positions:

- the “a” were presented in isolation

- the “a” were presented among other vowels
- the “a” were presented among consonants
- the “a” were presented in words

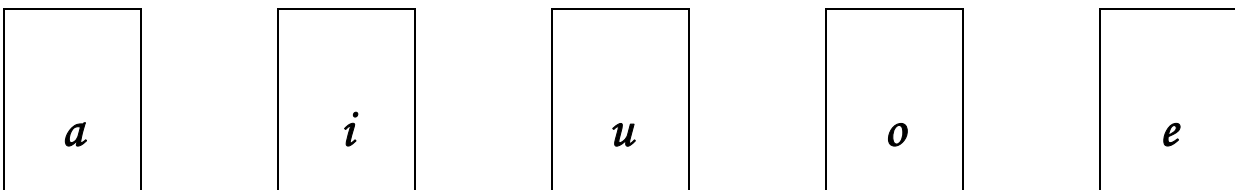
Observation

The learners enjoyed the new organisation of the learning opportunity, since at the beginning of the learning opportunity they were invited to read and write on the blackboard. However, taking into consideration that the objective was to assign remedial tasks to the class, the number of letters was too large for those learners who were not able to read at the time.

Before the reflection step of this cycle, I proposed to PR2 to facilitate another learning opportunity. I found that he had very sound communication with the learners and this fact should be explored more.

Action

The second learning opportunity was only related to vowels. Since the learning tasks were remedial PR2 invited the learner to sing a song which text had vowels. The learners sang with enthusiasm. It was a song that they learned at Kindergarten. After the song the PR showed the letters by writing them on the blackboard and showing them on cards. The learners read them individually. He then involved more learners by distributing the cards to 5 learners who were standing in front of class. The other learners were invited to read the letters. To end the learning opportunity the class wrote the letters in their notebooks.



Observation

The learning opportunity took place in a different environment. Practitioner-researcher 2 employed the use of cards with letters to encourage low achieving learners to read with fellow colleagues and alone. He also got the class to improve learning among those learners who

already had acquired the reading skills of vowels. In doing so he invited alternatively both groups to read the vowels. The learners were eager to read and/or to indicate the letter indicated by the teacher. At the end of this learning opportunity I did not notice how many of the low achieving learners could read; however, I found that all learners enjoyed the way in which they participated in the classroom.

Reflection

The reflection was an important part of this cycle. In his reflection PR2 stressed that “*I observed my pedagogical practice through the learning tasks carried out by my learners. I used a sheet to indicate the underachieving learners in order to support them*”. According to my observation, PR2 would continue supporting his learners. PR2 was content and his reflection showed a positive feeling: “*Indeed there is a slight difference on the work. I thought that it was an activity aimed at investigating the teacher’s work. Conversely the purpose was to improve the work in order to attain the learning objectives*”. In concluding he said that “*There is lack of these types of conversation. There is no debate on regulations coming from decision-makers. The seminar to justify (...) took two days*”. To end his reflection PR2 talked about the lack of incentives and materials.

Due to the level of poverty in suburban Maputo-Cidade he lamented saying that sometimes the learners did not achieve well, since they came to school without having eaten.

4.9.2.3 Case study C

Context

Case study C includes my AR cycles with PR3. PR3 had a powerful discourse when talking about the CPD process which she was participating in. In 2009 she had a Grade 2 class consisting of first-graders she had in the previous year. She started teaching in 1997 and in 2007 was appointed as delegate of the grade group. She started with two broad objectives related to two subjects, Portuguese and Mathematics, by saying that “*the fundamental objectives which I would like to attain are: my learners must be able to write and read very well; my learners should be able to do calculations, to sum, to subtract, and to multiply*”.

Then she limited the project objective by saying that *“one of the areas which I would like to investigate and achieve improvement in is reading and writing, since reading and writing are the basis of everything”*.

The classroom was full of desks organised in rows separated by a narrow corridor between them. A significant percentage of learners did not engage in learning tasks assigned by PR3 as they did not know how to do them. The difference of learning pace among the learners was perceptible as there were learners performing the learning tasks, others talking with peers, and others just looking at their textbooks.

Problem

In identifying the problem PR3 said *“my problem is the large class I have”*. PR3 was not confident about the skills she had in supporting low achieving learners in a large class context. The classroom was overcrowded, as other classes are, and the desks allowing for two learners each were occupied by three of them.

My interpretation of the problem she had identified was that she needed to look into her classroom management skills.

Challenges

When referring to the challenges in her project she stressed the large class she had, saying that *“the main challenge I face is the large number of learners”*. Her concern was explained in the following terms: *“The large number of learners raises difficulties for me to support my learners regularly”*. However, she concluded saying that *“Even so, I do as much as possible. I need to know my learners better, to know who they are living with”*. There was a group of learners whose reading and writing skills were below the expected standard at that stage of the term of the academic year. They could not read or write the syllables and letters.

Probable solution

“As a teacher I hope to improve the control of my learners, paying more attention to the learning tasks and homework I assign to them”. In addition, PR3 intended to:

- improve the follow-up of her learners when performing learning tasks on the blackboard

- introduce innovation in the learning tasks
- organise study groups among neighbour learners. These groups should include learners with different levels of achievement.

In order to show evidence of her project on improving her pedagogical skills in following up and supporting low achieving learners in a large class, she intended to show better achievement, a better accomplishment of the learning tasks in the textbook. In addition she intended to share her progress with the principal, the delegate of the grade, fellow teachers and parents.

Cycle 1

Action

The action step in this cycle consisted of supporting PR3 in large class management to follow-up her low achieving learners. PR3 had already identified the number of learners who would need additional attention and support to improve their reading and writing skills. Therefore the first activity that we carried out was to organise them into groups of three in which the learners could get more support from fellow learners, to know exactly what letters and kind of syllables they could not read nor write and then prepare the correspondent supportive learning tasks. The groups included only one low achieving learner and were randomly distributed in the classroom to avoid connotation of achievement in class. The learners were told that the new class arrangement aimed at improving their study conditions and, from that date the new group would study and perform the learning tasks together in the classroom.

Observation

I noticed that PR3 knew the composition of the learner groups and where each learner was sitting. Therefore, each learning opportunity started with the verification of the composition of the groups at each desk. As a result of the new arrangement in the class, PR3 started going around in the class and groups of learners with more persistence. This class group needed specific interventions and remedial learning tasks. I observed that in spite of PR3's engagement both in organisation of the new groups and all classes combined with individual follow-up, the process of supporting low achieving learners was slow. This slowness was brought about by class size and the established calendar for the subject. However, I found in general, that the low achieving learners felt motivated to complete the activities indicated in the textbook and spent more time engaged in learning tasks in comparison with what they did in previous learning opportunities. The motivation seemed to be due to the fact of being close to a fellow learner

who is busy with her/his learning task. As the activities progressed in this stage of my AR, I observed that, in spite of the difficulties PR3 had in following up the learners' achievement, she continued and found enjoyment in doing what she had planned towards her CPD. She remarked that she was enjoying working with the learners and expected to improve the learners' achievement.

Reflection

At this stage of the PAR process I considered large classes and classroom organisation combined with permanent follow-up of the learners' achievement in the early stage of the academic year as part of the issues to be addressed by all teachers. I felt that classroom management, follow-up of the learners' achievement and the immediate remedial learning tasks should be a pedagogical priority in the weakly learning unit. Therefore I reflected on how the deputy principal in each school should support the individual teacher in her/his CPD. I had observed only four learning opportunities and participated in the planning of three of them; the results show that the PRs were aware of the need to change and showed willingness to innovate their practice. Reflection on the positive outcomes of this cycle led to a more focused guidance regarding remedial tasks.

Cycle 2

Action

Following the class arrangement, we prepared the learning content to verify weaknesses in reading and writing among the selected group. To begin with, the learning content included only vowels and later on was combined with diphthongs. The lines of the vowels and diphthongs were presented in different colours written on large pieces of white paper. During the correction of the learning task other learners than those from the selected group were asked to read and write vowels and diphthongs on the blackboard. In doing so, two or three learners went to the blackboard at the same time to perform the same or different learning tasks.

Observation

The vowels and diphthongs presented on the blackboard are represented below. Reading and writing vowels and syllables were learning content to be worked on since 25% of the learners did not acquire the skills needed. Apart from vowels and diphthongs, others vowels combinations were introduced. Some of the major challenges were as follows:

- Knowing what the teacher was talking about; how to read or write.
- Reading or writing exactly what the teachers asked.
- Following the recommended trace when writing a letter or linking letters to form a vowel.
- Using the appropriate lines and spaces indicated for writing in the textbook.

i u e a o ai eu oi ui au

Reflection

According to the syllabus, at this period of the academic year the learners should read and write vowels, diphthongs and all consonants like *p, m, t, d, l*. However, a significant number of learners was already in Grade 2 without the reading and writing skills specified for the grade. This was allowed under the automatic promotion introduced in primary education as referred to in Chapter 1. What was lacking was a systematic follow-up on what the underachieving learners could or could not do and the appropriate remedial learning tasks to overcome their difficulties

PR3 appears to be aware of the need for both additional and specific remedial tasks. However, the main problem was what exactly to do and how to go about doing it in order to offer learners another opportunity to master pre-knowledge that should have already been in place. Despite this evidence, in general, the learners benefited from more time for individual learning. PR3 tried paying more attention to underachieving learners when verifying the pre-requisites. Another aspect that came to the fore was the nature of the learning tasks assigned to that group of learners. These tasks were designed and timed specifically to prevent underachievement.

4.9.2.4 Case study D

Context

Case study D includes my AR cycles with PR4. PR4 was the eldest teacher of the group. As a teacher, he was responsible for sport at school level in 2007, 2008 and 2010. He had extensive experience in facilitating learning in Grade 1 and permanently took into consideration the

learners' social condition. In this respect he said that *"I need to know better my learners."* In 2008 he had 60 learners. In his class only one of the learners was repeating Grade 1. When dealing with his classes he permanently took into consideration the learners' social background and used to say *"my learners have social problems, since some of them leave with grandparents in environments with low social conditions"*. Usually, some learners were in the class without note pad, pencil or rubber. However, he indicated: *"with respect to the facilitating learning process, I think that I know how to deal with various types of learners: learners with difficulties in understanding the learning content and behavioural problems"*.

With reference to the experiences he obtained in the context of this study, he was convinced that he would *"obtain good results by applying the additional knowledge acquired ... which will not finish after this study. I will carry forward and look for more knowledge in order to guarantee my work as professional educator"*. In addition PR4 viewed this study as an opportunity for his professional growth. Therefore he concluded his comments by saying that *"in this investigation I intend to assess myself in order to verify my performance and my learners' learning. This will allow me to look for techniques to overcome eventual difficulties among the learners."*

Practitioner-researcher 4 referred to the area that he was more interested in by saying that *"the area that I have more interest in is to bring my learners to efficiently acquire reading and writing skills"*. This PR was concerned with reading and writing as he thought that *"this topic is the key for the learning in the next grades"*. PR5 frequently used to ask for support concerning the reading and writing skills in Grade 1.

Problem

The problem indicated by PR4 had to do with writing and reading skills. He said that *"the concrete problem is the large class I have, difficulties on communication, since some learners do not speak nor understand Portuguese. The learners' socio-economic situation sometimes affects and demoralizes them and has influenced the learning process."*

Challenges

The challenge pointed out by PR4 was the class size. For that reason he stressed that

The challenges I will face with respect to the topic I selected is to always look for resources, methods to induce learners on attaining the foreseen learning objectives. Another challenge is the distribution of learning content within the syllabus and in the exercise book (or textbook). The time available is too diminished to care for learners with more difficulties. (...) I need to know better my learners and to maintain periodic and planned contacts with the family in order to know my learners' situation.

Probable solution

With respect to the probable solution of the problem, he said that *“it is necessary to work a lot at class level, what means to follow-up the learners' learning. If some learners need more attention, I will meet the family in order to jointly analyse the problem”*. Talking about solutions, PR4 also mentioned his engagement in looking for more learning materials, other methods of facilitating learning in order to bring the learners to attain the learning objectives.

Action

Before the beginning of the learning opportunity, PR4 decided to pay more attention to learners who entered late in class. There were 2 learners who used to be late. Thus, PR4 decided to have a meeting with the learners' parents. After having a class he would verify whether or not they have the minimal material, such as books, notebooks, pencils and rubbers. There were problems with the material. Some forgot their books at home. Others did not have a notebook – the reasons being that some learners had lost them and others had not bought them at the time. PR4 tried to minimise the problem providing pieces of paper to those who did not have a notebook. The learners who did not have pencils borrowed from fellow learners who had more than one pencil. After the provision of pencils all learners performed the learning tasks.

The learning opportunity was concerned with writing and reading vowels and diphthongs. The question that PR4 ask was: *“How can I promote learning in order to allow my learners to acquire writing and reading skills of vowels, diphthongs and some consonants at the end of Grade 1”?*

To be committed to the class he said that *“I will have all learners reading at least vowels and diphthongs at the end of the academic year”*.

Observation

PR4 asked permission from the principal to use one of the Physical Education hours for recovering lost time for learning. Thus, the class had one more hour to study Portuguese. Apart from this additional hour, PR4 indicated learning tasks to be performed collectively and individually. The learning task comprised the following examples:

| | | |
|------------------|--------------|-----------------|
| <i>a e i o u</i> | <i>a i e</i> | <i>ai ei ia</i> |
|------------------|--------------|-----------------|

Reflection

At the end of this cycle I was convinced that PR4 could continue paying attention to each learner achievement. My argument was based on my observation throughout the cycle and the period when I carried out un-structured interviews. At the outset of the study PR4 showed ability on dealing with learners in Grade 1 and on providing diversified learning tasks. However, the constraints concerning learning materials and the pedagogical knowledge and skills acquired during teacher education still biased his practice.

4.9.2.5 Case study E

Context

Case study E includes my AR cycles with PR5. She used to be appointed for Grades 1 and 2. PR5 had a class of 60 learners in Grade 2. In 2007 and 2008 she was the delegate of Grade 1 teachers and in 2009 was coordinating the activities of all teachers facilitating learning in Grade 1 and 2. Concerning her participation in this study she referred to her objectives, namely to *“investigate better my pedagogical practice on improving reading and writing skills of my learners; to apply other methods of facilitating learning and other ways to improve the learners’ understanding of the learning content.”*

Referring to Portuguese as a subject she said that *“my learners do not assimilate the contents in the same way”*. In addition she said *“my learners should at least read vowels, joint vowels, read syllable, diphthongs and short texts.”* PR5 was a confident teacher and was aware of the

challenge involved in the traced objectives and said that “*for this purpose I have to design diversified learning tasks and to ensure active participation of all learners in order to give opportunity to underachieving learners.*”

Problem and challenges

The learners did not have Portuguese speaking skills. They always speak in their mother tongue.

Probable solution

PR5 identified the underachieving learners and put them in groups with those who achievement well.

Action

The learners were revising the vowels and four consonants. During the learning opportunity the underachieving learners were frequently given opportunity to answer. During this procedure I took notes concerning the learners’ performance; and at the end the learners could see that their fellow learners could divide words in syllables by clapping hands.

PR5 introduced the learning opportunity with a conversation about what the learners did during the weekend and invited them to continue studying the letters. Then she wrote capitals letters in her own handwriting as follows:

| |
|---|
| <p><i>m m ma ma</i></p> <p><i>p p pa PP</i></p> <p><i>t t</i></p> |
|---|

The learners read on the blackboard individually and were invited to do handwriting in the air. She also used a big poster with letters provided by the school.

Observation

Pr 5 knew very well all the learners' names and the underachieving ones. She walked around between the learners in order to follow what they were doing. Some constraints appeared with the writing since there were learners who could not write properly. She was trying to involve all learners in the process of reading and writing.

Action

Three months later PR5 selected multiplication as the learning content in order to apply innovative ways of presenting learning tasks. The learning content was indicated in the Mathematics' textbook and she guided the task using the learners themselves. She called six learners and they stood in groups of two.

Observation

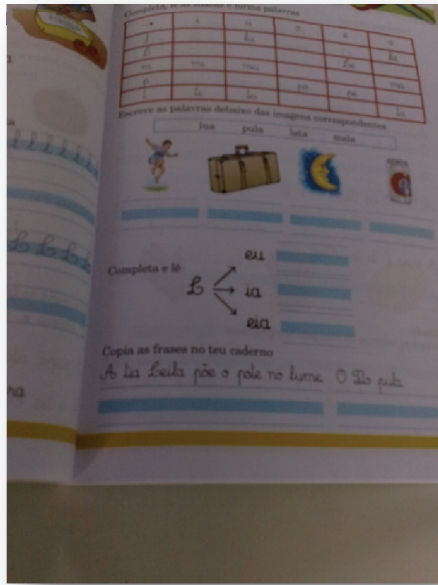
According to my observation, PR5 can continue paying more attention to what she needs to know in order to improve her pedagogical knowledge and the learners' performance.

Reflection

PR5 talked about what she did to solve the learners' problems regarding reading syllables and vowels. She asked support from her colleague PR4 in order to have a better understanding in relation to her class and they found that the main constraint was Portuguese speaking skills. *"I could work with my class in order to surpass the problem,"* she said. In addition she said: *"I as a teacher started working with the learners themselves by explaining the problem and what we should do to recuperate those who could not understand and read. After working in that way I tried to confirm whether or not I have achieved the objectives related to my investigation relating to my learners."*

To conclude the reflection she said that *"I will continue with my pedagogical practices in the next grades"*.

Photo image 6: Learning material



4.9.2.6 Reflection on the case studies

In the context of the exploratory research I performed in this PAR, the five case studies predictable followed the features of exploratory case studies (Yin, 1994; Winston, 1997) in the sense that I consider that my study might be an initial step of more comprehensive studies (Berg, 2007) in Mozambique.

In lower primary education (PE 1st level – Grades 1-5), Mozambique had 52 998 Mozambican primary school teachers in the academic year of 2007 (Ministry of Education and Culture – Directorate of Planning and Cooperation, Education Statistics, 2007). Out of this number, according to the data I obtained from all provincial directorates of education, in the context of this PAR, in the same year, there were 33 797 facilitating learning in Grades 1 and 2. This number means 63,77% of the total number of learning facilitators. For this reason, having focused learning facilitators appointed to Grades 1 and 2 may confer significance to this study. Moreover, learners in Grades 1 and 2 are the most attended grades. The significance of the case studies also derives from the need to deal with the deficient reading and writing skills in lowest PE1 (Grades 1 and 2), as referred to in Chapter 1. This deficient reading and writing skills

among the learners in lower Grades 1 and 2 became a “general public interest” and an issue “nationally important” (Yin, 2009:185).

Working in this context, my experience from the five case studies suggests that the teachers’ continuing professional development (TCPD) initially derived from learners’ achievement. Teachers very often think about what learners do not know and the skills they do not have at a specific point in time. In addition they are to some extent confident about their methods of facilitating learning. However, when faced up to innovative methods of facilitating learning and presenting learning tasks they were aware of the limitation in their pedagogical practices. For instance PR2 said: *“It was worthwhile to participate in this study and I thank the opportunity I had the learner had profit and I improved my classroom practices.”*

In her turn PR3 said: *“I am happy with the work. There were learners who could neither read nor write, but now they do. Because if someone is not engaged she will not succeed. It was worthwhile to wager on this way of working.”*

Reflecting on my experience with PR3, I realised the positive teachers’ endeavour on facilitating learning in Grades 1 and 2 and supporting learners on the acquisition and development of reading and writing skills. She expressed his professional learning in the following way: *“The change in my work is that I gained more skills concerning my practice with underachieving learners and even with those who are performing well. I did not have many ideas with respect to methods of facilitating learning and learning tasks for underachieving learners. I found that putting these learners in front and directly monitoring their work now and then are valuable procedures.”*

In addition, my experience and the findings regarding these 5 case studies indicated the importance of self-directed professional development for permanent teachers’ motivation and follow-up, supported at school level. This could improve the appropriateness of the TCPD programme for individual teachers, minimise costs resulting from such programmes and moreover to avoid the teachers’ embarrassment deriving from the fact of being observed by unfamiliar people. In this respect, PR1 said: *“At the first time, when you told me that you want to work with me, I felt a little afraid and I thought ‘now she comes here in order to control us. She almost knows everything’. Then as the time was passing I saw that it was not true. It was to*

improve me. After that I felt well. Now I know that I have to work in that way in order to allow the learners to understand well. Every day I see that I am improving. I thought that I do not know, but now I know that I can.”

In these case studies I applied the self-directed professional development (SDPD) model. As a facilitator of TCPD of the PRs, I should have promoted the fulfilment of the set of principles of SDPD described by Clark (1992). However, I did not. This limitation was due to insufficient pedagogical knowledge and skills provided by the 10+2 teacher education model they have attended. At the outset of the study, the PRs had limitations in identifying their learning needs and in planning their journey of learning. The pedagogical references they had, on the one hand, did not sufficiently yield for neither wide nor deep understanding of the difficulties showed by the learners and the ways to improve the situation, on the other, offered a reasonable degree of confidence as they had attended an initial teacher education programme. Therefore, SDPD has to be supported by previous approach of specific methodology of facilitating reading and writing in Grades 1 and 2.

After my professional practice in these case studies, I learnt more with reference to learning facilitation in a particular group of primary education – Grades 1 and 2. Despite the fact that the study only comprised five teachers did not diminish its contribution for the existing knowledge and the quality of TCPD carried in specific context like Mozambique and other developing countries. I am aware of the significance of both the study process and the knowledge emerged from it. A clear evidence is the change of PRs assumptions with respect to the learning opportunities they provided after having reflected on their and my practice. By the end of this experience, PR5 was concerned with the low learners’ achievement and said: *“This process should be continuous and if possible we should have the same class from Grade 1 to 5, since I know the difficulties of each learner.”* From this feeling, I believe that this study will be valuable to inform practise in Mozambican primary education as a whole and, particularly, in Grades 1 and 2.

According to my observation, I feel that apart from more extended initial teacher education programmes, the syllabus should deepen methods of facilitating learning and appropriate remedial learning tasks for underachieving learners.

In designing the PRs feedback and the mentor-researcher evaluation for quality assurance purpose, the reflection on the case studies was taken into consideration.

