CHAPTER 8

ASSESSMENT

The aim of this chapter is to present the kinds of assessment used at Marrere CFPP and students' results at the end of the year (graduation year). Section 8.1 briefly introduces the main points to be discussed in the chapter. Various forms of assessment are presented (Section 8.2). ACS test and teaching practice are defined as part of formative assessments (Section 8.2.1). Other kinds of assessments as part of summative assessment are defined and discussed (Section 8.2.2). The annual results are presented and discussed taking into account three periods, namely, before, during and after OP (Section 8.3).

8.1 INTRODUCTION

The assessment practices at the college are described at length. It is unclear how assessment fits in with the study's focus, its conceptual framework or the literature reviewed. A research question on assessment that clarifies its relationship to the other dimensions of the research, especially the relationship between policy and practice, should be included.

Among the several innovations that were introduced at the basic education besides the learner centred teaching interdisciplinarity, etc., it encourages the teacher to pay much attention on formative assessment. That is for them not to restrict themselves to texts (for example 2 ACS, 1 ACP, etc.) but to accompany the evolution of the students supporting themselves in an instrument that assures or facilitates the teacher trainer reminding him of the real development through the year, although this issue has not been deeply explored in the educative policy. The information obtained from the collective interview to the interviews with teacher trainers of the areas of Practical Activities and technologies and Maths and Natural Sciences allowed me to talk about the feeling they have about this issue (semi-automatic issues).

The PCEP points to summative assessment that allows the transition from one semester to the other or from one year to the other. Assessment comes to this study as part of the

curriculum. The basic education curriculum gives emphasis to the formative assessment, because it is the one that includes the diagnostic and the continuous assessment with the aim of providing information to the teacher about the level of realization of the objectives of the program. This information must be used to improve the teaching and learning process (INDE/MINED, 2003:49). This kind of assessment is given prominence because it is the great determinant for the basic education students. As you might know, the transition within cycles and through cycles is determined by the formative assessment. In the case of assessment by learning cycle it is called semi-automatic promotion.

The aim of this chapter is to see if the kind of assessments applied at Marrere match those prescribed in the basic education curriculum, on the one hand. It also intends to determine the different designation they take and finally the kind of difficulties that are found when applying the tests in the classroom.

Concerning semi-automatic promotion, it an issue that was not touched deeply, but the data collected can give an insight about this kind of assessment. This issue will be developed in this chapter. We do not want to talk about the kind of questions that are posed in the different kind of assessments. At the end we shall see if the results through the years will allow us to see any substantial improvements in relation to the learner's achievement and the number of graduates, since we have referred in Chapter 1 to the quantity of the graduates that the IFP graduate.

Assessment

What does assessment mean? Assessment is defined as "any systematic method of obtaining information (from tests and other sources) to draw inferences about characteristics of people, objects or programs" (Chatterji, 2003 in Januário, 2008). While Airasian (2001, in, Januário 2008:34) defines assessment "as the process of collecting, synthesising, and interpreting information to aid in decision-making." Taking into account both definitions, the latter ones, it is clear that "assessment is more than administering, scoring and grading paper-and-pencil tests, and also accommodates the full range of information gathered by teachers in their classrooms" Airasian (2001, in, Januário 2008:34). Perhaps it must be clarified that the data information through various tools can be done formally and informally. It means that assessment could be formal (assessment of learning) and informal (assessment for learning).

According Black et al. (2003, in Januário, 2008:33) assessment **for** learning is any assessment where the first priority is to serve the purpose of promoting student learning. This kind of assessment is usually informal, embedded in all aspects of teaching and learning, and conducted differently by different teachers as part of their own individual teaching styles. While assessment **of** learning is for grading and certification, occurs in formal settings or rituals, involves non-frequent tests, is isolated from normal teaching and learning, is carried out on special occasions, and is conducted by methods over which individual teachers have little or no control. He adds that formal assessment refers to assessment for learning as part of formal assessment, while assessment for learning occurs as part of informal assement.

In summary, assessment has the purpose not only to certify and grade people, but also to accompany the student progress. In both formal and informal assessment there is a range of assessment, authentic formative assessment, summative assessment, peer assessment, continuous assessment, self assessment, portfolio assessment, among other. In this study, assessment of learning was chosen because I wanted to see the type of assement taking place at Marrere CFPP and problems encountered in its application in the classroom. I am referring to the formative and summative assessment.

One the most important issues in the assessment when we use tests in the classroom is the validity and reliability of it. Reliability refers to the "degree to which test scores are free from errors of measurement" (Killen, 2007), while validity refers to "a test measure what is meant to measure" (Hill, 1981:22, in Killen, 2007). These are very complex issues that are very difficult to achieve in the school. It involves contexts, environment, types of questions to be asked in the test, and content, among other aspects.

Assessment theories

There are three theories of learning and their implications for assessment practice; namely behaviourism, constructivism and socio-culturalism (James, 2006, in Januário, 2008).

- For **Behaviourism theory** environment for learning is seen as the determining factor, the learning is the conditioned response to external stimuli, and rewards and punishments are powerful ways of forming or eradicating habits. The implications for assessment practice are that the progress is measured by timed tests, performance is interpreted as either correct

or incorrect, and poor performance is remedied by more practice in the incorrect items (Januário, 2008:42).

- For **Constructivism theory** prior knowledge (what goes on in people's minds) determines the learning environment. Emphasis is on 'understanding', and problem solving is the context for knowledge construction through deductive and inductive reasoning. The implications for assessment are that self-monitoring and self-regulation are relevant dimensions of learning, and the role of the teacher is to help 'novices' to acquire 'expert' understanding of conceptual structures and processing strategies to solve problems. When students are involved in the construction of their own learning through formative assessment, they develop the ability to monitor and regulate their learning agenda Januário, 2008:42).

- For **Socio-culturalism theory** learning occurs in an interaction between the individual and the social environment. Thinking is conducted through actions that alter the situation and the situation changes the thinking. The implication is that, prior to learning; there is a need to develop social relationships through language, because it represents the central element to our capacity to think (Januário, 2008:42).

Constructivism theory is outlined in the Mozambican curriculum because knowledge is constructed taking in to account a prior knowledge from the learners. It is different from what is advocated by behaviourism theory, that learning is determined by the learning environment.

8.2 HOW ARE STUDENTS ASSESSED?

The following assessments are those which are supposed to take place at Marrere CFPP:

- Systematic Control Activity (**ACS**)
- Partial Control Activity (**ACP**)
- Final Control Activity (**ACF**)
- Pedagogic Practices (Práticas Pedagógicas) (**PP**)
- Examinations (**E**)

- Teaching Practice (*Estágio*) (**EST**)
- Other activities (**OA**), which can range from community work, classroom activities, either individually or in group, research work, reports, etc.

In general, the most well-known assessments are diagnostic, formative and summative assessments.

In the case of Marrere CFPP summative and formative assessment, which are the most frequent forms of assessment, will be explored.

8.2.1 Formative assessment

The most well-known and most often applied formative assessment at Marrere CFPP is the ACS (Systematic Control Activity) and Pedagogic Practices (*Práticas Pedagógicas*).

Systematic Control Activity (ACS)

An ACS aims at assessing the assimilation degree of a thematic unit. Differently stated, an ACP aims at assessing the achievement level in a complete set of units or chapters and it must take place in the middle or at the end of each semester. This is a form of summative assessment.

Pedagogic practices

Before simulation proper, prospective teachers observe teachers of the annex schools. Simulation in the classroom begins after trainees have been taught how to write a lesson plan.

These, among others, are the activities that are carried out in pedagogic practices:

- Observing the lessons delivered by the teacher.
- Assisting the teacher in charge to manage the class.
- Attending classes and school meetings.
- Making a lesson plan and presenting it to the teacher.
- Making simulations in the classroom (the assessment is quantitative).

During pedagogic practices, the following elements are taken into consideration for assessment purposes:

- Analysing the planning frame.
- Observing the aptitude and behaviour.
- Analysing the report written by the trainee.
- Observing the achievement of the objectives of the pedagogic practices.
- Trainee/student relationship and trainee/teacher relationship.

The trainee is assessed by the teacher trainer and by the teacher of the class the trainee did his practice teaching in.

As is evident, in formative assessment we have two types of assessment, namely ACS and Pedagogic Practices. ACS, which is usually written, aims at checking how students assimilate the content, thus allowing the teacher trainer to find out the most appropriate strategies to improve the teaching and learning process (the academic area). At this level of assessment the academic area is complemented by the assessment of the professional area, the pedagogic practices. Pedagogic Practices begin with simulation in the classroom among colleagues and culminates in Pedagogic Practices (teaching practices) in the annex school, where trainees practise in a classroom together with primary students with the aim of getting familiarising the trainee not only with the teaching and learning process but also with how it is organised, planned, implemented, etc. In this way, trainees prepare themselves for the decisive phase which is the one-year teaching practice when they teach in a primary school under the supervision of the teacher in charge of that class. They put into practice everything they have learned (planning, teaching, assessing, organising, etc).

In short, the academic area (theoretical) and the professional one (practical) is at first assessed as a way of accompanying the progress, so as to improve trainees' actions (formative assessment). This formative assessment action is complemented by summative assessment to measure competences acquired by trainees; at theoretical level through ACP, ACS and examinations and at professional level through teaching practice. Marnewick & Rouhani (2004:269) say that "formative assessment takes place during the learning process in order to inform the learning experience for each learner." In other words, "formative

assessment aims to help learners grow and progress." In the same vein, formative assessment "provides feedback to students and teacher on learning progress" (Gronlund, 1993). Summative assessment is outlined as follows:

> "Summative assessment takes place at end of the learning experience … This usually means a major test or examination, written at the end of a school term or school year. Summative assessment aims to find out how much content a learner can remember. Traditionally, promotion to the next grade depends on summative assessment" (Marnewick & Rouhani, 2004:269).

It is worth remembering that the one year teaching practice is one of the greatest contributions of the Oswela Project to teaching practice assessment. It is different from the former three-month period teaching practice, which was very little time for a trainee to put into practice what he had learnt throughout the course. Unfortunately, the one year teaching practice did not last for long due to financial and legal problems. The former three-month period teaching practice was implemented again.

8.2.2 Summative Assessment

Summative assessment consists of Partial Control Activity (**ACP**), Final Control Activity (**ACF**), Examinations (**E**), Teaching Practice (*Estágio*) (**EST**) and Other Activities (**OA**).

Partial Control Activity

An ACP aims at assessing the achievement level in a complete set of units or chapters and it must take place in the middle or at the end of each semester. The design of ACPs must be coordinated by the delegate (the head of the subject) of the respective subject.

Final Control Activity

ACF (Final Control Activity) aims at confirming and assessing in global terms all the thematic units that were covered during the semester in subjects that do not have an examination in the respective semester. The ACF is designed under the coordination of the delegate.

