

## CHAPTER 5

### CURRICULUM ORGANISATION AND CURRICULUM CONTENT

*The aim of this chapter is to present the organisation of the curriculum in Marrere CFPP and primary school (Basic Education) and the relationship between both curriculum in terms of areas and subjects. Section 5.1 gives a detailed description of the curriculum in Marrere CFPP. The organisation of the Basic Education curriculum is presented in terms of subjects and areas of study and in comparison with the College curriculum. Changes made at subject level are addressed and discussed in Section 5.2. The weight of subjects is discussed in both curricula and similarities among them are presented in Section 5.3. Social Sciences (Section 5.4.1), bilingual education (Section 5.4.2) and Crafts (Section 5.4.3) as innovations in Basic Education and their implementation at Marrere CFPP are discussed. Community participation in the College activities and production of non-conventional materials are outlined. Section 5.5 presents and discusses the facilities and teaching resources in the Mozambican context, particularly in urban and rural areas. Crafts are presented as responsible for the production of non-conventional materials for other subjects in the College (Section 5.5.1). Finally, the summary is presented in Section 5.6.*

#### 5.1 INTRODUCTION

This chapter intends to answer the following research question:

To what extent does the teachers' training curriculum match the Basic Education curriculum and how does it do so?

As outlined in Chapter 1, the curricular plan for basic education has been changed. After Basic Education Curriculum was designed there was a need for changes in the teachers' training curriculum in order to adjust it to that of the Basic Education in terms of areas and subjects. In the light of those changes, explore convergence between both curricular will be explored, namely basic education curriculum and teacher training college curricular, in terms of subjects' areas and respective disciplines and showing their similarities and

differences by giving detailed descriptions of both. Based on the documents, observations and interviews, it should be discussed how those changes enact in practice at teacher training, looking more specifically to the constraints encountered during the implementation of subjects such as Social Science, Bilingual Education, and Craft as a subject responsible to the production of non-conventional materials for other subjects at the college.

## **5.2 ORGANISATION OF THE COLLEGE CURRICULUM**

The curricular plan 7 +2+1 was designed for the first two years of full-time training at the College; the third year was reserved for teaching practice.

The curricular plan for teacher training for primary school comprises the following subjects: Educational Sciences, School Administration and Organisation, Methodology of Portuguese, Methodology of Mathematics, Methodology of Natural Science, Methodology of Social Sciences, Visual and Technological Education and its Methodology, Physical Education and its Methodology, Music Education and its Methodology, Community Development Work. The table below shows all subjects taught for the three-year course (Table 5.1).

**Table 5.1**

*A study plan presenting the weekly time for each area or subject*

No.	Areas/and or subjects	Year 1		Year 2		Year 3	
		First Semester Hours	Second Semester Hours	First Semester Hours	Second Semester Hours	First Semester Hours	Second Semester Hours
1	Science Education	4,5	3				
2	School Administration and Organisation			1,5	1,5	Teaching Practice	
3	Methodology of Portuguese	1,5	3	3	1,5		
4	Methodology of Mathematics			3	1,5		
5	Methodology of Natural Science			3	1,5		
6	Methodology of Social Sciences			3	1,5		
7	Visual Education, Technological Methodology	1,5	1,5	1,5	1,5		
8	Methodology of Physical Education	1,5	1,5	1,5	1,5		
9	Methodology of Music	1,5	1,5	1,5	1,5		
10	Pedagogical Practice	6	6	6	12		
11	Craft/Community Development						
12	Teaching Practice						
13	Portuguese Language	4,5	3	1,5	1,5		
14	Mathematics	3	1,5	1,5			
15	Natural Sciences	3	3				
	Social Sciences	3	3				
<b>Total</b>		<b>30</b>	<b>30</b>	<b>27</b>	<b>25,5</b>		

*Source:* INDE/MINED, 1998

The numbers in the table above correspond to times allocated for each subject. This is the weekly time allocated for the subject of Science Education. 4.5 correspond to 270 minutes, thus each hour corresponds to 60 minutes and 0.5 to 30 minutes.

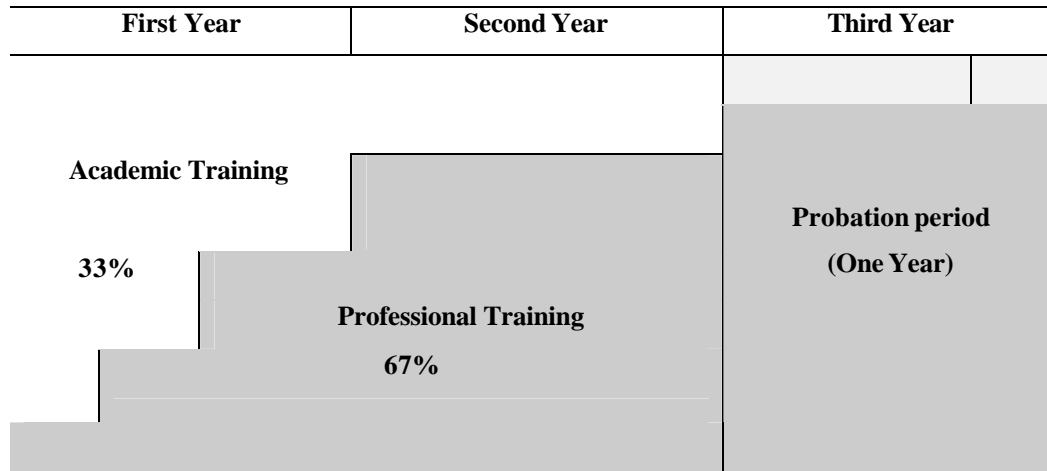
The study plan presented above has a total of 2.250 hours per year, 640 of which are utilised for general training, 1.010 for professional training, and 600 for the pedagogical practices and occupations/community development work. The plan still mediates one year of pedagogic apprenticeship (probation).

However, this study plan emphasises an initial strong reinforcement of the basic scientific knowledge and then slowly moves to professional training, as outlined in the curricular plan for teacher training (see Table 5.2 below). It is imperative that the future teachers master the subject matter. In addition, the future teacher should be able to do the following:

- Master the content in the programmes of EP1;
- Use the proper vocabulary of each curricular area.

**Table 5.2**

*Time distribution of different areas of training*



*Source:* Study Plan Course for Primary Teacher Training (1998:7)

As has been stated in Chapter 2, one of the problems found in primary schools is the large number of unqualified and untrained teachers. It is also well-known that candidates for teacher education at the primary school are those who have lower competence.

After introducing the new curriculum for Basic Education, all subject programmes were adapted at Marrere CFPP to meet the content taught in primary school. However, in general, most of the topics remained the same.

### **5.3 ORGANISATION OF THE BASIC EDUCATION CURRICULUM**

The Basic Education curriculum comprises three major areas of studying, namely Communications and Social Sciences, Mathematics and Natural Sciences, and Practical Activities and Technology.

The area of Communication and Social Sciences comprises the following subjects: Portuguese, Mozambican Languages, English, Music Education, Social Sciences, Civic and Moral Education. The area of Mathematics and Natural Sciences includes the following subjects: Mathematics and Natural Science, while the Technology and Practical

Activities area comprises the following subjects: Arts, Crafts (Practical Arts) and Physical Education.

The new curriculum for Basic Education was designed and introduced in Mozambican primary schools in 2004. This curriculum is characterised by the introduction of some innovations, which make it different from the old curriculum. What was changed? The new subjects introduced in the curriculum are English, Crafts (Practical Arts), Civic and Moral Education and Musical Education. This means that these subjects were not part of the old curriculum and note that these subjects were introduced during the OP in the Marrere CFPP curriculum.

In spite of these changes that occurred in the College, Crafts is still a subject taught without an official programme that guides the teacher trainers in terms of lesson planning, and consequently, facilitating the teaching and learning process in classroom becomes a challenge to most teachers. How important are these changes? First of all, the subjects and their respective programmes used during the OP constitute a basis for the decision makers to produce the study plan for Basic Education. The content of the programme for OP serves as basis to form the new programme for Basic Education. Note that the groups of authors from INDE, who designed both programmes for the primary school and for Marrere CFPP, are the same. After the introduction of the new curriculum for Basic Education in primary schools all over the country, a process of adjusting the Marrere CFPP programmes was initiated, taking into account the new programme for Basic Education.

What has remained unchanged? Despite the innovations taking place in the new curriculum, there are some classic or traditional subjects that have remained the same for years, namely Mathematics, Portuguese and Physical Education. The new ones are Crafts, Social Sciences, Civic and Moral Education.

**Table 5.3**

*Primary school curriculum versus Marrere CFPP curriculum*

*Comparison between the curricular plan for Basic Education and teacher training*

<b>Areas</b>	<b>Subject (Basic Education)</b>	<b>Subject (Marrere CFPP)</b>
<b>Communication and Social Sciences</b>		Sciences of Education School Administration and Organisation Probation
	Portuguese	Portuguese
	Languages Moçambican-L1 Portuguese-L2	Methodology of the Portuguese Language
	English Language	
	Music Education	Music Education and Methodology
	Social Sciences (History, Geography and Moral and Civic Education)	Methodology of Social Sciences Social Sciences
	Moral and Civic Education	-
<b>Mathematics and Natural Sciences</b>	Mathematics	Mathematical Methodology of Mathematics
	Natural Sciences (Biology, Physics and Chemistry)	Natural sciences Methodology of Natural science
<b>Practical Activities and Technology</b>	Craft	Pedagogic practices / Work of Community Development
	Visual Education	Visual Education, Technology and Methodology
	Physical Education	Physical Education and Methodology

*Source:* MINED/INDE, (1999) & (2003)

According to the curricular plan for Basic Education (PCEB), English Language is taught as subject only in the third cycle (Grade 6 and 7). In this case, it does not correspond with the curricular plan for the College because the CFPP graduate teachers are going to teach at EP1, that is from Grade 1 to 5, where there is no English. In other words, English as subject can be learned in Grade 6 and 7 (third cycle). This means that English as subject does not appear in the study plan for teacher education at this level.

As can be seen, the PCEB (INDE/MINED, 2003) is organised into three study areas, namely Communication and Social Sciences, Mathematics and Natural Sciences and

Practical Activities and Technology. Each area comprises different subjects. The curricular plan for teacher training is organised in terms of professional and academic subjects.

To compare both curricular plans in terms of areas and their respective subjects, we need to match the areas and their subjects from one curricular plan to those of the other. The organisation of the curricular plan for Basic Education was taken as a basis for comparison. All subjects integrated in the curricular plan for Basic Education have their correspondent in the curricular plan for teacher training at the College, except for the professional subjects, which constitute the specificities of the curricular plan of Marrere CFPP, namely science education, school administration and organisation, and the methodology of specific subjects. I would like to emphasise that, for example, in the curricular plan for the College (INDE, 1998, 1999 and 2004), we can find Natural Sciences and their methodologies. In practical terms there are two programmes in one: Natural Sciences and methodology of Natural Sciences. The methodology of Natural Sciences is concerned with techniques on how to teach the corresponding content in the classroom in primary school. Generally speaking, it is not the same teacher who teaches those subjects. For example, one teacher teaches methodology of Natural Sciences and another teaches Natural Sciences as a subject.

#### **5.4 THE WEIGHT OF THE SUBJECT**

The Portuguese language in the primary school curriculum occupies the first place in terms of weight, followed by Mathematics and the remaining subjects have almost the same weight. This scenario is applicable to the monolingual programme, with two or three shifts in primary school. In the bilingual programme, the scenario is similar, and the emphasis is placed on the local languages.

In relation to the curricular plan for teacher training, the weight of the subjects is the same as in the primary school curriculum. For instance, in academic subjects, Portuguese is in the first place and is followed by Mathematics; in professional subjects the scenario is similar. The methodology of Mathematics follows the Methodology of Portuguese. It is important to stress that the curricular plan for teacher training places greater emphasis on professional subjects.

The composition of the curriculum is similar worldwide and the curriculum for primary education is similar in terms of subjects and importance assigned to individual subjects (Bonavot & Kamens (1989) in Lockheed & Verspoor, 1991).

In the same vein, it has been consistent in emphasis and steady in primary school language skills, mathematics, science, social studies and arts have time, and other areas are assigned less time (Lockheed & Verspoor, 1991).

This raises the following question: Do all subjects have equal value? There is recognition by stakeholders that skills, English and Mathematics are equally important, however, in practice skills is given less importance. Only very few pedagogues are likely to implement such equality (Callewaert, 1999).

In short, languages and Mathematics continue to have more prestige than other subjects, including practical subjects.

In general, we can say that there are convergences between the primary school curriculum and the curriculum for the teacher training college, except for the subjects Science Education, Management and School Administration and specific methodology found in the Marrere CFPP because of their nature. However, the organisation is different. At college level the organisation is based in two axes, namely professional subjects and academic subjects, while the study plans of Basic Education are organised around three areas or subjects, namely Communication and Social Sciences, Mathematics and Natural Sciences, and Practical Activities and Technology.

I would like to return to the departure point, which is that learners as prospective teachers at Marrere CFPP have only to learn the content that they are going to teach in primary school.