4.9.3 Feedback on the Intervention

The feedback on the intervention was part of the quality assurance (QA) in this PAR. I began the QA process by observing learning opportunities. This observation was used to evaluate whether the PRs use the new knowledge and skills acquired and to find out issues to be included in the questionnaires. Preceding classroom observation I took part in one planning session in which the PRs planned biweekly sequences of unities, learning content and tasks. My participation in that session helped me to observe how they deal with issues of learners' recovery and self-directed professional development. At this stage of the study I observed that they planned the learning tasks recommended and the remedial tasks in the textbook.

To conduct classroom observation I used a different approach to observation than the one I had used during the intervention. I piloted the observation schedule observing two teachers in order to find out "that the schedule affected my ability to observe" (Radnor, 2001:52). The observation schedule mainly included items relating to the use of innovative ways for presenting learning tasks and the PR's awareness of improving their professional learning. I used an open-ended approach to allow me to gather more qualitative data than the frequency of the events during the learning opportunity.

The feedback process was performed by means of two semi-structured questionnaires with open-ended questions. The first questionnaire aimed at obtaining the PR's feedback with respect to their participation and the second one was to obtain from PRs the feedback on my role as mentor-researcher evaluation. Both questionnaires were discussed with three critical friends and the comments and suggestions were taken into consideration. Following this process I analysed the questionnaires with the PRs and verify the contents covered, the language, terminology used and the relevance of the questions. Before administering the questionnaires related to the QA, I asked permission from the Unidade 18 Primary School and invited the PRs for a meeting on April 23, 2010.

I considered the design of the questionnaires for QA purpose a crucial stage in my journey of learning in this PAR. I tried to avoid the usual questions asked to workshop participants which essential comprises topics regarding the organisation of the event, provision of handouts stated and do not provide substantial results. Therefore, informed by the literature reviewed, I applied a more comprehensive evaluation in order to verify the way in which it was innovative approach of TCPD. The evaluation also aimed at determining the significance of the intervention to my own practice and my professional growth, to the CPD of the PRs, to the knowledge of other learning facilitators and educators and TCPD providers in Mozambique. In addition the QA carried out yielded to my knowledge claim.

In taking into consideration the levels of evaluating the impact of continuing professional development described in Table 2.10, the following table summarises the questions asked to PRs and the purpose of each question in the context of the evaluation I performed.

| Level | Question | Purpose |
|--|--|--|
| Level 1: Rationale for the CPD programme | Do you think that this intervention could be used as part of continuing professional development? | To verify the attainment of the goals of the CPD |
| | How do you assess the intervention on promoting innovative ways of presenting learning tasks? | |
| Level 2: Participants' reaction | To what extent do you think that the content of this intervention was relevant? | To verify possible prerequisites of PD |
| | To what extent do you think that the hand-outs and material used, in general, were useful in contributing to the reflection on your practice? | |
| | Had your questions and doubts been answered by the mentor? | |
| | To what extent do you think that the period of the academic year in which the activities were carried out was appropriate to your needs and practice? | |
| Level 3: participants' learning | To what extent do you think that the intervention, in general, was useful in providing space for acquiring knowledge and developing skills to better understand your learners' learning needs? | To renew commitment of teachers as change agents |
| | As a practitioner-researcher, to what extent do you think that the intervention was useful in contributing to your own continuing professional development? | To renew or extend teachers' morale |
| | Do you think that you experienced any growth or development in your professional learning? | |
| | To what extent do you think that you can be both a change and innovation agent within the grade group, | |

| Level | Question | Purpose |
|--|---|--|
| | school and zone of pedagogical influence? The activities carried out provided knowledge and skills to better follow-up individual learner's achievement? | |
| Level 4: Organisational support and change | To what extent were the objectives and activities of this investigation aligned with those of the class, the school and zone of pedagogical influence? What was the most enjoyable issue/activity in your participation in this intervention? What was the least enjoyable issue/activity in your participation in this intervention? If you would have to change an issue in this intervention, what would it be? Is there anything else you would like to comment on or to say? | To raise motivation To sustain change To promote organisational change |
| Level 5: Participants' use of new knowledge and skills | Do you feel motivated on continuing to be responsible for your own continuing professional development by investigating your classroom practice? Did the intervention provide opportunities to you to carry out the teacher's roles indicated below? | To evaluate whether participants use the new knowledge and skills acquired |
| Level 6: Teacher reward | Do you see any reward in participating in this intervention? | To evaluate personal reward |
| Level 7: Cost-effectiveness | What is your perception regarding the cost-effectiveness of this intervention? | To evaluate the cost-effectiveness of the CPD programme |
| Level 8: Learning outcomes | Do you think that your learners had learnt more and better? To what extent do you think that your participation was useful in improving your learners' learning? | To assess the impact on learner learning |

Table 4.55: Purpose of the questions (adapted from Guskey, 2002:48)

In the following tables (Table 4.55 & Table 4.56) some of the qualitative feedback obtained from the PRs regarding their experience of the PD intervention and specifically their implementation of related principles in their teaching practice is captured. The focus was on me and the PRs and the feedback served a self-assessment purpose.

| | Question | PR1 | PR2 | PR3 | PR4 | PR5 |
|---|---|--------------------|--------------------|--------------------|-------------------|-------------------|
| 1 | Did the planning of the learning opportunities take into consideration the learning needs of the learners? | <i>Always</i> | <i>Always</i> | <i>Not always</i> | <i>Not always</i> | <i>Not always</i> |
| 2 | Did the planning of the learning opportunities promote my own continuing professional development? | <i>Always</i> | <i>Not always</i> | <i>Always</i> | <i>Always</i> | <i>Always</i> |
| 3 | Did I use innovative ways in the presentation of the learning tasks indicated in the book? | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| 4 | Did I consider the different learning styles of my learners? | <i>Always</i> | <i>Not always</i> | <i>Always</i> | <i>Always</i> | <i>Always</i> |
| 5 | Were the learning opportunities appropriate to the level of the majority of the learners? | <i>Always</i> | <i>Always</i> | <i>Always</i> | <i>Not always</i> | <i>Not always</i> |
| 6 | Was the fact that I followed-up the learners' achievement useful to identify the learning needs of underachieving learners? | <i>Very useful</i> | <i>Very useful</i> | <i>Very useful</i> | <i>Useful</i> | <i>Useful</i> |
| 7 | Did I provide learning tasks to improve the learning of underachieving learners? | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| 8 | Did I raise my expectations of my learners' learning? | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |

| | Question | PR1 | PR2 | PR3 | PR4 | PR5 |
|----|--|---|---|---|---|--|
| 9 | How many learners did I remediate/recover in this academic year? | 52 | 10 | 19 | 25 | 41 |
| 10 | What was the most significant change in my learners' achievement? | <i>The most significant change was that they could read a short sentence, to formulate and even to organise (subject, predicate) without too much effort.</i> | <i>Reading and writing of numbers and doing calculations.</i> | <i>The most significant change in my learners' achievement was in reading and writing.</i> | <i>It was the fact of the learners being able to read, to write and to identify different numbers, syllables, vowels.</i> | <i>The pedagogical achievement. The majority of the learners can read and write. How specific learners will work with low achiever learners.</i> |
| 11 | Comments and/or opinions about the tasks for remediation of learners with low achievement | <i>The comments are: I have to work more during the day; I will have other subjects like Handcrafts, Physical Education in order to engage them more.</i> | <i>It is an activity that demands greater effort from the teacher but it provides fulfilment.</i> | <i>Particularly myself, in my class; I gave different learning tasks because I felt that they did not assimilate well certain content, and then I did revision.</i> | <i>I think that to remediate the learners with low achievement it is always necessary to use new tactics, techniques to make them to be in touch with the teacher, placing them in front for better follow-up, always giving activities to them and incentives by asking them to go more often to the blackboard.</i> | <i>Organising groups. Joining learners with difficulties and working with each one.</i> |
| 12 | Do I feel rewarded apart from not receiving material incentives or promotion in my career? | <i>Amplly</i> | <i>Amplly</i> | <i>Amplly</i> | <i>Amplly</i> | <i>Amplly</i> |

| | Question | PR1 | PR2 | PR3 | PR4 | PR5 |
|----|---|--|--|---|--|--|
| 13 | What might prevent me from paying attention to my learners' learning after this intervention? | <i>The aspects which may prevent me from having more learning opportunities with Mrs Tembe in order to present the difficulties which I could have.</i> | <i>The working conditions. Class size, textbooks for all, parents collaboration and effort of the teachers.</i> | <i>The large class size.</i> | <i>I do not see any aspects that might prevent me from paying attention to my learners since I had acquired innovations on my work as a teacher.</i> | <i>Maybe the conciliation of my work and the unity sequence school from the school.</i> |
| 14 | Comments and/or opinions about the model of continuing professional development? | <i>Without much comment I would like all schools to have a group of able teachers in order to help the other teachers, instead of waiting on the District Director or ZIP. This was a positive idea.</i> | <i>Probably the model does not have problems; what counts most is the continuing professional development. But this model is acceptable.</i> | <i>What I have to say about the continuing professional development is: It is adequate.</i> | <i>The opinion is that it should happen at local level, school, ZIP and district for updating and ideas sharing in order to develop our work as educators.</i> | <i>It should be organised in groups of teachers in order to motivate others for this pedagogical practice.</i> |

Table 4.56: Practitioner-researcher feedback

4.9.3.1 Comments on the Feedback of the Practitioner-researchers

The practitioner-researchers (PRs) completed the questionnaire at their school in Apr 22, with my presence, apart from having participated on one meeting discussion on the questionnaire. This strategy had mainly two objectives. The first objective was to give to the PRs the possibility to promptly ask me what was not sufficiently clear. The second one was to ensure that I would have all questionnaires completed on time.

The questionnaires comprised question/items related to issues on

- Appropriateness of the planning of the learning opportunities
- Design/use of innovative practice towards their contribution for their own CPD and learners' recovering
- Changes on learners' achievement and feeling regarding their future ownership of their practice
- The model of CPD

Appropriateness of the planning of the learning opportunities

At the outset of this PAR my commitment with the PRS was to not disturb normal classes and, as much as possible, to follow the learning objectives foreseen for the learning objectives foreseen for the learning opportunities as recommended in the syllabus and exercise books. This will fundamentally support the thought that the PRs could attain the objective prescribed by doing different learning tasks.

Practitioner-researchers 3, 4 and 5 referred that the planning of learning opportunities *not always* take into consideration the learning needs. This had to do with the pressure on following the prescribed sequence of learning unit, even with the significant number of learners who, early in the academic year, did not follow the learning objectives and showed not satisfactory achievement. In the context of the study, the main activities was to analyse and monitor the learning of that group in order to identify areas which simultaneously contribute for the PRs CPD and the improvement of the learners learning. In doing so, at the end of the intervention, all PRs indicated that they had recovered from 10 up to 51 learners. PR1 was the one who recovered more learners. Since she was the less experienced from the group, she felt a significant support in this study and tried to use for her CPD and follow-up and monitoring of low achieving learners.

Design/use of innovative practice towards their contribution for their own CPD and learners' recovering

All PRs indicated they designed innovative learning tasks, starting from those recommended in the exercise book in order to provide different ways to learn and/or exercise the same contents. Innovative practices were one of the activities used in this intervention to promote our SDPD and the enjoyment of the learners in the class. Designing both innovative and remedial learning tasks were the more referred to as new learning and contribution for SDPD and the activities which raised their awareness on being responsible for their CPD and for ownership of their practice.

Changes on learners' achievement and feeling regarding their future ownership of their practice

With reference to changes on learners' achievement all PRs indicated that the learners made improvement on reading and writing skills. Two out of the five PRs also mentioned improvement on Mathematics with particular emphasis in terms of identification of numbers and doing calculation. This information confirms the positive impact of follow-up and monitoring of learners learning, sustained by the endeavour of permanently asking question related to "what" can be improved and "how" could be improved.

The PRs felt confident on the experiences acquired in this PAR. The only exception is PR1 who thought that do not have the research-mentor available might prevent her practice as she will not have one to present her difficulties. The other four PRs indicated issues like class size, textbooks and the prescribed learning units.

Large classes and the distribution of the learners in the classroom were the challenges faced by the PRs. During the study we paid attention to this phenomenon, for instance, by means of

- grouping learners with different levels of achievement
- changing the composition of the groups
- ensuring that the learners do not frequently sit on the back or in front
- circulating more times around the learners
- avoiding responses in chorus
- avoiding to carry out activities that can be done by the learners
- giving equal opportunities to all learners to answer and write on the blackboard.

Having improved the way in which the PRs understood learning, the responsibility they have on introducing changes to attain better learners' achievement as part of their SDPD, I believe that the study promoted AR practise and awareness concerning ownership of elementary research and classroom practice.

The model of CPD/SDPD

The PRs had a positive impression regarding the model of CPD adopted at school level instead of waiting from pedagogical support from the ZIP or District Directorate of Education. In these sense they thought that all schools should have one group of learning facilitators which could motivate and support the colleagues on this practise, taking advantages of the all periods allocated for the arrangement of pedagogical matters throughout the academic year. In addition, the overall feedback on the intervention indicated the appropriateness of SDPD since each PR was approached as a unique situation to be understood and supported in order to analyse what she/he is doing and find ways to improve and innovate the classroom practice towards a responsible CPD. Apart from this individualised approach a collaborative work among the PRs as a way to share experiences on their practice and instruction for all PRS had a positive impact on the SDPD.

| | Question | PR1 | PR2 | PR3 | PR4 | PR5 |
|---|--|-------------------------|-------------------------|----------------------|-------------------------|--------------------|
| 1 | To what extent do you think that the content of this intervention was relevant to your professional knowledge? | <i>Very relevant</i> | <i>Very relevant</i> | <i>Very relevant</i> | <i>Very relevant</i> | <i>Relevant</i> |
| 2 | Does the content correspond to your own interests as a teacher? | <i>Always</i> | <i>Always</i> | <i>Always</i> | <i>Many times</i> | <i>Always</i> |
| 3 | Who selected the learning content? | <i>The promoter</i> | <i>The promoter</i> | <i>The promoter</i> | <i>Myself</i> | <i>Myself</i> |
| 4 | To what extent do you think that the hand-out and material used, in general, was useful for the reflection on your practice? | <i>Very useful</i> | <i>Very useful</i> | <i>Very useful</i> | <i>Very useful</i> | <i>Useful</i> |
| 5 | To what extent do you think that the period of the academic year in which the activities were carried out was appropriate to your needs and classroom practice? | <i>Very appropriate</i> | <i>Very appropriate</i> | <i>Appropriate</i> | <i>Very appropriate</i> | <i>Appropriate</i> |
| 6 | Was the methodology used appropriate for adult learning, allowing for reflection and discussion about issues concerning your practice and the learning of your learners? | <i>Very appropriate</i> | <i>Very appropriate</i> | <i>Appropriate</i> | <i>Very appropriate</i> | <i>Appropriate</i> |
| 7 | Did the methodology used provide you space for reflection about your learners? | <i>Appropriate</i> | <i>Appropriate</i> | <i>Appropriate</i> | <i>Appropriate</i> | <i>Appropriate</i> |



| Question | PR1 | PR2 | PR3 | PR4 | PR5 | Question |
|-----------------|---|---------------------|--------------------|------------------|--------------------|--------------------|
| 8 | Did the methodology used allow discussion on aspects of your practice with the mentor? | <i>Always</i> | <i>Always</i> | <i>Always</i> | <i>Many times</i> | <i>Many times</i> |
| 9 | Was the intervention useful in providing space to acquire knowledge and to develop skills to better understand your learners' learning needs? | <i>Very useful</i> | <i>Very useful</i> | <i>Useful</i> | <i>Very useful</i> | <i>Very useful</i> |
| 10 | How do you assess the intervention with respect to the promotion of innovative ways of presenting learning tasks? | <i>Very good</i> | <i>Good</i> | <i>Good</i> | <i>Very good</i> | <i>Good</i> |
| 11 | Did the activities that were carried out provide you with knowledge and skills to better follow-up individual learners' achievement? | <i>Always</i> | <i>Many times</i> | <i>Always</i> | <i>Many times</i> | <i>Always</i> |
| 12 | How often did you feel the need to investigate and search for more information about issues regarding facilitation of learning? | <i>Once a month</i> | <i>Every day</i> | <i>Every day</i> | <i>Every day</i> | <i>Every day</i> |
| 13 | Have your questions and doubts been answered by the mentor? | <i>Always</i> | <i>Always</i> | <i>Always</i> | <i>Many times</i> | <i>Many times</i> |
| 14 | Were the objectives and activities of this investigation aligned to those of your class and your school? | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |



| | Question | PR1 | PR2 | PR3 | PR4 | PR5 |
|----|---|--------------|--------------|--------------|--------------|--------------|
| 15 | Did the participatory action research contribute to your own continuing professional development? | <i>A lot</i> | <i>A lot</i> | <i>A lot</i> | <i>A lot</i> | <i>A lot</i> |
| 16 | Did you notice any development in your professional learning? | <i>A lot</i> | <i>A lot</i> | <i>A lot</i> | <i>A lot</i> | <i>A lot</i> |
| 17 | Do you feel motivated to continue to take responsibility for your own continuing professional development by investigating your classroom practice? | <i>A lot</i> | <i>A lot</i> | <i>A lot</i> | <i>A lot</i> | <i>A lot</i> |
| 18 | Did the intervention provide you with opportunities to perform the teacher roles as indicated below? | | | | | |
| | - Learning mediator/facilitator | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| | - Interpreter and designer of learning programmes and materials | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>No</i> | <i>Yes</i> |
| | - Leader, administrator and manager | <i>No</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| | - Scholar, researcher and lifelong learner | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| | - Community, citizenship and pastoral role | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| | - Assessor | <i>No</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |



| | Question | PR1 | PR2 | PR3 | PR4 | PR5 |
|----|--|--|--|--|---|--|
| 19 | To what extent do you think that you can be a change and innovation agent within your grade group? | <i>Fully</i> | <i>Fully prepared</i> | <i>Prepared</i> | <i>Prepared</i> | <i>Prepared</i> |
| 20 | To what extent do you think that you can be a change and innovation agent within your school? | <i>Fully</i> | <i>Fully prepared</i> | <i>Prepared</i> | <i>Prepared</i> | <i>Prepared</i> |
| 21 | To what extent do you think that you can be a change and innovation agent within in the Zone of Pedagogical Influence? | <i>Fully</i> | <i>Fully prepared</i> | <i>Fully prepared</i> | <i>Prepared</i> | <i>Prepared</i> |
| 22 | How do you assess the usefulness of the intervention with respect to the improvement of your learners' learning? | <i>Very useful</i> | <i>Very useful</i> | <i>Very useful</i> | <i>Very useful</i> | <i>Useful</i> |
| 23 | Can you describe what you learned most about your practices during this intervention? | <i>I learned how to plan well my lessons; to orientate the learners regarding the activities in the classroom; to use that role that is not usual nowadays by giving some exercises.</i> | <i>Centre the learning on the learner; to notice the learners difficulties; to support the learners with more needs.</i> | <i>What I learned is that during this period I could be mediator and facilitator of my learners.</i> | <i>I learned how to deal with weak learners and what to do to remediate them, also various practices to present content, materials as a way to motivate them.</i> | <i>I learned many intervention strategies for change and growth in my field; innovations; new way for providing work to my learners.</i> |



| | Question | PR1 | PR2 | PR3 | PR4 | PR5 |
|----|---|---|---|---|---|--|
| 24 | Do you think that this intervention can be used as a way of continuing professional development? | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| 25 | Do you think that action research is applicable for teachers teaching Grades 1 and 2 in Mozambican schools? | <i>Yes, I do. Because on its basis, children in the 1st Cycle can read and write well.</i> | <i>Yes, I do. Because it reflects the teacher/learner demand.</i> | <i>Yes, I do. Because it improves the learners' learning.</i> | <i>It is applicable because it allows to seek ideas, change of opinions for the best development of our educational work.</i> | <i>Yes, I do. This is because these grades are the foundation where the learners must dedicate themselves more to the learning of sounds, syllables, vowels, diphthongs, structuring words, joining syllables, etc..</i> |

| | Question | PR1 | PR2 | PR3 | PR4 | PR5 |
|----|--|--|--|--|---|--|
| 26 | What were the challenges you met in being a practitioner-research? | <i>The challenges were very weak learners, without taking pleasure in learning, but I overcame all difficulties.</i> | <i>To make myself available; to present the difficulties that I have in class; to give opinion about the study; implementation of the innovative ideas in the classroom.</i> | <i>The challenges I had as a practitioner-research were: large number of learners; improving the learning (mainly in reading and writing).</i> | <i>The challenges were: Looking to find or overcome the difficulty that the learners with more problems in reading and writing.</i> | <i>My learners left Grade 1 already knowing to read the vowels, to form words with given syllables.</i> |
| 27 | Enumerate three aspects or activities that you liked more from your participation in this intervention. | <i>I liked: The explanation of the contents by Mrs Tembe; our interventions as persons; good instruction.</i> | <i>Approach of contents with the learners; elaboration of games; to notice the learners' difficulties.</i> | <i>To present the same learning task in different ways; to organise groups and develop the follow-up in order to identify the weak learners; to assign specific work to weak learners.</i> | <i>Experience sharing; methodology to deal with the learners with more problems on reading and writing; new learning.</i> | <i>Debates; experience sharing among the classes; to work with learners with different dispositions.</i> |
| 28 | Enumerate three aspects or activities which you liked less from your participation in this intervention. | <i>I do not have reason for complaints.</i> | <i>There are no aspects that I liked less.</i> | <i>The fact that it did not apply to larger numbers, that is to say, in my opinion it should be applied to more elements.</i> | <i>I did not notice aspects that I did not like.</i> | |

| Question | PR1 | PR2 | PR3 | PR4 | PR5 | Question |
|----------|---|-----------|---|--|--|--|
| 29 | If you would have to change something in this intervention, what would it be? | | <i>Nothing</i> | <i>In my point of view everything is in order; I only want to say that the teacher wishes to investigate but sometimes feels limited because of lack of resources.</i> | <i>It would be to allow me to carry out investigation, study group with the elements of the class in order to improve my work.</i> | <i>The programme should be elaborated with those new interventions (innovations for better understanding by the learners).</i> |
| 30 | Is there anything else you would like to say? | <i>No</i> | <i>It was very good and I would like to study more in the future.</i> | <i>What I would like to say is the following: If it were possible all teachers should have the opportunity to participate in participatory research.</i> | <i>Just to applaud and thank the researcher because it makes me increase knowledge that will improve my work.</i> | <i>I would like this intervention to be applied not only to initial grades but also other teachers.</i> |

Table 4.57: Mentor-researcher evaluation.