In every semester students are submitted to at least two ACSs, two ACPs and one ACF as well as OA. There are no ACFs in subjects without examinations.

The subject groups have to present all the ACPs and ACFs designed by the respective teachers as well as the respective correction guides and marks distribution to the pedagogic directorate at least eight days before the date they are due to be submitted to the students. However, not all teachers comply with this prescription, thus making the analysis and reproduction of the test a big issue. The person in charge of the photocopying machine is not always available because he is regularly asked to do other work in Nampula some 11 km from Marrere. Most of the time teacher trainers have to write the test on the blackboard with the consequent inconveniences when the test includes maps and graphics that are not easy to draw. In addition, some blackboards are not easy to write on because the chalk does not adhere to them or they are not visible.

Each teacher usually designs both the ACP and ACS for his/her own classes.

Some subjects are taught for one year (annual subjects) and others are taught for only one semester (semester subjects). Students are submitted to an examination at the end of the school year for the former and at the end of a school semester for the latter subjects.

Assessment is conducted in written rather than in oral form. In terms of weight, ACPs are more important than ACSs and examinations are the most important of the three. Practical work consists of research work which may be presented in class or not.

One difference between forms of assessment is that ACS and ACP cover part of the content that were taught in the semester and the examination covers all the content, either of the semester or the year. Another difference is that an examination takes 120 minutes, while an ACP takes 90 minutes and an ACS takes only 45 minutes. Depending on each teacher trainer, should learners have a very poor performance in any test, they may be granted an opportunity to sit for an extra assessment session to improve their marks.

Every semester students are entitled to sit for at least two ACS, two ACPs and one ACF in each subject. ACS can be oral or written. It can also be in the form of an assignment, where students undertake some kind of individual or collective research work. ACS may be designed by individual teachers or may result from a coordinated action among teachers of the same subject. In the latter case, the same ACS is administered by different teachers to their different classes.

Similarities and differences

It is important to point out that there are some similarities and some differences between the terms used at Marrere CFPP and Basic Education to refer to formative and summative assessment. The similarity is that in both Marrere CFPP and Basic Education there is a formative assessment designated ACS with the same objectives. However, there are summative assessments with essentially the same objectives but different designations. In Marrere CFPP there are ACP and ACF (MINED, 2003a) which correspond to AP and AF (MINED, 2003b) respectively in Basic Education. Taking into account that both kinds of assessment exist in both primary school and Marrere CFPP, there should be an adjustment of terminologies. This would be like the process of adjustment which took place in Marrere after the reform, in terms of the content of the different subjects taught in primary school. This has already been referred to in Chapter 5. The reason why I defend this is that prospective teachers should familiarise themselves with the terms of assessment which they are going to use in primary school. It does not make sense to use different sets of terms.

Another aspect that is worthy of highlighting is the design of the ACS. It may be designed by each teacher for his/her own classes or by a group of teachers for all the classes. The advantages of each teacher designing his/her own ACP is that he knows better what he has taught and how he has taught; the mini-test (ACS) is more likely to meet what and how knowledge has been delivered. Two different teachers may teach the very same content in such different ways that one teacher's learners may find it too difficult to write the other teacher's test (ACS). In this respect, an individually designed ACS is more advantageous than a jointly designed one. However, a jointly designed ACS is pedagogically better, since it being a form of formative assessment, it allows the teachers to compare and think about how they teach based on the students' performance.

Teaching Practice

When the Osuwela Project (OP) was introduced, the curricular plan prescribed that teaching practice should last a year. So trainees should work with one stream for a period of a year. During this period they would be supervised by the teacher in charge of that stream and by CFPP teacher trainers. However, things were never done like that because of financial constraints. As from 2003, another curricular plan was introduced according to which teaching practice would last only three months in the second semester of the last

training year. It would take place in the neighbouring schools to allow the teacher trainers to accompany their trainees and interact with the teachers in charge of the streams where the trainees did their practice.

One aspect worth highlighting is the introduction of a white smock for trainees doing their teaching practice. The white colour is expected to induce trainees to worry much about their personal hygiene. The assiduity of the prospective teachers is taken into consideration in assessing them. How the teaching practice is organised, how long it lasts, how the assessment is done, etc. are other elements that are taken into consideration when assessing trainees. The teaching practice period is short. Now the question is what are the key elements to be taken into consideration for the final assessment of the student during teaching practice? What is the weight of the teaching practice in the final assessment?

The objective of the teaching practice is to get trainees to put into practice not only the theoretical knowledge about the teaching content acquired, but also primary education regulations and administrative aspects. Teaching practice takes place in the third semester and lasts for about three months. It takes place in the first cycle primary schools (from Grade 1 to Grade 5), the level the prospective teachers from Marrere CFPP are going to teach.

Criteria for lesson assessment

Assessing a lesson delivered by a trainee will be done by a jury and must be based on his performance, taking into consideration the level of written preparation and his capacity to provide arguments for his lesson delivery when analysing his lesson delivery with the jury. The criteria for assessing the trainees during their teaching practice consider the following aspects:

Correct formulation of the objectives of the lesson, based on the plan of the thematic units

- Scientific knowledge
- The teaching methodology
- The classroom control and assessment
- Measures to achieve the expected results.

The teaching practice score is equal to the arithmetic mean of the mean of the lessons delivered and assessed by the jury and the mean of Teaching Practice Activities. The publication of the teaching practice score depends on the trainee passing all subjects of the course. A trainee will be considered as having passed the teaching practice if he or she gets 10 marks or more.

Other forms of assessment that stimulate learning and allow for an assessment of capacities (community work, reports, homework, written or not assignments and their presentation, etc.) that are not assessed through the written and oral test should also be considered. It is thus unacceptable that assessment is limited to ACS, ACP, ACF and Examination.

In short, summative assessment also has a theoretical part (academic content) through ACS, ACP, ACF and Examinations, and can be conducted after a semester or a year and assesses the professional aspect through Teaching Practice.

Pedagogical practice report

Trainees' pedagogical practice reports do not follow a unique pattern (structure) because there is neither any recommendation on how they should be written nor are they written with assistance from the teacher trainer. Usually trainees find it difficulty to put into writing what they saw, did, felt and other aspects they found during their teaching practice. The report is handwritten. From what I saw, there seems to be an attempt to follow the norms, but how it is done does not matter much. The result is poor quality reports, even though trainees get positive marks.

Should a trainee fail two subjects in the same year, he is banned from studying for a period of a year, after which he may be admitted on a written application to the CFPP headmaster.

Examinations

It is the pedagogic director's duty to demand of teachers to set good quality examination papers. Good quality examinations and students' success hinge on clarity of the language used. The different subject teachers write their test proposals and then the best one is chosen for the formal examination. All theses decisions are made in a meeting chaired by the delegate (teacher in charge of the subject). Students write examinations at Marrere CFPP. The Ministry of Education and Culture in coordination with the Provincial

Directorate of Education and Culture as well as other technicians of the teacher training institutions supervise, monitor and validate the process.

Should a trainee get nine or eight as annual mean score (after writing the examination) in not more than two subjects, thus failing to go to the subsequent standard, he or she can be conceded an opportunity to write a second round of examinations on request in the subjects in question. The trainee must not get less than ten marks to pass. Absentees are also conceded this opportunity if they produce a plausible justification and prove it, such as health problems, death of a close relative or have received a summons to appear in court on the day of the examination.

The big difference between examinations and other tests is that, by regulation, if a student fails an examination he is submitted to a second round one, which does not happen in the case of tests. However, depending on each teacher, a student may write a special test to improve his marks.

A trainee who gets 10 marks is admitted to the examination. If he or she gets 14 marks or more he or she is exempted from writing the examination. Examinations take 120 minutes for every subject.

Second round examinations: One of the examination types to solve the problem of not meeting the requirements to pass (second round examinations, 2005).

Among the 15 students who were submitted to the examination only three did not manage to pass. It must be remembered that these are students who did not manage to get 10 points.

In general, assessment regulation offers good chances for learners to improve their scores if they get negative marks. Teacher trainers may submit learners to an ACS which can either be oral or written for the learners to improve their scores. Teacher trainers may give learners an assignment in the form of research work, etc. In the case of examinations, the regulation is beneficial since learners have the opportunity to sit for a second round examination, ask for a second correction of his examination script if he thinks his score is lower than it should be. Moreover, a learner with positive mean scores in all subjects

except for one subject may be offered one mark to get a mean of 10 so that he or she can pass. For example, in 2006 (26 June 2006), according to minute number 3/06, there was one class body (Council marks - *Conselho de notas*) in which the chairman asked the teachers to think about how many marks were going to be voted on each learner. From class body (*conselho de notas*) it was decided that two marks would be given to each learner. If any learner still did not meet the requirement to pass after writing the examination he/she would have to be subjected to a second round of examinations in October, after the regular examinations. Altogether there were about seven trainees in this situation.

Other activities

Community work reached its peak during the time of OP when community participation was popular. Learners used to do research by interviewing local community members about the local history, about how the College name came about, about other aspects including local cultural activities. It seems that this link with community does not exist any longer.

Concerning individual or group research work based on bibliography, teacher trainers are aware of the lack of sufficient literature for learners to table quality work so they rarely assign such a topic. One aspect worth mentioning is the lack of clear instructions on how research work should be done. This also happens when learners have to write their pedagogic practice and teaching practice reports. They only receive instructions concerning the content of the report but are not guided about its structure (introduction, development and conclusion).

Not everybody participates in group work. The reason is that not all group members live in the hostel or in the town. Those living in the hostel cannot afford to go to the town because of financial constraints.

There are daily compulsory extra activities that take up much of the internal students' time so that they have very little time to go to the library to do research work. It is during research presentations that teacher trainers become aware of learners' weaknesses. In order not to penalise such learners, teacher trainers do not assign any score to this work.

It is worth highlighting that assessment based on the research assignment was conducted easily during the OP due to the abundance of resources but with time passing by, the books disappeared and they had to be locked in the *baú pedagógico* (See Chapter 5); this state of affairs makes research resources almost inaccessible and is the reason for the poor quality of research assignments. During the OP research work was based on interviews with local community leaders; topics covered include researching the origin of songs of the area, Marrere's social history, the way in which the name Marrere came into existence, the predominant cultural activities and the main products grown, etc. These research assignments were assessed. But this is no longer the case. The departure of the OP caused a lack of motivation. In short, this kind of activity allowed the student to have an active and predominant role in searching for information and offered the advantage of the acquisition of knowledge through the learner's own efforts. Nowadays research work is of a poor quality.

Weight of each assessment (final, annual and semester scores)

In each semester students write the following kinds of test: ACSs, ACPs, PP (Pedagogical Practices) and ACF.

The semester mark, year and the final average marks are calculated using the appropriate formula. The figures are always rounded when there are decimal places. For example, if the average mark is 9 it is rounded to 10; if the average mark is 9.4 it is automatically rounded to 9, the rounding by default.