## 5.5 RESTRUCTURING THE CONTENT OF THE NEW CURRICULUM

### 5.5.1 Social Sciences

Social Sciences are defined as “any subject or branch of science that deals with the socio-cultural aspects of human behaviour. Generally, the Social Sciences include cultural anthropology, economics, political science, sociology, criminology, and social psychology.” In addition, Social Science “is a term for any or all of the branches of study that deal with humans in their social relations.” <http://www.answers.com/topic/social-sciences>.

Byrnes (1996:206) defines Social Sciences as “the social studies that consist of an interrelated set of topics related to the history, environment, economics, lifestyles and governments of peoples who live in this and other regions of the world.” In addition, (Schunk, 2000:294) states that “social studies typically are viewed as comprising history, geography, civics, and political science, economics, psychology and sociology may also be included.”

Unclear definitions of Social Sciences as subject lead to confusion. There is the undefinition of the new subject profile. It was once considered for teaching generic notions and concepts of the subjects it consists of. Then it was considered the synthesis of geography and history (Fonseca, 2001). And the Portuguese experience of the introduction of Social Science such as undefinition of its objectives (Felgueiras, 1994).

From these definitions we can conclude that there is no doubt that Social Sciences are a branch of science that deals with the relationship between human beings; however, it is still unclear and difficult to characterise the subjects covered by this branch of science.

In order to determine how some Mozambican teachers perceive Social Sciences as a subject, recent studies conducted at different secondary schools all over the country concluded that teachers ignore or have different concepts of what concerns Social Sciences are. Among the definitions given, it is possible to distinguish common aspects such as the following:

“Social science as joining of history and geography; as a science that has the human being as its study object as a science that studies the human being as related to the society. ... In other cases, some teachers are confused about the concept of Social Sciences as a subject” (Sengulane et al., 2005:7).

It was said early in Chapter 4 that Social Sciences is one of the innovations that comes from the OP that was introduced in the new curriculum for Basic Education.

The study plan for the teacher training course in Basic Education (1998) clearly states that History and Geography and Moral and Civic Education compose the Social Sciences. The curricular plan for Basic Education (INDE/MINED, 2003:37-38) states the following:

Social Sciences have contents of history, geography and moral and civic education; they try to develop abilities and basic competences to recognise the past, to understand the historical process, to place the events in the space and in time; to know and to locate the physical aspects, such as the geographical and economic aspects of the country, of the continent and of the world in general; to know their rights and duties; to respect the rights and faiths of other people and to show attitudes of tolerance and of solidarity.

In the context of South Africa, “two main school subjects fall into this learning area, viz. Geography and History. At tertiary level there are dozens of Social Sciences subjects, such as psychology, sociology, education, political science, law and philosophy” (Jacobs, 2004).

Examining the programme of Social Sciences used by the College we can see and understand that this subject is the sum of two subjects, namely History and Geography. Thus, there is a problem when we refer in depth to the programme of Social Sciences. We can conclude that the content is not organised in an integrated manner as a whole. The content of Geography appears first, followed by the content of History or *vice versa*. The integration of the content in the curriculum is one of the major concerns of the curriculum for Basic Education. It is an attempt to avoid higher compartmentalisation of the curriculum, which was the main characteristic of the old Basic Education curriculum.

According to the Curricular Plan for the Basic Education (INDE/MINED, 2003)

“the introduction of Social Sciences represents a new concept in the curriculum. It includes history, moral and civic education, and geography. At the primary level, all of these subjects are to be taught in an integrated manner. The concept of the different subjects, in other words, is not being handled in an isolated manner, but it is within a specific context based on the thematic units. The role of the Social Sciences in the context of basic education, according to the Social Sciences curriculum, is to contribute to the civic education of the citizens, so they can live well integrated into the environment and participate actively into the economic development of the country.”

In the first learning cycle, the content of the Social Sciences (including the cross-cutting curricular approach of Moral and Civic Education) is integrated in the subject of Natural Science. Starting from Grade 4, the Social Sciences are dealt with as a separate subject. The Mozambique territory is studied in Grade 6. In the third learning cycle, Grades 6 and 7, the African continent is approached in its physical, economic, social, and historical aspects (Tovela, no date).

Why is it important to integrate the approach or to change subjects into learning areas? Jacobs (2004:65) asserts the following:

“An integrated approach to knowledge is one of the basic principles of OBE because it is believed that the single subject approach causes learners to ‘specialise’ at too young an age, and therefore limits their options for finding employment when they leave school. The labour market for school-leavers demands general skills rather than subject knowledge to give young people first better first job opportunities in general junior positions such as office assistants, waiters, factory workers, messengers, painters, handymen and shop assistants. An integrated approach usually means that learning is centred upon a theme. For example, a child learns to look at a tree from different perspectives: as a biological entity, as an economic commodity, as a topic of conversation, as an object of art and as a technological raw product.”

Taking into account that prospective teachers are going to teach Social Sciences as a subject in Mozambican primary schools, it is important for them to learn at College how to teach it in an integrated manner before they go to real schools. However, the annual syllabus of the Social Sciences group (2006) presents Geography and History content separately. Consequently, prospective teachers are likely to leave the College without knowing how to deal with the subject in the integrated manner. In other words, prospective teachers will face great difficulties in dealing with an integrated approach in a classroom setting. The principle is that one teaches as one has been taught.

The topic of Social Sciences has appeared as an innovation in Mozambique because it joins the content of three subjects, namely History, Geography and Moral and Civic Education. The content of the three subjects should be treated as one. Initially, the Social Sciences programme at Marrere CFPP included only the content of History and Geography. Later on, it took into account the curricular reform carried out for Basic Education. Now, Social Sciences include History, Geography and Moral and Civic Education.

To summarise, it is important to emphasise that Social Sciences as a new subject introduced in the new curriculum for Basic Education differ from the Social Sciences introduced at Marrere CFPP in terms of the content and subjects (see CFPP Murrupula/Marrere /Projecto Osuwela, 1998a; 1998b). For instance, the study plan for Basic Education states that the Social Sciences are composed of three subjects, namely History, Geography and Civil and Moral Education, while the study plan for the teacher training college states that Social Sciences are composed of History and Geography.

Social Sciences in the Basic Education curriculum are supposed to be approached in an integrated manner, while at colleges the content of History and Geography appears in separate programmes. This means that the content is taught independently. Prospective teachers who are going to teach in primary schools should be trained to be able to approach Social Sciences in an integrated manner. This does not happen at College.

According to Jacobs (2004:65), “an integrated curriculum teaches learners to have better problem-solving skills while a single-subject curriculum leads to students adopting a fragmented approach to problem-solving. A fragmented approach makes learners think of only one or two solutions instead of many.” Similarly, it can be concluded that Social Sciences as subject both in Basic Education and at teacher training colleges should be composed of History and Geography, except for Civil and Moral Education, which is integrated in the Social Sciences as a subject in Basic Education. In other words, Civic and Moral Education does not form part of Social Sciences at teacher training colleges. This subject appears as an independent one. Moreover, Civil and Moral Education as subjects follow an integrated approach in classrooms for Basic Education.

### 5.5.2 Bilingual education

Benson (2000:149) states the following:

“Changing the language of instruction in Mozambique required an unprecedented acknowledgement on the part of Ministry of Education officials that Portuguese, the official language of the country and its schools since colonial times, was not the mother tongue of the overwhelming majority of citizens, nor was considered the best language for primary schooling.”

Taking into account that effective learning occurs when instruction is conducted in the language that the learner knows best, it would seem logical that the medium of instruction in rural areas be the mother tongue. But this does not happen in Mozambique (Moíses, 2005).

“Interest in the use of Mozambican languages in primary schooling began to grow in the late 1980s, particularly among a group of linguistic scholars at the national Eduardo Mondlane University (UEM) in Maputo. Along with educational researchers at INDE and representatives of relevant governmental and non-governmental organizations, they organized a series of seminars to discuss pedagogical and linguistic strategies in order to improve the basic education in Mozambique. Most of these scholars believed that the exclusive use of Portuguese created a barrier to learning, and was at least partially responsible for the repetition and drop-out rates which characterized the national system” (Benson, 2000:152).

This point of view is underscored in the following quotation:

“The general use of Portuguese as medium of instruction brings consequences such as failure and drop-out, reduction of participation in the classroom, especially for girls, it deprives the students of their culture. Taking into consideration the consequences of using Portuguese as the medium of instruction, the results of the consultations with the civil society namely parents, community leaders, members of religious, members of parliament, chancellors of universities, teachers, students and the recommendations of the experts and educational officers/advisers, the Mozambican Government introduced Mother Tongue Based Bilingual Education, in primary schools as a part of the new curriculum” (Moíses, 2005).

Bazilashe, Dhorsan & Tembe (2004:233) declare the following:

“Mozambique is a country that possesses, like many other African countries, linguistically homogeneous areas (mostly rural) and heterogeneous ones (urban and per-urban areas). Several cultures and, consequently, several languages converge in these areas, and the pupils there speak Portuguese as the mother tongue or the L2. In linguistic contexts of this nature it is not possible to apply the proposed model of

bilingual education, because its application presupposes that the pupils and the teacher share the same language.”

From a pedagogical point of view, the ideal situation would be to ensure that initial literacy skill acquisition occurs in the mother tongue. However, economic and logistic constraints do not allow bilingual education programmes to cover the whole country in the short or medium term. We should therefore conceive a strategy in which local languages may be used as auxiliaries of the teaching-learning process, especially in rural areas where Portuguese is hardly used. This is why the Curricular Plan for Basic Education (2003) advocates the use local languages as a resource, with appropriate methodologies.

When we look at the study plan for teacher training colleges during OP, we can see that there is lack of a subject that teaches one how to deal with local languages or how to use bilingual education. However, Mozambican languages are being used in some primary schools in three different ways, as mentioned in Chapter 4.

The Curricular Plan for Basic Education was introduced in 2004 but no subject related to bilingual issues has been introduced at College so far. This means that bilingual issues are not being addressed, although teacher trainers at College are aware of the introduction of bilingual education in primary schools and sometimes they mention it in the classroom.

Once bilingual education has been introduced in primary school, there is a need to adjust the study plan of the teacher training at college to provide prospective teachers with competencies and abilities to deal with issues relating to bilingual education. It is important to emphasise that Mozambique is a linguistically heterogeneous country with approximately 20 local languages.

The deputy director of Marrere CFPP confirmed that no aspects related to bilingual education were being taught at the college, but he was not able to give us plausible reasons for this state of affairs. This innovation has not been introduced at the college because of a lack of specific programmes and materials as well as qualified teacher trainers for bilingual education.

During the fieldwork I observed that occasionally a teacher trainer of Portuguese told the prospective teachers that they would have to use local languages as an auxiliary resource in primary schools during class activities. One consequence of the lack of training in bilingual education is that when teachers are faced with the need for local language as an auxiliary resource, some primary school teachers merely translate the whole sentences from Portuguese to the learner's mother tongue.

### **5.5.3 Craft as subject - Practical Arts**

Crafts as a subject fills a gap in the curriculum of Basic Education and it meets the demands of the civil society. Its content develops learners' abilities and skills to produce useful objects with the purpose of improving their life world and that of the community through the use and sale of these objects (INDE/MINED, 2003a; 2003b).

The introduction of Crafts as a subject “is applied to all of the learning cycles to develop the practical activities necessary for the learners' integration in their community” (Bazilashe, Dhorsan & Tembe, 2004).

“Craft as a subject will develop the student’s skills and competences in activities such as sculpture, craft, cookery, farming, sewing, gardening, agriculture-cattle/raising, fishing and others. This subject appears to meet the need of endowing students of useful skills for their lives” (INDE/MINED, 2003:39).

Before we go further, it is important to note that although Crafts as a subject appears in the curricular plan for Basic Education (PCEB), it is being taught without an official programme at College.

The study shows that policy seldom meets practice in the classroom. Any subject should have a programme to provide the content and guidelines for teaching and assessing the content. However, classroom implementation does not always happen according to a programme.

In summary, according to the analysis of the content-based syllabus (2005 and 2006) of Crafts, it can be concluded that there is no convergence between the primary school's programme and the content of Crafts taught at College. Due to the lack of a programme,

teacher trainers themselves decide what they are going to teach. In general, most of the content taught in the CFPP in Crafts matches the content taught in the third cycle (EP2 - Grade 6 and 7). Prospective teachers learn something different from what they are going to teach in primary school. Moreover, in general, they are taught the content of Crafts but they are not taught how to teach it.

### **Community participation in College activities**

I would like to supply a brief description of what was considered Crafts as subject when it was introduced in 1999 at Marrere CFPP. As already stated above, this subject is more practical than theoretical. In other words, the main ideas were to deal with practical activities such as sculpture, craft, cookery, farming, sewing, gardening, agriculture-livestock, fishing, carpentry and others. A building was made available for Crafts classes and it was called CATEC, standing for *Casa de Artes Tradicionais e encontros Comunitários* (see below). The name suggests the house of traditional crafts and community meeting; this is the place where different stakeholders meet, namely teacher trainers, learners and community participants. Community participation is necessary to carry out these activities. This is done by finding people in the community who are experts in the field to teach trainees about specific Crafts aspects, for example agriculture-livestock, farming, sewing, etc.

The curricular plan for Basic Education clearly states that the local potential in the community should be utilised in the interest of the students (INDE/MINED, 2003:57). It is within this spirit that the College has tried to bring experts in certain occupations to teach the learners to do practical work and to produce different objects.

