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APPENDICES

APPENDIX A: INTERVIEW SCHEDULE FOR TRAINERS AND DEPUTY DIRECTOR

1. What is the characteristic of the new curriculum?

2. What are the principal innovations of the curriculum for basic education? Explain each innovation.

3. Interdisciplinarity is one of the innovations of the new curriculum. What does it imply?

4. What kind of a change was central in this year - administrative aspects, pedagogical or organisational?

5. How was the concept *learner-centred* introduced and what does it imply?

6. What materials relevant to the new curriculum have you read?

7. Which transformations were the results of the new basic education? Indicate whether these can be termed organizational or pedagogical issues (What is the nature of those changes)?

8. How were these aspects of integrated learning approached in the curriculum of the centre? How do you teach these?

9. What the main objectives of pedagogical practice?

10. How long does pedagogical practice take?

11. How is it organised? Who are involved in this process? What is the main task of each?

12. How is pedagogical practice assessed?

13. Where does the pedagogical practice take place? Why?

14. What are the main constraints? Why?

15. What kinds of materials are used in the teaching activities?

16. What kind of the report is produced? Mention the main components).

APPENDIX B: LESSON OBSERVATION SCHEDULE

1.   Use learner-centred approach (teaching methods) – group work, pairs, individual tasks, etc.

2.   Participative methods (what teaching strategies are used and how they are implemented during the learning activity) – discussion, question-and-answer, problem solving, project method, etc.

3.   Didactic material available (use of textbooks and other teaching media).

4.   How the classroom is organised (classroom environment – desks, chair, charts, equipment, posters).

5.   Use of learners' previous knowledge and life experience.

6.   Relationship between teacher and learners and among learners.

7.   What the teacher says.

8.   What activities the learners perform.

9.   Large class constraints – implications and effects).

APPENDIX C: GLOBAL OBSERVATION CLASS FORM

CENTRO DE FORMACAO DE PROFESSORES PRIMARIOS

(PRIMARY TEACHERS TRAINING CENTRE)

Trainer _____

Grade: _____ Stream: _____ Date: _____

Class Subject: _____

1.   Positive Aspects

_____
_____
_____
_____

2.   Highlights

_____
_____
_____

3.   Aspects to be improved

_____
_____
_____

4.   Aspects to Think on

_____
_____
_____

Assistant's signature   Trainee's signature

APPENDIX D: POST-CLASSROOM OBSERVATION INTERVIEW SCHEDULE

1.   What was the class objective?

2.   Did you achieve the class objectives?

3.   What teaching media were used in the class?

4.   What strategies had been planed for this class?

5.   Were they implemented? If not, why?

6.   Was your strategy learner-centred? Why?

7.   Did you face any difficulty during the class? If yes, what difficulty did you face?

REPÚBLICA DE MOÇAMBIQUE

MINISTÉRIO DA EDUCAÇÃO E CULTURA

SECRETÁRIA PERMANENTE

TO WHOM IT MY CONCERN
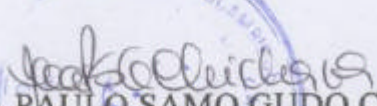
This is to confirm that **Mr. Manuel Zianja Guro**, has permission to do research in the Nampula Province at CFPP of Marrere.

Mr Guro is at present completing his Ph D with regard to:

"Basic Education in Mozambique: Between the Policy of Curriculum Change and the Practices of the Teacher Training College".

Maputo, 16 January 2006

ANA PAULO SAMO GUDO CHICHAVA

PERMANENT SECRETARY

APPENDIX F: LETTER FROM THE NATIONAL INSTITUTE FOR EDUCATION DEVELOPMENT TO THE OSUWELA PROJECT COORDINATOR

República de Moçambique

Ministério da Educação e Cultura

Instituto Nacional do Desenvolvimento da Educação

CREDENTIAL

In the extent of the course of Doctorate, in course in the University of Pretoria, RSA, Mr. **Manuel Zianja Guro**, employee of this institution, began his field work in CFPP of Marrere, where initially it was Projecto Osuwela to work.