The semester mean

The formula for calculating the semester mean:

a) **For subjects without examination**

$$NFS = \frac{ACS + ACP + ACF + OA}{4}$$

The formula above means that NFS (semester mean) is obtained by summing up the means of ACS and ACP plus the ACF mark and the mean of OA divided into 4.

b) For subjects with an examination

$$NFS = \frac{ACS + ACP + OA}{3}$$

The formula above means that NFS (semester mean) is obtained by summing up the means of ACS, ACP and other OA divided into 3.

Annual mean

a) For subjects without examination

$$NA=NAF = \frac{NFS1 + NFS2}{2}$$

The formula above means that NA (Annual mean) is obtained by summing up the means of the first semester and second semester divided into 2.

b) For subjects with examination

$$NA= \frac{\frac{NFS1+ NFS2}{2} + E}{2}$$

The formula above means that the annual mean is obtained by summing up the means of the first semester and second semester divided into two plus the examination score divided into two again.

The average final mark of the semester of subject without examination is the same as the annual mark of the same subject.

The mean of each year

$$NG = \frac{NA1 + NA2 + ... + NAn}{n}$$

The mean of the year is calculated by summing up the means of each subject and dividing it into the number of years.

$$MFC = \frac{NG1 + 2 \times NG2 + 2 \times NG3 + 2 \times EST}{7}$$

The final mean of the course is calculated by summing up the mean of year one plus two times the annual means of year two and year three plus two times the score of the teaching practices divided by 7.

The summary of formulae for calculating learners' marks can be seen in the table below.

Table 8.1

Formulae Calculating learner marks

1. Semester mean: $NFS = \frac{ACS + ACP + ACF + OA}{4}$
2. Semester mean: $NFS = \frac{ACS + ACP + OA}{3}$
3. Yearly mean $NA=NAF = \frac{NFS1 + NFS2}{2}$
4. Yearly mean: $NA = \frac{\frac{NFS1 + NFS2}{2} + E}{2}$
5. Average mark $NG = \frac{NA1 + NA2 + \ldots + Nan}{n}$
6. Final mark $MFC = \frac{NG1 + 2 \times NG2 + 2 \times NG3 + 2 \times EST}{7}$

Source: MINED, 2003a

All the assessments range from 0 to 20 marks. The ranges from 0 to 6 (not satisfactory) and 7 to 9 (acceptable) constitute negative achievement, and students are likely to fail. The ranges from 10 to 13 (satisfactory), 14 to 17 (good) and 18 to 20 (very good) constitute positive achievement, and students are likely to pass (MINED, 2003b).

There are several formulas to calculate the semester, annual, global means, etc., none of which is more advantageous than the other. Although they are different, in essence they are all equal. Teachers have a great job calculating the means of all the classes. This activity is time-consuming.

8.3 OUTCOMES

8.3.1 Final results at the end of last year of study or course

Table 8.2

Annual learners' results at Marrere CFPP (1993 – 2003)

		M	F	MF	M	F	MF	M	F	MF
1993	Preset	34	15	**49**	32	13	**45**	15	10	**25**
	Inset	5	0	**5**	5	0	**5**	5	0	**5**
	Total	**39**	**15**	**54**	**37**	**13**	**50**	**20**	**10**	**30**
1994	Preset	13	11	**24**	13	8	**21**	10	8	**18**
	Inset	26	1	**27**	26	3	**29**	23	0	**23**
	Total	**39**	**12**	**51**	**39**	**11**	**50**	**33**	**8**	**41**
1995	Preset	16	5	21	16	5	21	16	4	20
	Inset	36	8	44	30	6	36	29	6	35
	Total	**52**	**13**	**65**	**46**	**11**	**57**	**45**	**10**	**55**
1996	Preset	13	13	26	13	13	26	11	12	23
	Inset	17	2	19	17	2	19	17	4	21
	Total	**30**	**15**	**45**	**30**	**15**	**45**	**28**	**16**	**44**
1997	Preset	24	9	33	24	9	33	24	9	33
	Inset	21	2	23	21	2	23	18	2	20
	Total	**45**	**11**	**56**	**45**	**11**	**56**	**42**	**11**	**53**
1998	Preset	49	31	80	48	31	79	35	29	64
	Inset	35	5	40	34	5	39	35	1	36
	Total	**84**	**36**	**120**	**82**	**36**	**118**	**70**	**30**	**100**
1999	Preset	57	38	95	57	38	95	49	38	87
	Inset	14	3	17	14	3	17	16	2	18
	Total	**71**	**41**	**112**	**71**	**41**	**112**	**65**	**40**	**105**
2000	Preset	54	52	106	55	53	108	47	51	98
	Inset	4	0	4	4	0	4	4	0	4
	Total	**58**	**52**	**110**	**59**	**53**	**112**	**51**	**51**	**102**
2001	Preset	43	74	117	43	74	117	43	74	117
	Inset	0	0	0	0	0	0	0	0	0
	Total	**43**	**74**	**117**	**43**	**74**	**117**	**43**	**74**	**117**
2002	Preset	73	83	156	59	51	110	59	51	110
	Inset	0	0	0	0	0	0	0	0	0
	Total	**73**	**83**	**156**	**59**	**51**	**110**	**59**	**51**	**110**
2003	Preset	76	92	168	76	91	167	73	83	156
	Inset	0	0	0	0	0	0	0	0	0
	Total	**76**	**92**	**168**	**76**	**91**	**167**	**73**	**83**	**156**

Source: Annual maps of school results at Marrere CFPP

This chart shows Marrere CFPP year three trainees' school achievement from 1993 to 2003. In 1993 the initial number of students was 54, of which 39 were male and 15 female.

Among the 39 male students, 34 belonged to PRESET and five belonged to INSET. Only 50 trainees studied till the end of the year; 37 were male and 13 were female. At the end of the year only 30 graduated, 20 being male and 10 being female.

One aspect worth noting is that in 2001 there was not any INSET (teacher/students). From this we can conclude that INSET ceased in 1999. This is due to the fact that an INSET pedagogical nucleus was created and based at CFPP Marrere to deal with INSET (teachers/students).

Table 8.3

Graduate learners at Marrere CFPP (1993 – 2007)

Years	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Male	20	33	45	28	42	45	52	51	42	54	62	102	54	100	188
Female	10	8	10	16	11	55	53	51	72	46	97	151	76	156	163
Total	**30**	**41**	**55**	**44**	**53**	**100**	**105**	**102**	**114**	**100**	**159**	**253**	**130**	**256**	**351**

Source: Annual maps of school results at Marrere CFPP

The number of graduates at CFPP increased from 1993 to 2007. For example, in 1993, 30 future teachers graduated (20 men and 10 women). In 2003, 156 future teachers graduated (73 men and 83 women). Some time ago the number of graduate men was far higher than that of women but nowadays the number of graduate women is also increasing. For example, in 1993 20 men and 10 women graduated but in 2003 73 men and 83 women graduated. In 2000, although at the beginning of the year the number of men (58) was higher than that of women (52), the number of graduates was equal (51).

It is also important to highlight that in 2002 the number of male graduates was 59 and that of female graduates was 51, although at the beginning of the year there were 73 men and 83 women. In general, women fail more than men do. This and other factors account for the differences between the income and the outcome. The tendency for the number of female graduates to grow is a reality, partially due to the policy of positive discrimination mentioned in Chapter 4. This accounts for the higher number of women at Marrere CFPP. Some of the factors, among others, that explain the high rate of women failing are: drop out and death.

A percentage analysis shows the pass and failure rate. It is based on the yearly school achievement comparative data at Marrere CFPP before OP, during OP and after the departure of OP (see Table 8.4 below).

Table 8.4

School achievement 1990 - 2007

School achievement 1990 – 2007									
	Year	**Start**	**End**	**Drop Out**	**Assessed**	**Positive Situation**	**%**	**Graduated**	**%**
Before OP	**1990**	256	231	**24**	231	161	**70**	49	**21**
	1991	344	288	**56**	288	206	**72**	113	**39**
	1992	229	202	**27**	202	180	**89**	105	**52**
	1993	224	200	**24**	200	126	**63**	30	**15**
	1994	162	152	**10**	152	110	**72**	41	**27**
	1995	157	147	**10**	147	130	**88**	55	**37**
	1996	284	269	**15**	269	234	**87**	44	**16**
	1997	295	279	**16**	279	237	**85**	53	**19**
OP	**1998**	325	320	**5**	320	281	**88**	100	**31**
	1999	348	346	**2**	346	327	**95**	105	**30**
	2000	363	359	**4**	359	333	**93**	102	**28**
	2001	395	391	**4**	391	379	**97**	114	**28**
After OP	**2002**	569	564	**5**	564	513	**91**	100	**18**
	2003	762	755	**7**	577	533	**89**	199	**27**
	2004	732	688	**44**	688	633	**82**	253	**37**
	2005	588	568	**20**	568	537	**95**	130	**23**
	2006	1132	1128	**4**	1128	1082	**96**	156	**23**
	2007	1014	1013	**1**	1013	942	**93**	351	**35**

Table 8.4 shows school achievement of the trainees of Marrere CFPP between 1999 and 2007. The first column represents three fundamental periods, namely before, during and after OP. The second column refers to years. The third column represents the total number of trainees who are doing year three or last grade. The fourth column represents the number who continued till the end of the year. The fifth column represents the number of

drop outs (death, transferences, etc.). The sixth refers to the total number of those who were assessed. The seventh column represents trainees in a positive situation among those who were assessed. The eighth shows the percentage of trainees in positive situation, the ninth represents the number of graduated trainees and finally the tenth shows the percentage of graduated trainees.

In the period 1990 to 1997 the school achievement mean (average) was 28%. The lowest annual school achievement was 15% in 1993 and the highest was 52%, in 1992. This period was before OP. The next period (1998 to 2001), the OP period, the school achievement mean (average) was 30%. The lowest annual school achievement was 28% in 2001 and the highest was 31% in 1998. The last period (2002 to 2007), after OP, the school achievement mean (average) was 27%, the lowest annual school achievement 18% in 2002 and the highest was 37% in 2004.

Comparing the means (averages) of the three periods, we can see that there are not many differences; they range from 27% to 30%. Looking at the annual means of the 18 years, we can highlight 1992 when the annual school achievement was 52%, the highest of all; and 1993 when the annual school achievement of 15% was the lowest. Interestingly enough, the highest and the lowest annual school achievement were registered before the OP and they came one immediately after the other. Whatever percentage is obtained will be considered low, let alone if it is lower than 50%. The number of trainees who fail at the end of each year is higher than that of those who pass. The number of graduates does not keep up with the demand of teachers for primary education if we consider the annual need of 10.000 in Mozambique (MEC, 2006:44).