School management is responsible for formally contacting and bringing the experts into the College to teach the learners how things work or are made. The first constraint pointed out is the problem of payment. The experts claim payment after teaching the practical activities because people do not feel part of the programme or of the College.

After this negative experience a model which avoids facing this kind of problem was adopted. Learners who have experience or skills in a certain field now teach the others. The weakness of this initiative is that learners with experience are not always available in all fields.





*Source:* photography taken by the researcher (CATEC)

**Figure 5.1** The house of traditional crafts and community meeting

#### **Production of low cost material (non-conventional materials)**

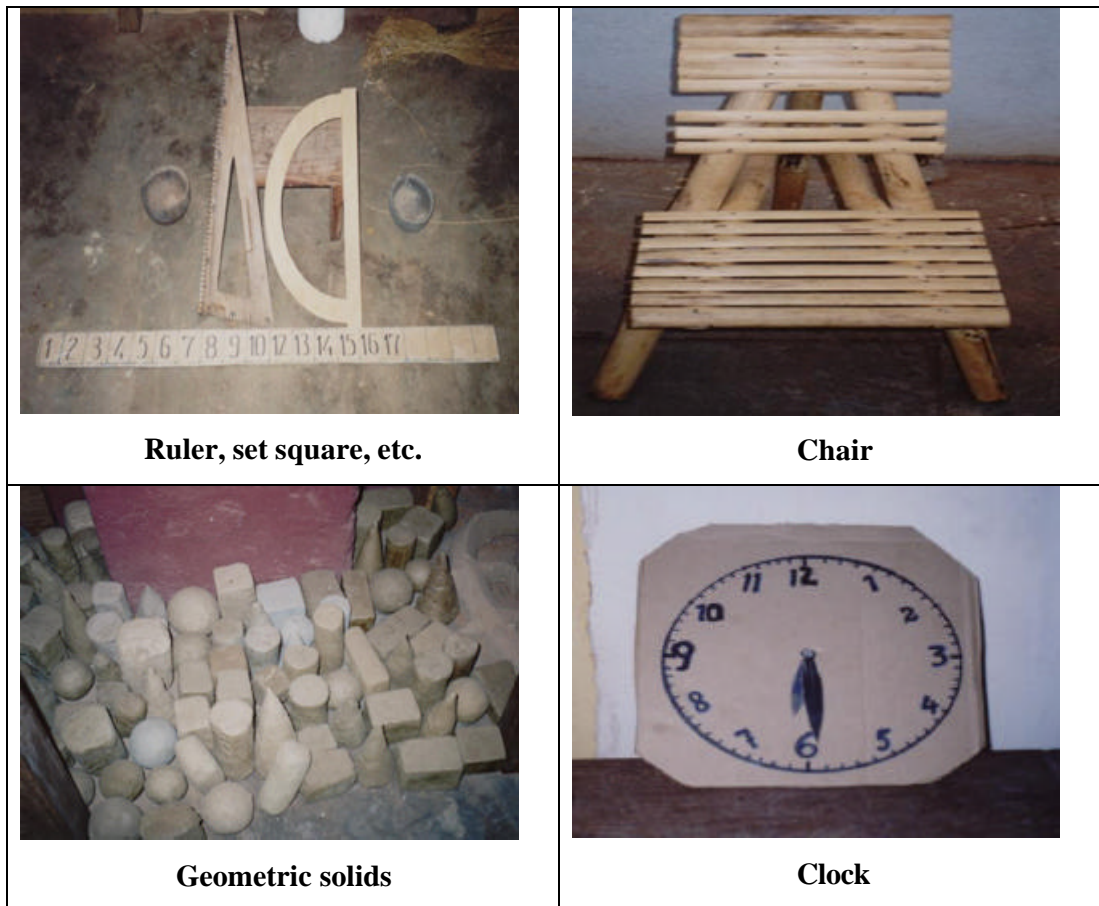
One of the most important initiatives undertaken during the OP was the production of instructional materials using local resources. The main objective was to make trainees aware of the shortage of resources in schools. This was done in order to prevent them from waiting for conventional materials before facilitating the teaching and learning process. By the end of the training each prospective teacher was supposed to have produced her/his kit of instructional material for use in primary schools. The main idea is that, taking into account that most of the prospective teachers are probably going to work in remote areas where there is a lack of instructional material, they would be able to mitigate this problem. Most of the primary schools do not have a library where teachers and pupils may read books, etc.

During this study I observed that Marrere CFPP has one building called *Oficina Pedagógica*, where the low-cost didactic material produced at college is exhibited. I have seen teaching materials such as wooden chairs, wires, covers for refreshments and rulers made of paper produced during Crafts classes.

It cannot be taken for granted that any prospective teacher ever produces his/her own kit of instructional material and takes it to the school where he/she wants to teach. According to

the interviews, it seems that currently the production of instructional material using low-cost materials is the responsibility of Crafts. There is no doubt that this practice is really an answer to the lack of some instructional material in most schools in Mozambique, especially in primary schools.

To illustrate what was stated above about non-conventional materials, see the picture below.



**Figure 5.2** Non-conventional materials



**Figure 5.3 Non-conventional materials**

“We develop material all the time in **OSUWELA/CRESCER**. However the idea is to develop materials with teachers and teacher trainers in accordance with the teaching and learning strategies that are proposed in the modules. This is also carried out in accordance with the context in which teachers are currently working. We therefore tend to avoid sophisticated materials and encourage teachers to improvise materials using local resources ...”<sup>1</sup>.

She was a pedagogical adviser during the OP at Marrere CFPP and now she works at Ministry of Education and Culture and she is responsible for the CRESCER programme.

Most of the teacher trainers interviewed stated that Crafts is responsible for producing supplementary teaching materials for other subjects taught at the College. The trainers who teach Crafts are of the same conviction:

“We have produced for natural science mats, reed mattress, etc. We have produced some pipes, globes for Mathematics. For instance, make a ... cone, of paper; we implemented those things so that other disciplines can use them.”

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<sup>1</sup> Information given by Hooker. She was a pedagogical adviser during the OP at Marrere CFPP and now she works at Ministry of Education and Culture and se is responsible for the CRESCER programme.

The teacher who teaches this subject confirmed that there is no official programme for this subject. For lesson planning he used notes from the IMAP of Nampula and some private books. The content is based on the Basic Education programme.

He recently (2004) graduated from IMAP. It was his first experience as teacher at college. He never taught before at any school, even in primary school.

The instructional material produced during the learning activities is kept at the pedagogic workshop, the *Oficina Pedagógica*. This venue is no longer used for its original purpose; it is now a storehouse. The initial function of the pedagogical workshop was to produce teaching materials.

The chairs produced in 2006 had two destinations. The best chairs were put in the visiting room at the student hostel and the others were put under the trees for the students.

## **5.6 FACILITIES AND TEACHING RESOURCES**

In this study facilities refer to what the classroom is made of, size of classroom, table, chair, illumination conditions, window, etc., while teaching resources refer to learning materials such as books, textbooks, maps, posters, etc.

Facilities and teaching resources play an important role in the teaching and learning process in any school - even in primary schools, and in teacher training institutions.

Basic learning materials are scarce in the urban and peri-urban Mozambican primary schools. "The quality of educational facilities is often poor" (MINED, 1998).

In the interviews conducted, teacher trainers complained about the lack of teaching resources (books, textbooks and teachers' guide), more particularly in their areas of study. For example, Portuguese trainers complained about lack of grammar books, dictionaries and textbooks for primary school (from Grade 1 to 5). They said that during the OP the library of Marrere CFPP was an obligatory reference for everybody from secondary school

to university. Students from both institutions used to go to the College library because of its richness and diversity of books.

After some time several books gradually disappeared. The relevant books are now kept in boxes called “*baú pedagógico*” (see below).



**Figure 5.4** Boxes (*Baú Pedagógico*)

Nampula City is not rich in books related to the pedagogical activities. The inaccessibility of books affects the pedagogical activities because learners do not have opportunities to read. Most of the time student reading is limited to reading exercise books, which is unsatisfactory. Another constraint is that Marrere CFPP is far from Nampula City, and internal students do not have enough time to move from Marrere to Nampula City to consult books.

### 5.6.1 Textbooks and materials

Heneveld & Craig (1996:34) state the following:



“The research evidence that the use of textbooks has a significant impact on student learning is considerable. Their impact is even better when there are supplementary reading materials and when teachers have guidebooks for the texts that describe what to teach, how to teach it, and how to assess student learning.”

In the case of Marrere CFPP, the lack of student and teacher textbooks does not allow trainers the opportunities to visualise and familiarise themselves with the contents taught.

Cohen, Raudenbush & Ball (2000, 2002, and 2003) state the following:

“Researchers report that schools and teachers with the same resources do different things, with different results for learning. Resources are not self-enacting, and differences in their effects depend on differences in their use. ... Resource has no direct effects, but that their effects depend on their use.”

In this study I regard resource material as books and other teaching media such as pamphlets, etc. “Most primary school students attend school on double shifts and in urban and peri-urban areas triple shifts are common. Basic learning materials are scarce in many schools” (MINED, 1998).

In principle, “the curriculum should build on the knowledge that children bring to school; it allows regions and communities to adapt the curriculum in their schools to local demands and preferences, including the increased use of maternal languages and teacher-produced materials in the classroom” (MINED, 1998).

## **5.7 SUMMARY**

In this chapter I have discussed the 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 comprise 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.

It has been stated above that preference is given at College to the content that prospective teachers are going to teach in the near future. This means that during training special attention is given to the content which covers the Basic Education curriculum from Grade 1 to 5. This is because of the low competence acquired by the learners by the time they join the College. In addition, the entry requirements are very low. Mozambique perhaps has the lowest entry level - Grade 7 or its equivalent - to be admitted to teacher training colleges in Southern Africa. I believe that if we need good teachers, their background must be better than this. We should remember that we are living in the 21<sup>st</sup> century; entry requirements must reflect this period.

Lockheed & Verspoor (1991:115) point out the following:

“A key determinant of student achievement is the quality of training. An effective teacher should possess at least a thorough knowledge of the subject matter being taught, an appropriate repertoire of pedagogical skills, and motivation. The teaching force in many developing countries fails to meet these standards.”

Not only is mastering content important in a teacher training curriculum, but also providing the necessary tools or strategies for teachers to teach effectively in the classroom. Content and pedagogical skills complement each other. Teachers should have knowledge of subject matter and appropriate strategies to teach them.

Another important aspect is that instructional materials should be relevant to and adequate for the age and interests of the learners.

Much is still to be done before practice meets policy. It seems that changes are not being implemented effectively.



## CHAPTER 6

### TEACHERS' UNDERSTANDING OF THE NEW CURRICULUM

*The aim of this chapter is to present teacher trainers' perception of the Basic Education curriculum reform with the focus on a learner-centred approach and an interdisciplinary approach in Section 6.1. The implementation process is presented in Section 6.2 and discusses the obstacles to implementation in Section 6.2.1 and to the training process of the teacher trainer in Section 6.2.2. Key characteristics of the curriculum, namely learner-centredness (Section 6.3.1) and interdisciplinarity (Section 6.3.2) are discussed in Section 6.3. And finally, conclusions are presented in Section 6.4.*

#### 6.1 INTRODUCTION

This chapter intends to explore the teachers' views of the new curriculum reform for Basic Education, as well as to understand the concepts *learner-centred approach* and *interdisciplinary approach* as the main and fundamental part of the new curriculum for the Basic Education introduced in Mozambique in 2004. This chapter also discusses teachers' points of view on constraints to the implementation of a policy, particularly the case regarding the implementation of the new curriculum for Basic Education at Marrere CFPP.

#### 6.2 IMPLEMENTATION

##### 6.2.1 Obstacles

In the implementation process of curricular reform there are some constraints that may impair its implementation by the teachers as key agents. It means that policy rarely meets practice in classroom. In the case of Marrere CFPP, teacher trainers pointed out some constraints resulting from the process of implementation of the new curriculum, as the following quotation illustrates:

“I think that the new curriculum for Basic Education is welcome, but we are facing many problems related to teaching material. We don't even have the new books for the new curriculum. We have asked for the directorate of Marrere CFPP to contact the

directorate of Nampula City which is in charge of making the free distribution of books, but we haven't had a plausible answer yet. If only we could get the material for year threes which is having teaching practice in a near future. They will face difficulty in the teaching practice. Some schools haven't received material so far. Our school has larges classes, but not as large as those they will find when they finish their course. So they will face many difficulties.”

It must be clear that teacher trainers are worried about the lack of instructional material, namely books, because some content is complex and appears in the curriculum for the first time. It is worth remembering that the current programmes of the CFPP of Marrere were readjusted in the light of the new curriculum. There has also been an effort to reconcile teaching and learning strategies to the large number of learners in the classroom. I expected teacher trainers to mention the lack of PCEB as a basic policy document containing the philosophy of the new curriculum. This is a document that orientates users about the pedagogical implications of the new curriculum.

During the fieldwork in 2005, I observed the existence of the programme and the absence of student books in the library.