4.9.3.2 Comments on the Research-mentor Evaluation

The question/items included in the questionnaires summarises issues like

- Relevance of the contents, methodology and material used in the intervention
- Evaluation of the intervention
- Motivation to continue taking responsibility for their own CPD
- Teachers roles
- PAR for PD
- Challenges as PR

Relevance of the contents, methodology and material used in the intervention

In general the PRs evaluated positively the contents, the methodology and the material used in the intervention. The main merits of this PAR is that the PRs regularly had my participation and support whatever in the planning sessions for planning learning opportunities and designing learning material, in classroom practice and analysis. Therefore, they experienced, on the one hand, changes on their usual routines as learning facilitators and, on the other hand, a new paradigm of research and their role on their CPD by means of self-directed professional development (SDPD). In addition, I observed the learning material used in the classroom was only the one I provided.

Evaluation of the intervention

The evaluation of the intervention was seen in terms of its impact on promoting innovative ways of presenting learning tasks and the PRs progressively noticed concrete results in their learners achievement. Besides individual learner assessment and monitoring and the design of innovative learning tasks were activities in which the PRs concentrated their responsibility for their own CPD.

Motivation to continue taking responsibility for their own CPD

The responses give indication that the PRs will continue being responsible for their CPD by investigating they classroom practice. In this respect, likewise the previous PRs feedback the challenges could be the large class they use to have and both prescribed and overcrowded syllabus and exercise books

Teachers roles

In general, the PRs consider that the intervention developed in this PAR provided occasions for performing the teachers roles. However there were two exceptions. These are regarding the role of interpreter and designer of learning programmes and materials (PR4) and the role of assessor (PR4). Both responses have to do with the Mozambican practise in primary schools. The former role is considered as one of the Ministry Education attribution, since the syllabus, the exercise books and complementary learning material are centrally selected and provided to all schools. Another reason is that the learning programme understood as a learning unit is designed at each grade group level. In addition the design of a set of learning tasks and material aiming at solving learning difficulties was not seen as a learning programme. However, the PRs designed a set of remedial tasks. In relation to the last role the reason is that assessment tests are designed by each grade group level and the learning facilitators do not assess their learners from their own initiative.

Challenges faced as PR

As PRs the challenges are related to their availability and participation and implementation of the innovative ideas (PR2) and the process of analysing the situation and looking for solutions (PR4) the class size (PR2) and guiding the acquisition of reading and writing to low achieving learners (PRs 1 & 5). My understanding here is that the PRs are aware of what to do, however they do not have enough skills to deal with the constraints they mentioned.

| | PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | |
|-------------------------------|-----------------|---|--|---|--------------|-----|------------|
| | | | | | RM | PRs | RM and PRs |
| 2007 COMPREHENSIVE CYCLE A | Feb-Nov | Literature review and text analysis | To situate the study within the existing understanding of teachers' continuing professional development. To build a holistic theoretical framework to inform this study. To support the issues being investigated. | Review of TCPD practices in Mozambique and understanding of TCP within the context of the Mozambican strategies for teacher education and upgrading. Review of TCPD practices in developing and Western countries. Understanding of my topic in the accessible literature on TCPD, The theoretical framework which allowed me to discuss the topic of the study. | √ | | |
| | Feb 15 – Apr 19 | Collective and individual meetings with the six teachers from Unidade 18 Primary School | To inform the PRs about the objectives and nature of the study. To invite the PRs to participate in this study. | The teachers obtained information about the project and their voluntary participation. | | | √ |
| | | Sending letters to PRs | Formalisation of the teacher willingness on participating in this study. | The teachers receive my ethic statements. Informed consent from the six teachers. | √ | √ | |

Legend
RM = Research mentor; PRs = Practitioner-researchers

| | PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | |
|-------------------------------|----------|--|--|---|--------------|-----|------------|
| | | | | | RM | PRs | RM and PRs |
| 2007 COMPREHENSIVE CYCLE A | Feb 02 | Requesting informed consent from Provincial Directorate of Education, Culture and Technology of Maputo-Cidade for developing the study at Unidade 18 Primary School. | To negotiate access and obtain informed consent of education sectors. | Written permission and informed consent from provincial directorate of education, district directorate of education and school principal to administer the questionnaire. | √ | | |
| | May -Sep | Conducting unstructured and semi-structured classroom observation at Unidade 18 Primary School. | To get information to answer my research questions. To understand the process of facilitating and monitoring of CPD. To identify topics for PRs CPD. | The PRs and the class felt familiarised with my presence in the classroom. Awareness of both the teachers and school pedagogical routines. Understanding of the monitoring of CPD and areas for PRs CPD and improvement of my own practice. | | | √ |
| | Mar-Apr | Design of the questionnaires. | To build the baseline analysis of this study. | First draft of the questionnaires taking into consideration the information got from unstructured classroom observation in terms of monitoring TCPD and follow-up of learners' achievement. | √ | | |
| | Mar-May | Requesting information about the number of teachers in Grades 1 and 2 to the six provinces included in this study. | To obtain the number of teachers facilitating learning in Grades 1 and in Mozambican public schools. | Population of the study comprising 33 797 teachers. First proposal of sample size of 1 500 teachers from all provinces. | √ | | |
| | Apr | Analysis of the questionnaire with the promoter. | To verify the content and relevance of the questions. | Second draft of the questionnaire. | √ | | |

Legend

RM = Research mentor; PRs = Practitioner-researchers

2007
COMPREHENSIVE CYCLE A

| PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | | | |
|--------|---|---|--|--------------|-----|------------|------|---------|
| | | | | RM | PRs | RM and PRs | Resp | Map-Cid |
| May 10 | Discussions on the draft of the questionnaire with the promoter and STATOMET. | To refine the formulation of the questions. | Third draft of the questionnaire. | √ | | | | |
| | | To establish the structure of the questionnaire. | Second proposal for the sample size. | | | | | |
| Jun | Asking critiques from critical friends. | To verify the appropriateness of the formulation and content of the question. | Forth draft of the questionnaire. | √ | | | | |
| Jun | Revising the questionnaire | To include the suggestions proposed. | Fifth draft of the questionnaire. | √ | | | | |
| | Asking critiques from critical friends. | To verify the appropriateness of the questionnaire. | Sixth draft of the questionnaire. | √ | | | | |
| Jul | Piloting the questionnaires. | To test the questionnaire to get feedback regarding the time needed to complete, understanding of the language and questions. | Comments and indication of professional qualifications to consider and questions to be excluded. | √ | | | | √ |
| Aug | Definition of the sample size with STATOMET and the promoter. | To obtain comments on the questionnaire. | Information about terminology that is not used, | | | | | |
| | | To adjust the population and the sample size to limitation of time and financial resources to travel to the provinces. | Definition of the feasible population on 19 609 from the Northern, Centre and Southern Zones. | √ | | | | |
| | | To select two provinces from each of the three regions. | Sample size of 1 028 teachers. | | | | | |
| | | | Definition of the provinces by region. | | | | | |



Legend

RM = Research mentor; PRs = Practitioner-researchers; Resp Map-Cid = Respondents from Maputo-Cidade

| | PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | | |
|-------------------------------|--------------------|--|--|---|--------------|-----|------------|-----------|
| | | | | | RM | PRs | RM and PRs | Resp Prov |
| 2007 COMPREHENSIVE CYCLE A | Aug | Revising the questionnaires. | To examine the questions. | Final version of the questionnaire. | √ | | | |
| | Apr 19 - Sep 20 | Requesting informed consent from Provincial Directorate of Education, Culture and Technology of Sofala, Zambézia, Nampula and Cabo Delgado for administering of the questionnaire. | To negotiate access and obtain informed consent from the provincial directorates of education of the provinces to be involved. | Written permission and informed consent from provincial directorate of education, district directorate of education and school principals to administer the questionnaire | √ | | | |
| | Sep | Asking critiques from experienced primary school teachers. | To get comments on the questionnaire. | Uncertainty whether the respondents will be honest when answering the questionnaire due to the professionalism embedded in some of the questions. | √ | | | √ |
| | Sep 21- Oct 8 | Delivery of letters inviting the teachers from 117 schools from Sofala Province to respond voluntarily to the questionnaire. | To negotiate access. To administer the questionnaires. | Informed consent. | √ | | | √ |
| | | Administrating the questionnaires | | | | | | |

Legend

RM = Research mentor; PRs = Practitioner-researchers; Resp Prov = Respondents from the provinces



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| | PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | | |
|-------------------------------|--------------------|---|--|---|--------------|-----|------------|-----------|
| | | | | | RM | PRs | RM and PRs | Resp Prov |
| 2007 COMPREHENSIVE CYCLE A | Sep 21- Oct 8 | Delivery of letters inviting the teachers from 270 schools from Zambézia Province to respond voluntarily to the questionnaire. Administering the questionnaires. | Negotiate access. Administering the questionnaires. | Part of the questionnaires completed. | √ | | | √ |
| | Oct 12 – Nov 02 | Delivery of letters inviting the teachers from 146 schools from Cabo Delgado Province to respond voluntarily to the questionnaire. Administering the questionnaires. | Negotiate access. To administer the questionnaires. | Part of the questionnaires completed. | √ | | | √ |
| | | Delivery of letters inviting the teachers from 336 schools from Nampula Province to respond voluntarily to the questionnaire. Administering the questionnaires. | Negotiate access. To administer the questionnaires. | Informed consent | √ | | | √ |
| | Dec | Capturing data from the questionnaires. | To gather data from the questionnaires. | Preliminary data of the baseline study. | √ | | | |
| 2008 COMPREHENSIVE CYCLE B | Jan-Dec | Capturing data from the questionnaires. | To gather data from the questionnaires. | Preliminary data of the baseline study. | √ | | | |



Legend

RM = Research mentor; PRs = Practitioner-researchers; Resp Prov = Respondents from the provinces

| | PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | | |
|-------------------------------|---------------|--|---|--|--------------|-----|------------|-----------|
| | | | | | RM | PRs | RM and PRs | Resp Prov |
| 2008 COMPREHENSIVE CYCLE B | Apr 16-17 | Learningshop on Action Research carried out by the promoter with my support. | To introduce AR as a method for investigation. Promote reflection on the need for innovative practice. Discuss with the PRs practices towards their own PD. | Introduction of Action Research as tool for professional development. Commitment of RM and PRs in the study process. | | | √ | |
| | Apr 21-Jul 20 | Individual work with the class towards integration of the new experiences, innovative practices and the lessons learnt. | To allow the PRs opportunities to apply the knowledge and experiences from the learningshop on AR. | The PRs worked on their own and did not design the AR project as they were not confident. | | | √ | |
| | Apr 28 | Requesting informed consent from Provincial Directorate of Education, Culture and Technology of Maputo and Maputo-Cidade for administering of the questionnaire. | To negotiate access and obtain informed consent from the provincial directorates of education of the two provinces. | Written permission and informed consent from provincial directorate of education, district directorate of education and school principals to administer the questionnaire. | √ | | | |
| | May | Delivery of letters inviting the teachers from 76 schools form Maputo Province. Administering questionnaires. | To negotiate access. To administer the questionnaires. | Questionnaires completed. | √ | | | √ |



Legend

RM = Research mentor; PRs = Practitioner-researchers; Resp Prov = Respondents from the provinces

| PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | | |
|-------------------------------|-------------------|--|---|---|-----|------------|-----------|
| | | | | RM | PRs | RM and PRs | Resp Prov |
| 2008 COMPREHENSIVE CYCLE B | May | Delivery of letters inviting the teachers from 83 schools from Maputo-Cidade. Administering questionnaires. | To negotiate access. To administer the questionnaires. | Questionnaires completed. | √ | | √ |
| | May 25- Jun 01 | Gathering the questionnaires in Cabo Delgado Province. | To collect the remaining questionnaires. | Questionnaires completed. | √ | | √ |
| | Jun 02-20 | Gathering the questionnaires in Nampula Province. | To collect the remaining questionnaires. | Questionnaires completed. | √ | | √ |
| | July 21 | PRs report on the learningshop on AR. | To obtain impressions of the learningshop. To obtain information on what the PRs did after the learningshop on AR. | Report on the Learningshop on AR. | | | √ |
| | | Learningshop on Instructional Design and Assessment. | To identify common problems in learning. To understand learning problems. To design learning tasks. To discuss the role of working group in lower primary education. | The PRs were familiarised with basic Instructional Design issues mainly with respect to instructional analysis. | | | √ |



Legend

RM = Research mentor; PRs = Practitioner-researchers; Resp Prov = Respondents from the provinces

| | PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | | |
|-------------------------------|-----------------|---|--|--|---|-----|------------|-----------|
| | | | | | RM | PRs | RM and PRs | Resp Prov |
| 2008 COMPREHENSIVE CYCLE B | Jul 30 | Writing handouts and forms to be used by the PRs in designing the projects. | To provide support to PRs on AR. | Handouts on Principles of AR. Forms for individual project design. | √ | | | |
| | Aug -Sep | Designing the projects. | To design the first draft of the projects. | First draft of the PRs projects. | | √ | | |
| | | Refining the projects. | To design the final version of the projects paying attention to the research question and the probable solution. | Final version of the projects. | | √ | | |
| | | Planning of learning opportunities. | To pay attention on innovative learning tasks and the supportive learning material. | Innovative learning tasks and learning materials. | | | √ | |
| | | Classroom observation. | To observe innovative remedial learning tasks and the use of the learning materials. | | | | | |
| | | Reflection. | To identify issues to be improved. | Selection of learning tasks and strategies that could contribute to the PRs PD and the learners' learning. | | | √ | |
| | Sep 25 – Oct 05 | Gathering questionnaires in Sofala Province. | To collect the remaining questionnaires. | Questionnaires completed. | √ | | | |
| | Mar 26 | Classroom observation. | To observe how the PRs used the learning acquired and/or developed during the learningshops. | Promotion of innovative practice. | | | | |
| | 2009 | Apr 25 | Discussion on Chapter 1 with critical friends | To obtain comments on the background of study and the research questions | Comments on Chapter 1 | √ | | |
| | | . | Planning of innovative learning tasks and production of learning materials. | To pay attention to issues that could contribute to PRs CPD and improve my own practice. | Specific learning tasks and material different from those included in the learners' textbook. | | | √ |



Legend

RM = Research mentor; PRs = Practitioner-researchers; Resp Prov = Respondents from the provinces

| | PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | |
|-------------------------------|------------------|---|--|--|--------------|-----|------------|
| | | | | | RM | PRs | RM and PRs |
| 2009 COMPREHENSIVE CYCLE B | | Reflection. | To monitor the PRs learning and their CPD and my own practice. | Comments on the learning opportunities and the use of the learning materials. | | | √ |
| | | | To identify practices and issues to be improved. | Selection of learning tasks and strategies that could contribute to the PRs PD and the learners' learning. | | | |
| | Oct | Capturing data from the questionnaires. | To identify the code from the questions to the answers. | Data capturing from the questionnaires. | √ | | |
| | Oct 29 Dec 20 | Data entry from STATOMET. | To process the data from the questionnaires. | Data from each respondent. | √ | | |
| | Nov 23 | Asking critiques from critical friends on the questionnaires for PRs feedback and the questionnaires for RM evaluation. | To obtain comments and suggestions for the questionnaires. | Improved questions of the questionnaires. | | | |
| | Jan 29 Feb 19 | Data cleaning | To verify the correspondence between the information from the questionnaire of each respondent and the data processed. | | √ | | |
| 2010 | | Running frequencies. | To verify the frequencies of each variable and look for missing cases and consistency of the data. | Output. | | | |
| | | Recodification, regrouping and recategorisation. | To find out similarities and differences between responses | Codes for open questions from the questionnaires | | | √ |
| | | | Identify codes for open | | | | |

| | | | | |
|--------------------------------------|---|--------------------------------|--|---|
| | question | | | |
| Data analysis of the questionnaires. | To determine the frequencies of the closed questions. | Frequency and content analysis | | √ |

Legend

RM = Research mentor; PRs = Practitioner-researchers; Stat= STATOMET

| | PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | |
|-------------------------------|-----------------|------------------------|---|---|--------------|-----|------------|
| | | | | | RM | PRs | RM and PRs |
| 2010 COMPREHENSIVE CYCLE B | Apr 15 | Classroom observation. | To observe how the PR1 used the learning acquired and/or developed during the learningshops and previous classroom observation. | Monitoring PR1 practice on designing remedial tasks. | | | |
| | Feb 15 – Apr 19 | Reflection. | To identify practices to be improved. | Identification of learning tasks to be included. Design of remedial tasks to be assigned | | | √ |

Legend

RM = Research mentor; PRs = Practitioner-researchers

| | PERIOD | ACTIVITIES | PURPOSE | OUTCOMES | PARTICIPANTS | | |
|-------------------------------|-------------------|--|--|---|--------------|-----|------------|
| | | | | | RM | PRs | RM and PRs |
| 2010 COMPREHENSIVE CYCLE B | Apr 15- Jul 30 | Designing of the first draft of the questionnaire for PRs feedback and for MR evaluation. | To assess the self-directed professional development and my practice. | First draft of the questionnaires for PRs feedback and evaluation of the intervention. | √ | | |
| | Aug 13 | Asking critiques from a critical friend on the questionnaires for PRs feedback and the questionnaires for MR evaluation. | To get comments and suggestions regarding the questions and items of the questionnaires. | Improved questions of the questionnaires. | √ | | |
| | | Refining the questionnaire for PRs feedback and the questionnaires for MR evaluation. | To include de suggestions and to take into consideration the comments provided. | Second draft of the questionnaires for PRs feedback and the questionnaires for RM evaluation. | √ | | |
| | | Discussion on the questionnaires for PRs feedback and the questionnaires for RM evaluation with the PRs. | To have agreement on the content of the questionnaire. | Final version of the questionnaire for PRS and the questionnaires for RM evaluation with the PRs. | | | √ |
| | Apr 22 | Administrating the questionnaires for PRs feedback. | To allow the teacher to self-assess their participation on the intervention. | Feedback from PRs with respect to their participation in the study. | √ | √ | |
| | Apr 23 | Administrating the questionnaires for RM evaluation. | To evaluate the intervention and my practice. | Evaluation of the intervention. | √ | √ | |

RM = Research mentor; PRs = Practitioner-researchers;

Table 4.58: Summary of the action research cycles performed

4.10 CONCLUSION

In this chapter I have described the empirical study of this PAR as part of the progression of my aim to explore professional development intervention with a view to supporting the improvement of the teaching practice of primary school teachers facilitating learning in Grades 1 and 2 in Mozambique and improving my own practice as TCPD promoter and mentor-researcher. As an exploratory study one of the answers to be obtained is to a “what” question (Mouton, 2001). In this PAR the “what” of the sub-question was stated in the following way: *What kind of intervention could be developed to support teachers to take responsibility for monitoring their own professional development?*

The process of my journey towards the improvement of TCPD and specific knowledge emerged is further described in Chapter 6.

The empirical study was consistently informed by the outline on the latest and current practices on TCPD, the research questions and the rationale provided in Chapter 1, the theoretical framework and the research design, respectively indicated in Chapter 2 and Chapter 3.

I have shown the characteristics of the PRs and the respondents of the baseline analysis by means of a semi-structured questionnaire with open-ended questions. According to my observation throughout this part of the PAR, the sample could be considered representative of primary school teachers in Grades 1 and 2 in Mozambique in terms of opinions regarding TCPD programmes and classroom practices. From the baseline analysis, teacher education provided by teacher education colleges such as Primary Teaching Institutes (IMAP or IFP) and Danish Support from People to People (ADPP), emerged as the more attended model. Moreover, from the six provinces included in this PAR, in a descending order, methods of facilitating learning, curriculum and topics other than the pedagogical one, were indicated as the most valuable topics. In turn regular meetings, peer observation and classroom observation as the preferred models of an in-service education programme emerged.

From the learningshop, the methodology used, the activities proposed to the PRs and the reflection on the classroom practices during the learningshop on AR were learnt and applied in the next steps of this study to promote learning. The PRs and my knowledge are reflected in the reports (Appendices F & G).

The five case studies played a significant role in my progress of improving my practice as TCPD promoter and mentor-researcher and the PR's responsibility for their own PD. Throughout our practice in the AR cycles performed with SDPD were experienced and enjoyed. A non-hierarchical and empathetic relationship between me and the PRs was developed.

At the end of the empirical study I came to realise that the most significant and rewarding activities take place in the reflection steps derived from the observation one when asking questions to ourselves and looking for answers to questions like:

- What can I do better to improve my practice?
- What can I do differently and in an innovative way?
- How can the SDPD model assist underqualified teachers in developing methodologies and strategies on how to facilitate learning now and in the future?

The SDPD model I consider, having experienced in this PAR, can support primary school teachers in taking responsibility for their own CPD. Having encouraged SDPD for teachers in Grades 1 and 2, I believe that the PRs do. However, I am convinced that the model should be improved and support and follow-up will be required.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This study qualifies as action research aimed at exploring an intervention for improving the practice of primary school teachers. Having presented the empirical study in Chapter 4, the purpose of this chapter is to report the conclusions with respect to my learning driven by the research questions indicated in Chapter 1. Following the conclusion I present the recommendations derived from the activities performed by me and the PRs in this participatory action research (PAR) with a view to conducting further research and in practices, quality and assessment of teachers' continuing professional development (TCPD). In order to explore the intervention referred to above, this PAR was guided by one central research question, *How can teachers in Grades 1 and 2 be supported in terms of improving their practices by taking responsibility for their own professional development?* In an attempt to answer to this question, I carried out a literature review and a baseline analysis by means of a questionnaire with open-ended questions. Then to understand PD in depth, led by the teachers themselves, I explored different models of TCPD and SDPD from the literature. In this journey of my learning, I also explored theoretical assumptions related to the concept of professional and development, TCPD and adult learning.