In view of this data it can be concluded that there are no significant differences among the three periods, namely before, during and after OP. This lack of difference can be explained with the short time duration of the project in Marrere CFPP. While OP was starting to gain roots, it moved in December 2001 to Nampula City. The four years were not sufficient for it to have an impact on school achievement. However, it is recognised that during the time of OP there were considerable improvements in the organisation, in the teaching practice and in the institutional capacity-building in terms of human resources and material resources for the teaching and learning process. Some examples are the upgrade of the

teacher trainers and the introduction of an incentive (subsidy) for those teacher trainers who were permanently appointed at Marrere CFPP, to mention a few.

As can be seen from Table 8.4, the percentage of trainees in a positive situation in the three periods is different. The percentage of trainees in positive situation ranges from 63% (before OP) in 1993 to 97% (during OP) in 2001. The last one is the highest percentage ever obtained and it was obtained during the Oswela Project. This shows an improvement in the performance of trainees, but they show an extremely low performance in the examination and fail. So the big problem is the examination. Note that the examination is local which, we believe, makes things easier for trainees. Imagine if it were national.

Table 8.5

School Achievement 1990 – 2007 by Gender

	Year	Start			End			Drop Out	Assessed			Positive Situation			Graduated		
		Total	M	F	Total	M	F		Total	M	F	Total %	M %	F %	Total %	M %	F %
Before OP	1990	255	197	58	231	180	51	24	231	180	51	161 (70)	120 (52	41 (18)	49 (21)	35 (22)	14 (9)
	1991	344	285	59	288	241	47	56	288	241	47	206 (72)	175 (61)	31 (11)	113 (39)	98 (48)	15 (7
	1992	229	189	40	202	163	39	27	202	163	39	180 (89)	142 (70)	38 (19)	105 (52)	82 (46)	23 (13)
	1993	224	182	42	200	165	35	24	200	165	35	126 (63)	103 (52)	23 (12)	30 (15)	20 (16)	10 (8)
	1994	162	128	34	152	123	29	10	152	123	29	110 (72)	89 (69)	21 (14)	41 (27)	33 (30)	8 (7)
	1995	157	121	36	147	115	32	10	147	115	32	130 (88)	104 (71)	26 (18)	55 (37)	45 (35)	10 (8)
	1996	284	206	78	269	195	74	15	269	195	74	234 (87)	174 (65)	60 (22)	44 (16)	28 (12)	16 (7)
	1997	295	201	94	279	191	88	16	279	191	88	237 (85)	159 (57)	78 (28)	53 (19)	42 (18)	11 (5)
OP	1998	325	197	128	320	183	127	5	320	183	127	281 (88)	163 (51)	118 (37)	100 (31)	45 (16)	55 (20)
	1999	348	175	173	346	174	172	2	346	174	172	327 (95)	161 (47)	166 (48)	105 (30)	52 (16)	53 (16)
	2000	363	166	197	359	162	197	4	359	162	197	333 (93)	145 (40)	188 (52)	102 (28)	51 (15)	51 (15)
	2001	395	173	348	391	157	248	4	391	157	248	379 (97)	150 (37)	241 (60)	114 (28)	42 (11)	72 (18)
After OP	2002	569	251	318	564	249	315	5	564	249	315	513 (91)	233 (41)	280 (60)	100 (18)	54 (11)	46 (9)
	2003	762	317	445	755	244	352	7	577	244	352	533 (89)	225 (38)	308 (52)	199 (27)	62 (12)	97 (18)
	2004	732	300	432	688	289	399	44	688	289	399	633 (82)	264 (38)	369 (53)	253 (37)	102 (16)	151 (24)
	2005	588	236	352	568	224	344	20	568	224	344	537 (95)	215 (38)	322 (56)	130 (23)	54 (10)	78 (14)
	2006	1132	469	663	1128	470	658	4	1128	470	658	1082 (96)	457 (40)	625 (55)	156 (23)	100 (9)	156 (14)
	2007	1014	482	532	1013	537	1013	1	1013	537	1013	942 (93)	476 (47)	486 (46)	351 (35)	168 (20)	163 (17)

Source: Annual maps of school results at Marrere CFPP

Male trainees tend to have better results (school achievement) than female ones, that is, they graduate more than female trainees. This is due to the fact that, although the number of female trainees is higher than that of males at the beginning, after examinations, the number of both male and female trainees becomes balanced or that of graduated male trainees increases. For example, in 2000 there were 363 trainees in year three. 166 were male trainees and 197 were female. Only 359 were enrolled until the end of the year, of which 162 were males and 197 were female trainees. Among the 359 who studied until the end of the school year, only 333 were in a positive situation. Of these, 145 were male and 188 were female trainees. After the examination a balanced number graduated: 51 men and 51 women. In spite of the positive discrimination at the beginning of the year, and the examination at the end of the year, more female trainees fail than male trainees. If it were not for positive discrimination, even fewer women would graduate as teachers. This situation of few female graduates is even more evident in 2000 and 2002. For the first time in 2000 the number of female trainees was higher than that of males.

The objective of the Osuwela Project of admitting more female students was definitely achieved. However, admitting more women does not automatically mean having more women graduating at the end of each year. There are many factors contributing to the decrease of female graduates: economic and social reasons, low perseverance level, death, poor school performance and others. The present scenario puts the ideal of the Ministry of Education and Culture to increase the number of female teachers at schools to promote gender balance far out of reach. For example, in 2007, at primary education level (EP1), there were a total number of 74 366 teachers, 25 494 of which were female teachers. This is only 34% of the total number of teachers. The desire to have many women teachers has to do with the belief that women are more patient and work with children more easily than men do and also because of their maternal instinct. Unfortunately, the number of female graduates is still far from what is desired.

The idea that a female teacher gets better results is reinforced by Linnakyla (1993:32) in her study about *Teaching reading around the world: IEA study of reading literacy.* She concluded that there are significant differences between female and male teachers in terms of results and that "in many countries students taught by females scored higher than students taught by male teachers, especially at lower grade levels." In the same vein, Elley (1992:40) argues that "high average reading scores were obtained in education systems

with higher proportion of women teachers." In spite of this conclusion, there is no explanation given by the authors about it.

Social Science and its methodology test

Social Science examinations face certain constraints. In the design of the tests, except for the examination, teachers sometimes face problems of a lack of paper (A4 paper). All the tests were written on the chalkboard which made it difficult for the inclusion of maps, images and other elements in accordance with the programme and methodology of the subject. This scenario is different from that of examinations, for which every necessary material is bought, such as A3 and A4 paper, ink, etc. This is the reason why tests such as ACS and ACP were not analysed. None of the tests that were written on the blackboard is available in the files.

How Social Science examinations and their methodology examinations are set

As has been mentioned in Chapter 5, Social Sciences content is separated into Geography content and History content. This separation is also reflected in the way tests and examinations are set. The data refer to Social Science tests and examinations written from 2002 to 2006. Ten first and second round Social science examinations were observed from 2002 to 2006. The logic was the same in most of the examinations, not to say in all examinations. In general, there were three groups of questions with sub-questions. In the first group there were History questions, then Geography ones and finally Social Science and Teaching Methodology questions. This example shows the faithful reproduction of what happens in the programmes of Social Science. Sometimes Geography questions come first, then History ones and the last group is those of the Methodology of Social Science.

This is a case of 2006 second round examinations in Social Science for year three students of the last course. It consists of two major groups, I and II. In the first group there are History and Geography questions. The first and second questions cover History content and the third deals with Geography content. The second group consists of Social Science Methodology content. There are three questions. According to the correction guide, History questions are worth 4.5 points while Geography questions are worth 3 points; the remaining questions on Social Science Methodology are worth 12.5 points. As can be seen, there is an unbalanced distribution of weight of the questions, with Methodology content

weighing the most. It can be said that this unbalanced distribution of 1/3 for Methodology contents is due to the fact that it is a teacher training institution.

Link between formative test and semi-automatic promotion

Reflection on semi automatic promotion

Teachers demand more autonomy in determining the automatic passing of first cycle primary students. They say that lack of autonomy prevents them from having a greater contribution to an even better performance of the students in the coming cycles. They also complain about lack of coherence and logic sequencing of the contents in the subjects and a poor relation between the teacher's book and the content, based on the teaching and learning programmes. This is an issue that the newspaper Domingo (2006:4) has written about; the question is how applicable is the new Basic Education curriculum.

Teachers working with the new curriculum of Basic Education demand more autonomy in determining the students who should automatically pass, especially in the first cycle of primary education, instead of the current system prescribed by the assessment regulation for this teaching level. According to them, the regulations prevent them from giving the necessary relevance to notes about students' daily performance which would allow them to avoid that the passing or failure of the students be determined exclusively by the regulations.

This normative assessment instrument, according to the newspaper Domingo (2006:4), determines that, in the first cycle of primary education, a student needs to get an average mark of only 7 points in each subject to move from Grade 2 to Grade 3, regardless of his average marks in Mathematics and Portuguese, subjects which were considered compulsory in the former teaching and learning curriculum.

Teacher trainers do not feel comfortable about the new assessment policy because they feel compelled to let students pass that clearly have not mastered the required knowledge and skills to teach.

According to the newspaper *Domingo (2006:4)*, the new curriculum encourages laziness in students because they know even if hey do not work hard they will be promoted to the next

grade. Even if a student gets 2 for Portuguese and 1 for Mathematics, for example, he can move to the next level, as long as he gets a mark in other subjects that allow him to have the minimum average mark of 7.

Although some parents, recognising that their sons are not well prepared, demand of the teacher trainer and the education directorate to retain their sons in the same grade, others insist that their children pass even when they do not make the grade. Domingo (2006:5) knows that in an attempt to change the situation, some parents ask the teacher trainers and the school headmasters to demote their children to a previous grade, which is not possible due to the fact that the academic achievement data have already been registered in the official documents at school level and with the district and provincial directorate. What teachers want is that their daily notes about student performance be taken into consideration and be relevant in determining whether a student passes or not in the first cycle.

Teachers are aware of the effort they will have to make because of the high teacher-learner ratio and the excessive working hours which make them assist a high number of students.

To summarise, no doubt most primary school teachers in Mozambique are not happy with semi-automatic promotion because it does not allow them to pass or fail a student. However, the main reason is a misinterpretation of or a lack of information on what semi-automatic promotion is and what its philosophy is.

In-Service Training and Initial Training

CRESCER has been offering in-service training to some teachers, providing them with tools to deal with formative assessment. This is the key element of semi-automatic promotion adopted at the basic level. One aspect to take into consideration is that every teacher trainer takes part in this training. In the beginning, teacher trainers find it difficult to get familiar with the practice. There are differences between what is done at in-service training and what is done at initial training concerning assessment. It is forgotten that prospective teachers will have to use that type of assessment, which is the basis of semi-automatic promotion. As a consequence, in-service training will be necessary for teachers when working in primary schools due to the fact that they do not have the necessary knowledge to deal with formative assessment.