There are a reasonable number of teaching programmes available in library, namely those of the first, second and third cycle, but there is no PCEB that explains Basic Education. There are programmes for every subject, but there is a lack of books on Basic Education and the content to be taught. This scenario has changed slightly during the research conducted in 2006, as Marrere CFPP received some teacher and students' books (a reasonable number of books) for all subjects from Grade 1 to 7, which comprises Basic Education. These books were kept in the deputy office. If teacher trainers want to use any books they go the deputy office and sign a paper and get the books. This procedure prevents theft of the few books available. These materials reduced the dire need for students' and teachers' books. There is no security for making student books available to everyone in the library. As has been mentioned in Chapter 4, it is a paradox that the most significant books were “well kept” in the cases “*baú pedagógico*”. The acquisition of new books was useless because they would neither benefit the teacher trainers nor the trainees since they were kept in cases.

In summary, none of the teachers mentioned the need for a curricular plan for Basic Education as an obligatory policy document, which would prescribe the mission and

philosophy of the Basic Education System; they referred to the lack of books only. One teacher trainer said the following:

“I think that we should get only some training advice because the centre should have received the new material such as the students’ books. The trainers would then discover the most difficult areas that the trainee would face his graduation at primary school as prospective teacher.”

Teachers expected to receive instructional material relating to the new curriculum in time before implementing the new curriculum; this would help them develop the content prescribed in the new programmes. At least 15 of 26 teacher trainers interviewed at Marrere CFPP said that they had a problem concerning instructional material. It is worth mentioning that there is the lack of books to aid the teaching of each subject and of students' book.

The introduction of new content that they are not familiar with challenges the teacher. For instance, in the subject Crafts there is content such as weaving and modelling or moulding for which the teacher trainer needs the necessary literature. Teacher trainers are concerned about the fact that the materials related to the new curriculum are not treated as a major concern as the PCEB prescribes. One teacher trainer talked about the lack of literature on teaching methodologies; is worried about how the content should be taught.

It is important to highlight that when teachers were asked to talk about the new curriculum for Basic Education, they emphasised constraints, e.g. the lack of instructional material related to the new curriculum for Basic Education.

All the teachers that were interviewed confirmed that they had heard about the reform from different sources of information. Some heard about the new curriculum by participating in training in primary schools and others by participating in seminars about the new curriculum for Basic Education organised by INDE.

It is also important to focus on what the interviewed teachers said before answering the questions on curriculum reform for Basic Education in Mozambique. Some teacher trainers stated that the need for instructional material was the major constraint. They referred to student books, saying that the College had not received new student books

related to the new curriculum. Besides talking about student's books, they also referred to the lack of the teachers' books as supporting material to teach the subjects. These complaints could be considered positive because they are concerned with teaching and the management of primary school student books, with which prospective teachers must get acquainted. However, one of the major concerns of primary schools authorities is to prevent teachers from using students' books as a key instrument in the planning of their lessons. The key instruments for planning lesson are still the programme of each subject, such as the programme for Social Sciences, the programme for Natural Sciences, the programme for Mathematics, and so on.

### **6.2.2 Training**

Any curricular programme requires that those who are going to implement it be trained to be able to deal with it. Mozambique is no exception. There was a seminar for the teacher trainers of Marrere CFPP organised by INDE/MEC to prepare teacher trainers for the new curriculum.

The Deputy Director of Marrere CFPP confirmed what has been said above:

“Concerning implementation of the curriculum, we have had a week seminar facilitated by technicians from INDE. Every teacher trainer got acquainted with the Curricular Plan for Basic Education, materials for every area, programmes as well as the content of the curriculum.”

Besides the pedagogic director, three teacher trainers who participated in the study supported the deputy director when he said that there had been preparation for the introduction of the new curriculum for Basic Education. One of the preliminary actions was the seminar (2004) for all teacher trainers of Marrere facilitated by INDE, the institution that was in charge of designing the new curriculum for Basic Education. It was hosted at Marrere. The current programmes at Marrere CFPP and the programmes for Basic Education were readjusted and made compatible with the requirements of the new curriculum for Basic Education.

It means that the introduction of the new curriculum for Basic Education made it necessary to empower teacher trainers of Marrere and other primary teacher training institutions. The

seminar took place at Marrere and lasted for one week. Some teacher trainers say they participated in the seminar; others say they did not. According to the report by INDE, every teacher trainer of Marrere CFPP participated in it, and this can be evidenced by the signature of each participant. The person in charge of pedagogic affairs also says they all participated.

Although three teacher trainers said they had participated in a seminar, they did not remember the issues that were addressed. Two of them say that the seminar was too short so the content could not be elaborated on.

In my opinion the seminar was short because of financial constraints suffered by the Ministry of Education and Culture. After the seminar, teacher trainers were expected to have a more profound knowledge resulting from reading documents distributed during the seminar. Only three PCEB, which are key documents, were provided. It was expected that the institutions would make copies for each teacher trainer to have a deeper reading. The PCEBs were kept in the pedagogic office. Concerning syllabuses, teachers' own subject syllabuses were distributed to them. This might have made them place more emphasis on their own subject area. This explains why teacher trainers talked more about their own subjects.

It was also clear that most of the interviewed teachers had received information about the new curriculum for Basic Education from the Ministry of Education and Culture through the seminar.

## **6.3 KEY CHARACTERISTICS OF THE CURRICULUM**

### **6.3.1 A Learner-centred Approach**

#### **Teacher don't understand**

Before we go to what teacher trainers understand by the concept *learner-centred approach*, I would like to highlight that at least three teacher trainers did not answer these questions. They alleged that they did not know the new curriculum for Basic Education. However, this answer contradicts those of the deputy director and other teacher trainers, according to

whom every teacher trainer had taken part in the seminar that was organised by INDE on the College premises.

These trainers did not answer the question because they did not know the Basic Education curriculum. They know very little about it, but the essence of learner-centred teaching does not depend on knowing the curriculum, since in the Basic Education curriculum plan the principle of learner-centred teaching is mentioned but not developed as a concept.

### **Teacher understanding, belief and attitudes**

Let me present five quotations showing similarities and differences from teacher trainers that the researcher found most relevant to illustrate the understanding that these teacher trainers have about a learner-centred approach and its applicability at Marrere CFPP:

#### **MZG: What do you understand by a learner-centred approach?**

Learner-centred approach is an approach wherein the learner is the centre. Differently from what used to happen before, when the teacher was the great orator. In learner-centred approach there is an attempt to make the learner active. For him not to be passive, this is the present situation. The learner is only listening to the teacher, who is the great orator, explaining what he knows. The learner just listens and writes. In learner-centred approach the learner must be active and he searches for knowledge. The teacher now is a facilitator. He organises the work (teaching and learning); he gives learners an opportunity to carry on actions because knowledge, learning must start from an activity. If the learner does nothing and just listens how he is going to grasp the knowledge. The teacher organises reading and research activities, activities which lead student to searching for knowledge. The learner must be the owner of his the knowledge. Of course, there is some knowledge which is provided by the teacher, most of it must result from the learner's own research. So, that is what I understand by learner-centred approach: the learner being the owner of his own knowledge.

The teacher trainer first emphasised the role of the learner as the centre of the teaching and learning process, with the learner being an active participant. The role of the learner is no longer a passive one, as it used to be. He no longer just listens and writes down in the exercise book what he hears or is told to by the teacher. The teacher trainer shows knowledge of what is going on in Mozambique, particularly in the area of education, when he says that differently from what happened before the introduction of the new curriculum, when the teacher was the great orator and he delivered the material, now, with the new curriculum, the teacher is a facilitator and can now use the knowledge that the learner brings and his experience, he organises group work, assigns activities to get learners to

apply new knowledge. The teacher organises a range of activities from reading to research; he is responsible for developing the knowledge that the learner brings from home. The teacher trainer highlighted two important aspects in his statement, namely the teacher's role and the learner's role during the teaching and learning process in both teacher-centred and learner-centred approaches. In short, this teacher trainer shows what a learner-centred approach is by emphasising the following aspects: the role of the teacher (facilitator); the role of the learner (active participant); teaching method and strategy (group work) starting point for the teaching and learning process (take into account the experience or previous knowledge of the learner) and finally the fact that the learner is the owner of his or her own knowledge.

In the second quotation another teacher trainer expresses his idea about a learner-centred approach.

**MZG: What do you understand by a learner-centred approach?**

The learner-centred approach I understand as that process of learning in which the learner chooses what he wants to learn. The learner-centred approach has much to do with the dynamics of the learner, where the teacher already is not the one who is the holder of the proper knowledge (learning), but a teacher to orientate and help.

As can be seen, this teacher trainer emphasises the learner choosing what he or she wants to learn in class. Perhaps the learning and teaching process is impossible to manage when based on the learner's preferences or what he feels like learning. However, these two teacher trainers have something in common. For example, both teacher trainers say that the teacher is no longer the holder of the knowledge. He just directs the teaching and learning process and helps the learners. In other words, the teacher guides the teaching and learning process in the classroom. It is worth highlighting the terms that were used to characterise the role of the teacher trainer during the teaching and learning process. The former teacher trainer says he is a facilitator and the latter uses the term guider. They are essentially the same terms.

The third teacher trainer contributed the following:

**MZG: What do you understand by a learner-centred approach?**

About learner-centred teaching we can say that... the learner is the subject of study, he must have more time to speak and work. We must take the most advantages of his experience. The learner is fundamental in this teaching and learning process. The teacher just helps to mediate the teaching and learning process, however, taking advantage of the learner himself. Things didn't use to be like that. The teacher was almighty, and dictated everything to learners. Learner-centred teaching provides an opportunity for the learner to have a go, think, do many exercises and present them to the teacher so both can come to a conclusion. Everybody works towards to the most important point. The learner is the key of the lesson so he must have most of the talking in the classroom, touch, indicate, demonstrate, dramatise, illustrate, ask questions, answer them and handle the material.

This teacher trainer differs from the first one who emphasises the role of the learner and the teacher in learner-centred teaching. He emphasises only the learner's role in stating that the learner has more time to talk and perform tasks or carry out practical activities, expressing, thinking, touching, demonstrating, dramatising, illustrating, asking questions, answering them and doing several exercises and presenting them. He also emphasises the experience learners brings with him, while the teacher is a mediator.

He introduces a new term to characterise the role of the teacher during the lesson in a learner-centred approach: mediator. This term links with other terms such as *facilitator* and *guider* used to characterise the role of the teacher in the classroom. These terms refer to the same teacher's role. However, this teacher trainer is more exhaustive in describing the role of the learner. He explicated the terms *active* and *dynamic*; he mentioned the possibility to talk, experience, think, touch, demonstrate, dramatise, illustrate, ask questions, answer them, etc.

Interestingly enough, the next teacher trainers who provided the most accurate definitions of a learner-centred approach showed better knowledge of the curriculum for Basic Education; they declared that they tried to use strategies related to a learner-centred approach in the classroom. One of them went so far as to say that he did not know whether he was on the right track.

**MZG: What do you understand by a learner-centred approach?**

The learner as the participative element, therefore, is the learner who is supposed to acquire his/her knowledge. The learner-centred approach is a kind of teaching where the teacher, instead of expressing or delivering the contents along the 45 minutes, must give priority to the experiences of the students. So, he must take advantages of the



knowledge the child brings from home to develop the same child. So, he must take the child's knowledge and develop this experience I based on the present curriculum.

I think that it is a method that is possible to use in the school because no child comes from home without a minimum of knowledge. When a child leaves home he/she knows something. For example, he/she knows water, he/she has already talked about food and many aspects related to environment and the nature of where he/she lives. So it is possible to take advantage of this knowledge that the child has to develop.

I have tried to use but I don't know whether I do it well or wrongly. This is new business. We had some experience with the OP and the continued teacher training. The programmes that were being used are practically the ones that are linked to this; they were more learner-centred than teacher-centred. In our trainings in the ZIPs with the students, the activity was more learner-centred than teacher-centred. We are trying to do the same here, the same strategy and the same methodology in the classroom.

Okay, one of the strategies is the group activities, the other is bringing the subject matter to the classroom, raising some questions and the students discuss them in the classroom with the teacher. It is a strategy I have used. Or write it on the blackboard and get students to discuss.

This teacher trainer, besides emphasising the active role of the learner like the previous three interviewees, also emphasises the responsibility of the learner in the building of his or her own knowledge. He also highlights the use of the learner's existing knowledge as the starting point to develop the teaching and learning process in the classroom, instead of spending forty-five minutes exposing the content.

Those teacher trainers who provided less accurate answers to the question in case appear to be much more optimistic concerning the teaching and learning process in the classroom. They declare that they use a learner-centred approach. However, I noticed that the teacher trainers who were most cautious about a learner-centred approach are the ones who really seem to try to use participative methodologies in the classroom.

This teacher trainer believes that it is possible to use a learner-centred approach in our schools. He bases his belief on the truth that any child brings to school some experience or knowledge. He adds as an example that the learner knows water, food and many other things related to the environment he or she lives in. These experiences and knowledge need to be developed and elaborated on. In summary, he mentions three aspects that should be emphasised: the use of previous knowledge, the role of the learner (he is responsible for his own knowledge) and the teacher's role (the teacher does not expose the contents).

The fifth teacher trainer has the following perspective on the topic:

**MZG: What do you understand by a learner-centred approach?**

If everyone had the capacity to use the learner-centred approach... I think that not all teachers can do it because some bring their dogma of the content transmission system. I use the expository method. Some teachers do not use group work in the class. I think that the large number of students can be minimised by using the participative method, using group work.