Evolving from the understanding emerged from the literature, from the results and finding of the questionnaires and the overall process at this stage of the Cycle A, including the background of study, I chose to explore a self-directed professional development (SDPD) model. The assumption was that in researching in a context where academic and professional qualifications of the learning facilitators are fewer than those required for an individual design of a plan for professional learning, the model to be adopted should encourage them to take responsibility for their own CPD. I assumed that a top-down approach of TCPD does not help teaching facilitators to develop themselves since it presupposes that they are the group to be trained. Therefore the intervention was based on the individual learning needs of the mentees.

Accordingly, a number of classroom practices were observed, reflected upon and improved by means of a simultaneous approach of innovative methods of facilitating learning and the appropriate remedial tasks supported by innovative learning material.

Having developed TCPD on an individual basis, the feedback provided by the practitioner-researchers (PRs) suggests the adequacy of SDPD. However, according to my observation and the current situation in the majority of Mozambican primary school regarding expertise in methods of facilitating and monitoring learning, the model should initially be supported by outsider expertise. This does not mean that the facilitator will be out of the school/zone of Pedagogical Influence. My understanding is that owing to the limitations concerning learning in Grades 1 and 2 among the learning facilitators in primary school, someone experienced in primary education could support the process towards ownership of individual practice. For this reason the pedagogical deputies could in the future be responsible for CPD at school level.

Following the process of answering the central question the sub-questions were generated and answered throughout the empirical study. The first sub-question that arose in this study, *How do Grade 1 and 2 teachers take responsibility for monitoring their own professional development?* was answered through analysing the results and findings of the questionnaire administered as part of the baseline analysis and during the practices with my PRs. The PRs and I experienced transformation of our assumptions regarding TCPD, individual learner learning, monitoring and assessment towards the improvement of our practice. In this respect we came from a deficit model of CPD to a SDPD which has more to do with a personal instead of homogeneous experiences and PD needs.

The second sub-question intended to explore the suitable intervention for TCPD asking, *What kind of intervention could be developed to support teachers to take responsibility for monitoring their own professional development?* Throughout the five case studies, in searching answers to this sub-question I took into consideration the Mozambican learning environment, with the emphasis on teachers' academic and professional qualifications, the predominance of large classes, the lack of learning materials and the primary school routines throughout the academic year. The second

sub-question was answered at the end of the intervention when the PRs participated in the discussion of quality assurance procedures by means of questionnaires for PR's feedback and research-mentor evaluation. In the questionnaires they demonstrate a clear recognition of the appropriateness of SDPD as a model for TCPD. In addition they state their willingness to continue paying attention to monitoring their learners' learning.

From the overall situation that seems to characterise the school where I carried out this study, I permanently asked myself, *How can self-directed learning help teachers with limited pedagogical skills to develop strategies to improve their learning facilitation?* In so doing I paid attention to what they already knew and what they needed to know at a specific point in time of this PAR either when planning **or** reflecting on learning opportunities, facilitating learning, finding complementary learning material, monitoring and assessing their learners.

Although I had explored models of TCPD and theories on adult learning, the results from the Cycle A of this PAR, which comprised the baseline analysis, classroom observation, encouraged me to progress with the third and last sub-question, *How can elementary principles of action research, instructional design and learner assessment support teachers in monitoring their own professional development?* In an attempt to answer this sub-question the PRs participated in learningshops on those topics and wrote a report. The PRs report, my own report and the activities performed with each PR provide positive indications of the use of AR, procedures of instructional design and learner assessment. However, is worth mentioning that assessment of individual learner has always been a matter of concern, mostly due to the large classes PRs had. Sixty learners in Grade 1 or 2 were a complex situation to deal with due to the insufficient knowledge on large class management among the PRs. To minimise the problem, the PRs very often introduce the learning content on the blackboard instead of asking each learner to follow in her/his exercise book. In doing so, the PRs ensure that all learners are following the learning opportunity. Another strategy is to follow and monitor what learners are doing. Mentoring learners' achievement was also a challenge to face since they were bound to lose the exercise books provided for free by the Ministry of Education. The families could not afford the replacement of those

materials. Most of the learners did not have a conventional school bag for carrying the learning materials. The main reason is the high degree of poverty in the country.

5.2 RESEARCH FINDINGS

The findings of this study to some extent show that teachers are aware of the need for more academic and pedagogical qualifications to improve learners' learning and their professional growth by means of improvement like promotion in the career and obtaining incentives. For the purpose of this conclusion, two basic findings are described, namely findings of the questionnaires and findings of the classroom observation.

5.2.1 Findings of the Questionnaire

The findings of the questionnaires allowed me to conclude that the respondents are concerned about their professional growth, mainly with respect to academic and pedagogical qualifications obtained through the attendance of teacher education programmes or progressing in to secondary education or university. The motivation for TCPD varied among others from financial to pedagogical concerns. The respondents had positive comments on CPD models or programmes which consider the systematic provision of CPD and are supported by follow-up of post-CPD events. Another conclusion indicates that the respondents require formal recognition from the Ministry of Education by means of credit points in order to advance in their teacher careers.

The study involved respondents with different levels of qualification. However, the teachers' perception concerning their roles as educators and the way in which they assess learning do not indicate significant differences.

5.2.2 Findings of the Classroom Observation

Regarding the findings of classroom observation, I am convinced that the PRs will improve the usual learning opportunities and create specific time for remedial tasks. The PRs plan and facilitate learning, taking into consideration the diversity of the level of knowledge and skills among the learners. Having been engaged in self-directed professional development, they looked at the learners' learning needs and the appropriate remedial tasks.

All PRs use the same exercise book and assign to the learners the same learning tasks. However, with pedagogical support, this PAR concluded that the PRs can identify innovative ways of presenting the learning tasks indicated in the exercise books or design similar learning tasks.

5.3 RESEARCH QUESTIONS: WHAT DOES THE EMPIRICAL FINDINGS SHOWS?

In this section I summarise the main findings of this study in relation to the central research question and the derived sub-questions. Firstly the summary provides findings of the sub-questions followed by the findings of the central one.

5.3.1 Research Sub-question 1

How do Grade 1 and 2 teachers take responsibility for monitoring their own professional development? The related response shows that Grade 1 and 2 teachers do monitor their professional development using different ways, namely:

- moving from CFPP to IMAP/ADPP or from IMAP/ADPP to in order to progress in the teacher career

- taking responsibility for their own continuing professional development through individual initiatives to continue in the following academic level in Secondary or Higher Education
- participating in the meetings provided at Zone of Pedagogical Influence (ZIP) for pedagogical support, which shows the importance given to the ZIP.

5.3.2 Research Sub-question 2

What kind of intervention could be developed to support teachers to take responsibility for monitoring their own professional development?

From my observation as a researcher in this study, I concluded that the closer the facilitator of CPD, the greater the teacher's engagement will be. Due to the weakness presented in the introductory section of this chapter, the teachers need permanent support and follow-up in order to increase their motivation and performance. Another conclusion is that providers of TCPD need to promote and sustain self-directed professional development (SDPD), since each teacher is one single case to be dealt with. In addition, the findings of sub-question 2 lead to the conclusion that the TCPD programmes should follow a *whole school professional development* approach. This approach assures that all teachers at school are involved in SDPD.

5.3.3 Research Sub-question 3

How can elementary principles of action research, instructional design and learner assessment support teachers in monitoring their own professional development?

The study provided basic knowledge and skills concerning action research (AR), instructional design and learner assessment to PRs. The PRs raised their awareness with respect to reflection on their practice and the need to support individual learners systematically. The promotion of short cycles of AR can encourage teachers to reflect on what they do and can do better instead of blaming the curriculum, the learners and the shortage of learning materials. Reflecting on their practice, the teachers determine the appropriate remedial tasks to be assigned to each learner or to groups of learners. Once the change has been implemented, teachers need to be encouraged to proceed in order to improve their learning and the learners' achievement.

5.4 RECOMMENDATIONS

This PAR was an exploratory process. Therefore this study is not an end in itself; it is part of the challenge to find ways to support those who facilitate learning in Grades 1 and 2. It is therefore of value to state that the recommendations following from this PAR research are two-fold, namely recommendations for the implementation of the research findings and recommendations for further research.

5.4.1 Recommendations for the Implementation of the Research Findings

The following recommendations can be made with respect to the reflection on and implementation of the findings:

- The provider of TCPD should apply an all-school professional development approach in order to include all teachers.
- The introduction or initiation of innovative models of TCPD or innovative approaches regarding the facilitating learning should be introduced taking into consideration factors associated with initiation, with particular emphasis to those related to the learning facilitators, such as teacher motivation, teacher advocacy and pedagogical knowledge basis.
- The provider of TCPD should promote self-directed professional development and the implementation of short action research cycles and/or projects.
- At school level the teacher should be encouraged to produce learning materials for all subjects, with particular attention to Portuguese language in Grades 1 and 2 to support the acquisition of reading and writing skills.
- In order to put into practice self-directed professional (SDPD) at school level, significant changes should be introduced concerning human resources management with reference to the learning facilitating profession at provincial level. This involves a formal recognition of TCPD attended by means of in-service education programmes, such as seminar, short courses and SDPD at school level.
- Taking into consideration the number of teachers in lower primary education, the focus should be the pedagogical deputy from each primary school. This

person, being the one who is in charge and primarily deals with pedagogical matters at school level could be the facilitator, mentor and monitor of AR and TCPD. The approach should be a “whole school approach” in the sense that all learning facilitators should be involved. The programme could begin small, with those who are appointed for Grades 1 and 2; however, the aim should be to involve all learning facilitators. The procedure could be as follows:

- A pedagogical team, at provincial level of education, comprising experienced teacher educators, pedagogical technicians from the Provincial Directorate of Education, supported by researcher on PD and/or teacher education, expertise in primary education, concerning areas such as reading, writing and individual learner monitoring and assessment in Grades 1 and 2, could design and develop programmes to improve knowledge and pedagogical skills among teachers from these grades.
- The programmes designed should include the indication and production of learning material for the learning content in Grades 1 and 2.
- The pedagogical deputies participating in the programmes should produce their own kit comprising the basic learning material.
- The provincial team defines the minimal number of in-service education programmes each learning facilitator should attend and the certificate of participation to be provided.
- The provincial team develops a work schedule to involve pedagogical deputies of primary schools, according to the better practises used for a large and workable working group before the beginning of the academic year.
- Each pedagogical deputy, before the beginning of the academic year, promotes and facilitates TCPD on reading writing and monitoring and assessment of individual learning. At school level the pedagogical deputy could be supported by experienced colleagues and individuals with recognised experience.

- The TCPD programmes on reading writing and monitoring and assessment should provide participants the opportunities to produce their own learning material.
 - The PD programmes should focus on whole school, involving all learning facilitators in order to provide similar experience of CPD and opportunities to acquire or develop pedagogical skills. This approach is crucial for Mozambican schools since the practice in primary school is that a teacher does not often has the same class from Grade 1 up to Grade 5 or at least at Grade 2 when the learners, in theory, complete literacy acquisition.
 - The pedagogical deputies should follow-up and monitor how at classroom level the activities recommended for the initiation of reading and writing are being performed in order to ensure an effective reading and writing process.
 - The pedagogical team should follow-up the practises running at school level.
 - At the end of a set of in-service education programmes a certain number of learning facilitators should be appointed as Grade (1 or 2) or Cycle (Grades 1-2) specialists.
- The provider of TCPD should work towards an emerging expertise on acquisition of reading and writing skills among the learning facilitators at school level. This is likely
- to improve the quality of TCPD programmes
 - to contribute to the professional growth in the learning facilitator profession
 - to increase the acknowledgement of TCPD programmes
 - to discard and reduce expenses on the frequent and repeated revitalisation of revitalised Zones of Pedagogical Influence.

5.4.2 Recommendations for Further Research

As an exploratory research, this PAR has not been exhaustive; it has its limitations and raises a number of questions and creates ample opportunities for further research. The following issues are recommended:

- A number of TCPD have been provided by the Ministry of Education and by either governmental or non-governmental organisations; however, no research has been developed to find out the impact of the model of the CPD on the classroom practice. Therefore it is important to carry out research to establish the relationship between the learning provided throughout the TCPD and what learning facilitators actually do in class.
- The TCPD programmes provided have had little follow-up and monitoring. Therefore there is no clear feedback available. It is crucial to develop research on the impact of TCPD provided and the learners' achievement obtained.
- In Mozambique there are learning facilitators with different academic and professional qualifications. However, all of them are exposed to the same TCPD and the impact of TCPD on each group of learning facilitators is not clear. In order to establish the impact on those groups research could be performed.
- Owing to the different levels of professional qualifications there is no formal profile of a learning facilitator in primary education. Therefore, based in general on the aims of the national education system and in particular on objectives of primary education and curriculum planning for this level, research on the profile of learning facilitators should be carried out.
- This PAR has identified that methods of facilitating learning are the most valuable topic in the TCPD programmes attended. Accordingly research on the learning contents and the level and extent of the learning facilitators' participation in those programmes should be conducted.
- This PAR did not accurately identify the practice of individual learner assessment in terms of frequency, achievement attained and the provision of instruction to support low achieving learners. It is therefore important that research on the TCPD offered with respect to the aims and learning objectives, participation, follow-up and monitoring be performed.

- The study revealed that PAR is suitable for TCPD due to the importance given to the PRs participation in all stages of the study, with particular emphasis on the search for appropriate solutions. Therefore research should be conducted to find out how PAR could be used in primary schools.
- This PAR did not aim at designing or proposing a framework for self-directed professional development (SDPD) in primary schools. This is a topic for further research.

5.5 CONCLUSION

The findings from this PAR show *a priori* insufficient capacity of conducting authentic AR among the PRs. I as a research-mentor and beginner-researcher had to manage doing research and supporting a group of five PRs within the constraints at school and PR's availability as previously mentioned. I conclude that there is a need to create a minimal capacity in order to promote investigation in schools towards a SDPD.

As a facilitator of CPD of the PRs I should have promoted the fulfilment of the set of principles of SDPD described by Clarck (1992). However, I could not. This limitation was due to insufficient pedagogical knowledge and skills provided by the 10+2 teacher education programme. As mentioned in previous chapters, the PRs held 10+2 certification. To some extent they had limitations in identifying their learning needs and in planning their journey of learning. Therefore SDPD had to be supported by previous learning of methods of facilitating reading and writing in Grades 1 and 2. However, taking into consideration the overall process of this PAR and the involvement of the PRs, I conclude that this study contributes to improving my knowledge as research promoter and facilitator of TCPD. In addition I am convinced that the PRs increased their awareness and skills in relation to SDPD and elementary issues related to reflection and follow-up of individual learner achievement. Moreover, each PR can systematically design and develop remedial tasks. The PRs and I believe that the study provides a meaningful contribution to a SDPD in primary schools.

CHAPTER 6

META-REFLECTION ON THE STUDY PROCESS

6.1 INTRODUCTION

In this chapter I present a meta-reflective discussion on the process of my learning concerning TCPD, on the experience and knowledge created towards the improvement of my own practice as a researcher-mentor (RM) and the shortcomings of the study. I call it a meta-reflection since action research per se is a reflexive process. Given the purpose of this study, ‘exploratory research’ was appropriate to study ‘Exploring Professional Development Interventions for Improving the Teaching Practice of Primary School Teachers’. From the outset of the study process in 2007 the challenge was to find out what fits the school context and the PRs’ learning needs and availability in terms of time and the academic schedule in the class best.

My study was a kind of ‘exploratory research’ since I designed and developed all steps to explore, in classroom settings, an intervention for teacher continuing professional development (TCPD) and for the improvement of my own mentoring practice. The study aimed at investigating TCPD in lower primary education, focusing on learning facilitators in Grades 1 and 2 in Mozambique towards the improvement of my practitioner-researchers’ (PRs’) practice and my own mentoring practice. In Chapter 2 I reviewed the literature on (continuing) professional development of teachers and issues concerned with change in professional development (PD), models of TCPD and quality assurance. My learning at this stage and my experience as primary school teacher jointly informed an understanding of both the design and the data from the questionnaires referred to in Chapter 3 and 4 respectively.

The literature reviewed consistently indicates that teachers should be encouraged to take responsibility for their own CPD by means of analysis of their classroom practices, in terms of what they do to promote learning, a further identification of what has to be improved and design of suitable innovative practices and learning materials for their class, context and individual development. In so doing, the self-directed professional development (SDPD) appears to be the most appropriate model. The SDPD does not exclude the significant role of collaborative work and experience sharing with fellow teachers, or support from internal

and/or external promoters, as SDPD does not mean to leave the teachers on their own. The individual teacher should be able, and most of all, should be responsible for the identification of areas to improve in order to improve her/his learning and the learners' achievement. This is particularly crucial in contexts of developing countries like Mozambique where the professional qualification of the majority of teachers is below the desired level as discussed in Chapter 1. Consequently, there are primary school teachers who do not have substantial pedagogical skills and knowledge that can support effective reflection.

The improvement of teachers' pedagogical practices and my own mentoring practice was the purpose of this participatory action research (PAR). To do so the PRs were encouraged to monitor individual learner achievement critically and use appropriate remedial tasks and learning material. Accordingly, to some extent they identified areas in which they needed more support. From my side, the lesson learnt from the literature reviewed, the examination of the data from the questionnaire and the PRs' reports on the learningshop, the classroom observation and even the observation of the environment at the visited schools significantly improved my understanding with respect to the effective outcomes of in-service professional programmes (INSEP) and, consequently, of the low learner achievement in primary schools.

The emphasis of this PAR is on the pragmatic nature of the research. However, from the previous chapters of this study, apart from pragmatic understanding, the theoretical understanding was also constructed and can be summarised as follows:

- The background exposed in Chapter 1 advocates the need for new and innovative approaches of TCPD with emphasis on SDPD and the disadvantages of a top-down design model. Firstly, the initiative should come from teachers themselves. Secondly, as discussed in Chapter 2, in a SDPD context, teachers positively pay more attention to (a) the purpose of their learning, (b) themselves as persons who need to grow in the teaching profession, (c) the context in which they work and (d) the change that new knowledge will introduce to their culture of teaching.
- In Chapter 3 the PAR design showed that the teachers can apply principles of AR in order to contribute to their professional development (PD), though limited against their professional background and experience.

- The quantitative and qualitative data from the empirical study discussed in Chapter 4 have shown that the respondents are aware of the PD they need to improve their pedagogical skills and living conditions..
- With the increased need for more teachers’ professional qualifications, a significant practical outcome of this PAR is the enhancement of teachers’ responsibility for both their and their learners’ learning.
- My own learning was an important outcome – on the one hand, as a PD facilitator and on the other hand as a RM. As a PD facilitator, my journey of action, observation and reflection has shown the relevance of classroom-based PD to the teachers’ learning and to the facilitators’ practice. I could work in an authentic setting with all implications of the class timetable, the PRs’ availability, the school calendar, the lack of learning material, just to mention some. I also experienced the occasional unenthusiastic attitude towards PD through seminars and irregular visits to school. Apart from the practical outcome, I improved my understanding on transferability of TCPD models from Western or developed countries to developing countries and the factors associated with change as indicated in Chapter 2.

Having introduced the meta-reflection in terms of the outcomes of the study and the theoretical background that informed this PAR, specific areas of the meta-reflection on the study process are provided in the following sections.

6.2 EVALUATION OF THE RESEARCH PROCESS

This study was designed within an action research (AR) paradigm (Zuber-Skerritt, 1996). Furthermore, AR was privileged since it is also commonly acknowledged as an approach to personal and professional development to be adopted by practitioners in order to investigate what they do, and to build their own knowledge and theories of the practices carried out (McNiff & Whitehead, 2000; McTaggart, 2005). Participatory Action Research offered the appropriate type of AR, due to the importance given to the PRs in all stages of the study, with particular emphasis on the planning and the search for suitable solutions (Zuber-Skerritt, 1996), the design of the material, the observation sheets and the questionnaire used to

evaluate the intervention. Accordingly, in this PAR, the PRs and I critically reflected on the usual classroom practices and found the situation to be improved in matters such as the PRs' responsibility for pedagogical practice, knowledge and learners' achievement. In addition the research process improved the ability to change my and the PRs' actions and practices, to identify the problems faced, questions that had not been answered and the ways to find a solution (Wadsworth, 1998), and to identify learning disabilities and methods of facilitating learning. This procedure provided substantial information to me and to the PRs. To me it had particular significance in confirming that "transformative learning cannot be taught; it is the learner who experiences transformative learning" (Grabove, 1997:90). This assumption is reflected in the length of this study when compared with the data collected. It was necessary to expand the activities and the PRs freely participated in the study and enjoyed what they were doing.

Apart from the lack of self-confidence to change practices at the beginning of this PAR, they dealt with the issues of "what", "how" and "when" to change. In addition they had to follow a prescribed and overcrowded syllabus while participating in this study. The understanding that similar learning tasks could attain the learning objectives centrally indicated was followed in outline, due to the recommendation to abide by the calendar for the learning content in each grade. Due to the significant participative nature of this study and the great importance given to the real world context in which the PRs worked as referred to by Fullan and Hargreaves (1992), all the above constraints had to be taken into consideration. As argued by Cranton (2002), the accomplishment of steps that characterise the process leading to transformation, such as activating events, critical self-reflection, engaging in discourse behaving, and talking and thinking are important procedures towards transformative learning.

The integration of the classroom practices of my PRs was slow, since they used a research paradigm that was new for them and for me as a researcher and research-mentor (RM). I regarded this slowness as a shortcoming of the research process, mainly with respect to *What* and *How* to innovate. The PRs took long in taking ownership regarding the reflection of their practice with a view to initiating further actions, including the identification of issues to be improved and the appropriate method of facilitating learning and designing learning tasks within the SDPD model. As mentioned by Van Eekelen et al. (2006), SDPD is PD directed and carried out by teachers.. I therefore had to create empathetic relationships and encourage the PRs to ensure their inclusion and participation (Kember, 2000). The PRs' and my

transformative learning and the attempt to design authentic practices required courage, effort and persistence as Grabove (1997) mentions. The PRs and I were engaged in the process of transformative learning. Our learning related to the new knowledge gained from innovative practices and the PAR process itself. Another shortcoming was my inexperience in dealing with large samples and statistical procedures as promoted by STATOMET. I attempted to gather empirical data from teachers in the three geographical regions of Mozambique (Northern, Central and Southern) in order to provide a means for formulating relevant and effective activities to be carried out with the PRs towards our PD. The strength I had was my experience in primary education and facilitator of TCPD, which to some extent I had to ignore in order to avoid bias.