8.4 CONCLUSION

The first conclusion is that there are two types of assessment that are frequently used at Marrere CFPP, namely formative (ACS and Pedagogical Practices) and summative assessment (ACP, ACF, Examinations, Teaching Practice and others). School achievement (school results or performance) in the three periods, namely before, during and after the Oswela Project, reflects a slight difference. In 2003, when the Oswela Project was operating, the best result was 97%. However, the average percentage of the graduated students at the end of each year shows no significant differences among the three periods. This means that trainees have most difficulties in the examinations.

The second conclusion is that throughout the years the number of trainees has increased considerably, thus changing the previous situation when the number of male trainees was larger than that of female ones. However, the total number of trainees decreases so markedly in the course of the year until the graduation that the number of male and female trainees is equal or that of female trainees is lower than that of males. Formal examinations remain the main reason for the failure of many students.

The third and last conclusion, taking into account the degree of selectivity of the final examinations, is that trainees graduating from Marrere CFPP seem to be not well qualified to carry on their future profession.

Finally, during the application of some tests, particularly ACS, some problems emerged, such as a lack paper to print ACS test on or machine broken, among others.

CHAPTER 9

CONCLUSION AND RECOMMENDATIONS

The aim of this chapter is to present the conclusions of the study drawn from major findings and the recommendations, taking into account three different perspectives in Section 9.1. The main problem, research questions, purposes and objective of the study are presented in Section 9.2. Conclusion drawn from the main findings emerging from the literature review and the main findings emerging from different chapters are presented in Section 9.3. Section 9.4 presents a reflection of the study. Finally, the chapter presents recommendation and implications (Section 9.5), recommendations for policy and practice and for further research (Section 9.5.2) and for further development work (Section 9.5.3).

9.1 INTRODUCTION

This chapter presents the summary of the main findings, conclusions, recommendations and their implications. The conclusions are based on the summary of the problem, research questions and the aim of the study, and it mains findings are drawn from qualitative research instruments and from the literature review. The main findings emerging from the study are discussed in this section. The chapter ends with the researcher's recommendations.

9.2 THE MAIN PROBLEM, RESEARCH QUESTIONS, PURPOSES AND OBJECTIVE OF THE STUDY

As stated in Chapter 1, Mozambique embarked on Curricular Reform for Basic Education (**1998**) which culminated with its getting into effect in **2004**. The reasons behind this curricular reform for basic education were political, socio-economical and cultural changes that occurred in the country. Apart from this, the introduction of the curricular for basic education is made in the poor resources context. It means that Mozambique faces many problems, namely facilities and resources, lack of didactic materials in schools, among other problems.

However, after the introduction of the new curriculum for Basic Education, it is still to be known how these changes, namely learner-centredness approach, interdisciplinary approach, new subjects areas (social science), new subjects for arts or crafts and bilingual education, have been implemented at Marrere CFPP.

This is a case study at a teaching training college against the background of the implementation of new policies.

This study intends to determine how the theories about curriculum change have been implemented and the reason why they have been implemented in that way. It also seeks to determine the relationship between curriculum change and practice at Marrere CFPP, the extent to which the teacher training curriculum and assessment match the Basic Education curriculum and how they do so, as well as their outcomes.

The purpose of the study is to explore the relationship between policy and practice in the classroom at Marrere CFPP. Its aims are to contribute to a reform of teacher education in Mozambique through an analysis of how the present form of teacher education relates to the needs of the new school curriculum. The challenge facing the education system in Mozambique is to train more teachers well in the context of massive increasing numbers of students and schools.

In answering the above questions, the study had to focus on what was going on with the implementation of the basic education curriculum in Mozambique, specifically at Marrere CFPP, to which end particular attention was focused on classroom practices, some school conditions, and the factors class size, resources, facilities, teacher trainer qualification and their influence the implementation of the curriculum.

The data needed to answer the research questions was obtained via interviews, classroom observations, documents and written notes. Triangulation validated the information already collected. The following conclusion reflects findings drawn from the investigation.

The literature reviewed revealed that the implementation of curriculum is not linear but a very complex system. This complexity can be found at the government level agencies involved and they are numerous at national, regional and local level. This complexity is

complemented by the structure existing at each level. Also, the power is top down. This means that decisions are taken centrally and move in only one direction. This scenario fits very well in the Mozambique context. For example, in Mozambique there are many government agencies which constitute the branch of Minister of Education and Culture, at national, regional and local levels. At each level, there are internal structures.

In this study, the Marrere CFPP is one of the government agencies which are located at local level. The relationship between these agencies of the Ministry of Education and the top level depends on the structure installed at the middle, e.g. Ministry of Education, Provincial Education directorate, district education directorate and finally the Marrere CFPP.

As stated before, the relationship established is top-down. I can give one example that illustrates how this type of power impairs the teaching and learning process at Marrere CFPP. Since 2007, INDE, through the Teacher Training Department, took responsibility to list the overall relevant reference books in order to send these to teacher training institutions as well as their prices. This work was done in a short period of time. This list or information was sent to the Minister of Education. What happened since 2006 until 2009 nothing was done, because of bureaucracy at top level. No books were bought and sent to **school (college)**. This example illustrates that the top-down power structure and excess of bureaucracy really affect the implementation of new curriculum for basic Education in Mozambique. In other words, if at the top level there is lethargy, then at other levels nothing will be done as well. Three years have gone by now and no book has been bought. Note that the budget to buy the books is available but bureaucratic problems impair their purchase.

It is important to remember that during OP at Marrere CFPP was structured according to the project action and the decisions were made collegially. After the departure of OP from Marrere CFPP, the power reverted to the previous approach (top-down). It means that Marrere CFPP was organized (Chapter 4) as follows: The Management of the Centre is constituted by a Management Council (*Conselho alargado da Direcção*) which comprises Marrere CFPP Director, Deputy Director, Boarding School Director, Head Office, Representative of School and Community Centre.

9.3 CONCLUSIONS DRAWN FROM THE MAIN FINDINGS OF THE INVESTIGATION

The relationship between basic education curriculum, teacher training curriculum and its implementation

In the light of the new curriculum for basic education in Mozambique, the teacher training curriculum has been adjusted in order to meet the needs of the new curriculum (Chapter 5). In this line there is convergence of both the study plan for Basic Education and the study plan for the teacher training college in terms of areas and the respective subjects. It can be concluded that, in general, there is convergence of both study plans in terms of subjects areas, except for some specific subjects, which we call professional subjects, only found at Marrere CFPP. However, the emphasis is on the gap between policy and practice. Social Sciences which are composed of History, Geography and Moral and Civil education, are supposed to be taught using an integrated approach, but this does not happen at Marrere CFPP.

Despite the relationship between the Basic Education curriculum and College curriculum, it is important to emphasise that there is a need to provide both trainers and prospective teachers with the necessary skills to be able to deal with the integrated approach outlined in the curricular plan for Basic Education, more particularly in Social Sciences. Organising and stating the intention of policies is not enough; it is also necessary to meet all requirements in order to achieve them. Intentions are located at the rhetorical level because the lack of practice is explained by lack of knowledge to implement such intentions.

On the one hand we must still say that the directorate of Marrere CFPP is in charge of providing the relevant books for the subjects, hidden in the "*baú pedagógico*" (Chapter 5), with the allegation that with no control they may disappear. Still on the same issue, the production of non-conventional didactic material in the craft subject for other subjects is a good initiative but is has its restrictions because it is restricted only to objects (Chapter 5) and in some cases to cartoons, maps, landscapes and others. It does not produce books and handouts that are usually the most used materials in the teaching and learning process at Marrere CFPP, to the detriment of illustrative material (Chapter 7) in the classroom.

The perception of teacher trainers regarding the new curriculum for basic education

A learner-centred approach vs. participative methods

The new curriculum for basic education in Mozambique, among change, adopted **interdisciplinarity** and a **learner-centredness approach** as a teaching method to be used during the teaching and learning process in the classroom.

In general, teacher trainers that were interviewed provided different definitions of a learner-centred approach. Apart from this, they shared more viewpoints since they all highlighted the role of the teacher and that of the learner. They are aware of the changed role of both the teacher and the learner when there is shift from a teacher-centred approach to a learner-centred one. They use different terms to characterise the role of the teacher: *facilitator, director, mediator,* etc. Some teacher trainers highlighted the importance of learners' previous knowledge. One of them elaborated on the role of the learner, saying that learners must have the opportunity to speak, experience, think, touch, indicate, demonstrate, dramatize, illustrate, ask questions, answer questions, handle the material, do several exercises, etc.

It seems that most of the trainers have a notion of the concepts relevant to the new curriculum for Basic Education. However, putting them into practice is the problem.

Interdisciplinarity vs. an integrated approach

At least seven teacher trainers said that interdisciplinarity and an integrated approach were synonymous. Two of them said that there is interdisciplinarity in every lesson, regardless of the subject. There is a contradiction among some teacher trainers, evidence of a lack of clarity about the concepts being studied. Besides regarding interdisciplinarity and integrated approach as synonymous (Chapter 6), the examples show that the teacher trainers have a superficial knowledge of the concepts.

In summary, many teacher trainers do not have a basic notion of methodological principals which guide the teaching and learning process prescribed in the PCEB. This results in inconsequent application of the terms by teacher trainers.

The new curriculum for Basic Education curriculum has been designed in order to improve the quality of Basic Education in Mozambique. To achieve these goals, it is very interesting to focus on a learner-centred approach and semi-automatic promotion which is much related to the cycle of learning.

A study by Adler & Flihan (1997:7) shows that "interdisciplinarity and integrated approach are generally used as synonyms or interchangeably but in real terms they are different concepts." "Interdisciplinarity literally refers to a study of *relationships among disciplines*, while integrated approach refers *to a cross-disciplinary approach* that is the result of sifting related idea out of subject matter content" (Adler & Flihan, 1997:64).

The results that were obtained concerning the concepts *learner-centred approach*, *interdisciplinarity* and *integrated approach* show that the trainers have different backgrounds and educational experience and that they lack access to the literature that supports the above concepts. Even the policy documents neither define nor explain the terms.

Classroom practice: teacher-centredness approach, work group and discussion

The pedagogy lesson observed was teacher-centred because the strategy used in class was question-and-answer, dictation and teacher exposition. This was complemented by writing and explanation on chalkboard. Towards the end of the lesson the teacher trainer used pair work for learners to solve the problems written on the chalkboard. The second lesson was teacher-centred as the teacher trainer relied heavily on question-and-answer which does not constitute discussion strategy. And finally, the third lesson was learner-centred and made use of group work; learners of each group presented content to the class; question-and-answer was also used as a form of direct instruction.