Having the need to interview linked technicians to the project, to have access to documents related with the formation in exercise, to visit the centre of resources and other places, we saw for this half to accredit the pedagogic technician above suitable, so that close to Osuwela is rendered him/her the necessary support.

Atempadamente thanked V. Collaboration.

Maputo, May 06, 2005.

Director

_____

Simão Mucavele

(Pedagogic Technical Instructor of N1)

APPENDIX G: LETTER OF CONSENT

INFORMED CONSENT

I, _____, agree to participate in the study about curriculum change at teacher training colleges conducted by **Manuel Zianja Guro,** under the supervision of the Faculty of Education at the University of Pretoria. Mr. Guro has explained in full the purposes of his research. I understand that confidentiality and anonymity are guaranteed. I grant Mr. Guro permission to use the information I shall give him in his dissertation and in subsequent publications, workshops, and conferences.

Participant's
Signature   Date

Researcher's
signature   Date

_____   _____

CONSENTIMENTO

Eu _____ ,

concordo em participar no estudo sobre a mudança curricular no Centros de Formação de Professores conduzido pelo **Manuel Zianja Guro**, sob a supervisão da Faculdade da Educação da Universidade de Pretória. O senhor Guro explicou de forma exaustiva o objectivo da sua pesquisa. Eu entendi que a confidencialidade e o anonimato estão garantidos. Eu autorizo que o Sr. Guro faça o uso da informação obtida para a sua dissertação e em publicações subsequentes, workshops e conferencias.

Assinatura do
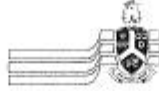participante   Data

Assinatura do
participante   Data

_____   _____

APPENDIX H: ETHICAL CLEARANCE CERTIFICATE

UNIVERSITY OF PRETORIA

FACULTY OF EDUCATION

RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE	CLEARANCE NUMBER : CS10/08
DEGREE AND PROJECT	PhD Curriculum Studies
	Basic Education reform in Mozambique: The policy of curriculum change and the practices at Marrere Teachers College.
INVESTIGATOR(S)	Manuel Guro - 23273993
DEPARTMENT	Curriculum Studies
DATE CONSIDERED	28 April 2005
DECISION OF THE COMMITTEE	APPROVED
	Renewed on 28 January 2009.

This ethical clearance is valid until 31 March 2009

CHAIRPERSON OF ETHICS COMMITTEE	Dr. S Human-Vogel
	28 January 2009
CC	Dr E. Weber
	Mrs Jeannie Beukes

This ethical clearance certificate is issued subject to the following conditions:

1. A signed personal declaration of responsibility
2. If the research question changes significantly so as to alter the nature of the study, a new application for ethical clearance must be submitted
3. It remains the students' responsibility to ensure that all the necessary forms for informed consent are kept for future queries.

Please quote the clearance number in all enquiries.

APPENDIX I   CERTICATE OF LANGUAGE EDITING

Monica Botha
PO Box 32945
WAVERLEY
0135

Tel: (012) 332 5741
Fax: 0866 754 626
Cellular: 083 269 0757
Email: monicabo@lantic.net

9 November 2009

TO WHOM IT MAY CONCERN

This serves to confirm that I have edited the document entitled *Basic Education Reform in Mozambique*, prepared by Mr MZ Guro for a PH D degree, for language and technical layout.