Planning, action, observation and reflection involved in this study improved my knowledge as a RM. From the outset of this PAR I was involved in the PRs' practices; at certain stages of the study I acted as supervisor, where the supervisor and the teacher are jointly responsible for the activities performed. I did so because of the need to fill gaps in the methods of facilitating learning used by the PRs.

At the outset of the study my concern was to identify the tools and/or procedures used by teachers in Grade 1 and 2 to improve pedagogical knowledge and skills. This concern derived from the distrust of the pedagogical support previously provided to the teachers. I do think that successful TCPD should be based on teachers' daily practice. Another concern was related to the view of provider and facilitator of TCPD. For instance, my experience in this PAR is that each teacher should be given certain opportunities such as to:

- be regarded as an individual with particular professional learning needs, aspirations and beliefs about facilitating learning;
- understand the rationale for the CPD programme;
- trace her/his own PD plan as often as possible in terms of her/his strengths and limitations;
- critique and transform her/his practice without administrative pressure;
- be systematically encouraged for SDPD and supported in the personal and professional growth process;
- be periodically appraised and formally rewarded.

The introduction of SDPD was mainly motivated by pedagogical practices and classroom observation by means of learners' learning, learning monitoring and the appropriate remedial tasks, which should improve the class achievement. The PRs were eager to learn and were aware of the need of innovation; however, they faced constraints regarding procedures to support the learners. We would organise new groups in the class in such a way that the low achieving learners were seated with peers who could give support. This procedure was complemented by the design of remedial learning tasks for reading and writing skills.

This could be achieved by learning opportunities provided to teachers concerning the main learning problems learners face and by the production of kits of learning material while in teacher education college and/or during PD programmes. Discussing the nature of the remedial learning tasks with the PRs and paying attention to low achieving learners clearly supported the PRs in their professional development and improved their self-confidence.

With respect to the baseline analysis by means of a questionnaire, the design, the pilot study and the administration itself provided data concerning what teachers think about the PD programmes attended, how they experienced the learning content approached, how they could transfer new insights to their practice and how they felt after attending such programmes. The results and the findings of the questionnaires have informed my mentoring practice and changes in the TCPD field in general.

At the end of the study I was more convinced that, in Mozambique, PD as part of the overall strategy for teacher education should be a priority of the education sector agenda, with emphasis on SDPD. There may be other interventions for SDPD apart from PAR. However, I am of the opinion that this study has the potential to convince providers of TCPD to develop further research in this field and in the AR paradigm.

6.2.1 Evaluation of the Research Methodology

This study focuses on TCPD in primary education with particular emphasis on teachers who facilitate learning in Grades 1 and 2. Through PAR, one of the types of AR, I attempted to improve the PRs' and my own practice. As stated by McNiff and Whitehead (2006), improvement of learning towards the improvement of educational practices and increase in

the existing knowledge and theory are the basic reasons for conducting AR. Therefore PAR was the suitable research design. Using classroom practices as the authentic setting of this study confirms what Kember (2000) argues for, saying that the nature of AR makes it the appropriate method for the improvement of education. AR as a way of investigating “professional experience which links practice and the analysis of practice into a single productive and continuously developing sequence” (Zuber-Skerritt, 1996:14) accommodated the activities performed by the PRs and me. Different ways of investigating were evident. Therefore the research methodology can be described as a process consisting of an overarching AR design, which is executed by means of a mixed-methods approach. It is PAR since a synchronous model (Du Toit, 2008) is followed in which I did AR on my own mentoring practice in tandem with the individual AR process of each PR; the PRs were involved in one another’s and in my AR by acting (participating) as peer assessors, co-learners, critical friends, etc.

6.2.2 Evaluation of the Used Methods

Although all methods I used have provided powerful insight and data, at this stage of my study I stress the valuable contribution of the learningshop on AR, the questionnaires and classroom observation. The learningshop on AR was of crucial importance regarding the need for offering the PRs an opportunity “to have a clear view of the details of the investigation in which will be engaged” (Mills, 2007:43). Despite the limited time they had the learningshop introduced elementary principles of AR that guided the PRs’ participation in AR as they obtained practical outcomes in terms of their pedagogical practice and learners’ achievement and simultaneously created new forms of understanding in relation to the learning facilitation process (Reason & Bradbury, 2001:2). The questionnaire was an adequate method for the sample of this study concerning the respondents from the 135 primary schools in the five selected provinces. In turn classroom observation substantiated the entire process of this PAR since it allowed me to experience CPD and learners’ learning.

The outcome of this baseline study will serve as a point of reference for any professional development intervention I may undertake and include in my lifelong action research-driven professional spiral in future.

6.3 MY JOURNEY TOWARDS THE IMPROVEMENT OF MY PRACTICE AND THE QUALITY OF TEACHERS' CONTINUING PROFESSIONAL DEVELOPMENT

In recent years I have been involved in TCPD programmes following a cascade model, basically aimed at improving pedagogical skills among primary school teachers in Grades 1 and 2 in order to improve reading and writing skills. This model was named *Courses of School Capacity Building: Systematic, Continuous, Experimental and Reflexive* (CRESCER). The cascade started at the Ministry of Education (MINED). An international consultant working at the MINED designed all TCPD programmes to be used to instruct/teach facilitators at central, regional, provincial and Zones of Pedagogical Influence (ZIP) levels. In turn the ZIPs had the responsibility of facilitating TCPD to teachers from the respective ZIPs. The central team comprised pedagogical technicians from MINED, the National Institute for Development of Education (INDE) and the National Institute of Teachers Upgrading (IAP). This team included lecturers from Eduardo Mondlane University (UEM) and the Pedagogical University (UP). I was one of the lecturers coming from UEM participating in the central team responsible for facilitating the programme at regional level. The regional team included teacher educators and pedagogical technicians from the provinces.

At that time the TCPD model summarised here was the latest model adopted by MINED. Reflection on the practices was the innovative component of the model. This experience was an expansion of a model developed by a consultant and teacher educator at a teacher education college.

I participated in this programme and found that only the consultant took ownership and control of the activities. Neither the pedagogical technicians from INDE nor from IAP whose responsibility was, respectively, to design syllabi, writing textbooks and teachers' guides for primary education and developing material for distance education of primary schools took any control or ownership. There was a unique programme and activities for the entire country, which included the timetable to be followed, the text in the textbooks, the learning material, working group activities and planning and demonstration of learning opportunities. Despite this practice the achievement in primary education and specifically in Grades 1 and 2 did not increase significantly.

From this experience I found that the majority of the participants from the institutions at central level were not comfortable with such a low level of involvement. I began to think of another model of TCPD that would take into consideration effective participation by means of the selection of the content and related learning outcomes and the model of TCPD, and that would promote the idea of teachers being involved in taking ownership of their PD and complementing AR. I decided to explore an intervention that can be used in order to support primary school teachers in Grades 1 and 2 in improving their practices through PAR. At the outset of the study and particularly during the classroom observation the PRs felt scared since previous experiences in this regard had been degrading. Therefore, in this intervention I changed my usual facilitator features: the knowledgeable facilitator who had solutions for all pedagogical problems; the one who knows what all teachers need; the expert who brings a list of “do’s” and “don’ts”. Instead, I decided to start from each PR’s impressions with respect to issues to be improved as the foundations of the professional learning in order to change the role they usually play in TCPD programmes from being passive to becoming self-directed practitioners who would take responsibility for their PD. I developed a new monitoring schedule (McNiff & Whitehead, 2006). This strategy can contribute to the improvement of the quality of TCPD programmes.

6.3.1 Monitoring Case Study D towards his Continuing Professional Development

This section includes an elaboration on the case study of one of the PRs out of the group of five participating in this PAR.

Deciding on what case study to choose was a difficult endeavour since each PR of this PAR had particular involvement, disposition and pedagogical knowledge and skills; the PRs were more diverse than homogeneous (Clark, 1992). However, I decided to select PR 4 who in the study was identified as case study D. I chose case study D as he was the eldest teacher in the group. This criterion was included for three reasons. The first reason is that, currently, the concern about professional qualifications and participation in professional development courses or programmes is typical among most teachers (Rodrigues, 2005). Mozambican teachers are no exception. The results from the baseline analysis related to the preferred way to contribute to their own professional development was through attendance of professional development – moving from CFPP level to IMAP/ADPP or from IMAP/ADPP to Higher Education (Table 4.32). The second reason was related to the fact mentioned by Hargreaves

and Fullan (1992) that many young teachers probably have not achieved a level of personal maturity that enables them to work significantly with fellow teachers. The third one is to disagree with Hargreaves and Fullan's (1992) statement which states that teachers in their mid-life span are frequently more cautious concerning change.

The following sub-sections provide the account of PR 4's journey on his continuing professional development. In attempting to match the extracts provided in this chapter with the statements on PR 4's artefacts (see photographs),

6.3.1.1 Practitioner-researcher 4 context

In an attempt to situate PR 4's journey of his continuing professional development and my role as research mentor and TCPD facilitator, I considered his participation in the AR learningshop as the starting point, since the learningshop aimed at familiarising all PRs with the AR paradigm which informs all steps of this study. By that time PR 4 has had more than 26 years of experience in facilitating learning and has been facilitating learning to first-graders for a significant period of his profession. Since 1982 he has also been facilitating learning to Grades 2 up to 5. Throughout his professional experience he attended more than 10 in-service education programmes. He had a large class with 60 learners. One out of the 60 learners is repeating Grade 1. This class size is usual in the lowest grades at the Unidade 18 Primary School and almost in all urban and suburban areas of Mozambique.

As mentioned in Chapter 4 after the learningshop on AR all PRs participated in a discussion about the new experience. Following the discussion in July 21, 2008, PR 4 wrote a short report concerning his learning and impressions. This report is offered in the next pages and the summarised translation of his impressions on the learningshop is presented in Table 4.54. In this report he indicates what he had learned, phrasing his feeling in the following way: *"I obtained experiences related to the management of facilitating learning and learning processes. I had the opportunity to acquire tactics, strategies on how to deal with learning disabilities."* Evolving from the information given by PR 4, I had understood that he will in future apply the knowledge and skills acquired throughout the learningshop regarding the attention to be paid to learners who do not progress appropriately. *"How to deal with learning disabilities"*, which means monitoring learners' learning, was seen as a daily concern after the learningshop. This suggested to me that PR 4 would in future assume ownership and responsibility for this aspect of his pedagogical practice after the learningshop and the PAR.

To develop his self-directed professional development (SDPD) in the context of this PAR, he selected reading and writing skills as the preferred topic saying that, *“In this area what is more interesting is to encourage the learners to read and write effectively.”*

The problem indicated by PR 4, which also was a concern, was *“the large class I have, difficulties on communication, since some learners do not speak nor understand Portuguese. The learners’ socio-economic situation sometimes affects and demoralizes them and has influenced the learning process.”*

6.3.1.2 Practitioner-researcher 4’s concerns and challenges

The main concern indicated by PR 4 and that motivated the cycles performed was the learners’ level of writing and reading skills. In addition he faced difficulties of communication, since some learners did not speak or understand Portuguese. The learners’ social background was also a concern since poverty affected their motivation to learn. They did not have note pads, pencils or erasers to participate actively in the daily learning opportunities.

He was concerned since the learners in Grade 1 had to initiate literacy competences to be completed in Grade 2 and the lack of learning material affected the learners’ progress. Therefore the question that arose was: How can I promote learning in order to allow my learners to acquire writing and reading skills of vowels, diphthongs and some consonants at the end of Grade 1? In order to improve the learners’ level of ability in writing and reading skills his commitment was expressed in the following terms: *“However, I will have all learners reading at least vowels and diphthongs at the end of the academic year”*. To achieve his goals, PR 4 was aware of the challenges he would face in the process of both his professional learning and the learning of the learners attending his classes. He expressed his feeling, saying that *“The challenges I will face with respect to the topic I selected are always to look for resources (learning material), methods to encourage learners on attaining the foreseen learning objective”*.

He only used the blackboard and the learners’ exercise books. Then we produced cards with the letters to be studied as a remedial task. The importance that PR 4 gave to learning material to offer better opportunities to learn clearly demonstrates that he had experienced

transformative learning. From his assumption that all learners could learn through the sole presentation of the letters on both the blackboard and in the exercise book, he came to understand the assumption regarding the role of the learning material. I noticed that my practice had influenced PR 4's practice and, moreover, influenced my mentoring practice. He reported that "*Another challenge was the distribution of learning contents within the syllabus and in the exercise book (or textbook). The time available is too little to care for learners with more difficulties. (...) I need to know my learners better and to maintain periodic and planned contacts with the family in order to know my learners' situation.*"

6.3.1.3 The way towards ownership of his practice

Generating evidence is a crucial stage in AR. Evidence is specific data that can sustain my claim to knowledge (Mcniff & Whitehead, 2006). Accordingly, at this stage of this PAR, from all data throughout the study, in relation to PR 4, I selected specific steps of my mentoring, questions and respective answers from the questionnaire for feedback and assessment, pictures, information from his colleagues and the principal.

Practitioner-researcher 4 saw professional development as the acquisition and/or development of professional knowledge and skills. The suggestion that he is assuming ownership of his professional development is that he states that "*in this investigation I intend to assess myself in order to verify my performance and my learners' learning*". This statement is part of his impressions given on April 23, 2010 and creates the impression that he assumed the need and importance of the reflection on what he is doing and what and how the learners learn. His comment, "*This will allow me to look for techniques to overcome eventual difficulties among the learners*" clearly shows that PR 4 recognised that improving his practice and learners' learning was his own responsibility. Such responsibility demands effort to look for more effective strategies and innovative practices and learning tasks.

Furthermore, this PAR contributed to PR 4's understanding of the need to investigate professional experience and to ask: How often did you feel the need to investigate and search for more information about issues regarding the facilitation of learning? He answered, "*Every day.*" (Question 12, Table 4.56). The PR did not have investigation skills as a

researcher but I believe that he will be able to formulate questions related to the situation to be improved or problem to be solved.

On August 10, 2010 PR 4 asked a plan of the learning of Portuguese as subject in Grade 1, as learning in this subject used to be the major concern for the teachers. The learning opportunity plan was structured in the way recommended by the school to all teachers. The important aspect was that PR 4 had planned to monitor the learners' activities in order to support the learners, provide feedback and explain the task to those who did not understand or did not know how to execute the learning task.

At this stage I found that PR 4 continued strictly following the textbook. However, the plan showed that he made improvements in supporting individual learners. He planned to go around the class and provide support when needed.

My follow-up and mentoring

Observation

The last time I observed PR 4 was while facilitating learning in two subjects: the first was Portuguese followed by Mathematics. I did not participate in the planning of these learning opportunities. Before the start of the learning opportunities I asked permission from the pedagogical deputy and from PR 4 himself.

Practitioner-researcher 4 used the blackboard to assign to the learners the same learning tasks recommended in the textbook according to the planning at school level. Photo image 7 provides the page from the textbook. I observed that he conducted only individual readings of words and sentences and a significant number of those learners who could not read were encouraged to read. This clearly shows PR 4's taking ownership of his practice, since commitment to individual learner achievement and the way to find solutions for low achieving learners was the frequent issue for his PD. The self-confidence regarding innovative practice by means of ownership is indicated in his answer given in the feedback on the intervention. He pointed out that he would assume ownership of his practice after the intervention when saying, "*I do not see any aspects that might prevent me from paying attention to my learners since I had acquired innovations in my work as a teacher*" (Question 13, Table 4.55). Another example of ownership is that he said, "*I will carry forward and*

look for more knowledge in order to guarantee my work as professional educator.” From this statement I am convinced that he was and still is involved in innovative practice, had taken ownership of his practice and realised the need for being responsible for his own CPD. The reason why I believe this is that according to my observation as mentor most reading activities in Grades 1 and 2 are performed collectively and in PR 4’s class individual reading is the preferred approach.

After the completion of the first learning task (indicated by the number 1 in photo image 7) PR 4 provided a different reading task. He completed the parts of the sentences recommended in the textbook, using different words than those indicated in the learning material. The right-hand side of photo image 9 provides the new reading task provided.

The learners did not perform all the learning tasks proposed for the learning opportunity due to the large number of learning tasks recommended. However, the positive fact is that PR 4 attempted to enhance the quality of the reading by assigning a different task by means of an innovative strategy.

The majority of learners seated in the back had not yet acquired and/or developed reading skills and PR 4 often asked them to read from the blackboard and supported their reading. According to my observation as mentor, the majority of teachers do not take care of the learners who do not appropriately follow the learning process during the learning opportunity. However, PR 4 did. This is evidence that PR monitored the learners’ learning. In addition PR 4 said, *“I often change the learners’ seating in the classroom in order to give more opportunities to those who need my support”*. In Table 4.55, question 14, when asked to add comments and/or opinions about the model of continuing professional development, PR 4 stated, *“The opinion is that it should happen at local level, school, ZIP and district for updating and ideas sharing in order to develop our work as educators.”*

Photo image 7: Page of Portuguese textbook

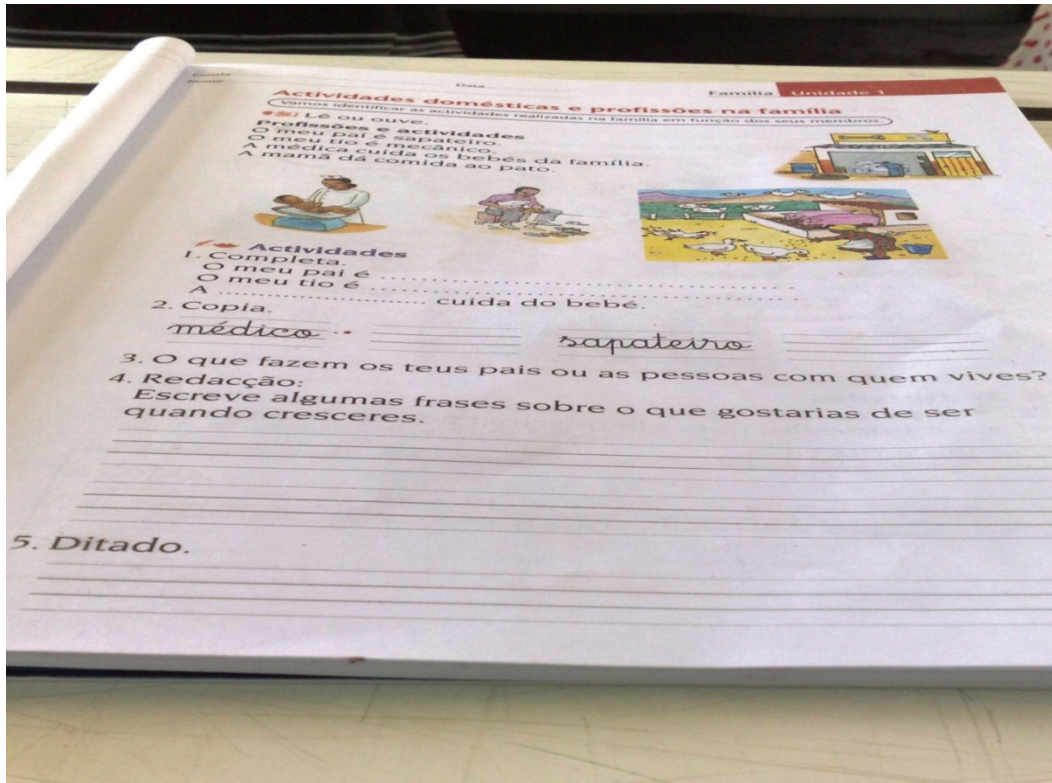


Photo image 8: PR 4 indicating individual learner to read on the blackboard



Photo image 9: Different reading tasks with different words provided by PR 4

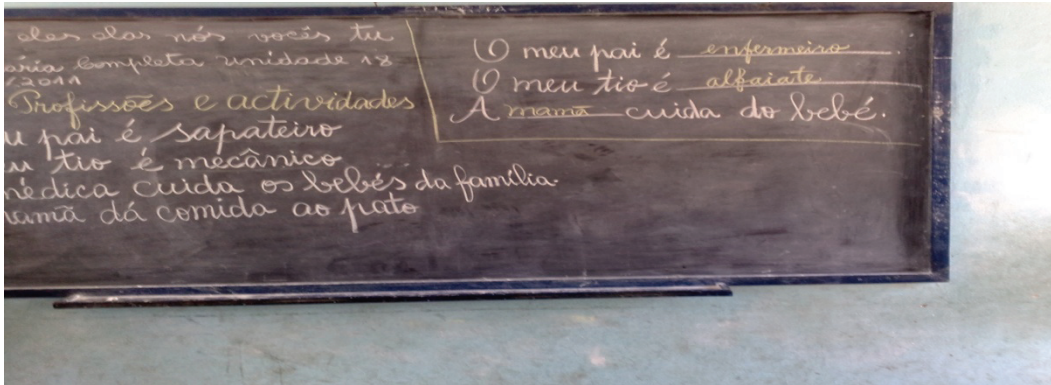


Photo image 10: Page of Mathematics textbook



When facilitating learning in Mathematics, PR 4 started in a different way. To begin with he assigned a learning task that was different from those indicated in the exercise book. This was an innovative strategy and evidenced that PR 4 looked for different ways to promote learning as a form of ownership of his practice. The evidence is substituted in his answer to Question 17 from the questionnaire for mentor-researcher evaluation: Do you feel motivated to continue to take responsibility for your own continuing professional development by investigating your classroom practice? The response of PR 4 was “A lot.”

Reflection

Practitioner-researcher 4 was receptive to my presence in the class despite the fact that we did not plan the learning opportunity to be observed jointly. He knew that I did not have a list of “do’s” and “don’ts”. My intention had never been to follow an instructional approach to

teachers' continuing professional development but rather to facilitate the learning process. The central purpose was to encourage the PRs to find potential areas for innovative practice by reflecting on what they had done with the learners and what they could do better in order to improve their pedagogical practice.