The lessons described have some common aspects:

The first observation is that the instructional material used facilitating the teaching and learning process was basically chalk and chalkboard. Teaching media were not incorporated. There is a need to use concrete material for the trainees to gain insight into abstract concepts. Taking into account that the trainees will teach primary school children who are still in their physical and cognitive developmental stage, it is imperative to realise

the impact of illustrating, concretising, touching and experimenting on the learner who often has to master difficult content. For example, when the topic is plants in a Social Sciences class, the teacher should bring the real plant instead of a drawing. The teacher may also ask learners to bring one to the classroom to better observe its characteristics in the classroom.

No medium teaches on its own (Van Rooyen & Van der Merwe, 2004:273). Teaching media complement the techniques used in classroom and require careful lesson preparation.

Teacher trainers tend to use the chalkboard and chalk as instructional material. Illustration is rarely used. It is necessary that teacher trainers illustrate what they are talking about. Handouts can be time-saving. For example, in the Psycho-pedagogy class, the teacher trainer took a long time dictating the content that could have been avoided if he had brought a handout with the material he wanted learners to have. He even used material from his exercise book he had used when he was a student. Learners should be given the handouts in advance to familiarise themselves with the topic for the class to be more productive. In short, the teaching and learning process requires a concretisation whenever possible for better understanding purposes.

The second finding is that incorrect answers were rarely used to develop the lesson. There was no praise for the trainees who answered correctly to stimulate them and others.

There is little evidence of some teaching strategies related to Basic Education concerns, namely learner-centred teaching and the use of discussion and group work.

The principle of a learner-centred approach is understood as a change of the role of teachers involved in the process of learning. This means that the teacher is seen as a facilitator or mediator and the learner as object of his learning. The learner is active in his/her learning. A learner is supposed to work in groups with instructional material.

Major constraints to the implementation of the new curriculum

It can be concluded that the implementation of the curriculum for Basic Education in the Mozambican context starts with a deficit at policy level; it is impossible to implement something that is not clear to those that have to implement change.

Respondents pointed out a lack of material such as a curricular plan for Basic Education and inadequate primary school programmes as major constraints to following and implementing the innovation stated in the new curriculum for Basic Education. One of the functions of the Director and Deputy Director is to guarantee the application of the approved curricula for Ministry of Education; this means creating all conditions, from dissemination to execution or implementation. The college must create the conditions, such as making copies in order to share documentation with trainers to improve the innovation.

The library at Marrere looks like an abandoned place; many books are kept in the big wooden boxes (*baú pedagógico*). The cleaner is the person who helps people in the library. There is no librarian in the library. This situation affects the teaching and learning process and, more particularly, the implementation of the new curriculum. The constant absence of the person who deals with photocopying affects the teaching and learning process as well.

Some trainers say that the curriculum for Basic Education does not have many innovations as they had experienced similar reforms in the OP. This point of view is based on their having been introduced to participative methodologies. However, they do not take into consideration the fact that there are many other innovations. For example, they forget concepts such as semi-automatic promotion, interdisciplinarity, etc.

Most of the trainers are aware of the problems that Basic Education is facing. The teacher-learner large class size for example, is one teacher per 100 students and they agree that this is very high. They also add that it is very difficult to work with such a high number of students because it is not possible for them to interact with every student in the classroom. They are of the opinion that the average number of students should be 35 to allow for better transmission of the pedagogy and the content to the prospective teachers. As an example, during the OP, classes had no more than 35 students. From there on, matters have changed. For example, in one of the years one class had 82 students. This situation should

be compared to a learner-centred approach as one of the main pedagogies referred to in the curriculum.

Once a curriculum has been designed, it needs to be implemented. As we know, teachers can act as key agents of change. However, the lack of teaching materials, especially books, affects the implementation of the curriculum.

Attitudes concerning the new curriculum differ in some cases because of the degree of knowledge that individual trainers have about the new curriculum for Basic Education. Some teacher trainers participated only in the seminar presented by INDE; others took part in the diffusion and seminars about the new curriculum for Basic Education at the ZIPs through actions organised by OP.

Didactics materials as key factor to implementing curriculum

The teacher trainers that were interviewed at Marrere CFPP admitted that they had the problem of material resources for the implementation of the basic education curriculum.

It is important to highlight that when teachers were asked to talk about the new curriculum for Basic Education, they emphasized the constraints, the lack of instructional material related to the new curriculum for Basic Education, the lack of books for Grades 1 to 5, the lack of teachers' book and the lack of books for the different learning areas (Chapter 6).

It shows how worried the teacher trainers are about the effective implementation of the curriculum due to the lack of some basic material, namely students' books, teachers' books, etc. It matches what the literature review says and our conceptual framework which talk about the material resources as one of the factors that affect the implementation of the curricular reform in course.

- The disappearance of some books from the ex-resource centre built by the OP.
- The existence of certain quantity of hidden books at the "*baú pedagógicos*"- these books are inaccessible to both the teacher trainers and the trainees.

In the presence of what has been stated, a problem concerning the sustainability of the OP arises after the departure of the Osuwela Project. The developments that were achieved

during the project were not being maintained, namely the subsidy for teacher trainers to maintain them at the college full time, the resource centre (it lost all its computers), the specialised people to deal with the resource centre, among other examples.

The four identified problems (low quality of education and curriculum, under-qualified, unqualified and untrained teachers, the teacher-learner ratio and lack of facilities and teaching resources) affect basic education as well as the process of policy implementation in Africa and in Mozambique in particular. The impact of the identified factors on education depends on the educational context of each country.

The problem of policy implementation is not new; early scholars have attempted to understand the problem of policy implementation through research. Research suggests that policy intentions seldom determine classroom practice. Once policy has been formalised, it must be put into practice in the classroom. The literature review shows that the gap between policy and practice is still a major concern. The main problem of policy and practice is policy implementation. The purpose of implementing new policies in education is often associated with a need to effect new changes. Therefore there is an assumed direct link between policy implementation and change. Change is non-linear and complex.

There are two dominating theoretical traditions of implementation in policy, namely a top-down and bottom-up perspective. Top-down underlines the linear relationship between policy and practice (policy process as hierarchical and linear) while a bottom-up perspective assumes that the demarcation between policy decision and implementation is unclear. The relationship between policy and practice is not a linear, rational and predictable process. On the contrary, research has demonstrated that relying exclusively on either a bottom-up or a top-down approach to change is ineffective; successful reform demands a combination of these approaches.

For developing countries, the failure of policy implementation is attributed to poverty, inequality and financial constraints, lack of resources and the inadequacy of teacher training (Malen & Knapp, 1997).

The OP curriculum contributes to the new curriculum for Basic Education by incorporating a learner-centred approach and grouped subject areas. These two elements

appear as elements of the new curriculum for Basic Education because they have been introduced in the OP before. It has been said above that the OP has emerged as an experimental model for teacher training in pre- and in-service training for primary school teachers.

The new curricular plan for Basic Education adopts participative methods in the teaching and learning process in the classroom. This marks a new era of classroom practice in Mozambican primary schools in which the learner is seen as an active participant and becomes involved in the different activities presented during the class. The learner is no longer a passive subject. I admit and believe that the learner brings some knowledge when he comes to school. Therefore, the role of teachers changes and they are seen as facilitators in the teaching and learning process. The new approach has been tested during the OP in both INSET and PRESET. Under the responsibility of the OP, trainers have been sent to primary schools to teach primary school teachers how to use the new approaches. Before that, the trainers applied the same techniques in the classes at Marrere CFPP. This has resulted in the production of the module used to train primary school teachers dealing with these techniques. The new approach has been incorporated as a law in the new plan for Basic Education. The curricular plan for teacher training (OP) serves as a basis for the rest of institutions in Mozambique devoted to training primary school teachers at the same level

Emphasis will be placed on Integrated Science (*Ciências Integradas*), which was the first proposed designation, and comprised two sub-areas, namely Social Science (History and Geography) and Natural Science (Chemistry, Physics and Biology). They are supposed to be two subject areas (Natural Sciences and Social Sciences) and later on one subject area, the so-called Integrated Sciences. For instance, the module produced by teacher trainers during the OP was designated within the scope of Integrated Science. That is, the Integrated Science module comprised Chemistry, Biology and Physics. Nevertheless, the prevailing subjects in Marrere CFPP and primary schools are Natural Sciences and Social Sciences.

In my opinion, an integrated approach implies a radical change for the education system. That is why decision makers have preferred to move slowly in only two subject areas. To summarise, the contribution of OP/Marrere CFPP is still valid because it has proposed two

areas of study, Integrated Science (Chemistry, Physics, Biology, History and Geography) and subject areas, namely Social Sciences (History and Geography) and Natural Sciences (Chemistry, Physics and Biology). The remaining and accepted proposal is the last one: Natural Sciences and Social Sciences. I would like to emphasise that one of the modules used in PRESET and INSET was called Integrated Science and was published in 2002. The same module was revised according to the last designation (Natural Sciences) and was published in 2005. This shows an attempt to adjust the designation currently in use at Marrere CFPP and primary schools. In spite of content such as energy, environment and living things, the Natural Science's module has added the denomination currently in vogue.

> "The educational integration of those areas of knowledge seems to be an imperative for teachers' professional training whose activities are based largely on the creation of learning situations that enforce the children's actions in contact with the natural atmosphere and in their interactions with others, promoting balanced and global development" (CFPP de Murrupula/Marrere OP, 1998).

The upgrading of trainers of the Marrere CFPP was one of the most important actions of OP, because at the beginning of its pedagogical activities there were fewer qualified trainers. In order to allow trainers to improve their performance, the OP in collaboration with the Pedagogical University (UP) organised in-service bachelor degree courses, which are presented at Marrere CFPP. The courses take at least four years to complete. The advantage is that they deal with theory and practical changes.

One of the problems that emerge at Marrere CFPP is the moving of teacher trainers, not from the education system but from Marrere CFPP (from 2005 to the present, five trainers left Marrere CFPP). For example, some of them have been called up by the Provincial Directorate of Education in Nampula to take over positions as heads of department in the Provincial Directorate of Education, District Directorate of Education and Primary School Directors. As a consequence, Marrere CFPP had to appoint new teacher trainers, who needed some time to become familiar with the system. This problem is aggravated firstly because the new teachers have low qualifications compared to the ones who have left; secondly, they lack teaching experience at primary school level. For instance, a Craft trainer with high school level and no teaching experience is appointed as the subject head teacher in his second year of experience as trainer at Marrere CFPP.

All of the interviewed teachers have heard about the educational reform from different sources of information. Some have heard about the new curriculum by participating in training in primary schools, others by participating in seminars about the new curriculum for Basic Education organised by INDE.

In my point of view events of this kind are just beginning to disseminate the notions of the Basic Education curriculum. The knowledge acquired in this way can be consolidated by studying documents related to the issue. During my stay at the College I found that there were few copies of the curriculum for Basic Education. These could be found in the pedagogical director's office.

The pedagogical director stated that "for the implementation of this curriculum here at Marrere CFPP some seminars had been presented. We had a seminar lasting one week. All the teacher trainers were informed about the changed curriculum for Basic Education."