MONICA BOTHA

APPENDIX J: MARRERE CFPP TRAINERS PROFILE - 2005

Marrere CFPP Trainers Profile - 2005

Numbers	Gender	Age	Academic Level	Teacher qualification	Subjects taught	Years of experiences		
						Primary	Education	CFPP
1	Male	46	11 grade	Bachelor	Psychology	3	25	15
2	Male	42	11grade	Bachelor	Mathematic/Methodology		20	14
3	Male	48	11grade	Bachelor	Psychology		29	14
4	Male	37	9 grade	Bachelor	Visual, Technology Education		16	14
5	Male	53	9 grade	Bachelor	Portuguese/Methodology	8	29	14
6	Female	43	9 grade	Bachelor	Social Science		20	8
7	Male	39	11 grade	Bachelor	Natural Science		16	14
8	Male	53	12 grade	-	Portuguese Methodology	3	30	6
9	Female	41	9 grade	-	Social Science	15	16	1
10	Male	38	9 grade	-	Physical Education		18	6
11	Male	40	9 grade	Bachelor	Mathematic/Methodology		16	14
12	Male	50	9 grade	Bachelor	School Management	2	28	17
13	Female	50	12 grade	Bachelor	Mathematic/Methodology	26	30	8
14	Female	34	12 grade	Licentiat	Portuguese		2	1
15	Female	60	8 grade	-	Arts & Craft		40	8
16	Male	49	12 grade	Bachelor	Portuguese		29	4
17	Male	41	10 grade	Bachelor	Psychology	15	20	3
18	Male	34	10 grade	Bachelor	Portuguese/Methodology	11	16	3
19	Male	30	10 grade	Bachelor	Mathematic/Methodology	1	6	3
20	Male	43	11 grade	Bachelor	Natural Science		22	10
21	Male	32	10 grade	Bachelor	Social Science	7	6	3
22	Male	37	10 grade	Bachelor	Musical Education/Portuguese		12	3
23	Male	38	10 grade	Bachelor	Natural Science	11	16	3
24	Male	35	10 grade		Musical Education		14	3
25	Female	37	10 grade		Musical Education		20	3
26	Male	23	10 grade		Arts		0	0

Source: Marrere CFPP

APPENDIX K: MARRERE CFPP TRAINERS PROFILE - 1998

Marrere CFPP trainers profile - 1998

Nº	Gender	Age	Academic level	Teacher qualification	Subject (s) Taught	Years of experiences
1	Male	30	9 grade	9ª+2 CFQE	Art Education	9
2	Male	41	11 grade	9ª+1 CFQE	Pedagogy/Psychology	22
3	Male	47	9 grade	9ª+1	Methodology of Portuguese	21
4	Male	41	11 grade	Bachelor [2]	Portuguese	20
5	Male	35	9 grade	9ª+2	Mathematics/Physics	18
6	Male	40	11 grade	Bachelor	Portuguese	20
7	Female	33	9 grade	9ª+3 IMP	Portuguese	15
8	Male	39	11 grade	Management	Psychology	20
9	Male	44	11grade	Bachelor	Geography	27
10	Male	33	9 grade	9ª+2	Mathematic/Physics	9
11	Female	43	9 grade	9ª+3	Chemistry/Biology	24
12	Male	36	9 grade	9ª+3	Music Education	17
13	Male	34	9 grade	9ª+2	Mathematics/Physics	15
14	Female	36	9 grade	9ª+2	History/Geography	13
15	Male	31	9 grade	9ª+3 INEF	Physical Education	11
16	Male	32	9 grade	9ª+2	Chemistry/Biology	9
17	Male	43	9 grade	9ª+1 CFQE	Pedagogy/Psychology	21
18	Male	43	11 grade	9ª+3 IMP	History/Geography	21
19	Male	32	9 grade	9ª+2	History/Geography	12
20	Male	41	11 grade	Bachelor	Mathematics	20

Source: Guro, 2000

---

[2]. Trained by Setúbal Higher Institute of Education. The course had two training periods. The first part took place in Mozambique and the other part in Portugal.

APPENDIX L: VERIFIED INTERVIEW TRANSCRIPT (E 6)

Question: What is the characteristic of the new curriculum?
Answer: I have already heard speak, but I would like to introduce myself a little bit. I am a teacher with 39 years of experience in Education. I have worked 19 years as a trainer at CFPP of Unango; in Niassa province. Afterwards I also worked in the teachers training centre of Balama in Cabo Delgado province. I also worked in the Teacers training center of Momole which was then transferred because of the war. It then was the teachers training centre of Murrupula, where I worked in the area of methodology of Portuguese.

The centre of Momola stopped existing and is now in Nampula. The centre of Murrupula joined the centre of Marrere. This here was a normal school of school post and belonged to a church. I like it because I spent 1969 here as a learner. I feel myself at home.