When reflecting on what he and the learners had done during the learning opportunity PR 4 mentioned the need to plan remedial tasks for deep understanding of the multiples of the number ten. He assigned tasks such as the following:

$$10+10 = 20$$

$$20+10 = 30$$

$$30+10 = 40$$

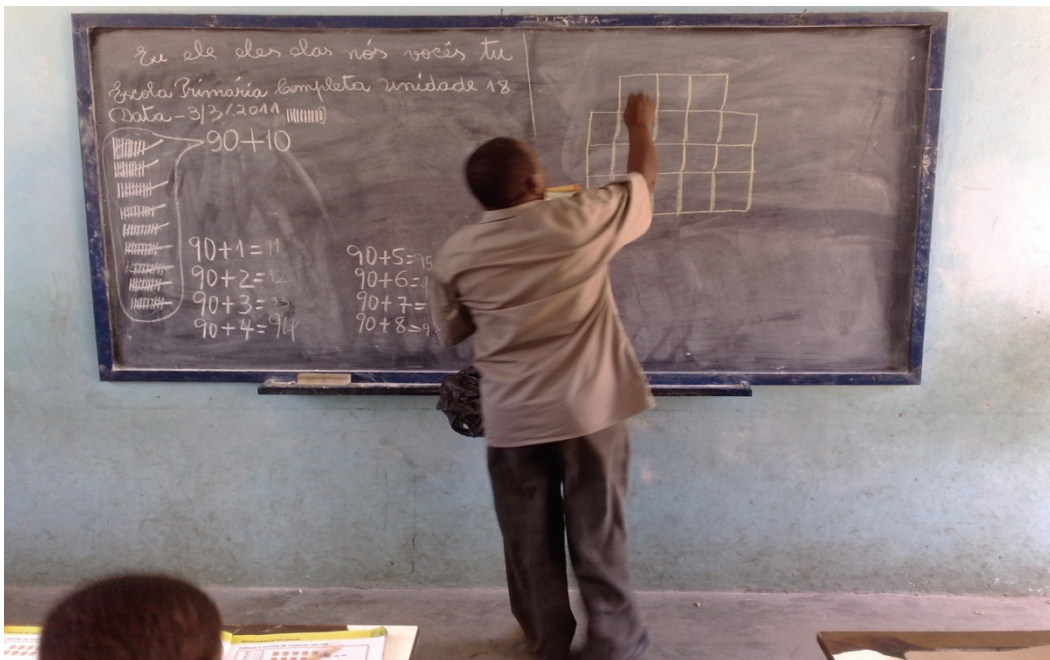
$$40+10 = 50$$

$$50+10 = 60$$

...

Reflection on the learning and practice of PR 4 strengthened my impression that he can design diversified learning tasks, although to some extent, like the majority of the teachers, he still doggedly follows the textbook.

Photo image 11: Practitioner-researcher 4 assigning learning tasks on the blackboard



At the end of this PAR, apart from the questionnaire for PRs' feedback and the mentor-researcher evaluation referred to in Chapter 4, I carried out an assessment process about PR 4's responsibility and ownership of his practice and the validity of SDPD. I also carried out brief telephonic interviews for peer-assessment with two colleagues of the PR group, and an

external assessment by the principal of the school. The interview questions and answers were the following:

Interview 1: My mentoring

- Mentor-researcher: *During the study we jointly planned some learning opportunities. How do you think did those activities improve your professional development?*
- Practitioner-researcher 4: *Those activities improved the methods of facilitating learning I used. The procedures improved my professional knowledge.*
- Mentor-researcher: *Do you think that you could continue taking ownership of your practice and investigate it?*
- Practitioner-researcher 4: *Yes I do, because I saw the positive results of my learners' learning. I can also use my experience at school and ZIP level.*
- Mentor-researcher: *How do you solve learning problems among your learners?*
- Practitioner-researcher 4: *I collect the exercise books from the low achieving learners, I identify the problems and I design the appropriate remedial tasks.*
- Mentor-researcher: *What is your experience in terms of ownership of your practice?*
- Practitioner-researcher 4: *I analyse what my learners and I did in the classroom; I identify the problems and I try to solve the problems with different learning tasks. I also support my colleagues.*

Interview 2 A: Peer assessment and peer mentoring

- Mentor-researcher: *Practitioner-researcher 4 is your colleague at Unidade 18 Primary School and was your co-participant in the study. How do you assess his practice?*
- Practitioner-researcher 3: *Practitioner-researcher 4 is very engaged in putting into practice what we learn. He talks to us about how he solves learning problems by assigning innovative practices.*
- Mentor-researcher: *Does he participate during the planning of the sequence of learning units?*
- Practitioner-researcher 3: *Yes he does. He often reminds the group about time to be allocated to remedial tasks during learning opportunities.*
- Mentor-researcher: *What else would you like to say about PR 4's practice?*
- Practitioner-researcher 3: *Practitioner-researcher 4 is a good learning facilitator and takes leadership in planning learning opportunities in the group.*

Interview 2 B: Peer assessment and peer mentoring

- Mentor-researcher: *Practitioner-researcher 4 is your colleague at Unidade 18 Primary School and was your co-participant in the study. How do you assess his practice?*
- Practitioner-researcher 5: *Practitioner-researcher 4 is good learning facilitator and he always assigns remedial tasks to his learners.*
- Mentor-researcher: *Does he participate during the planning of the sequence of learning units?*
- Practitioner-researcher 5: *Yes he does. He is the first one to refer to the need for regular assignment of remedial tasks.*
- Mentor-researcher: *How did you experience/see his ownership?*
- Practitioner-researcher 5: *He is mentor of our practice. He is always ready to support and guide us in ways to look for innovative approaches.*
- Mentor-researcher: *What else would you like to say about PR 4's practice?*

Practitioner-researcher 5: *I used to ask him about my practice when I did not know how to do.*

Interview 3: External assessment

Mentor-researcher: *How do you assess PR 4's practice?*
Principal: *Actually he is a good teacher. He is very concerned about his learners' learning.*

Mentor-researcher: *Do you think that he could have a mentor role at school level and influence his colleagues?*
Principal: *I think so because he is a very experienced learning facilitator. He likes to assign diversified learning tasks to his learners.*

Mentor-researcher: *Do you think that he will continue paying attention to his CPD?*
Principal: *Yes, I do because he already shows interest in looking for new ways of facilitating learning.*

Mentor-researcher: *Would you like to say anything else about PR 4?*
Principal: *I think that he learnt a lot in your study and he is acting accordingly.*

6.4 THE SIGNIFICANCE OF THE STUDY

As argued by McNiff and Whitehead (2009) the ways in which a study provides contributions are named significance, that in turn implies the meaning for the researcher, for the wider community, and yet for the future.

The significance of the different aspects of this PAR arose first of all from my intention to improve my practice as promoter of TCPD and as research mentor (RM) of primary school teachers. Secondly, the significance derives from the central research question which is addressed by this study: *How can teachers in Grades 1 and 2 be supported in terms of improving their practices by taking responsibility for their own professional development?* and the three sub-questions derived from it. The research questions and the literature reviewed guided all stages of the study and, consequently all processes aimed at improving my own and my PRs' professional learning. Hence, throughout the steps of the Comprehensive Cycles A and B the PRs, and I modified our practices and activities to be carried out in the classroom in a participatory approach. Throughout the study I realised that the previous TCPD I had conducted were traditional CPD by means of top-down decision-making (Díaz-Maggioli, 2004). For instance, the programmes were based on transmission which basically characterises models such as the deficit model, cascade model and the coaching/mentoring model. I did not take into consideration what Clark (1992) states by saying that teachers differ in terms of knowledge and skills and they have more differences than similarities. Using top-down designed programmes with little follow-up I facilitated the

CPD of teachers and teacher educators who came from a variety of models of teacher education, different contexts of work and, above all, with different experiences. Now I am convinced that this PAR contributed to the change of my epistemological assumption concerning learning and facilitation of TCPD and promotion of research initiatives. The significant knowledge in these fields was to challenge both my methods of facilitating TCPD and the innovative practice I followed and the scholarly self-monitoring. As a research-mentor of beginner researchers and at the same time participants in this study, I realised that the PRs and I had engaged in a PAR process since we contributed to the improvement of one another's understanding in performing pedagogical activities; in addition it is clear that other educators and interested people will learn from it (McTaggart, 1997). What the PRs and I did with respect to investigating our practices in order to find out what knowledge and skills could contribute to our own CPD and improve our professional skills is likely to influence the future of learning facilitation and the quality of TCPD programmes in Mozambique.

However, I am aware of the limitations of this PAR regarding the nature of AR as a paradigm and participatory type. The PRs and I had only started engaging in a substantive PAR owing the limitation of the context in which we were researching. The PRs were, on the one hand, limited by being obliged to facilitate learning according to a prescribed and compulsory syllabus, textbooks, timetable, insignificant opportunities for change and, on the other hand, the limited pedagogical knowledge and skills to sustain innovative practice and scholarly monitoring of their professional development. To me the limitation was to accommodate the study in the working conditions of the PRs, being a full-time academic and having a new practice as researcher-mentor established.

It is also important to state that in terms of adding value, irrespective of the limitations mentioned, I felt awarded as I have influenced the PRs in applying principles of AR to improve their professional knowledge and skills and have initiated my practice as researcher-mentor. This is also significant since I notice the progress I have made since 1976, when I was first appointed to conduct professional development programmes till now. I fully realise that SDPD programmes are more likely to promote change of practice.

In this study the PRs changed their attitude with respect to their responsibility by looking for solutions to the problems they face when facilitating learning, and ways to overcome learning disabilities. As the study progressed I found that the PRs were more receptive by asking

themselves what they can do more and better instead of blaming the learners, the syllabus and learning material. They attempted to monitor learners' achievement, to introduce diversified remedial tasks to improve learning in the class and, as a result, they had achieved improving learners' performance and said that the remaining teachers from Unidade 18 Primary School should be involved in similar experiences.

The process of my learning throughout and of my practice to sustain my knowledge claim is provided in the following section.

6.3 SUMMARY OF MY KNOWLEDGE CLAIM

Having completed my meta-reflection on this PAR, in this section I attempt to sum up what I found to be the major knowledge regarding practice and theory with respect to my role of promoter of TCPD and research-mentor (RM).

Concerning my role as promoter of TCPD, the SDPD model I used to support the PRs in terms of being responsible for their professional development by reflecting on their practice towards innovation and transformation has been an excellent model for this PAR. Although the PRs had no sufficient pedagogical knowledge and skills, owing to the encouragement, support and follow-up I provided, they were able to take ownership of their practice. In so doing I improved my knowledge about both my own practice as facilitator of TCPD programmes and the practices of the PRs. I could see the complexity of a SDPD in the context of a developing country like Mozambique where teachers' qualifications are still a challenge to be dealt with. The lack of professional qualifications is associated with a lack of resources and weak working conditions. Therefore, at this point of this study, I am convinced that primary school teachers can be responsible for their own continuing professional development (CPD) in accordance with the support provided at school level which will aim to overcome the limitations.

In terms of theoretical knowledge constructed throughout this study I improved my understanding of TCPD and the role that effective initial teacher education and school-based support play. For that purpose, basic pedagogical knowledge and skills that will allow the teachers to look for information that could improve their practice is more likely to motivate

or develop SDPD. In addition it is possible to encourage the teachers to, first of all, reflect on the process of facilitating learning, and then to find ways for SDPD and monitoring individual and/or groups of learners achievement, notwithstanding the low level of professional qualification, the large classes they have and unsatisfactory working conditions. Primary school teachers should use principles of AR to improve their practices. Therefore, TCPD should be approached as an individual teacher's responsibility by promoting SDPD.

Regarding my role of RM I developed the understanding that the time available is an important issue to take into consideration. Therefore the limited time available to do research for a degree is unlikely to produce the desirable AR competences in the PRs. In addition I learned that the possibility of teachers researching their practice is associated with the control they have of curriculum management in terms of time allocated, and learning outcomes versus learning content.

I am convinced that it is possible to promote SDPD at school level if it is supported by the pedagogical deputy. Evolving from this viewpoint I can summarise my knowledge as follows:

Statement 1: The design of a top-down orientated TCPD, based only on the learners' achievement, is a complex task to be carried out at central level, for example by the Ministry of Education (MINED).

Statement 1.1: An individual teacher approach to TCPD is likely to improve classroom practices and promote individual and professional growth.

Statement 1.2: Learning outcomes and tasks identified by the teacher, individually or supported by a fellow teacher/pedagogical deputy/external expert are more probable to be integrated in daily practices.

Statement 1.3: In cases of under-qualified teachers both direct instruction and working groups can be used in order to create knowledge and develop pedagogical skills.

Statement 1.4: Even in cases where the teachers have the same academic and professional qualifications each teacher is a singular case in her/his personal and professional growth.

Statement 2: Self-directed professional development is encouraged by both intrinsic and extrinsic motivation in an environment of confidence and empathy.

Statement 2.1: Confidence between the TCPD facilitator and the teacher is likely to promote an environment for authentic classroom practice without adjustment that can impress the TCPD facilitator. Scaffolding learning tasks and materials or specific knowledge and/or methods of facilitating learning play an important role if provided in the nick of time.

Statement 2.2: An empathic relationship between the RM and the teacher in which there is co-responsibility for the design and development of the AR project is more likely to promote a receptive attitude towards the less tidy nature of AR. This lack of rigorous order will be seen as normal either by the RM or by the teacher.

Statement 3: Action Research as systematic inquiry is likely to pursue a regular cyclical, reflective approach when conducted by a teacher-researcher.

Statement 3.1: When investigating classroom practices through AR in cases in which facilitating learning is not the daily researcher's task PAR is likely to provide more authentic data.

Statement 3.2: Substantial pedagogical knowledge and skills are required to guide observation and reflection in order to lead innovation and create knowledge.

From the above statements it is worth mentioning that the introduction of any SDPD model in primary schools appears to be a complex and challenging task. This process should mainly take into consideration teachers' motivation for innovation and change of their classroom practice and support of individual learners. However, the first challenge and difficulty to be faced by TCPD providers will be the provision of appropriate professional development to pedagogical deputies in order to build a pedagogical resource at school level. It is important that the professional development programme encompasses methods of facilitating learning in Grades 1 and 2, and action research and mentorship.



Copy of PR 4's report on the learningshop on action research

Maputo, 21 de julho de 2008

Análise do W realizado após o seminário realizado no mês de Abril, na faculdade de Educação

Constatações seguintes:

- Para mim o seminário foi importante, porque permitiu aumentar o meu nível no Δ do meu W profissional. Acolhi experiências quanto a administração do P.E.A. Tive oportunidade de adquirir técnicas, estratégias de como me encara os alunos que possuem dificuldades mentais, comportamentais. É referir que não tenho assim um sucesso aplausivo devido as condições de W que ocorreu durante o II Trimestre dado q obras de reabilitação da escola, que as vezes tinha que se juntar as turmas dificultando desta feita o controle e operamento dos dados disciplinares por q o nº de alunos foi maior. Para terminar tenho a louvar o esforço empreendido por Dr. Pieter du Toit em colaboração com a Sr^{te} Cristina Teube, advertindo que este processo seja contínuo e permanente.

Por participante

Boaz Jotam Machaie



Copy of PR 4's project

Aplicação Prática dos Workshops Desenho da investigação (2)

1. O contexto do meu estudo

Sou professor da 1ª classe, na escola Primária Completa Unidade 18, sita no Bairro do Aeroporto na Cidade de Kaput. Sou docente do ensino primário desde 1982, e tenho leccionado da 1ª a 5ª classe. Neste ano lectivo, a minha turma é constituída por 60 aprendentes. Deste número apenas 1 aluno é repetente.

① O tópico do meu estudo é leitura e escrita. Nesta área o que mais interessa é levar os alunos a saber ler e escrever com eficácia.

② 2. Problema

O problema concreto gestado na turma numerosa. Tenho dificuldades na comunicação dado que algumas crianças não falam nem entendem a Língua Portuguesa. Também as condições socioeconómicas que por vezes desmoldam o aluno no processo de ensino e aprendizagem.

Uma possível solução para resolver este problema é necessário primeiro fazer o trabalho na turma, que é o acompanhamento da aprendizagem dos aprendentes. Se alguns aprendentes precisarem de mais atenção, procurarei contactar a família ou encarregado de educação para juntos qualificar o ponto de situação e arranjar as formas do problema.



PR 4's project (continued)

3. Objectivo

O Objectivo do meu estudo é investigar a minha prática pedagógica, na forma que lecciono de modo a melhorar a minha prática e aprendizagens do meus aprendentes.
* Escolhi este tópico porque é a chave para a aprendizagem nas classes subsequentes. O trabalho vai contar com a participação do meu colega e do meu aprendente.

4. Pergunta de pesquisa.

A pergunta que eu vou orientar neste estudo é a seguinte:
② Como é que hei de orientar o processo de ensino e aprendizagem de modo a permitir que, no fim da 1ª classe os aprendentes aprendam a ler e escrever vogais, os ditongos e algumas consoantes.

5. Desafios

① O desafio que espero encontrar face a este tópico é de sempre procurar meios, métodos de levar os alunos a atingir o objectivo esperado. Outro desafio é a distribuição do conteúdo no programa e no caderno de exercícios do aluno, assim como a dosificação na aula.
O tempo (e) disponível é muito reduzido para atender os aprendentes com mais dificuldades.
Contudo, até ao fim do ano, eu terei
③ todos aprendentes a ler pelo menos as vogais e ditongos.



PR 4's project (continued)

⑤ Preciso de conhecer melhor os meus aprendentes e manter sempre contactos periódicos planificados com as famílias para me inteirar da situação dos meus educandos e dar-lhes informações sobre a situação pedagógica, comportamental e de mais aspectos de interesse e ligados ao processo de ensino e aprendizagem.

Neste estudo, pretendo auto-avaliar-me para poder ver e melhorar o meu desempenho e ver a assimilação dos conteúdos por parte dos meus aprendentes, permitindo-me assim procurar técnicas de ultrapassar eventuais dificuldades que possam surgir nos alunos.

5. Método

O estudo é uma investigação-ação na observação da minha prática e das actividades dos meus aprendentes.

BOAZ JOÃO MACHAIE

6.4 CONCLUSION

As a conclusion to the meta-reflection provided in this chapter I can state that this study contributes to the improvement of the understanding of TCPD through a Self-directed Professional Development model embedded in an AR paradigm applying a PAR type of AR. Consequently, the study demonstrates the potential characteristics of a TCPD programme in primary schools, involving PRs holding the medium level of professional qualification in Mozambique. The final results and positive consequence reflected in this meta-reflection are the attention that PRs pay to individual learners and the awareness of providing remedial tasks to low achieving learners.

In terms of a scholarly perspective this study contributes to the improvement of the importance of a Self-directed Professional Development (SDPD) model due to the opportunity given to each PR to participate in problematising her/his practice and searching for probable solutions. This participation is of great importance in order to overcome teachers' limitations and to engage the pedagogical deputy as facilitator within the school. Another contribution is in the sense of avoiding top-down decision-making programmes used in traditional professional development.

Throughout the study I reflected on the quality of TCPD programmes I had promoted or facilitated and on what the teachers had actually learned and put into practice. As a consequence of the changes I had introduced in my monitoring procedures at the end of the intervention I felt that I had improved my practice as promoter of TCPD and research mentor, and had influenced the PRs' practice.

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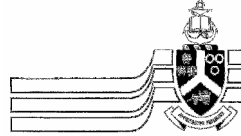
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Appendix A: Ethical Clearance



UNIVERSITY OF PRETORIA
FACULTY OF EDUCATION
RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE

DEGREE AND PROJECT

INVESTIGATOR(S)

DEPARTMENT

DATE CONSIDERED

DECISION OF THE COMMITTEE

CLEARANCE NUMBER :

CS07/03/02

PhD Curriculum Studies

Exploring professional development interventions for improving the teaching practice of primary school teachers

Cristina Tembe

Department of Humanities Education

30 September 2010

APPROVED

Please note:

For Masters applications, ethical clearance is valid for 2 years

For PhD applications, ethical clearance is valid for 3 years.

CHAIRPERSON OF ETHICS COMMITTEE Prof L Ebersohn

DATE

30 September 2010

CC

Dr PH du Toit
Ms Jeannie Beukes

This ethical clearance certificate is issued subject to the following conditions:

1. A signed personal declaration of responsibility
2. If the research question changes significantly so as to alter the nature of the study, a new application for ethical clearance must be submitted
3. It remains the students' responsibility to ensure that all the necessary forms for informed consent are kept for future queries.

Please quote the clearance number in all enquiries.



Appendix B: Questionnaire



QUESTIONNAIRE

Continuing Professional Development of Primary School Teachers in Grades 1 and 2

To complete, circle the appropriate number in a shaded number or write in the provided shaded space.