In all classes it is possible to use the learner-centred approach because there is no class which does not allow for a debate. With the expository method the teacher has a lot of work and gets tired soon. With the learner-centred approach a teacher can teach 12, 13, 14, or even 20 classes without getting tired because the major work will be done by the students and the teacher just moderates.

This teacher trainer talks about group work, debates as learner's activities and refers to the teacher as a moderator. He refers to teacher exposition in the classroom but does not talk about learner activities, although it is implied that learners just listen to the teacher. But he talks about the advantages of a learner-centred approach linking it to excessively larger classes. According to him, to reduce the impact of the problem of large classes, teachers should assign group activities whereas by using the expository method the teacher gets tired. In short, this teacher trainer highlights the role of the learner and that of the teacher (moderator) in a learner-centred approach (group work) and the advantages of this approach for the large classes.

Comparing this teacher trainer with the previous one, we can say that the latter clearly explains the role of the teacher and that of the learner in both teacher-centred and learner-centred approaches but does not specify how learners become active. He does, however, manage to say that it is group work that makes learners work in the classroom. Neither of the last two respondents refers to learners' previous knowledge in the teaching and learning process.

Concerning the role of the teacher, one teacher trainer says he is a facilitator and the other says he is a moderator. Essentially they mean the same thing. In a learner-centred approach the teacher guides the lesson in the classroom.

In short, all teacher trainers made reference to the role of the teacher and that of the learner. The terms used to characterise this role are *facilitator*, *guider*, *moderator* and *mediator*.

To summarise, teacher trainers view a learner-centred approach in terms of the role of the teacher and learners, methods used in classroom and the use of previous knowledge by the teacher. However, most of them view it in terms of the role of the teacher and use terms like *facilitator*, *mediator*, *moderator*, *guider*, and *controller* to characterise their roles. In order to prove that they understand the term *learner-centred approach*, they also mentioned some methods they use during the teaching and learning process and said they avoid expository methods that characterise a traditional lesson or teacher-centred lesson. They further mentioned that in a learner-centred approach teachers are not seen as having great wisdom or being the great orator, rather as the person who is going to facilitate the classroom activities as a whole; the existing knowledge that learners bring to school must serve as a departing point for the course of the lesson. It shows that teachers must take into account learner experience in developing their lesson. Finally, they pointed out relevant practical activities to acquire knowledge.

The teacher trainers who participated in the study view learners as active agents in the teaching and learning process in a learner-centred approach. Learners must be dynamic, creative and active agents; this is different from the traditional lesson, where a teacher dominated the entire lesson during the teaching and learning process. During the class, learners can experiment, i.e. do practical activities, can touch, manipulate things or objects, demonstrate, illustrate, ask questions, answer questions, and reflect. In summary, learners make the class or lesson (the student is the maker of the class). In a learner-centred approach, the existing knowledge possessed by the learner is emphasised. It means that a learner does not have an empty head, he/she is not a *tabula rasa* but has some knowledge that he/she brings from home. Learners discover and build knowledge through investigation or research. During the teaching and learning process learners reflect and at same time they are agents of the teaching and learning process.

### **Teaching methods**

Most of the interviewed teachers pointed out that group work was a first teaching method used in their classrooms and sometimes a unique method used in order to involve learners

during the class. It seems that a learner-centred approach is synonymous to group work. However, they mentioned other strategies used in the classroom such as asking questions, independent work, etc. Van Graan (1998) in her study *Learner-centred Education: equal to group work?* concluded that it seems that when one talks to teachers about learner-centred education, the single method that is immediately connected with the approach is group work.

I could learn the following lesson from the classes I have observed: most of the teacher trainers try to use one of the strategies of a learner-centred approach. I found that the teacher trainers do not follow up wrong answers supplied by the learners. When a learner gives a wrong answer to a question, the teacher trainer chooses another learner to answer it until he or she gets the correct answer. However, he does nothing with the wrong answers. I found that the learners' participation was spontaneous and those whose answers were wrong tended to become shy; their spontaneity tended to be affected.

From the answers supplied by the respondents it can be concluded that they do not have the same background about the new curriculum for Basic Education because some of them were involved in its dissemination and others were not. Some trainers work directly with OP and other not.

At the pedagogical level, classroom practice is emphasised. The interviewed teachers said that this curriculum differs from the former in that the strategies stressed by the new curriculum for Basic Education focus on the use of participative methods in the classroom. This comment suggests a more active learner participation in the teaching and learning process. This means that new strategies are needed in order to make learners participate actively in the teaching and learning process in the classroom.

### **Similarities and differences**

The above-mentioned five teacher trainer perspectives on a learner-centred approach have only one aspect in common, namely the teacher's role (facilitator, mediator, guider, etc). As can be seen, there are few similarities and more differences as explained below.

Trainers had a clear idea concerning policy - what it was and what it should be in the teaching and learning process, what the process was before curriculum reform and after the

reform of Basic Education, what the role of the teacher and that of the learner was before and what it should be after the reform. They unequivocally declared that the changes were effected at policy document level, since we are talking at theoretical level. There is no doubt the classroom practice was teacher-centred, but mentioning that teaching should be learner-centred does not mean that that it really happens in the classroom. It is a question of the relation between policy and practice. This will be discussed in Chapter 7.

Not one teacher trainer could give a complete definition of the term *learner-centred approach*. One gave a broad definition and talked about the role of the learner and the other pointed out the strategies that must be used to make the lesson dynamic. In general, the role of the learner and teacher in the learner-centred teaching process was also mentioned.

During the interviews some teacher trainers said that they were neutral about whether the lectures they presented were learner-centred or not; some indicated that they believed that the lectures were learner-centred, while others said they were not sure whether they were learner-centred.

Many teacher trainers believe that their lessons are learner-centred. However, three teacher trainers questioned themselves whether the approach they used was really learner-centred. For learner-centred teaching much material must be planned and used; this includes making photocopies and distributing handouts.

### **6.3.2 An interdisciplinary versus an integrated approach**

#### **Teacher trainers don't understand**

At least six teacher trainers did not know the terms *interdisciplinary and integrated approach*, so they could not say what it is. These are some of the answers to the question:

**MZG: What do you understand by interdisciplinarity?**

What?

**MZG: What do you understand by interdisciplinarity?**

Sorry, I do not know what that is ...

**MZG: What do you understand by interdisciplinarity?**

I cannot answer that now.

**MZG: What do you understand by interdisciplinarity?**

I do not know. I would need to read before I answer that, I will not answer that question.

In short, it can be said that some teacher trainers did not know the concept or term. In this research respondents were not supposed that to prepare for the interviews.

As mentioned in Chapter 3, *interdisciplinarity* was used and defined by the teacher trainers as being synonymous to *integrated approach*. The following two quotations provide evidence:

**MZG: What do you understand by interdisciplinarity?**

Integrated content approach is what we call interdisciplinary. So I think that I might also already use it. For example, In Science I tell my students to make a drawing, when they do it they take the knowledge from natural science. When I am introducing a theme and I tell a story or I sing song, it means that I am integrating visual education and musical education.

**MZG: What do you understand by interdisciplinarity?**

Integrated content approach is an approach where there is interdisciplinarity. For example, when I am teaching Portuguese I mention some terms belonging to other subjects. There terms that can be used for geography or history, etc. In a Portuguese class we must not only approach what constitutes linguistics, but we must also take into consideration these phenomena - history; science; geography; culture; morality. They must be introduced whenever necessary. The teacher must refer to all these concepts.

The above extracts are examples of the use of interdisciplinarity/integrated approach as synonyms. At least seven teacher trainers used them as synonyms. Apart from this, there is one teacher trainer who said that a spiral approach was synonymous to interdisciplinarity/integrated approach. This shows that there is no consistency in teacher trainers' use of vital terminology.

One teacher trainer, who is a Portuguese teacher, says that he can, for example, mention some terms that belong to other subjects, namely Geography or History. He adds that in

Portuguese he teaches not only Portuguese content but also content of History, Geography, Culture and Science. He also says that these aspects must be introduced whenever necessary in the teaching and learning process. From the trainer's comment it can be deduced that he considers the mere mentioning of terms relating to another subject as interdisciplinarity.

The above example illustrates that an interdisciplinary and integrated approach are the same thing. This notion is shared by two teacher trainers. Perhaps the second common aspect between them is the superficial definition of interdisciplinarity/integrated approach. It is logical that during the teaching and learning process terms belonging to other areas or subjects can be used. That is, for example, why the Portuguese teacher says that in teaching Portuguese, if students are asked to write the words *animal, man, plant, stone*, etc. he is integrating Natural Sciences. Using terms belonging to other knowledge areas does not by itself constitute interdisciplinarity or an integrated approach. The next teacher trainer, who was much more elaborate, based his perception of integrated approach on themes like plants and the human body:

**MZG: Tell me what you understand of an integrated content approach?**

I think that this integrated approach was good. In fact this approach was already used before. We said it is an innovation, but it is not. It is not actually innovation. We always talked about it. Although it was not written as an orientation, we talked about it. Even in the previous curricula. It is not possible for a teacher of Portuguese not to talk about science whether it has been planned or not. In the process of communication he will mention aspects of other fields, for example of natural science, namely the human body. When talking he mentions the human body, plants. This is all part of communication. It is all integrated. In general I think it was well designed. Learner do not learn as if they were keeping things in drawers; one mathematics drawer, then they close it and open another drawer. Learners learn everything at the same time. They learn mathematics at the same time they learn Portuguese. After all, whatever is spoken about in natural science, the names, are in Portuguese or any other language. So learners end up learning Portuguese in a math's class; math in science classes, in a Portuguese class. So integration has always existed. Teachers were not aware of it. Sometimes teachers do not have capacity to explore it to the utmost. Sometimes a teacher is talking about leaves in natural science and they should take advantage and talk about colours (dice) and aesthetics, the beauty of the leaves, their shape. So, in terms of maths, the size. Sometimes they can't explore it. These are positive aspects. They are necessary for an integrated approach, because as far as I know everything is related. Because there is a repetition. What a learner learn in maths, a science teacher can also teach. So this repetition helps to memorise it.

Another idea that was defended by this teacher trainer is that in any lesson there is interdisciplinarity. This is not true. This would be saying that a lesson delivered anywhere

is within the scope of an interdisciplinary approach. This is a simplistic view of seeing the concept.

This teacher trainer introduces a new element: that children learn as if they were opening drawers, filling them and then opening another, filling it and so on. He confuses the compartmentalisation of subjects and an interdisciplinary approach.

However, this teacher trainer says that interdisciplinarity is the philosophy of OP and that it is rarely practised at Marrere CFPP. This statement refutes the point of view of the other teacher trainer that interdisciplinarity is always present in every lesson. In fact, each teacher trainer is concerned with his own subject. He adds to say that HIV/AIDS and environment content are cross-curricular issues. It is true that the existing curriculum has some content considered to be cross curricular issues that must be covered in every subject. Examples are HIV/AIDS, environmental studies, etc.

“The cross cutting issues which emerge from curricular plan for teacher training institutions are: education of values, human rights, gender and democracy; reproductive and sexual health (ITS, HIV/SIDA), school health (first aid, most frequent disease in the school ages, nutrition, drugs and alcohol prevention and environment education) ...” (Guro & Lauchande, 2007).

This teacher trainer started by saying that he thought that the introduction of integrated teaching in the Basic Education in Mozambique was good. He added that the use of an integrated approach to content is not new because it has been used before in the classroom and that they have always talked about it though it had not been formulated in writing. He was of the opinion that it was impossible for a Portuguese teacher not to talk about science, regardless of whether it has been planned or not.

That is because during the communication process he would mention some aspects from other fields of knowledge; he cited Natural Science as an example, more specifically the human body and plants. All this is part of communication and thus the content of these themes is integrated. He said that learners do not learn content as in compartments: a drawer for Mathematics, one for Portuguese, and so on. In fact, learners learn Portuguese and Mathematics simultaneously. He called attention to the fact that the teacher was not always aware of this fact. That was why sometimes some teachers could not follow this approach.



In contrast to the previous teacher trainer, he mentioned the fact that an integrated approach was the philosophy of the OP. However, he thought that this approach was implemented. According to him teacher trainers were more worried about the subjects they taught. They should plan cross-curricular activities.

**MZG: Tell me what you understand of an integrated content approach?**

This is the philosophy of this project. But here in the centre I think we rarely use (d) the integrated approach. We are much more concentrated on the subject itself. We can (should) have a **cross cutting vision** of contents, but we haven't paid much attention because I see in the work that is done in the ZIPs, in our work, one of our colleagues from any field goes there with all integrated approach of the contents, but here in the centre each one teaches something of his own field, except for once and a while when, in a **cross cutting way, they quickly mention of other fields contents**. Maybe he/she touches those aspects of actuality related to AIDS, we can talk about it, environment, but it is not traditional we only do that once in a while.

Yes, for example we saw in maths methodology it is impossible to integrate psychology elements. So I think that interdisciplinarity is present in every class regardless of the subject.

This teacher trainer said that interdisciplinarity was always present in any lesson; however, in the methodology of Mathematics it was impossible to integrate Psychology content.

**MZG: Tell me what you understand of an integrated content approach?**

We had subjects I would call compartmentalised subjects; however, in fact they are not, something has been changed. For example, Social science subject is not compartmentalised. One of the advantages of non compartmentalisation is that learners will know that knowledge is not isolated and that subjects need to collaborate, they need to mobilise knowledge from one another subject.