Assessment process or assessment test

There are two types of assessment that are frequently used at Marrere CFPP, namely formative (ACS and Pedagogical Practices) and summative assessment (ACP, ACF, Examinations, Teaching Practice and others). School achievement (school results or performance) in the three periods, namely before, during and after the Osuwela Project, reflects a slight difference. In 2003, when the Osuwela Project was operating, the best result was 97%. However, the average percentage of the graduated students at the end of each year shows no significant differences among the three periods. This means that trainees have most difficulties in the examinations. Throughout the years the number of trainees has increased considerably, thus changing the previous situation when the number of male trainees was larger than that of female ones. However, the total number of trainees decreases so markedly in the course of the year until the graduation that the number of male and female trainees is equal or that of female trainees is lower than that of males. Formal examinations remain the main reason for the failure of many students. Taking into account the degree of selectivity of the final examinations, trainees graduating from Marrere CFPP seem to be not well qualified to carry on their future profession. The high rate of failing students shows that the proposed objective cannot be achieved.

What is new in this PhD?

The study is about the relationship between policy and practice in African developing countries in general, and in Mozambique (Marrere CFPP) in particular, under poor conditions, namely unqualified, untrained and under-qualified teachers; high teacher-pupil ratio; lack of resources, etc. Such a study has not yet been done. The literature reviewed about policy and practice is more related to developed countries where conditions are the opposite. This constitutes the conceptual framework of this study.

The study tries to respond to such main questions as what lecturers say about the new curriculum for basic education, what they do and what the outcomes (assessment) are.

After several years of research, the study findings are that, on the one hand, while lecturers (teacher trainers) have a superficial understanding of interdisciplinary pedagogies, especially in the social sciences, only a few of them have applied these pedagogies in the classrooms. On the other hand, the reforms seem to have had a deeper impact in their advocacy for the use of learner-centred teaching strategies, although lecturers continue to use question-and-answer practices widely because they are convinced that question-and-answer is a part of the learner-centred approach. In other words, lecturers still do not understand the curriculum; they continue to teach in the former way (teacher-centred approach) and as a consequence learners do not do well.

The process of implementation of policy and practice differs from rich countries to poor countries. It must be understood and treated differently because the goals, policies, conditions and human resources are different.

Teacher qualification

The literature contends that the quality of teachers is linked to their qualifications. Teacher quality variables appear to be more strongly related to student achievement than class sizes. Among variables assessing teacher "quality", the percentage of teachers with full certification and a major in the field is a more powerful predictor of student achievement than teachers' education levels (e.g., master's degrees) (Darling-Hammond, 2000:37). In this study I found that most teacher trainers (eighteen) have been upgraded through the modular course organized (INSET) by the Pedagogical University whereby they obtained the Bachelor degree. However, some teacher trainers were not submitted to upgrade, among them there were those with Honours' degree (*licenciatura*) and others did not even

have a Bachelors' degree. Another aspect that deserves highlighting is that teacher trainers have not been trained to be trainers at colleges and some of them have no experience in teaching on Basic Education. In the literature, inexperienced teacher are those who have less than three years of experience (Darling-Hammond, 2000:7). It means that teachers with more than three years of teaching are considered experienced. In the developed countries we find that for one to be a teacher trainer, he or she must have at least a Masters' degree and must have recognized experience in the teaching area. Although effects of teacher experience on student's learning have found a relationship between teachers' effectiveness and their years of experience (Darling-Hammond, 2000:7, quoting Murnane & Philips, 1981, Klitgaard & Hall, 1974), this relationship is not always linear. Looking at Marrere CFPP, we observed that some teacher trainers have certain teaching experience and other have none.

Lack of resources

The lack of basic infrastructure (buildings and other resources) is a recurring issue in poor countries like Mozambique (Chapter 5). For instance; Marrere CFPP has some classes located outside their own premises due to the excessive number of learners and a lack of classrooms. In order to minimize the lack of classroom, CATEC (*the house of traditional crafts and community meeting*), which was mentioned in Chapter 5, originally intended for housing activities with the community, was used as a classroom. Another solution was that of dividing some existing classrooms into two. This scenario shows clearly that the situation of a lack of basic infrastructure is critical. Infrastructure constitutes one of the basic conditions for the teaching and learning process to take place, in particular, and school in general. This example of a lack of infrastructure in Mozambique can be extended to other African countries, more particularly, in Southern Africa, where the situation looks the same. Concerning didactic materials, in developing countries, every material such as books, pamphlets, rulers, etc. is based on conventional material. In such a context of poor conditions as is the case of developing countries (Mozambique), it is not possible to rely only on conventional material; there is a need to resort to non-conventional materials produced by learners (see Chapter 5) in Crafts subjects. I found that non-conventional material (Chapter 5) produced by learners in the crafts subject, using low cost and local material, can minimize the lack of material in the rural areas. Teachers and students´ books for EP1 and EP2 were allocated to Marrere CFPP three years after the introduction of the new curriculum for Basic Education. This happened because of the excessive top-down

power, i.e., from the Ministry of Education to provincial level, then to the district level until school agency. Students and teachers books were available only in 2006 due to the top-down structure. In whatever level there is a problem, the solution must come from the top level and the consequence resulting from any delay will be felt at the bottom level. One example is that of a school sending a letter to the district claiming for books, from the district to the province and then from here to Ministry of Education. Consequently, books were sent two years later. Everything gets stacked up when it depends on the top. On the contrary, at Marrere CFPP, as I mentioned in Chapter 5, some books acquired during OP have been kept in the boxes with limited or no access at all by teachers or learners. When OP left, the school did not create conditions to maintain the books in the library.

Teacher pupil ratio

The literature refers to classroom reduction projects in developed countries where each class consists of 15 (fifteen) pupils. In my study I found that during the OP there were attempts to reduce the class size, and it was, to thirty or thirty-five (30 – 35) students per class in order for the classes to be manageable by teacher trainers during the teaching and learning process. Notwithstanding these efforts, the number of learners per class has increased after the OP left to Nampula City. In other words, teacher-leaner ratio reverted to the prior situation. It can be explained by the introduction of learners after entry tests under the instructions of hierarchical superiors. This is even worse when the correlation between classroom dimension and class size is not observed. The smallest class contained a higher number of students. Classroom size differs in terms of length and width. Some classrooms are smaller and others are bigger. Paradoxically, the smaller classrooms accommodate more students than the bigger ones. For instance, in classroom number 5 there were only 47 students, while classroom number 1 had 60. There is no correlation between the classroom length and the number of students in each class.

In the poor context we need to graduate more teachers for basic Education but the conditions under which teachers are trained are not good. Could it be said that bad teachers training conditions are good for the prospective teachers if they are going to work under the same conditions? Does the OP project influence the large class size or not? How does it do so? Does OP have an influence on the improvement of resources condition? How? How about dividing the existing classroom into parts, instead of building new ones? The point

that I will try to make is that there is a need for correlation of students' number and dimension of classroom, although there is no standard measure for a normal classroom.

What is new? What have you discovered that adds value to the existing knowledge about policy and practice?

The process of policy implementation in developing countries and developed countries occurs in different contexts. Implementation of policy in poor countries takes place in poor conditions (unqualified, untrained and under-qualified teachers; high teacher-pupil ratio; lack of resources); while in rich countries it occurs in better conditions (more resources, money to support any constraint). So the problems arising in the two worlds are different. Taking into account this discrepancy, we concluded that the design of curriculum in developing countries such as Mozambique does not take into account the context of its implementation. Although there is no homogeneity across the country, the same curriculum is implemented across the country in the same way. Moreover, some of the aspects of curriculum (learner-centred approach) and its implementation are blindly imported from rich countries, which are in general homogeny.

Differently from developed countries where teachers have greater capacity, better training and adequate resources of teaching and learning process as well as money to support the needs, in developing countries such as Mozambique, teachers still lack the most basic resources as well as basic training in order to achieve the proposed goals and policy. Lecturers still teach in the old ways. It means that the teaching and learning process is teacher-centred and characterised by questions and answers. The level of integration (see Chapter 6) of subjects is very superficial. For instances, the findings on these issues show that most of the teachers have very superficial knowledge of interdisciplinarity and regard integrated approach as synonymous to interdisciplinary (see Chapter 6). They believe that interdisciplinarity is always present in any lesson. Even, in terms of outcomes, the results between industrialised countries and developing countries differ because of their natures. The latter ones got bad results which legitimised low student achievement.

The implementation process in developing countries is characterised by poverty, inequality and financial constraints, lack of resources, the inadequacy of teacher training, the weak design of implementation strategy and the problems of policy coherence which affect the

implementation process. Then, "in developing countries it has not received sufficient analytical attention; many aspects of the process involved are not yet well" (Dyer, 1999).

What can scholars overseas learn from it? How must we now think about policy and practice?

From this study, we can learn that there is a need for more research related to policy and practice in the poor conditions like developing countries where the implementation process is different compared to developed countries and has not been sufficiently researched yet. To do so, will allow a deeper understanding of the implementation process.

What can we learn from the study?

From this study we can learn that there is a need to do more research related to the policy and practice in the developing countries in order to get more insights about this issue, because it is made in poor conditions that differ from those in the rich countries.

The significance of the study in terms of literature concerns the contribution that is made in the literature. The study of policy and practice in Mozambique is new and the first in its field.

The study in a developing country such as Mozambique, tells about the literature developed in rich countries related to policy and practice and focus experience on classroom practice by analysing the process of curriculum implementation in the Southern African region due to the lack of field studies.

9.4 REFLECTION ON THE STUDY

9.4.1 Substantive Reflection

In the introduction I referred to the fact that Mozambique has never had an acceptable and durable primary teacher training course model which could be the basis for the design of subsequent curriculum models. The change from one model to another has not been preceded by any evaluation which would allow an identification of the weaknesses and strengths of the former model so that the strengths could enrich the new one and the weaknesses could be improved upon. In 2007 a new teachers' training model, aiming at training as many teachers as possible in as little time as possible, was introduced for

current basic education. It aimed at keeping the teachers salary fund low. Mozambique, like other African countries, depends on international donor agencies to provide advisory support to the government of Mozambique, especially the Ministry of Education on the advantages of a cheap teachers' training model and the sustainability of paying salaries to low level teachers with low training costs. It is said that training a bachelor is expensive, and even more expensive to pay his salary after training him. One salary for a bachelor graduated is enough to pay five or six basic level teachers (with Grade 10). We should not forget that 50% of the Mozambican Estate budget is sponsored by donor agencies. The donors are more interested in saving the financial resources and do not care much about the quality of the training, teachers and education. They seek to solve the problem of a lack of teachers with psycho-pedagogic training at the expenses of education quality according to international compromise towards Education for All. The strategic plan of the Ministry of Education and Culture for teacher training for basic education suggests that a viable model for teacher training should be found. It should also train qualified teachers as a way to guarantee quality in basic education where the quality leaves much to be desired. In Chapter 1 I mentioned that the annual demand for teachers in Mozambican schools is estimated at 10 000. Since the number of graduate teachers in private schools is less than the demand, the solution has been in contracting teachers with no psycho-pedagogic training. The education strategic plan as a normative document and policy states that the quality of education must not be jeopardized by the millennium compromise (to achieve universal education for all). That is, the spreading of education must not be achieved at the expense of quality.