For office use only

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|------|---|---------------------------------|---|--|---|--|---|-----------------|---|--------------|---|--------------------------------------|---|---|---|----------------------------|---|----------------------------------|---|---------------------|---|-------------------------|---|-------------------------------|---|-----------------------|---|--|----|---|----|--|
| <p>1. Respondent number</p> <p>2. What is the name of your school?</p> <div style="background-color: #cccccc; height: 20px; width: 100%;"></div> <p>3. In which province do you teach?</p> <div style="background-color: #cccccc; height: 20px; width: 80%;"></div> | <p>V1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 1</p> <p>V2 <input type="text"/> <input type="text"/> <input type="text"/> 5</p> <p>V3 <input type="text"/> <input type="text"/> 8</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>4. What is your gender?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Female</td> <td style="width: 20%; text-align: center;">1</td> </tr> <tr> <td>Male</td> <td style="text-align: center;">2</td> </tr> </table> <p>5. What is your age?</p> <div style="background-color: #cccccc; height: 20px; width: 80%;"></div> <p>6. What is the highest level of academic education you have achieved?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Primary education or equivalent</td> <td style="text-align: center;">1</td> </tr> <tr> <td>1st Cycle of General Secondary Education or equivalent</td> <td style="text-align: center;">2</td> </tr> <tr> <td>2nd Cycle of General Secondary Education or equivalent</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Bachelor degree</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Licenciatura</td> <td style="text-align: center;">5</td> </tr> </table> <p>7. What is the highest level of professional qualification you have achieved?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>I have no professional qualification</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Centro de Formação de Professores Primários</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Instituto Médio Pedagógico</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Instituto de Magistério Primário</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Magistério Primário</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Universidade Pedagógica</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Universidade Eduardo Mondlane</td> <td style="text-align: center;">7</td> </tr> <tr> <td>Universidade Católica</td> <td style="text-align: center;">9</td> </tr> <tr> <td>Instituto Superior Politécnico e Universitário</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Instituto Superior de Educação e Tecnologia</td> <td style="text-align: center;">11</td> </tr> </table> | Female | 1 | Male | 2 | Primary education or equivalent | 1 | 1 st Cycle of General Secondary Education or equivalent | 2 | 2 nd Cycle of General Secondary Education or equivalent | 3 | Bachelor degree | 4 | Licenciatura | 5 | I have no professional qualification | 1 | Centro de Formação de Professores Primários | 2 | Instituto Médio Pedagógico | 3 | Instituto de Magistério Primário | 4 | Magistério Primário | 5 | Universidade Pedagógica | 6 | Universidade Eduardo Mondlane | 7 | Universidade Católica | 9 | Instituto Superior Politécnico e Universitário | 10 | Instituto Superior de Educação e Tecnologia | 11 | <p>V4 <input type="text"/> 10</p> <p>V5 <input type="text"/> <input type="text"/> 11</p> <p>V6 <input type="text"/> 13</p> <p>V7 <input type="text"/> 14</p> |
| Female | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Male | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Primary education or equivalent | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 st Cycle of General Secondary Education or equivalent | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 nd Cycle of General Secondary Education or equivalent | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bachelor degree | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Licenciatura | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I have no professional qualification | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Centro de Formação de Professores Primários | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Instituto Médio Pedagógico | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Instituto de Magistério Primário | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Magistério Primário | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Universidade Pedagógica | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Universidade Eduardo Mondlane | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Universidade Católica | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Instituto Superior Politécnico e Universitário | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Instituto Superior de Educação e Tecnologia | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



8. How many years of teaching experience do you have?

V8 15

9. How many shifts are you currently teaching per day at each schools?

| School | Number of shifts |
|---------------------|----------------------|
| Own school | <input type="text"/> |
| Additional school 1 | <input type="text"/> |
| Additional school 2 | <input type="text"/> |

V9 17

V10 18

V11 19

10. How many hours, on average, do you spend on lesson planning per week?

V12 20

11. How many formal short in-service education programmes have you attended from 2004 to 2007?

V13 23

12. Indicate the two most valuable topics that have been focused on in-service education programmes that you have attended.

1.

2.

V14 25

V15 27

13. To what extent do you think that these programmes in general were useful in improving your professional learning? (*Mark 1 answer only.*)

| | |
|-----------------|---|
| Very useful | 1 |
| Useful | 2 |
| Quite useful | 3 |
| Not very useful | 4 |
| Useless | 5 |

V16 29



14. Indicate two areas in which you made improvements after participating in the in-service education programmes.

| |
|---------|
| 1. |
| 2. |

V17 30

V18 32

15. What do you think should be the emphasis of in-service education programmes? (Mark one answer only).

| | |
|--|---|
| Emphasis on developing the teachers strengths | 1 |
| Emphasis on rectifying the teachers weaknesses | 2 |

V19 34

16. Consider the examples below. Indicate the 1st, 2nd and 3rd in order of importance for you as aims of an in-service education programme (Indicate 3 priorities only).

| | |
|--|--|
| Increasing the quality of learning | |
| Improving pedagogical practices | |
| Expanding teachers subject knowledge | |
| Standardising content to be taught in each grade | |
| Allow experience sharing among teachers | |

V20 35

V21 36

V22 37

17. Consider the examples below. Indicate the 1st, 2nd and 3rd in order of importance what should be typical of an effective in-service education programme (Indicate 3 priorities only.)

| | |
|---|--|
| Based on effective pedagogical practices | |
| Promoting improvisation of didactic materials | |
| Promoting continuity of in-service education programmes along the academic year | |
| Ensuring regular follow-up of teaching practices | |
| Ensuring "assessment" by experienced persons | |

V23 38

V24 39

V25 40



18. Consider the examples below. Indicate the 1st, 2nd and 3rd in order of preference of an in-service education programme you prefer (*Indicate 3 priorities only*).

| | |
|-----------------------|--|
| Regular meetings | |
| Regular dialogue | |
| Peer observation | |
| Supervision | |
| Classroom observation | |
| Workshop/Seminar | |
| Reading/Self study | |

V26 41
V27 42
V28 43

19. Consider the examples below. Indicate the 1st, 2nd and 3rd in order of importance the factors that an in-service education programme should be sensitive to (*Indicate 3 priorities only*).

| | |
|--|--|
| Training methods | |
| Methods of facilitating adult learning | |
| Individual learning | |
| Examples of case studies of best practices | |

V29 44
V30 45
V31 46

20. Indicate your preference in terms of the duration of in-service education programme (*You may mark one or more answers*).

| | |
|---|---|
| 1 day with follow up of reflection after 3 monts | 1 |
| 2 days with follow up of reflection after 3 monts | 2 |
| 5 days with follow up of reflection after 3 monts | 3 |
| 1 day with follow-up providing concrete results | 4 |
| 2 days with follow-up providing concrete results | 5 |
| 5 days with follow-up providing concrete results | 6 |

V32 47
V33 48
V34 49
V35 50
V36 51
V37 52

21. How could you contribute to your own continuing professional development? (*You may mark one or more answers*).

| | |
|---|---|
| Taking responsibility for my own continuing professional development | 1 |
| Monitoring/controlling my own continuing professional development | 2 |
| Waiting to be trained | 3 |
| Developing habits of learning | 4 |
| Participating in ZIP meetings | 5 |
| Attending the following academic level | 6 |
| Moving from CFPP level to IMAP/ADPP or from IMAP/ADPP to Higher Education | 7 |

V38 53
V39 54
V40 55
V41 56
V42 57
V43 58
V44 59



22. How do you think that continuing professional development should be recognised? (Mark one answer only).

| | |
|--|---|
| Not awarded | 1 |
| Periodically awarded | 2 |
| Certificate/diploma from college or university | 3 |
| Credit points for progression in the professional career | 4 |

V45 60

23. Consider the following teacher roles. Indicate your opinion about each one of these roles.

| | Yes | No |
|---|-----|----|
| Learning mediator/facilitator | 1 | 0 |
| Interpreter and designer of learning programmes and materials | 1 | 0 |
| Leader, administrator and manager | 1 | 0 |
| Scholar, researcher and lifelong learner | 1 | 0 |
| Community, citizenship and pastoral role | 1 | 0 |
| Assessor | 1 | 0 |
| Learning area/subject/discipline/phase specialist | 1 | 0 |

V46 61
V47 62
V48 63
V49 64
V50 65
V51 66
V52 67

24. Consider each statement below and indicate your opinion about the issues to consider when planning lessons.

- 1 = Strongly Disagree - SD
2 = Disagree - D
3 = Neutral - N
4 = Agree - A
5 = Strongly Agree - SA

| Statement | SD | D | N | A | SA |
|--|----|---|---|---|----|
| Instruction aims to support the learning of the individual learner | 1 | 2 | 3 | 4 | 5 |
| Instruction aims to identify the learning problems of the individual learner | 1 | 2 | 3 | 4 | 5 |
| Planning should cover both immediate and long range | 1 | 2 | 3 | 4 | 5 |
| Instruction must be based on knowledge of Pshychology | 1 | 2 | 3 | 4 | 5 |
| Design of instruction involves analysis, design and evaluation | 1 | 2 | 3 | 4 | 5 |

V53 68
V54 69
V55 70
V56 71
V57 72



25. How often do you assess individual learners in terms of learning achieved? (*Mark 1 answer only*).

| | |
|----------------------|---|
| Never | 1 |
| Once a year | 2 |
| Once a semester | 3 |
| Once a trimester | 4 |
| Once or more a month | 5 |
| Every day | 6 |

V58 73

26. How often do you analyse individual learner achievement? (*Mark 1 answer only*).

| | |
|----------------------|---|
| Never | 1 |
| Once a year | 2 |
| Once a semester | 3 |
| Once a trimester | 4 |
| Once or more a month | 5 |
| Everyday | 6 |

V59 74

27. What do you use the information of the analysis for? (*Mark 1 answer only*).

| | |
|---------------------------|---|
| Supporting learners | 1 |
| Giving marks | 2 |
| Reflecting on my teaching | 3 |
| Improving my planning | 4 |
| Improving teaching | 5 |

V60 75

28. How often do you provide instruction to prevent early underachievement? (*Mark 1 answer only*).

| | |
|----------------------|---|
| Never | 1 |
| Once a year | 2 |
| Once a semester | 3 |
| Once a trimester | 4 |
| Once or more a month | 5 |

V61 76

29. How often do you write a report about potentially under-achieving learners? (*Mark one answer only*).

| | |
|----------------------|---|
| Never | 1 |
| Once a year | 2 |
| Once a semester | 3 |
| Once a trimester | 4 |
| Once or more a month | 5 |

V62 77



30. What suggestions do you have to improve the acknowledgment of teachers' continuing professional development from educational sectors?

1.
.....
2.
.....

V63 78

V64 80

Thank you for your collaboration

QUESTIONÁRIO:

Desenvolvimento Profissional Contínuo de Professores do Ensino Primário na 1.^a. e 2.^a. Classes

Para responder ao questionário, faça um círculo à volta do número sombreado que achar adequado à sua resposta ou escreva no espaço sombreado indicado.

Para uso só pelo investigador

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|-----------|---|---|---|---|---|---|---|-------------|---|--------------|---|---------------------------------|---|---|---|----------------------------|---|----------------------------------|---|---------------------|---|--------------------------------------|---|-------------------------|---|-------------------------------|---|-----------------------|---|--|----|---|----|--|
| <p>1. Número do respondente</p> <p>2. Como se chama a sua escola?</p> <div style="background-color: #cccccc; height: 15px; width: 530px; margin-bottom: 5px;"></div> <p>3. Em que província ensina?</p> <div style="background-color: #cccccc; height: 15px; width: 350px; margin-bottom: 5px;"></div> | <p>V1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 1</p> <p>V2 <input type="text"/> <input type="text"/> <input type="text"/> 5</p> <p>V3 <input type="text"/> <input type="text"/> 8</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>4. De que sexo é?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 80%;">Feminino</td> <td style="width: 20%; text-align: center;">1</td> </tr> <tr> <td>Masculino</td> <td style="text-align: center;">2</td> </tr> </tbody> </table> <p>5. Qual é a sua idade?</p> <div style="background-color: #cccccc; height: 15px; width: 80px; margin-bottom: 5px;"></div> <p>6. Qual é o nível académico mais elevado que concluiu?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Ensino Primário do II Grau ou equivalente</td> <td style="text-align: center;">1</td> </tr> <tr> <td>1o. Ciclo do Ensino Secundário Geral ou equivalente</td> <td style="text-align: center;">2</td> </tr> <tr> <td>2o. Ciclo do Ensino Secundário Geral ou equivalente</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Bacharelato</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Licenciatura</td> <td style="text-align: center;">5</td> </tr> </tbody> </table> <p>7. Qual é o nível de formação profissional mais elevado que concluiu?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Não tenho formação profissional</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Centro de Formação de Professores Primários</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Instituto Médio Pedagógico</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Instituto de Magistério Primário</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Magistério Primário</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Ajuda Dinamarquesa de Povo para Povo</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Universidade Pedagógica</td> <td style="text-align: center;">7</td> </tr> <tr> <td>Universidade Eduardo Mondlane</td> <td style="text-align: center;">8</td> </tr> <tr> <td>Universidade Católica</td> <td style="text-align: center;">9</td> </tr> <tr> <td>Instituto Superior Politécnico e Universitário</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Instituto Superior de Educação e Tecnologia</td> <td style="text-align: center;">11</td> </tr> </tbody> </table> | Feminino | 1 | Masculino | 2 | Ensino Primário do II Grau ou equivalente | 1 | 1o. Ciclo do Ensino Secundário Geral ou equivalente | 2 | 2o. Ciclo do Ensino Secundário Geral ou equivalente | 3 | Bacharelato | 4 | Licenciatura | 5 | Não tenho formação profissional | 1 | Centro de Formação de Professores Primários | 2 | Instituto Médio Pedagógico | 3 | Instituto de Magistério Primário | 4 | Magistério Primário | 5 | Ajuda Dinamarquesa de Povo para Povo | 6 | Universidade Pedagógica | 7 | Universidade Eduardo Mondlane | 8 | Universidade Católica | 9 | Instituto Superior Politécnico e Universitário | 10 | Instituto Superior de Educação e Tecnologia | 11 | <p>V4 <input type="text"/> 10</p> <p>V5 <input type="text"/> <input type="text"/> 11</p> <p>V6 <input type="text"/> 13</p> <p>V7 <input type="text"/> 14</p> |
| Feminino | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Masculino | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ensino Primário do II Grau ou equivalente | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1o. Ciclo do Ensino Secundário Geral ou equivalente | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2o. Ciclo do Ensino Secundário Geral ou equivalente | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bacharelato | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Licenciatura | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Não tenho formação profissional | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Centro de Formação de Professores Primários | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Instituto Médio Pedagógico | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Instituto de Magistério Primário | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Magistério Primário | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ajuda Dinamarquesa de Povo para Povo | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Universidade Pedagógica | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Universidade Eduardo Mondlane | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Universidade Católica | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Instituto Superior Politécnico e Universitário | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Instituto Superior de Educação e Tecnologia | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



8. Quantos anos de experiência tem no ensino?

V8 15

9. Em quantos turnos lecciona, por dia, em cada uma das escolas em que actualmente lecciona?

| Escola | Número de turnos |
|-----------------------|----------------------|
| Na própria escola | <input type="text"/> |
| Na escola adicional 1 | <input type="text"/> |
| Na escola adicional 2 | <input type="text"/> |

V9 17

V10 18

V11 19

10. Quantas horas, em média, gasta na planificação de aulas por semana?

V12 20

11. Em quantos cursos de capacitação de curta-duração participou de 2004 a 2007?

V13 23

12. Indique os dois temas mais valiosos que foram focados nos cursos de capacitação em que participou.

| |
|---------|
| 1. |
| 2. |

V14 25

V15 27

13. Em que medida pensa que esses cursos, em geral, foram úteis na melhoria da sua aprendizagem profissional? (*Marque 1 resposta apenas.*)

| | |
|--------------------|---|
| Muito útil | 1 |
| Útil | 2 |
| Mais ou menos útil | 3 |
| Não muito útil | 4 |
| Inútil | 5 |

V16 29



14. Depois de ter participado em cursos de capacitação, por favor, indique duas áreas em que tenha registado progressos.

| |
|---------|
| 1. |
| 2. |

V17 30

18 32

15. Qual acha que deveria ser o destaque de um programa de capacitação? (*Marque apenas 1 resposta.*)

| | |
|---|---|
| Destaque no desenvolvimento dos aspectos fortes dos professores | 1 |
| Destaque na rectificação dos aspectos fracos dos professores | 2 |

V19 34

16. Considere os exemplos abaixo. Indique, por ordem de importância, para si, a 1^a., a 2^a. e a 3^a. finalidades de um programa de capacitação. (*Indique apenas 3 prioridades.*)

| | |
|--|--|
| Aumentar a qualidade da aprendizagem dos alunos | |
| Melhorar as práticas pedagógicas | |
| Expandir o conhecimento dos professores sobre as disciplinas | |
| Uniformizar os conteúdos a ser ensinados em cada classe | |
| Permitir a troca de experiência entre os professores | |

V20 35

V21 36

V22 37

17. Considere os exemplos abaixo. Indique, por ordem, 1^o., 2^o. e 3^o., o que deveria ser característico de um programa de capacitação efectivo. (*Indique apenas 3 prioridades.*)

| | |
|--|--|
| Baseia-se em práticas pedagógicas eficazes | |
| Promove improviso de material didáctico | |
| Promove continuidade das acções de capacitação ao longo do ano lectivo | |
| Garante acompanhamento regular das práticas pedagógicas | |
| Garante “avaliação” por pessoas com experiência | |

V23 38

V24 39

V25 40

18. Considere os exemplos abaixo. Indique o 1º., o 2º. e o 3º., por ordem de preferência, as acções de capacitação que prefere. (Indique apenas 3 prioridades.)

| | |
|---------------------------|--|
| Encontros regulares | |
| Diálogos regulares | |
| Assistência mútua | |
| Supervisão | |
| Workshop/ Seminário | |
| Leitura/Estudo individual | |

V26 41
V27 42
V28 43

19. Considere os exemplos abaixo. Indique o 1º., o 2º. e o 3º., factores a que um programa de capacitação deve ser sensível. (Indique apenas 3 prioridades.)

| | |
|---|--|
| Métodos da capacitação | |
| Métodos de facilitação da aprendizagem de adultos | |
| Aprendizagem individual | |
| Exemplos de estudos de caso de boas práticas | |

V29 44
V30 45
V31 46

20. Indique a sua preferência em termos de duração de um curso de capacitação. (Poderá marcar uma ou mais respostas.)

| | |
|---|---|
| 1 dia com acompanhamento de reflexão após 3 meses | 1 |
| 2 dias com acompanhamento de reflexão após 3 meses | 2 |
| 5 dias com acompanhamento de reflexão após 3 meses | 3 |
| 1 dia com acompanhamento apresentando resultados concretos | 4 |
| 2 dias com acompanhamento apresentando resultados concretos | 5 |
| 5 dias com acompanhamento apresentando resultados concretos | 6 |

V32 47
V33 48
V34 49
V35 50
V36 51
V37 52

21. Como poderia contribuir para o seu próprio desenvolvimento profissional contínuo? (Poderá marcar uma ou mais respostas.)

| | |
|---|---|
| Tomando responsabilidade pelo meu próprio desenvolvimento profissional contínuo | 1 |
| Monitorando/controlando o meu próprio desenvolvimento profissional contínuo | 2 |
| Esperando para ser capacitado | 3 |
| Desenvolvendo hábitos de aprendizagem | 4 |
| Participando nos encontros da ZIP | 5 |
| Frequentando o nível académico seguinte | 6 |
| Passando do nível do CFPP para o IMAP/ADPP ou do IMAP/ADPP para o Ensino Superior | 7 |

V38 53
V39 54
V40 55
V41 56
V42 57
V43 58
V44 59

22. Como pensa que o desenvolvimento profissional contínuo deveria ser reconhecido? (*Marque 1 resposta apenas*).

| | |
|--|---|
| Sem prémio | 1 |
| Premiado periodicamente | 2 |
| Com certificado/diploma de 1 Instituição de Formação de Professores ou de 1 Universidade | 3 |
| Com créditos para a progressão na carreira profissional | 4 |

V45 60

23. Considere os seguintes papéis do professor. Indique a sua opinião sobre cada um destes papéis.

| | Sim | Não |
|---|-----|-----|
| Mediador/facilitador da aprendizagem | 1 | 0 |
| Intérprete e elaborador de situações de aprendizagem e de materiais | 1 | 0 |
| Líder, administrador e gestor | 1 | 0 |
| Estudioso, investigador e aprendente para toda a vida | 1 | 0 |
| Papel de orientador na comunidade e para a cidadania | 1 | 0 |
| Avaliador | 1 | 0 |
| Especialista de área/tema/disciplina/ciclo de ensino | 1 | 0 |

V46 61
V47 62
V48 63
V49 64
V50 65
V51 66
V52 67

24. Considere cada uma das declarações abaixo. Indique a sua opinião sobre cada uma das questões a considerar na planificação de aulas.

1 = **Discordo Plenamente - DP**

2 = **Não Concordo - NC**

3 = **Sem Opinião - SO**

4 = **Concordo - C**

5 = **Concordo Plenamente - CP**

| Declaração | DP | NC | SO | C | CP |
|--|----|----|----|---|----|
| A instrução tem em vista apoiar a aprendizagem de cada aluno | 1 | 2 | 3 | 4 | 5 |
| A instrução tem em vista identificar problemas de aprendizagem de cada aluno | 1 | 2 | 3 | 4 | 5 |
| A planificação deve cobrir aspectos imediatos e a longo prazo | 1 | 2 | 3 | 4 | 5 |
| A instrução deve basear-se em conhecimentos de Psicologia | 1 | 2 | 3 | 4 | 5 |
| A elaboração de 1 instrução compreende análise, elaboração e avaliação | 1 | 2 | 3 | 4 | 5 |

V53 68
V54 69
V55 70
V56 71
V57 72



25. Com que frequência avalia os alunos individualmente em termos de aprendizagem atingida? *(Marque apenas 1 resposta.)*

| | |
|-------------------------|---|
| Nunca | 1 |
| Uma vez por ano | 2 |
| Uma vez por semestre | 3 |
| Uma vez por trimestre | 4 |
| Uma vez ou mais por mês | 5 |
| Todos os dias | 6 |

V58 73

26. Com que frequência analisa o aproveitamento de cada aluno individualmente? *(Marque apenas 1 resposta.)*

| | |
|-------------------------|---|
| Nunca | 1 |
| Uma vez por ano | 2 |
| Uma vez por semestre | 3 |
| Uma vez por trimestre | 4 |
| Uma vez ou mais por mês | 5 |
| Todos os dias | 6 |

V59 74

27. Para que é que usa a informação da análise do aproveitamento? *(Marque 1 resposta apenas.)*

| | |
|--------------------------------|---|
| Apoio aos alunos | 1 |
| Atribuição de notas | 2 |
| Reflexão sobre o meu ensino | 3 |
| Melhoria da minha planificação | 4 |
| Melhoria do ensino | 5 |

V60 75

28. Com que frequência providencia uma instrução para prevenir, atempadamente, o baixo aproveitamento? *(Marque 1 resposta apenas.)*

| | |
|-------------------------|---|
| Nunca | 1 |
| Uma vez por ano | 2 |
| Uma vez por semestre | 3 |
| Uma vez por trimestre | 4 |
| Uma vez ou mais por mês | 5 |

V61 76



29. Com que frequência escreve um relatório sobre os alunos em situação negativa? (*Marque 1 resposta apenas.*)

| | |
|-------------------------|---|
| Nunca | 1 |
| Uma vez por ano | 2 |
| Uma vez por semestre | 3 |
| Uma vez por trimestre | 4 |
| Uma vez ou mais por mês | 5 |

62 77

30. Que sugestões tem para melhorar o reconhecimento do desenvolvimento profissional contínuo dos professores pelos sectores da educação?

| |
|---------|
| 1. |
| |
| 2. |
| |

V63 78

V64 80

OBRIGADA PELA SUA COLABORAÇÃO



Appendix C: Letter to Provincial Directorate of Maputo-Cidade

De:

Cristina Tembe
Departamento de Currículo e Formação de Professores
Faculdade de Educação – Universidade Eduardo
Mondlane

Exmo. Senhor:

Director de Educação, Cultura e
Tecnologia da Cidade de Maputo

Maputo



Maputo

Maputo, 12 de Fevereiro de 2007

Tendo em vista a realização de um estudo, sob a forma de investigação-acção, para explorar uma intervenção de desenvolvimento profissional de professores primários nas primeiras classes, solicito a devida autorização para a efectivação deste estudo na Escola Primária Unidade 18.