When I am in a Portuguese class surely I am not only going to teach Portuguese, there is something else I use from other subjects to integrate in this subject area. For example, when I am teaching Portuguese and I ask students how many types of sentences they know and they say four types, we have mathematics in this case. When they name the types of sentences we are also using maths. I may also ask them "How is the weather today?" "Is it good or bad?" "How is the sun?" "How is the sky?" students may say we are fine because the weather is humid. We are talking about geography, but I am teaching Portuguese.

What I understand by *integrated contents approach* is that in a subject such as maths, for example, as the teacher teaches maths content it is possible to use content from other areas and integrate them in maths. I as a maths teacher may intervene on language-related issues. Well, in a maths class we can talk about basic vocabulary, for example. There are terms which are applicable either to maths or to language. We can also integrate social science, for example, when we talk about the statistics of the population activities, for example. So we integrate in maths issues of population density. It is one of the examples related to other areas.

Two teacher trainers believed that interdisciplinarity was present in any lesson or in almost every lesson. The following quotation is just an example:

**MZG: Tell me what you understand of an integrated content approach?**

“Talking about an integrated approach is talking about what we have mentioned in what we call spiral ... when addressing the content we find some integration. Content of one subject is related to content of another subject. When we address the content of that subject we must not forget the responsibility to talk about content of other subjects. We might find it difficult to address the contents of other subjects but we must address them and show the *integrality* of these contents with those of other subjects. I am talking about science and social science, and we must show them that this is a science and we may need to make calculus... that is math and social science. These subjects are related and therefore there is integration and interdisciplinarity.”

The findings on these issues show us that most of the teachers have very superficial knowledge of interdisciplinarity and they regard an integrated approach as synonymous to interdisciplinarity. For example, when they were asked to give some examples on their own subject we got answers such as, “When I teach Maths I use Portuguese to teach it. This is integration of Portuguese in the Mathematics class.” As we can see in this case, there is no doubt that Portuguese is used as medium of instruction.

The lack of common understanding of this concept makes it difficult to disseminate information on teaching in a training session or seminar at the college. For example, a Namibian document, which serves as policy for education, clearly states in many pages what is meant by a learner-centred approach. It is believed that it will be difficult to implement change in the curriculum if the change agents do not understand basic educational terminology. Policy makers and policy documents have stated clearly what changes should be made in the curriculum during the reform.

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

Various sources of collecting information were employed, such as interviews, observation, papers and articles.

It has been highlighted that the new curriculum for Basic Education is welcome, but there are some constraints which hinder the successful implementation of the process. I refer to the provision of the curricular plan for Basic Education as a law which guides the subject programmes. No teacher trainer referred to the lack of the curricular plan for Basic Education (PCEB) which justifies the reason why this new curriculum was designed. Theoretical concepts such as such as *semi-automatic promotion* emerged from the philosophy behind the design of the new curriculum for Basic Education. Automatic promotion is linked to formative assessment. This aspect will deal be dealt with in Chapter 8.

In short, it can be concluded that each teacher trainer understands the concepts in his or her own way and according to their own professional experiences. This is due to the fact that there is no official document from the Ministry of Education clarifying concepts and principles that appear in the curriculum so that people can share the same understanding of the concepts.

#### **6.4 CONCLUSIONS**

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."

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

### **A learner-centred approach vs. participative methods**

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. The first innovation in the new curriculum is the use of 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, dramatise, 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**

Seven teacher trainers said that interdisciplinarity and an integrated approach were synonymous. Two of them said that there was interdisciplinarity in every lesson, regardless of the subject. There was a contradiction among some teacher trainers, evidence of lack of clarity about the concepts under study. Besides regarding interdisciplinarity and integrated approach as synonymous, 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.

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).

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 who have to implement change.

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.

Respondents pointed out a lack of material, such as a curricular plan for Basic Education and inadequate primary school programmes as major constraints in following and implementing the innovations 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 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 the object of his learning. The learner is active in his/her learning. A learner is supposed to work in groups with instructional material.

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. The next chapter is devoted to the teaching practice at the College.

Some trainers say that the curriculum for Basic Education does not have many innovations; 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 ratio, for example, is one teacher per 100 students and they agree it 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 delivered 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.

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.

The next chapter is devoted to classroom practice at Marrere CFPP.

## CHAPTER 7

### TEACHING METHODS AND CLASSROOM PRACTICE

*The aim of this chapter is to present and discuss the main teaching styles at Marrere CFPP. Section 7.1 introduces main points to be addressed or covered in this chapter. Classroom organisation and the main features followed are discussed in Section 7.2. The lecture as teaching method will be addressed and discussed in Section 7.3 and discussion as a method will be presented and discussed in Section 7.4. Group work as a method will be presented and discussed in Section 7.5. Section 7.6 presents a conclusion to the chapter.*

*“... 'best practice' is assumed to be learner-centred (where curriculum and pedagogy are based on learner interests and experience) and geared to assisting learners to do things within their particular, localised contexts” (Gultig, 1999:59).*

#### 7.1 INTRODUCTION

The review of the literature in Chapter 2 shows that policy is rarely implemented in classrooms as policymakers intend it to be. Teachers as change agents are seen as the key factor in the implementation of the proposed changes.

In this chapter I will present three different teaching styles, namely *lecture*, *discussion* and *group work*. They will be discussed because by doing so it can be illustrated what is going on at Marrere CFPP in relation to the basic Education reform, more particularly, to a learner-centred approach. In other words, it is intended to stress the classroom practice in terms of what teaching strategies and methods are used in classroom, how lecturers teach and if the practice can be improved. I will refer to the teaching media used in each class and to its organisation.

The classes that are described in this chapter have been selected among the several (24) that were observed by the researcher in the company of the deputy director (see Chapter 3). The lessons chosen help answer the research questions. In other words, they address problems posed in the research questions. The choice has much to do with the observation guide (appendix - teaching methods, participative methods, didactic materials, interaction



teacher pupil, and classroom organization) as well as the main happenings in all the classes observed. Most of the classes had common characteristics, namely the teacher-centred teaching based on questions and answers without teaching materials. The psycho-pedagogy class should be highlighted, which was chosen for the same theme having been taught by two teacher trainers differently. One class was more teacher-centred and the other more learner-centred and was based on group work in a number of four trainees each. I found this class representative either for teacher-centred teaching or for learner-centred teaching. Finally, for discussion, only one class was chosen among the ones that were observed. It is important to comment on it as a strategy that occurred (discussion, question and answer, problem solving, the teaching and learning in the classroom and discussion). In summary, the lesson was chosen in order to show the general picture of the main strategies followed during teaching and learning process at Marrere CFPP.

Before going ahead, I will present a brief and general description of the classroom where the classes took place in order to give a general picture of the physical and classroom environment.

## **7.2 CLASSROOM ORGANISATION AND MAIN FEATURES**

Basically classrooms differ in terms of size, furniture (chairs and table) and illumination conditions. There are four types of classrooms: small, medium, big and very big (saloon) classrooms. There are only double desks, some are joined to the chairs and others are not.

In small classrooms the teaching environment is less appropriate because there are too many learners in them. The first learners of each row are too close to the blackboard and there is not enough room for the teacher trainer to move. Also, too many people in a small room reduce the air supply and the classrooms become stuffy; as a consequence breathing becomes difficult.

The Marrere CFPP has some classes located outside their own premises due to the number of learners and the lack of classrooms. The College had to negotiate with a neighbouring primary school located 50 metres away from the College premises and was awarded two classrooms for two year-three classes. The 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. The hall (saloon) which was intended for housing theatre and cultural activities was also used as a classroom and it accommodated 82 students. Finally, the library/resource centre was divided into, two using a piece of carpet and one of the rooms was used a classroom.

This was done with a view to accommodating all learners, from year 1 to year 3, and to presenting their classes in the morning. Classes begin at 07:00 and finish at 13:00, from Monday to Friday. The classrooms differ from one another in terms of size, desks, and the number of tables and chairs inside them.

All classrooms are organised in the traditional manner: the blackboard is in front and is stuck to the wall; the chairs and tables are generally organised in four rows. No posters are found in the classroom except for two classrooms which had a piece of paper with the group organisation of the class written on it, stuck on the wall.

### 7.2.1 Brief characterisation of the classroom

When talking about the characteristics of some classrooms in terms of size, it is important to mention that classrooms differ from one another in terms of length and width. Here are some examples of the measurements of some classrooms. The following numbers refer only to the classrooms that were physically located at the College because at least two classes were attending lessons at an annex school nears the College (see Table 7.1 below).

**Table 7.1**

*Classroom measurements at Marrere CFPP*

Measure	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Room 7
Length	9.20 m	9.20 m	9.20 m	9.20 m	9.20 m	9.20 m	9.20 m
Width	5.10 m	5.10 m	5.10 m	5.10 m	9.10 m	9.10 m	25 m

Classroom sizes differ 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.

### 7.3 LECTURE ANALYSIS

#### **Classroom organisation and composition**

The lesson observed was a pedagogy lesson in the hall (saloon). Before the class began, the teacher took the register by numbers, not by names. A student was absent and the teacher asked if he was ill or not. No one could tell if he was absent for health or for any other reason.

#### **The Topic was “Fundamental Concepts used in Pedagogy”**

**Instructional materials:** Chalkboard and chalk. Other instructional materials such as textbooks, handouts and newspapers were absent.

The key concepts to be learnt were written on chalkboard; these were *learning, teaching, instruction and education*, as can be seen bellow:

1. Learning is holding knowledge, retaining something, acquiring knowledge and keeping it in the memory.
2. Teaching means conveying something, knowledge, experience, skills to others.
3. Instruction is a teaching process that is concerned with practical aspects of education or a teaching process that deals with the practical aspects of education. It guarantees that each person gets capacity to perform several activities that are necessary for the development of personality. We characterise instruction in teaching as a joint work by the teacher and the learner, according to a determined plan, in a determined place and time, where the teacher teaches, organises and directs the teaching.
4. Education is a social process aiming at preparing people for life and work. It focuses on working, production and life experience. Education is also the process of personality building for life and work in society. It is a social process, the aim of which is to prepare man to live and work. Education is also the process of personality building for life and work in the society.

The lesson followed the same order of the concepts written on the chalkboard, namely what is learning, teaching, instruction and education. The main strategy adopted by the

teacher trainer for developing each concept was asking many questions to the class as a whole and getting answers from it.

One concept was developed and, after that, the teacher trainer provided the definition and trainees wrote it down while the trainer dictated. Then he moved to the next concept and so on. It should be noted that as the trainees were giving their answers the teacher trainer wrote the key words on the blackboard and moved to the next concept and so on, up to the end of the lesson. The questions were directed at the entire class; then the teacher trainer pointed out someone who had put up his/her hand. Sometimes only one trainee had his/her hand up and others several times.

The trainer was good at writing on the chalkboard. The size of the letters was big enough for the learners to see. His chalkboard writing skills exemplified best practice.

The motivation for the lesson started with revision of the previous lesson's content, with the following question: "Who remembers what the necessary conditions for learning to take place are?" Trainees provided their answers voluntarily. Among the answers given by the learners were the following:

Good relations between learners and teacher are one of the conditions for learning to take place.

Age is a necessary condition for learning to take place.

The psychological conditions are also important for learning to take place.

Maturity and repetition.

Learners kept on giving their answers as the teacher trainer was eliciting more conditions. To the third answer provided by the trainees, the teacher trainer got annoyed, and raised his voice and said the following: "Please, ladies." He seemed disgusted with some answers provided by trainees for not meeting his expectations, as well as being nervous about our presence. He expected a good performance from the trainees, which would somehow impress us. This attitude might have affected trainees, inhibiting them to participate spontaneously. The fact that he interacted with the same trainees most of the time may account for this. Only those who were absolutely sure that what they were saying was correct, participated.

It is worth highlighting that when the teacher trainer dictated the concept “teaching”, the word *outrem* (another person) appeared in the concept. When the teacher trainer found out that trainees were not familiar with the word, he asked how it was spelt. One volunteer went to the board and wrote it correctly. Then the teacher thanked him/her as the example below illustrates:

**Teacher trainer:** How do you write this word?

**Trainee:** *Outrem* (another person)

**Teacher Trainer:** Thank you.

This is an example of exemplary teacher trainer attitude. It encourages other trainees to participate. It is rare for teacher trainers to do so. However, it seems to be a casual attitude because in all other cases his attitude was the same for wrong and correct answers.

Another example of the teacher trainer’s attitude was when he asked if trainees had doubts after the third concept; he said that the trainees should have the habit of expressing their doubts in the classroom so that he could help them. The learners did not take long to respond. One learner asked about the meaning of a word he had written on the blackboard. “What is the meaning of *outrem*?” The teacher said that the question was not for him to answer but the whole class. A learner said that that meant “*uma outra pessoa*” (another person). See the example bellow:

**Learner:** What is the meaning of *outrem*?

**Trainer:** This undoubtedly is not for me; it is for the class.

**Learner:** It means *outra pessoa* (another person).

**Trainer:** Are there any more doubts?

Advising trainees not to take doubts home is a praiseworthy attitude. It is part of a teacher's job description to clear any doubts learners might have in the classroom. However, some trainees feel shy to say when they have doubts.