Q: Let's go back to the initial question. What is the characteristic of the new curriculum?
A: Well, I have already heard speak about this curriculum plan of basic Education. As far as I am concerned, in fact, there is an alteration which will happen in that curriculum. The proponent of that curriculum will need the great participation of the teachers themselves, form a planning. Besides, a child, I think, with that curriculum, will be able to become well trained, whatever the implementation of this curriculum is. We, here in the centrals, we have had some seminaries. According to with that seminary was oriented by an element, or anyway, elements came from INDE. However, all the formers integrated in this plan of curricular of Basic Education. All materials in all areas, programmes as well as contents which takes a part of curriculum, not only, but also, the proper structure. Eh, of thematic division of levels, 1st cycle, 2nd cycle and 3rd cycle. (pause) inside of this, also, its seen that, should have a structure in terms of introduction of some national Languages, of that which I know, about, how those languages will work, is in the 1st phase of National languages, will be able to serve us. Languages of teaching which posterior already can be able a discipline, if it should more elevated in this case. Eh, well, comparing to this curriculum of Basic Education, with what, we have come to do here, as the formation institutions of teachers, I see that … it's good we are more or less embodied in relation to that vision of the new curriculum of basic Education. Our new curriculum of basic education here was being experimented. Have determined disciplines that we have come to give, also, are the same which are reflected in this new plan of curriculum for the central of formation of teachers which being forth of this curriculum of basic education.

Q: What are the principal innovations of the curriculum for basic education? Explain each innovation.
A: Well, now… (pause) first is the introduction of general (pause) eh! The subjects and the contents have been revised and were (pause) reformulated so there were new contents in grade seven that are integrated in grade 3 and 4. (Pause) eh (pause) it is the reformulation of the curriculums in one or other way it is the local curriculum. This curriculum has two parts after all. The first part is the national curriculum. The other part is the local curriculum that is something new, an innovation. Eh! Then (pause) eh what else can I say? Eh! Still in these innovations we can eh! See the introduction of new subjects. That is the case of English that started in grade 7 before, I mean in grade 8. Now it starts in grade 7. Eh, also the organization f the teaching in levels. So, in levels, cycles we (pause) now have levels, we have cycles. There are three cycles. The first cycle is grade 1 and 2; cycle 2 is from grade 3 to 5 and the third cycle is grade 6 and 7. We also have the organization. We have primary education first degree from grade 1 to grade 5; and primary education second degree from grade 6 to seven. These are some of the changes. We can see methodological aspects. There are also some differences. The teacher has some freedom. Before the changes, classes were planned beforehand and the teacher just took the manual and had to follow it. That happened frequently. When the subject was Portuguese in one school, every school had the same subject. The new curriculum is not like that. Timetables are now designed in the

schools. There is greater responsibility and autonomy of the teacher in the management of the teaching process. What else can I say?

Q: What else?
A: About learner centred teaching? It is a teaching whereby the learner is the centre. Contrary to what happened before in the traditional teaching when the teacher was the great orator. There is an attempt to change things so that the learner takes an attitude, for him to become active. He is not a passive element now, as it happened before in our school. Before the student just listened to the teacher, who was a greater orator, explain what he knows and the learner just listened and wrote. Nowadays, in the learner centred approach, the student is an active element, he doesn't just wait for knowledge; he looks for it. Teachers must facilitate, organize and give opportunity to the student to act because knowledge and learning must start from an activity. If the learner does nothing, he just listens how is he going to get the knowledge? The teacher organizes activities, reading activities, research activities, activities that make the student look for knowledge. He is being the owner of his own knowledge. So, it is true that there is some knowledge that is impaired by the teacher, but a great deal of it must arise from the student's research. That is what I understand by learner centred teaching.

Q: You as a teacher trainer, do you use the principal of learner centred approach?
A: yes, well, I would like to say that, as well as, I used, in fact, I treat a new change. It will not be easy, immediately; more we have founded to incorporate the learners in that which must be also the participant of the knowledge.

Q: What strategies have you used for the major involvement of the students in the classroom?
A: I have used more strategy to expose, however, the theme in study and then to rise up, to make appear rising of the knowledge about the proposed theme. Then, the students integrate giving your ideas, at the end. I have to give them the value of those ideas leading to the proper reality of the contents.