Agradeço antecipadamente a atenção prestada.


Cristina Tembe

Eu, por este meio, autorizo A Sra. Cristina Tembe a realizar a sua investigação na Escola Primária Unidade 18.

Assinatura: _____

Data: _____





Cristina Tembe
Faculty of Education - Eduardo Mondlane University

Maputo

Provincial Director of Education

Maputo

Maputo, December, 5 2006

Dear Director

I am hoping to undertake an action research study into how I can improve achievement in lower primary education. I would be grateful if you would give your permission for this research to proceed in the following primary schools.

With thanks.

Cristina Tembe

I hereby give permission for Cristina Tembe to undertake her research in Eduardo Mondlane Primary School.

Signed _____ Date _____



Appendix D: Letter to School Principal of Unidade 18 Primary School

De:

Cristina Tembe
Departamento de Currículo e Formação de Professores
Faculdade de Educação – Universidade Eduardo Mondlane

Exmo. Senhor:

Director da Escola Primária
Unidade 18

Maputo

Maputo

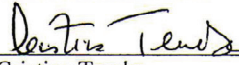
Maputo, 14 de Fevereiro de 2007

Tenho em vista a realização de um estudo, sob a forma de investigação-acção, para explorar uma intervenção de desenvolvimento profissional de professores primários nas primeiras classes. Para o efeito, solicito permissão e apoio para a efectivação deste estudo.

A recolha de dados neste estudo far-se-á através de gravações em áudio e vídeo das oportunidades de aprendizagem/aulas, notas do trabalho de campo e relatórios. Garanto que observarei boa conduta ética ao longo do trabalho. Prometo não revelar o nome da escola, de colegas, pais e/ou encarregados de educação ou de crianças em nenhum momento, excepto se o consentir e me manifestar esse consentimento por escrito. Se desejar, providenciarei informação sobre o progresso do estudo. O relatório do meu estudo estará disponível na escola para escrutínio antes da sua publicação.

Agradeço que assinie e devolva uma das cópias desta carta e mantenha a outra nos seus arquivos.

Muito atenciosamente


Cristina Tembe

Exma. Senhora:

Cristina Tembe

Eu FAUSTINO FAZILÃO GUAMBE autorizo a Sra.
Cristina Tembe a realizar o seu estudo nesta escola.

Assinatura: Faustino Fazilão Guambi

Data: 15.02.07

Cristina Tembe

Faculty of Education - Eduardo Mondlane
University

(Name and address of principal)

Maputo

Maputo

Maputo, September 5 2006

Dear

I am hoping to undertake an action research study into how I can improve achievement in lower primary education. I would be grateful if you would grant permission and support for this research to proceed.

My data collection methods will include audio and videotape recordings of learning opportunities, field notes and reports. I guarantee that I will observe good ethical conduct throughout. I promise that I will not reveal the name of school, colleagues, parents or children any time, unless you inform me in writing that you wish me to do so. If you wish I will keep you informed of progress throughout. My research report will be available at school for scrutiny before it is published.

I would be grateful if you would like to sign and return the slip below at your earliest convenience.

I enclose two copies of this letter. Please retain one copy for your files.

Yours sincerely,

(My signature)

Cristina Tembe

Appendix F: Report on the learningshop on action research

This report includes my observation and reflection complemented by the PRs impressions concerning their participation and learning during the learningshop.

I approached the learningshop on action research (AR) bearing in mind that the PRs would use their prior knowledge on research from initial teacher education as part of the final evaluation learner-learning facilitators carry out an elementary research. However, I realised that AR would be new learning content and that raised interest with the PRs.

At the outset of the first session I found two different levels of participation in the group of PRs. Four PRs were significantly supportive and one was not. The difference was in terms of the period of time to be devoted to the learningshop. Despite the fact that the learningshop took place during the school holidays he thought that we would not take more than four hours since there were female colleagues who needed to do other activities at home. I began to be concerned with the achievement of the learningshop learning objectives. However, this difficulty was overcome with the prompt availability shown by the remaining PRs. Apart from participation PRs wanted to give the impression that there was nothing new in the learning contents of the learningshop and to some extent this began to influence the group. As the learningshop was progressing they felt that there were significant aspects to learn with respect to AR and the process of learning facilitation and learning. They found that the learningshop was *rich since we learnt many important issues related to our professional life* (PR3). In addition *the topics were not new as they are issues related to our work. What he gained were new experiences* (PR2) that is, new ways of doing things. *However, we learnt new things*. Accordingly, the main topics mentioned for all PRs as part of the new experience were

- Learning opportunity
- Responsibility and tasks of the learning facilitator.

Apart from these topics, other PRs mentioned as main topics the following:

- Experiential learning
- Constructive learning
- Professional development

- Teacher role.

Regarding the main topic, there were also references to

- Action research
- Working with low achieving learners
- Designing learning tasks for low achieving learners
- Assessment of learners with difficulties regarding writing skills.

I believe that the learning content, the methodologies used and the activities proposed to the PRs throughout the learningshop had potential information to support transformation and innovative classroom practice. The PRs had always been involved in discussion about their practice, exposed to new ways of doing the same practice, and analysing the new perspective. The tasks challenged the PRs, asking them how they would like to improve their practice. An example of this strategy is the set of activities carried out with a view to approaching the teachers' roles, which I describe as follows:

- Discussion of the teachers' responsibility and tasks in pairs
- Writing down all teachers responsibility and tasks
- Categorising the items from the list obtained
- Comparison between the list that came up from the discussion with the list comprising the seven roles listed in the *roles for educators* provided by the facilitator
- Swot analysis of values, analysing
 - Strengths
 - Values and resources
 - Awareness with respect to
 - Preferences in learning
 - Weakness
 - Challenges
 - Areas for growth
- Description of the ways in which each PR would like to improve her/his practice.



Appendix F: Letter to Practitioner-Research 4

Exmo. Senhor:

Boaz Jotamo

“Escola Primária Completa Unidade 18”
Maputo

De:

Cristina Tembe
Departamento de Currículo e Formação de
Professores
Faculdade de Educação - Universidade
Eduardo Mondlane

Maputo

Maputo, 19 de Abril de 2007

Pretendo realizar um estudo, sob a forma de investigação-acção, para explorar uma intervenção de desenvolvimento profissional contínuo de professores primários nas primeiras classes. Para o efeito, solicito a sua participação no meu estudo. A sua participação é voluntária e confidencial em todas as partes do estudo.

No âmbito deste estudo, estão planificadas duas actividades de investigação fundamentais em que o professor estará envolvida: o preenchimento de um questionário e a investigação-acção na sua sala de aulas.

As actividades em que o professor estará envolvida neste estudo compreendem:

- Preenchimento de um questionário;
- Planificação de aulas;
- Leccionação de aulas para assistência/observação;
- Participação em três workshops (o 1º sobre investigação-acção, o 2º sobre princípios de desenho instrucional e o 3º sobre avaliação);
- Identificação de áreas para práticas inovativas na sua turma;
- Participação no desenho do projecto de investigação-acção na sua turma;
- Participação em encontros de análise das aulas dadas no momento que melhor lhe convém;
- Apresentação de comentários e sugestões sobre todas as partes do projecto de investigação sempre que desejar.

O questionário cobre informação sobre formação académica e profissional, dados sobre oportunidades de formação contínua, planificação e condução de aulas e avaliação do processo de ensino e de aprendizagem. Na investigação-acção, a professora irá, juntamente com a investigadora, investigar sobre práticas pedagógicas na sua turma à sua escolha.

Darei prioridade aos seus interesses a todo o momento. Assim, prometo o seguinte:

- Protecção da sua identidade excepto se me conceder permissão específica para identificá-lo.



- Liberdade de se retirar do estudo em qualquer momento e, por conseguinte, retirar todos os dados consigo relacionados.
- Verificação dos dados relacionados consigo antes da sua publicação.
- Disponibilização de uma cópia do relatório do estudo antes da sua publicação.

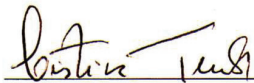
Todas as actividades terão lugar na sua escola, nas horas normais de trabalho e nenhuma actividade será realizada fora do seu período de actividade normal. Em casos de actividade fora do período de trabalho, os seus interesses serão respeitados e serão criadas condições logísticas apropriadas.

Os resultados deste estudo poderão ser usados para melhorar as estratégias e actividades de no âmbito do desenvolvimento profissional contínuo de professores primários e, por conseguinte da aprendizagem dos alunos.

Seguem duas cópias desta carta. Se aceita participar neste estudo, agradeço que assine e devolva uma das cópias como declaração do seu consentimento e participação voluntária.

Mantenha a outra cópia nos seus arquivos.

Agradeço antecipadamente a sua atenção


Cristina Tembe

Assinatura do professor BOAZ JOTANO MACHALELE

Data 20.04.07

Appendix G: Self-assessment Sheet of Practitioner-Researcher 4



Auto-avaliação de Oportunidades de Aprendizagem
Ficha de Observação: Material Concretizador

Professor: Boaz Jotamo

Classe 1ª

| Frequência | | Taxonomia de Bloom | | | | | Estilos de Aprendizagem | | | | Comentários | | |
|--|-------------------------|--------------------|------|-------|------|------|-------------------------|---|---|---|-------------|---|--|
| Episódio | Material | Conh | Comp | Aplic | Anál | Sínt | Aval | A | B | C | | D | |
| 1. Introdução e Motiv. | Quadro Cartaz | | | X | X | X | | | | | | | Não Considerei os estilos de aprendizagem. Considerei só critérios de aprendizagem por ser de alunos mais fracos |
| 2. Mediação Assimilação | Quadro | X | X | | X | | | | | | | | |
| 3. Composição | Quadro | X | | X | X | | | | | | | | |
| 4. Escrita da letra no ar, no tempo da carteira no livro | Carteira livro do aluno | X | X | X | | | | | | | | | |
| 5. Domínio e Consolidação | livro do aluno | X | | X | | | | | | | | | |

Legenda:

Conh = Conhecimento

Comp = Compreensão

Aplic = Aplicação

Anál = Análise

Sínt = Síntese

Aval = Avaliação



Auto-avaliação de Oportunidades de Aprendizagem
Ficha de Observação: Material Concretizador

Professor: Boaz Jotamo

Classe 2ª

| Frequência | | Taxonomia de Bloom | | | | | | Estilos de Aprendizagem | | | | Comentários | |
|---------------------------|--|--------------------|------|-------|------|------|------|-------------------------|---|---|---|-------------|---|
| Episódio | Material | Conh | Comp | Aplic | Anál | Sint | Aval | A | B | C | D | | |
| 1. Introdução e Motivação | Quadro Cartões | | | X | X | X | | | | | | | Não Considera o Estilo de aprendizagem que se dá no contexto. Considera o ritmo de aprendizagem do aluno mais lento |
| 2. Mediação e Assimilação | Quadro | X | X | | X | | | | | | | | |
| 3. Composição | Quadro | X | | X | X | | | | | | | | |
| 4. Escrita da letra | Carteira no ar, no campo da letra. Cartões e no livro do aluno | X | X | X | | | | | | | | | |
| 5. Domínio e Consolidação | livro do aluno | X | | X | | | | | | | | | |

Legenda:

Conh = Conhecimento

Comp = Compreensão

Aplic = Aplicação

Anál = Análise

Sint = Síntese

Aval = Avaliação



Auto-avaliação de Oportunidades de Aprendizagem
Ficha de Observação: Actividades

Professor: Boaz Jotamo

Classe 2ª

| Frequência | | Tipo de Actividade | | | | | | | Estilos de Aprendizagem | | | | Comentários |
|---------------------------|------|--------------------|------------|----------|---------|-------|--------|---------|-------------------------|---|---|---|--|
| Episódio | Prof | Apr | Explicação | Pergunta | Leitura | Cópia | Ditado | Desenho | A | B | C | D | |
| 1. Introdução e Motivação | X | X | | X | | | | | | | | | Not foram verificadas as estilos de aprendizagem |
| 2. Mediação e Assimilação | X | X | | | X | | | | | | | | |
| 3. Leitura e Escrita | | X | | | | X | | | | | | | |
| 4. Domínio e Consolidação | X | X | | | | X | X | | | | | | |

Legenda:

Prof= Professor

Apr= Apendente



Appendix H: Observation Sheets on Practitioner-Researcher Classroom practice

CASSROOM OBSERVATION SHEET
Continuing Professional Development of Primary School Teachers
in Grades 1 and 2

| | Not good | | Very good | |
|------------------------------------|----------|---|-----------|---|
| | 1 | 2 | 3 | 4 |
| Positive dress | | | | X |
| Planning | | | X | |
| Objectives | | | X | |
| Methods: | | | | |
| Exposition | | X | | |
| Questioning technique | | | | |
| To all class | | | X | |
| To a group | | | | |
| To a specific learner | | | X | |
| Elaboration: teacher and learners | | X | | |
| Material: | | | | |
| Study: teacher and learners | | | | |
| Concretise | | | X | |
| Diversity | | X | | |
| Dynamics: | | | X | |
| Learners distribution in the class | | | | |
| In groups | | | | |
| In lines | | | | X |
| Learning style flexibility | X | | | |
| Learning facilitation | | | X | |
| Support to individual learner | | | | X |
| Innovative ideas | | | X | |
| Humor | | X | | |
| Talked most of the time | | | X | |
| Authority: learners and teacher | | | | |
| Balance | | | X | |
| Not taking | | | | |
| Empathy: | | | | X |
| Summary: teacher and learners | X | | | |
| Assessment: | | | X | |
| Homework: | | | X | |



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UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA



CASSROOM OBSERVATION SHEET
Continuing Professional Development of Primary School Teachers
in Grades 1 and 2

Planning

A. Planning of the learning opportunity

| | |
|---|---|
| 1 | Structure The structure of the learning opportunity follows the recommendations of the school and the planning carried out at group level. |
| 2 | Time The time was less than the foreseen in the timetable because the learners took long to be in the classroom. The class wait for the other class to leave the room. While one class leave the room another class enter to occupy the same room. |

B. Learning objectives

| | |
|---|---|
| 1 | Language PR4 uses simple and clear language. He explains the same learning tasks in different ways |
| 2 | Appropriateness to the learning contents The learning contents are appropriate for the Grade. However there are learners who are not following properly. They do not have the prerequisites. PR4 uses to support individual learner. |

C. Methods

| | | Not good | | Very good | |
|---|-----------------------------------|----------|---|-----------|---|
| | | 1 | 2 | 3 | 4 |
| 1 | Exposition | | | | |
| 2 | Questioning technique | | | X | |
| | To all class | | | X | |
| | To a group | | | X | |
| | To a specific learner | | | | X |
| 3 | Elaboration: teacher and learners | | | X | |



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YUNIBESITHI YA PRETORIA



D. Material

| | | Not good | | Very good | |
|---|-----------------------------|----------|---|-----------|---|
| | | 1 | 2 | 3 | 4 |
| 1 | Study: teacher and learners | | | | |
| 2 | Concretise | | | X | |
| 3 | Diversity | | X | | |

E. Dynamic

| | | Not good | | Very good | |
|--|---|----------|---|-----------|---|
| | | 1 | 2 | 3 | 4 |
| | Teacher and learners The learners are dynamic. They go to the black board to write and read, work in pairs. PR4 promote participation. | | | X | |

F. Learners distribution in the class

| | | Not good | | Very good | |
|---|-----------|----------|---|-----------|---|
| | | 1 | 2 | 3 | 4 |
| 1 | In groups | | | | |
| 2 | In lines | | | | X |

G. Learning styles flexibility

| | | Not good | | Very good | |
|---|-----------|----------|---|-----------|---|
| | | 1 | 2 | 3 | 4 |
| 1 | Diversity | | X | | |

H. Practitioner-researcher use of the new knowledge and skills

| | |
|---|---|
| 1 | Innovative facilitating learning PR4 indicate different learning tasks to attain the objectives included in the syllabus. He uses the learners, the exercise book, the desks, and windows to concretise. He give more time to learners talk. |
| 2 | Innovative ways of presenting learning tasks He starts with the learning tasks presented in the textbook. Then presents similar tasks. |
| 3 | Support to individual learner PR4 give opportunity to learners reading. Invites the low achieving learners to show what they are doing and provides the needed support. He encourages and congratulates their activities in the class. |
| 5 | Remedial learning tasks PR4 assign remedial tasks at the beginning of the learning opportunity after the correction of the homework. The low achieving learners feel good because all class are involved. They do not feel constraints. |



I. Assessment

| | |
|---|--|
| 1 | While learners perform the learning task PR4 walk around all learners, provides support, explains the learning tasks to individual learner. He promotes collaboration among the group of 3 learners seated in each desk. |
| 2 | At the end of the learning task At the end PR4 seat in front of the class and the learners go to show the learning tasks performed. He gives indications for the corrections. If the learner did well PR4 assign another learning task. PR4 going to correct the tasks the learner feel good and talk. |

J. Learner Outcomes

| | |
|--|--|
| | The outcomes are visible in the exercise books. However there are different paces. One group follows the learning objectives very well; another group is starting their writing and reading. |
|--|--|

L. Homework

| | |
|---|--|
| 1 | Assignment Homework comprises the learning tasks which were not completed during the learning opportunity. |
| 2 | Correction Individually correction. |

M. Summary

| | |
|---|--|
| 1 | Teacher In order to summarise the learning opportunity PR4 wrote the topic and the contents to be approached. |
| 2 | Learners _____ |
| 3 | Teacher and learners _____ |



CASSROOM OBSERVATION SHEET

Evaluation of the Continuing Professional Development of Primary School Teachers in
Grades 1 and 2

Not good Very good

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Planning | | | X | |
| Objectives | | | X | |
| Methods | | | | |
| PR4 uses exposition in order to present the task | | | X | |
| Questioning technique: | | | | |
| To all class | | | X | |
| To a group | | | X | |
| To a specific learner | | | | X |
| Elaboration: teacher and learners | | | X | |
| Material: | | | | |
| Study: teacher and learners | | | X | |
| Concretise | | X | | |
| Diversity | | X | | |
| Dynamics: | X | | | |
| Teacher position in the class | | | | |
| In front | | | | |
| Walking around the learners | | | X | |
| Learning style flexibility | X | | | |
| Learning facilitation | | | X | |
| Support to individual learner | | | | X |
| Innovative ideas | | | X | |
| Humor | | X | | |
| Talked most of the time | | | X | |
| Authority: learners and teacher | | | | |
| Balance | | | X | |
| Not taking | | | | |
| Empathy: PR4 establish good relationship with the learners. They feel free to ask questions and support | | | X | |
| Summary: teacher and learners | X | | | |
| Assessment: PR4 corrected the learning tasks while circulating in the classroom around the learners. The learners show the learning tasks individually. | | | X | |
| Homework: The learners show the homework at the beginning of the learning opportunity. At the end PR4 indicates the homework. | | | X | |



Appendix I: Letter to Provincial Directorate of Education for the Administration of the Questionnaires

De:

Cristina Tembe
Departamento de Currículo e Formação de Professores
Faculdade de Educação - Universidade Eduardo Mondlane
Maputo

Exma. Senhora:

Directora Provincial de Educação, Cultura e Tecnologia da Província de Maputo
Matola

Maputo, 28 de Abril de 2008

Sou estudante inscrita no curso de Desenho e Desenvolvimento Curricular e Instrucional, sob a supervisão do Doutor PH du Toit, do Departamento de Estudos Curriculares, da Faculdade de Educação na Universidade de Pretória.

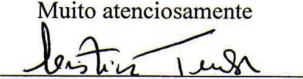
Tendo em vista a recolha de dados sobre Desenvolvimento Profissional Contínuo de Professores do Ensino Primário na 1ª. e 2ª. Classes, solicito a devida autorização para a administração de um questionário na Província de Maputo no período de 30 de Abril a 23 de Maio.


O questionário cobre informação sobre formação académica e profissional, dados sobre oportunidades de formação contínua, planificação e condução de aulas e avaliação do processo de ensino e de aprendizagem.

Os resultados deste estudo poderão ser usados para melhorar as estratégias e actividades de no âmbito do desenvolvimento profissional contínuo de professores primários e, por conseguinte da aprendizagem dos alunos.

Aproveito o ensejo para lhe apresentar os meus mais respeitosos cumprimentos.

Muito atenciosamente


Cristina Tembe



Appendix J: Letter for the Respondents for the Administration of the Questionnaires

Cristina Tembe
Faculty of Education - Eduardo Mondlane
University

(Name and address of teacher)

Maputo

Maputo, September 5 2006

Dear

I am undertaking an action enquiry into how I can improve achievement in lower primary education, and I am asking you to be interviewed for my research.

I will give priority to your interests at all times.

I promise the following:

- Your identity will be protected at all times unless you give me specific permission to name you.
- You are free at all times to withdraw from the research, whereupon I will destroy all data relating to you.
- I will check all data relating to you before I make it public.
- I will make a copy of my research report available to you prior to its publication.

Two copies of this statement are enclosed. Please sign and date both. Keep one copy for your files and return one copy to me.

Cristina Tembe _____ Date _____

I have received an ethics statement from Cristina Tembe

Signed _____ Date _____