It is also worth highlighting that during the lesson the teacher trainer asked several questions, some of which were not correctly answered and he said he did not agree with

the answers provided by individual trainees. He then asked the whole class to answer, as the example below illustrates:

**Trainer:** When did education come to existence?

**Learner:** Education came to existence at the beginning of humanity.

**Trainer:** Does anyone have a different idea? I don't agree with the answer myself.

**Learner:** Since our childhood.

**Trainer:** Where did it come to existence? Was it in early Greece or where?

**Trainer:** So what is education?

**Learner:** It is a permanent process.

The teacher's saying overtly that he does not like the trainee's answers and him not correcting the wrong answers inhibit trainees to participate. The teacher trainer does not value trainees' efforts and participation. This attitude is in contrast with that described before, when he thanked a trainee. That is why the first example is termed casual. This behaviour should be abandoned because trainees might act in the same way in the future as prospective teacher in primary schools. Mahaye & Jacobs (2004:191) say the following:

“A common weakness of incompetent teachers is that they disregard the reaction stage; in other words, they fail to give feedback after the learner has responded and merely ask another question of another learner. If a teacher consistently fails to react to responses, it creates an atmosphere in which learners are reluctant to answer questions because the teacher does not acknowledge their efforts and seems not to even listen to their answers.”

In addition,

“There are times when learners give incorrect answers which need to be corrected by the teacher. In correcting the learner, the teacher should guard against hurting the learner's feelings because it may result in resentment or withdrawal. For example, a learner may feel hurt when the teacher reacts by saying: you are wrong! That is very bad! Learners should be made to feel that the criticism is directed at the answer and not at them. They need to be told that the answer is incorrect in a way that keeps them interested in the discussion and does not discourage future participation” (Mahaye & Jacobs, 2004:193).

It should be emphasised that the teacher trainer did summarise the main points of the lecture. According to Killen (2007), a teacher at the end of any lesson must “give an adequate summary of the main points of the lesson.”

Sometimes the trainer tried to link concepts to the life world of the learner. For example, he showed how the problem of teachers lacking psycho-pedagogic training negatively influences the teaching and learning process in the classroom, in particular in Basic Education in Mozambique. This is a problem for many teachers without psycho-pedagogic training in Mozambique. By referring to this issue, the teacher trainer intended to show that it is important for a teacher to have psycho-pedagogic training. He demonstrated that he was aware of the problem of a lack of trained teachers in the country, especially at Basic Education level. A teacher without methodological training, however good he or she may be in terms of knowledge of the contents, will most probably fail to convey the content adequately, because he or she lacks the appropriate strategies and techniques. As a consequence, the improvement of the quality of education that is one of the objectives of the strategic plan of the Ministry of Education will be jeopardised.

The same learners kept answering the questions but the teacher did not say anything. The class was designed jointly, based on question-and-answer. In my opinion, the teacher could have delivered the lesson better than he did. It would have been better if the teacher had brought a text on the issue for learners to read and discuss in groups and later make a synthesis of the relevant issues covered in the lesson.

During the lesson the teacher trainer, seeing that the same people kept on putting their hands up, said: “Please, it must not be the same learners that answer the questions.” Unfortunately it kept on being the same learners who answered the questions and he said nothing. He conformed to the situation. The teacher-learner interaction was limited to the teacher and the few learners who answered the questions; the remaining learners had a passive role, though they exchanged ideas among themselves. One praiseworthy aspect is the fact that the teacher praised the learner who went to the chalkboard to write the word “*outrem*” correctly. “Thank you for writing the word *outrem* on the chalkboard”, said the teacher trainer. Almost nobody knew its meaning. Praise is rarely given.

The lesson ended with homework with questions such as the following:

1. Define education in both narrow and broad senses, using your own words.
2. Why is it said that education is a personality building process?
3. What do you understand by instruction?



4. What is the relation between learning and teaching?

In summary, the lesson described above had the following main activities:

- Teacher asked questions
- Learners answered questions
- Teacher wrote notes on the chalkboard
- Teacher dictated
- Learners wrote in their exercise books.

Judging by the previous scenario, it is clear that the lesson was teacher-centred. He did most of the talking and dominated the questions and answers from the beginning to the end of the lesson. The question-and-answer to the whole class was a strategy complemented by the teacher writing on the chalkboard, explaining and dictating to learners. In other words, the lesson was based on questions formulated by the teacher trainer and answers provided by the learners, although a few questions were asked among learners. Finally, learners wrote in their exercise books the concepts dictated by the trainer. Before the end of the lesson, the trainer did not summarise the main points to be fixed by the learners. Mahaye & Jacobs (2004:203) state the following:

“The teacher can write the important points from a textbooks or lecture on the chalkboard before the lesson. To write on the board while the lesson is in progress is detrimental to class discipline because the learner’s become restless and rowdy when a teacher turns his or her back to the class for longer than a minute. It is a good idea to tell the learner’s to copy notes from the board and to expect learners to study this material as minimum knowledge.”

However, some aspects are obviously strengths and others weaknesses, as can be seen below:

**Strengths**

- Revision of the previous lesson before introducing the new lesson.
- Clear handwriting on the board.
- The fact that he assigned homework and the questions demand students to think because trainees had to answer them using their own words.
- The teacher’s mentioning that the same learners should not dominate the discussion.

- The teacher's asking if students had doubts and writing the difficult word on the board and asking its meaning.
- The teacher trainer noticed that there was a word (*outrem*) with which the learner might not be familiar with and asked them how they spelt it.
- The student answers were written on the chalkboard.
- There are great moments in this lesson that deserve highlighting. One of the first moments is the revision of the previously mastered content before introducing the new topic. In other words, motivation was about the previous lesson's issues.

### **Weaknesses**

The weak points of this lesson are the fact that the teacher trainer did not take handouts to the classroom for the students to broaden the content as well as the absence of bibliography for further reading. The fact that the teacher trainer dictated the materials from his exercise book, probably the one he used as a student, is another negative aspect. Dictating material is time-consuming and learners have difficulty writing, apart from the fact that they write slowly. If the teacher trainer had brought handouts there would be no need to waste time writing difficult words on the blackboard.

Only the same trainees participated and kept on answering all the questions. The teacher-learner interaction was restricted to a very small group of learners and the others continued to feel shy.

He did not summarise what he had taught at the end of the lesson.

The teacher asked a question about when and where education originated for the first time. He moved to another question without answering the question.

Another lesson with the same characteristics in which the teaching was teacher-centred is now analysed.

### **Classroom organisation and composition**

It was a Mathematics lesson presented in the classroom (room 1). The classroom was arranged in six rows of desks and there were four desks in each row. The classroom was traditionally organised. It is one of the classrooms that was divided into two, so it was so

small and the students were too close to one another and could not feel at ease. The light was good. So students were sitting in pairs, with 49 students present in the classroom.

**Topic: Conventional model**

Instructional material: chalkboard and chalk

**Non-conventional measurement**

Rope, Steps, Palms and Jumps

Non-conventional measurement does not have a fixed measure.

**Conventional measurement**

The main unit: metre (m)

Sub-multiples: decimetre (dm), centimetre (cm) and millimetre (mm)

Multiples: kilometre (km), hectometre (hm) and decametre (dam)

**Table 7.2**

*Summary of multiples and sub-multiples of metre*

<b>Multiples</b>	<b>The main unit</b>	<b>Sub-multiples</b>
Kilometre (km)	Metre (m)	Decimetre (dm)
Hectometre (hm)	M	Centimetre (cm)
Decametre (dam)	M	Millimetre (mm)

It was a question-and-answer-based lesson. The teacher trainer questioned the whole class. The teacher trainer indicated the trainee to answer the question from a group who had put up their hands. At first, during motivation, trainees were taken to the front to demonstrate for others to see. It was emotive because learners participated spontaneously. This may be because the content was familiar. Almost at the end of the lesson the trainee asked the learners to work in pairs to solve some problems. These exercises had as objective for the learners to make conversion as the example below illustrates:

1. Complete the following exercise:

A	1 m =	_____	Km
B	1 m =	_____	Hm
C	1 m =	_____	Dam
D	1 m =	_____	Dm
E	1 m =	_____	Cm
F	1 m =	_____	Mm

It should be highlighted that it was not necessary to move the learners to do the exercise in pairs because they were already sitting in pairs. The teacher just passed from desk to desk and explained any doubts the students had. There were some pairs with doubts and they were supported and kept on working.

The pair work was well organised. There was no other alternative because the desks could not be moved. The teacher moved from desk to desk checking the students' work. Some pairs asked the teacher to explain something.

Of all teaching strategies used the predominant one was question-and-answer. Apart from question-and-answer, the trainer used explanations on the chalkboard, demonstrations and pair work.

In this lesson on teaching the length unit, the teacher preferred to motivate the learners by starting with non-conventional measures. The Mathematics teacher decided to use the knowledge the learners had as the starting point and then moved to the new content. The teacher was successful. Several non-conventional measures were identified, namely rope, steps, palm and jumps. He then introduced the new topic by discussing how tall people are. Women are different from men; younger people are different from older people. That is to say that spans, jumps and steps are different from person to person. For example, people who are taller tend to have their span and steps longer and their jumps higher than those of shorter people. For this reason, we need to have a universal exact measure to be used everywhere in the world. Thus the length measure unit was invented.

**Trainer:** After the research there was the need to standardise it for its use worldwide. What do you call this measure?

**Learner:** length measure unit.

**Trainer:** so the topic today is...Length unit

You mentioned that the universal measure is the metre

**Learner:** Metre

**Trainer:** Metre has its sub-multiples. Let us organise them.

**Trainer:** I don't know that multiple. I don't know them.

**Learner:** There was a volunteer for the blackboard.

**Trainer:** What is the symbol? Think on the symbol of decametre.

Unfortunately, during that class there were some problems of learners answering in chorus. The teacher said nothing about it. The teacher should have told the students that whenever they felt like answering any question, they should raise their hands and he would indicate which learner should answer. Prospective teachers should be warned not to allow answering in chorus in their own classes.

In short, the Mathematics class had three important moments: motivation, development and pair work. At the end the teacher trainee assigned homework to the students. The teacher succeeded with motivation, based on the learners' existing knowledge.

The participation was moderately good and spontaneous. The teacher-learner interaction was exemplary. The only problem was that the teacher did not use visual teaching media. The teacher trainer should have brought a tape measure to make things much more concrete and asked a learner to measure some learners with different heights or even the length of some objects in the classroom. By doing so, the learners would have had a more concrete idea of the length measure and would know how to use a tape measure.

Finally, the teacher listed books for the students to refer to when doing the homework. In other words, he wrote the page numbers of the pages the students should read on the blackboard. It was an effective procedure. However, the teacher should have written the full reference on the chalkboard: the author's name, title, publisher, etc. Showing the book to the students at a distance is not enough.

The instructional material used in the classroom consisted of chalkboard and chalk. I think that the teacher could have used other teaching media such as photocopies (handout textbooks), metric tape, etc. as teaching media. A tape measure would have been very useful because students would visualise the difference between metres and centimetres, etc. The main length unit measure is the metre and a tape measure would be good for a better illustration. Lack of illustration and concretisation is one of the concerns of Basic Education in Mozambique.

Whenever possible, teachers should provide visual cues because it makes learning and remembering easier for students. In this case, the correct choice of media would enable the learners to see, touch and use a tape measure. For lack of the real object, a visual image can be used rather than learners' imagination only.

Practising these principles should begin right from the start of teachers' training. This will guarantee that prospective teachers will become familiar with sound didactic theory.

The lesson was dominated by question-and-answer. It can be said that question-and-answer was the predominant strategy in this lesson and this was complemented by writing and explanation on the chalkboard, although the teacher used pair work at the end of the lesson to solve the problems displayed on the chalkboard. These dealt with reducing from one measure to another. From the beginning to the end the lesson was teacher-centred and not learner-centred. Because question-and-answer is not equivalent to discussion (Killen, 2007:134) the lesson was teacher-centred. The fact that pair work was implemented does not mean that the lesson was learner-centred. What accounts for a lesson to be learner-centred or not is the predominant strategy during the 90 minutes of the lesson. Unfortunately the trainer spent most of the 90 minutes talking, thus monopolising the lesson. The reform of Basic Education recommends that the learner and teaching process in the classroom must be learner-centred, not teacher-centred.

The strengths of the lesson were that the teacher trainer links previous knowledge to the topic. Before telling trainees to copy from the board, he asked them if they had any doubts. The teacher left some time for the trainees to copy from the board. That was so that trainees would not forget the teacher's explanations.

The weakness of the lesson was the absence of instructional materials and incomplete bibliographical reference.

Comparing the two lessons described above, it be see that they have some common aspects concerning classroom organisation. The classrooms were organised in a traditional way, in rows. There was a chalkboard and chalk. Question-and-answer was the predominant teaching method and both lessons were teacher-centred. The lack of teaching media or instructional material and the absence of a summary of the main teaching points at the end of the lesson are weak points.

## **7.4 DISCUSSION**

### **Classroom organisation and composition**

Groups should have been organised in such a way as to allow a better identification of group members. It did not happen and the classroom was organised traditionally: four rows with six double desks each. In addition, learners were sitting spread in relation to the groups they were members of. A total of 43 students were present in the classroom.