According to Castiano (2005:21-22)

> The compromise that was signed by the government of Mozambique in Dakar is, just like all African countries, to design a national plan and define strategies to provide education to all school age children by 2015. The most visible effort to achieve universal education has been concentrated in the increase of the number of schools and classrooms. In fact, in 2002 there were 7771 first degree primary schools, from grade 1 to grade 5 (EP1) while in 1999 there were 6605. In three years the schools in this level increased by 17.6 %. This increase of schools made the net school rate to increase from 43.6% (1999) to 62.6% (2002), which is equivalent to an annual increase mean of 0.7%. This rate means that that if in 1999, only 44 school age children (from six to tem years) out of 100 were at school, in 2002 the number of school children studying increased, in average, to 64 out of 100. The other 36 out of 100 are still out of school. In terms of number of students, in 2002 there were about 2644400 children in EP1, while in 2002 there were 2053000. At EP2 the number of schools increased to 823 in 2002, while there were 448 in 1999, which is equivalent to

> a double increase. At the same time the number of students of EP1 increased from about 187000 to 277500 from 1999 to 2002.

As can be seen in the passage above, the increase in the number of schools and the consequent increase in the number of students in basic education testify to the efforts made by the government of Mozambique to provide education for all. However, the problem of a lack of quality and quantity in teacher training to meet the consequent increase in demand of teachers in basic education still persists.

According to Januário (2008:233),

> "the few studies that have been conducted about the quality of system outputs, some address issues related to teacher training and curriculum implementation others look at student alternative conceptions and beliefs and others address the issues of school effectiveness, with particular emphasis on the assessment of student learning. Most of the studies focus on primary education."

Few or any studies conducted in teacher training institutions have focused mostly on classroom activity having a learner-centred approach and the teaching and underlying learning strategies as the starting point. A modest contribution done by the present study is that it has some concrete suggestions to improve the teaching and learning process in the teacher training institutions in the context of Mozambique.

9.4.2 Scientific Reflection

As referred to earlier in Chapter 3 (Section 3.2), this study is a qualitative case study and therefore it has used qualitative data gathering methods to gather information (interviews, documents and classroom observation). This study explores the policy and implementation at Marrere CFPP.

Among the weakness are:

- Absence of teaching media;
- Teacher-centred approach;
- Non-use of wrong answers.

These findings are very important to disseminate among primary school teachers because they are the main points to be considered when dealing with a child.

Classroom observations by two people allowed for a discussion and consensus about the classes observed. It is advantageous to have two people observe a class because one person only could fail to capture some important aspects of the class. Observation with someone representing the institution is even more advantageous. Two people as two different units are likely to have different perceptions. In addition, an exchange of ideas between two people makes the job much more productive.

I conducted interviews alone and I used an aiding instrument such as a tape recorder to facilitate my work. If I had to take notes during interviews I would have had to shoulder significant problems. Experience shows that in interviews it is good to have at least two people - one can ask questions and the other one can concentrate on the recording.

Although the study has used statistical data about school achievement from 1993 to 2007 to show the number of trainees who passed or failed at Marrere CFPP, it is still a qualitative study. It shows how important statistical data sometimes are, as Creswell (1994) point out. Statistical data were used in Chapter 8, making it a mixed approach in data collecting.

9.5 RECOMMENDATIONS AND IMPLICATIONS

This sections ends by providing some recommendations, taking into account three perspectives, namely policy and practice, further research, and further development work. The recommendations are based on the findings of the study.

9.5.1 Recommendation for Policy and Practice

A relevant conclusion of the study is that the most predominant teaching style is lecturing, where teacher trainers still dominate the discourse in the classroom. The lessons are based on question-and-answer. Other teacher styles are, however, emerging. The implication is that these teacher trainers need support in designing and using appropriate instructional

media in order to facilitate the teaching and learning process. It is recommended that MEC provide the required instructional material at Marrere CFPP.

Another conclusion is that teacher trainers at the College use few illustrative materials such as figures, images, posters, handouts, etc.

The following Chinese proverb seems appropriate:

> If I hear I forget
> If I see I remember
> If I do I learn.

For this to happen, the Ministry of Education and Culture must make the necessary instructional material available, taking into account the content that has to be taught. It should allocate funds for this purpose. In addition, teachers should have a good command of the use of instructional material since it is very dangerous to use it incorrectly.

The Ministry of Education and Culture, through INDE, should design a brochure explaining the key concepts that are included in the PCEB, including *learner-centred approach* and *interdisciplinary approach*. It should then be distributed to the different teacher training institutions in the country. Each institution should engage in an in-depth study of the document so as to have solid knowledge of the Basic Education curriculum and its underpinning philosophy.

Another conclusion that can be drawn is that teacher trainers have a very superficial knowledge of an interdisciplinary approach in teaching. Thus, further study at Marrere CFPP is recommended so that they may have a notion of the concept. For this to happen, MEC/INDE must produce complementary handout material clarifying some terms that are part of the Basic Education curriculum, to allow teacher trainers to have a common understanding of the concepts in PCEB. Lovat & Smith (2003: 212) state that "if the teacher is not clear about the nature of the change, the reasons behind it and how it is supposed to be implemented, and, more important, if the teacher is not committed to the change, then there is little chance that it will be implemented." In the same vein "a persistent challenge facing education policy is the difficulty of ensuring local implementation of instructional reforms by teachers. Despite numerous instructional

reform initiatives, teacher practices have remained relatively constant over the past century" (Chau et al., 2006).

Although there is relative knowledge about learner-centred teaching at theoretical level, there are still serious problems at practical level. Experienced teachers from INDE or the Ministry of Education and Culture should organise demonstration lessons in which they use all the necessary teaching means concretising as much as possible the concepts to be conveyed. They could also demonstrate how to deal with negative (poor) and positive (rich) answers from students in the classroom. These lessons would serve as model lessons. Changing attitudes takes long; trainers should not be expected to revolutionise their teaching in a short period of time.

The entry admission of Grade 7 for teacher trainers should be upgraded to Grade 10 or its equivalent. This implies refining the admission criteria in order to get better students.

9.5.2 Recommendation for the future research

The purpose of this study, already stated in Chapter 1, was to explore the relationship between policy and practices taking into account that teacher trainers at Marrere CFPP are key agents for the implementation of the new Basic Education curriculum reform in Mozambique. As this was a case study, there is a need for other studies to be undertaken in other teacher colleges to identify the main teaching styles to generalise the results. This kind of research should be undertaken in existing primary schools to determine the perspective of practising teachers.

There is a need for doing large scale research in order to generalise the outcomes.

The quality of future teachers in terms of competence is questionable because it can only be certified in their working place. The researcher's judgement of the qualifications of the trainees is based on training, on the content taught, pedagogic practices and teaching practice. Teaching practice is the highest and decisive stage when trainees demonstrate what they have learnt during their training. Since the college does not have systematized information about teaching practice, the newly graduated trainees should be accompanied

in primary schools to determine their difficulties in the different environments such as rural, urban and peripheral areas.

9.5.3 Recommendation for further development work

When designing and planning group work activities during the lessons, special attention needs to be paid to the time required to form and organise groups; the number of learners and the size of the specific classroom, the time needed to complete those activities should be taken into consideration.

When planning the course of a lesson, special attention needs to be paid to the instructional material that will facilitate learner understanding. The new curriculum for Basic Education emphasises the use of instructional media as an integral part of the teaching and learning process. The effective teaching and learning process is based on using adequate teaching strategies. In the Mozambican context, where teachers work with inadequate resources, there is a need for instructional leadership.

There are many things that might prevent change in schools, including a lack of interest, a lack of resources, no leadership, a lack of support, a lack of time and conservation (Lovat & Smith, 2003).

Mozambique embarked on the new curriculum for Basic Education. Some innovations have been adopted and their implementation in Marrere CFPP was effected by teacher trainers. The study was guided by research questions which are supported by the literature review related to policy and practice. Data collection was through interviews, classroom observations, documents and written notes. Triangulation validated the information already collected. The study is located at the interpretive paradigm because knowledge is a construction process, which means that it is not constant and static. The relationships between the key factors (resources and facilities, large class size and teacher trainer's qualifications) which influence the implementation of curriculum are framed as a conceptual framework. This is a case study of Marrere CFPP which occurs in a natural setting. The background and school organization and conditions and facilities (Chapter 4) were described in order to provide the general view of the institution (Marrere CFPP) with particular reference to OP. The overall organizations of the curriculum for basic education

in Mozambique related to the subjects areas and new subjects and which of them occurred or did not, were identified. Why did they not occur? (Chapter 5). Teachers' trainers understanding (Chapter 6) of the new curriculum for basic education in Mozambique, namely learner-centred approach, interdisciplinarity and other factors which impair the implementation of the curriculum were noted. Once it was understood what teacher trainers understood about the curriculum, I tried to confront it with the practice in the classroom. I see if what the teacher trainers said is applied in the classroom at Marrere CFPP (Chapter 7). Practice at teacher training college is complemented by the types of assessment (Chapter 8) that took place. It means that once content is taught in the classroom, there is a need for it to be assessed as part of the implementation of the curriculum. This could be done during every lesson or at the end of a thematic unit. Doing so effectively, the policy can meet the practice at micro level without constraints. Unfortunately, it is not a case of Marrere CFPP.

In the light of the empirical findings, the relationship between policy and practice revealed that it is not effective at Marrere CFPP and it is located in the top-down power. Many constraints were encountered during the implementation process, such as poor resources (lack of materials and books), bad conditions and facilities, large class size and quality for the teacher trainers. In the classroom questions are most predominant and teacher trainers are convinced that answer and questions are definitively learner-centred approach. In the same line, policy – practice (school) and implementation (teachers) does not means that interpretation of the concepts such as learner-centred approach implies its implementation in practice in the classroom. However, they are close to implementing it as it is already internalized.

According to the findings of this empirical study concerning the relation between policy and practice, it can be said that although there are basic education curricular implementation problems, there is some identification with the curricular innovations related to the Osuwela Project, or else the trainer identified and identify themselves with the changes that were made relative to the curriculum during the Osuwela Project at Marrere CFPP (bottom-up). It does not mean that they are implemented. As we can see in Chapter 7, the learner-centred teaching is the result of this project (Marrere), teachers know what the concept means but in practice there are implementation problems (one angle of analyse); another angle of analyse is that the innovations were made in the basic

teaching. For example, the semi-automatic promotion is not understood as it should be as it is not explained at the centre related to the formative assessment.