### **The topic was Discussion of the Food Diet Chart.**

Instructional material: chalkboard and chalk.

The topic of the lesson was “Discussion of the food diet chart”. Learners had to fill in a diet chart food for three days (Monday, Tuesday and Wednesday) ensuring a balanced diet (breakfast, lunch and dinner). They also had to take into account the three kinds of food that they had studied (protectors, constructors and energisers). The teacher asked groups 1, 2 and 6 to present the group work. Soon he realised that the first group did not have it ready to present and the group was replaced by another. They had to show the diet map of all the meals of the day on the board before they could do an oral presentation.

The lesson was characterised by written and oral presentation by at least three groups, followed by a question-and-answer activity prepared by the learners.



Table 7.3 below represents one of the daily meals presented by one of the three chosen as an example.

**Table 7.3**  
*Daily meals (breakfast, lunch and dinner)*

Meals	Monday	Tuesday	Wednesday
<b>Breakfast</b>	Bread and tea, eggs, milk, tangerine	Sweet potatoes, maize and tomato, onion, oil and banana	Cooked cassava, curry of fish, tomato, oil, onion pine apple
<b>Lunch</b>	Rice and meat, oil, salt, potatoes and paw-paw	<i>Caracata</i> , dry fish, seasoning onion, tomato, orange	<i>Chima de Meixoeira</i> with chicken, tomato, garlic, onion Cashew-nut
<b>Dinner</b>	<i>Maize Chima</i> , beef, tomato onion, oil, pepper. Minutes	<i>Chima de mapira</i> com cabbage pea-nut, tomato, onion and apple	Salad and bread, tea and milk, eggs Mangoes

The first activity required one member of each group to go to the blackboard and write the meals for three running days, taking into account the three kinds of food that they had studied. The three learners completed their charts simultaneously as the teacher had divided the board in three parts. The writing took nearly 25 minutes, during which the remaining students had nothing to do but wait for their colleagues to finish writing. Consequently, students were involved in conversation about matters that had nothing to do with the lesson. As can be seen, there was a waste of time which could have been used much more productively. In addition, the lesson became boring and tiring. The teacher could have used this time for discussion. In my opinion students should have completed the chart in advance on A1-format paper using markers.

Oral presentation of the chart was followed by question-and-answer and possible explanation. It means that after completing the chart on the chalkboard, the group representatives presented the content of their chart taking turns. After the presentation they answered questions formulated by the teacher and the other students.

After the presentation of the first group, questions were raised and answered by learners themselves. From the second presentation on, questions were raised by the teacher trainer and answered by the learners. So the teacher trainer changed his role from facilitator to interrogator. In other words, learners ceased to exchange ideas and clarify doubts by asking

and answering one another because the teacher trainer dominated the lesson. Killen (2007:134) outlines the role of trainee and trainer in a discussion as follows:

“It is important that the teacher does not dominate the discussion; learners should be talking for their majority of the time. When the teacher does talk, it should not always be to ask questions. Questions and answers sessions are not discussions. The questions in a discussion are used to help learners gain knowledge, rather than to allow them to just demonstrate their knowledge. As a consequence when learners talk they will not always be answering a question from the teacher; they may be answering another learner’s questions, or making a comment, or agreeing with a statement, and so on. During a productive classroom discussion, learners will be thinking, offering opinions, developing reasons, and providing justifications.”

One aspect that is worth mentioning is that he urgently stopped the learners when they spoke more than one at a time. After the teacher’s warning, students did not speak all at the same time. The teacher wanted to show that speaking all at the same time is not correct and it does not render any advantage, since nobody can hear anybody.

The first interaction was among the learners. One student asked another from the same group something about the chart content and the latter answered him. For example, one student asked the group if there could be a dessert for breakfast on Monday. The answer to this question was that dessert could be served depending on the type of breakfast. The teacher praised the student for the answer. It should be noted that the teacher performed as a mediator.

Students kept on making comments on the work they presented and answering the teacher’s questions. The teacher did not know where he wanted the discussion to go.

When the discussion was not developing as he had planned, the teacher intervened and told the students that they should find out whether in each meal the three groups of food (constructors, protectors and energisers) were present. In my point of view, this is the role of the teacher: facilitating the teaching and learning process, leading the discussion according to the pursued objectives. However, he did not make it clear how the discussion would take place. The lesson ended up not being a proper discussion.

During the class, several questions were asked, either to the groups or the class. The question whether cashew nuts are a protector is a case in point. Students provided

diverging answers. Nobody explained why they thought cashew nut was a protector or constructor. At the end the teacher seemed to be doubtful about the correct answer when he said, “I am not sure which group cashew nuts belong to in the food chain”. The teacher’s position is questionable since he should be able determine the relevant facts in good time. He could have asked the students to answer questions for homework so that he could have time to ask his colleagues or consult any relevant bibliography. The teacher would not necessarily provide the answer himself; he could get students to discuss the answers they would have found at home.

The teacher’s silence means that he was satisfied with the answer. Once again the trainer did not give the learners any feedback after the question-and-answer session.

In fact, after the wasted time and with the large number of learners in the class it would not be possible for everyone to talk. His words could be understood as a warning for those who had not spoken to speak in the following lessons. It is definitely impossible for a teacher to interact with every student in a single class. One student made the following comment: There are some people that have a balanced diet but they neither grow well nor are they intelligent; similarly there are people who eat an unbalanced diet but they are intelligent and strong physically. The teacher said that it cannot be taken for granted that people without a healthy diet do not grow physically; there are many other factors interfering in this aspect.

At the end of the lesson the teacher asked the students why everybody, including themselves, the teachers and the community should know about the food diet:

- For the organism to function well.
- To keep our bodies healthy.
- To defend the organism against diseases; for the body to grow.

In fact, this question made students aware of the need for a balanced diet, which was the objective of the lesson. Because they were running out of time, the teacher gave students homework.

The lesson ended with homework, where learners were assigned the task of thinking of diseases that can be caused by lack of a balanced diet.

In short, the lesson has such important moments as writing on the board, presentation and discussion between learners. The teacher trainer asked questions. Learners' responses to other learners and explanations are important aspects of the lesson. The learning activity ended with ample student talking time. Asking and answering questions is not a discussion. However, there was an attempt to promote discussion.

In summary, the main activities developed during the class were the following:

- Writing on the chalkboard.
- Oral presentation of table contents followed by question-and-answer and possible explanation amongst learners.
- Questions and answer among learners.
- Answering the questions asked by learners.
- Interaction between learners

### **Strengths**

The trainer had less talking time in the classroom in comparison to the trainees' talking time. He talked in his capacity as facilitator, despite the fact that he did not manage to clarify the doubt about cashew nuts.

### **Weaknesses**

Wasting time by completing tables on the chalkboard.

For Killen (2007:133), discussion is both active and learner-centred and learners are expected to share their thoughts. In the case of the lesson under discussion, the beginning conformed both to the active and learner-centred character of discussion, but subsequently it became teacher-centred.

## 7.5 GROUP WORK

### **Classroom organisation and composition**

#### **Topic: Fundamental Concepts in Pedagogy**

Instructional material: chalkboard and chalk

The key concepts written on the chalkboard were: learning, teaching, instruction and education.

Main activities in the classroom

- Learners discussing the concepts and writing down on paper and in their exercise books.
- Oral presentation by representative of each group.
- Learners answering the teacher's questions.
- Speaking loudly.
- Teacher writing on chalkboard and explaining.

The lesson concluded with a summary of the concept and was written on the chalkboard as follows:

#### **Learning**

- Assimilation, experience, and its retention in the memory.
- Acquiring knowledge.
- Getting skills.

#### **Teaching**

- Conveying knowledge, experiences to people.
- Process of conveying knowledge in a planned way.

#### **Educating**

- Preparing people to teach in society.
- Providing notions on how to carry out a certain activity.

It is teaching somebody which steps they will follow to carry out a certain activity. It is a process of intellectual training, of knowledge acquiring skills according to a given knowledge level domain.

#### Homework

1. Using your own words, define education.
2. Why is education considered a personality building process?

Before trainees joined their groups for group work, the teacher asked what the terms used for pedagogy were and what concepts were most used in pedagogy.

Among the four concepts that had been learned, trainees could mention only three, namely teaching, instruction and learning. So they could not remember education. The teacher told them the fourth, which was education.

Once they knew the four concepts to be studied that day, the teacher trainer gave instructions on what to do:

**Trainer:** Without wasting time, let's make groups of four students. You are organised in groups, aren't you?

**Learner:** Yes.

**Teacher:** Trainer: How many?

**Learner:** Five groups.

**Trainer:** How many are you? Five groups are too many. Let us make only four groups. Let's make groups of four.

Learners were instructed to discuss the concepts *learning*, *teaching*, *instruction* and *education*. They were allowed to write notes.

The teacher trainer gave instructions about the group work and the time he expected learners to take. This is important information to give to learners, for they can then organise their activity taking into account the time it will last. What sometimes happens is that teacher trainers do not tell learners how long the activity should take and when he asks them to present it, some ask for more time to finish.

Group members stayed in their groups and provided feedback on the concept *learning*. Thirteen groups were formed.

In this class, the teacher trainer made learners find the meaning of the concepts to be dealt with through question-and-answer. Then, the teacher trainer told the class to remain in groups of four to share ideas about the four concepts.



*Source:* Researcher (example of work group of 4 learners each).

**Figure 7.1** Work group





*Source:* Researcher (teacher trainer looking at what is going on in the groups)

### **Figure 7.2 Work group**

The picture above illustrates the groups formed during the lesson. Each group was composed of four learners. Generally, in each group two learners face two learners sitting opposite them. As can be seen, groups are sitting very close one another. Group members' talking easily disturbs other groups next to them. This is one of the largest classrooms in the centre. The organisation of the groups did not take enough time because the teacher trainer wanted to avoid spending too much time on it.

It was beneficial to the learners that the teacher trainer visited all groups to monitor group activities. However, due to the organisation of the classroom it was not easy to see all groups.

The first concept to be discussed was *learning*. Group members formulated their definitions in writing for the spokesperson of the group to present the result of the discussion. The teacher trainer circulated for some time, then he sat down in his chair. During the presentation the groups kept to their places and the presentation started with the question, “What is the meaning of ‘learning?’” While the group members were speaking the group's contribution was written on the chalkboard. The teacher trainer sometimes added something to the learners' statements.

Here are some passages of the main statements for each definition and the respective additions by the teacher trainer in italics. The teacher trainer did not dictate any notes. The learners wrote down what resulted from the discussions or from sharing of ideas.

A negative aspect of this lesson is the fact that it was difficult to see what was written on the chalkboard due to the fact that the board was damaged. The fact that the teacher trainer did not read what he was writing made it even worse for the students, who wanted to copy from the chalkboard. Students had to get up several times to go to the blackboard to better see what was written.

The teacher trainer passed from group to group to supervise the trainees' work, give some instructions and make sure that each group had someone jotting down the answers to be presented to the class. This procedure guaranteed that each group had a spokesperson. The remaining group members participated by adding and clarifying some specific aspects of the presentation.

The 13 groups discussed the four concepts. Maybe it would have been more productive if some groups discussed two concepts and the other groups discussed the other two concepts.

However, four members per group were not too many. It allowed for a somehow deeper discussion.

Noteworthy here is that the definitions were given by learners and the teacher gave or added some clarification to the definitions. The main and predominant activity was group work. Learners worked in groups and they produced definitions for *education*, *learning*, etc. The approach was learner-centred.

### **Strengths**

The homework assignment, with questions such as “Define education using your own words” was a good point. It prevented the reproduction of the notes that were taken in the classroom. Learners often tend to reproduce the words from the notes without understanding their exact meaning.

## Weaknesses

- Forming groups is sometimes time-consuming. This time may be necessary for the activity itself.
- The teacher did not determine the duration of the group work.
- The teacher wrote the homework assignment on the board and read it to the class.
- Questions asked by the teacher must be more productive than reproductive ones. In other words, start by asking a description of a concept and move slowly to questions on a higher cognitive level. Killen's (2007) advice is relevant:

“In their effort to link previous knowledge with new knowledge, teacher should encourage learners to ask and answer questions which will demand interpretation, analysis and application of knowledge. This form of learning is referred to as active reception because learners are not just sitting, but are also using imagination, accepting or questioning the content, making their own judgment, and so on.”

To summarise, regardless of the weaknesses this lesson might have, it is the only one, among the ones described in this chapter, which was learner-centred. The learner did most of the talking and worked in groups of four, which allowed for a better exchange of ideas. That is what trainees are expected to do when they go to teach in primary schools, where children will be working individually, in pairs or in small groups. There is no doubt that the overcrowded classes have a negative impact on the teaching and learning process. In the case under discussion, the teacher trainer did not manage to supervise the activities of all thirteen groups.

## 7.6 CONCLUSION

This chapter emphasises the different teaching styles in the teaching and learning process.

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 the 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.

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 facilitates 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.

According to Van Rooyen and Van der Merwe (2004:262),

“Researchers have found that information is remembered best if teachers are provided with many concrete experiences, since concrete experiences lead to improved perception. Perception is the active interpretation of sensory impressions and it makes learning meaningful. For this reason it is essential for teachers to use teaching media. If media are applied correctly, they benefit the learners in four ways: they are motivational, encourage participation, cater for individual needs and stimulate meaningful learning.”

However, 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.