The other strategy that I have applied is sometimes I have been in work. I divide them in groups and discuss the contents in study and then, there is a moment when each group presents of what they have done and from there we synthesise about the contents which we are treat. Eh, those are strategies I have used. More over, also, exists that … traditions, always we have given values, became. It is not possible to involve all things the students. There are things, in fact, precise information, which alone, are not capable to reach that which pretends. Students can communicate among themselves, exchange ideas and help each other. Communication is almost in sense. There is the Teacher-learner communication and learner- learner communication.

There are also small activities of research, small experiences data collection; interviews etc. so there are small inquiries.

Q: You talked about small groups. How are they constituted? How many elements constitute them?
A: Well, (pause) here the groups depend a lot on (pause) class organizatio. I don't like the groups that are there. For example, I was working with the class that is divided in 7 groups. I made my own groups. I made groups of 4, and 5 is the maximum number of students in each group. Communication is not good when students are more that 5 in one group. That is why I don't like it. Material may be in the opposite side of the desk and very far from the student in the other further side. Sometimes there is only one handout and some students will not be able to see it. I sometimes leave the groups created in the classroom, by the class structure. Usually I make my own groups.

Q: What is the criterion for making groups?
A: It depends on how they are sitting. They are about 50 students and the classrooms are small. I vary them. Sometimes I vary them according to materials. For me it doesn't matter if the groups are

permanent or not. I just make my own groups. I see the number of students, the materials available, and according to arrangement of the class, how they are. I find a way to arrange them quickly.

May time's group are permanent but sometimes, we have moderating a change to permit an exchange of suppressions with other element who is not the same group. There is a moment, which we round, but normally the groups that have been permanents.

Q: What do you understand by learner centred teaching?
A: about learner centred teaching, It is a teaching whereby the learner is the centre. Contrary to what happened before in the traditional teaching when the teacher was the great orator. There is an attempt to change things so that the learner takes an attitude, for him to become active. He is not a passive element now, as it happened before in our school. Before the student just listened to the teacher, who was a greater orator, explain what he knows and the learner just listened and wrote. Nowadays, in the learner centred approach, the student an active element, he doesn't just wait for knowledge, he looks for it. They must facilitate organize and give opportunity to the student to act because knowledge and learning must start from an activity. If the learner dos nothing, he just listen how is he going to get the knowledge. The teacher organizes activities, reading activities, research activities, activities that make the student look for knowledge. He is being the owner of his own knowledge. So, it is true that there is some knowledge that is impaired by the teacher, but a great deal of it must arise from the student's research. That is what I understand by learner centred teaching.

Q: How was the concept learner-centred introduced and what does it imply?
A: concerning Learner-centred teaching we can say that the (pause) the learner is the object of study, he must have much time. We must take advantages of his experience. The learner is the fundamental element in the teaching learning process. The teacher helps to mediate the teching process, taking advantages of the learner´s capacity. This didn´t happen before; the teacher used to be the one who knows everything. The teacher used to dicide everything for the students. The learner-centerd teaching allows students to have opportrunities to experiment, to think about something, make several exercises and present them to the teacher for both of them to reach come to a conclusion. Everybody works with the aim of reaching the important conclusion. However, the student is the key of the lesson so he should have much of the talking time, touch things, indicate, demonstrate, dramatize, illustrate, make questions, answer them and handle.

Besides working as a teacher trainer I deal with organizing the Osuwela Project programmes and with designing some modules for Portuguese and School management. So, one of the aspects we have discussed and is related with these innovations is the initial orality, reading and writing with which the teacher gives priority to this learner-centred approach. We provide capacitation at the district, ZIP and do our best to change the previous scenario, in which the teacher did most of the speaking. We made have children do group work by themselves, experiment, do pair work and present doubts. Based on these modules, I use them for my trainees at the Primary Teachers Training Centre.

Most of the time I use material made by them and other made in the group where we are. I use material verty often, and I prefer to distribuite it in pairs, according to to the theme that is going to be discussed on. Each student ou pair of students will try to say what they think about it. Three or four questions about about the material I want. I get students work for sometime by themselves and present the result in front. Each pair or group presents its opinion sintetized in a peace of paper. I usually use a peace of caki paper. Thanks to the project, I can request some paper as work with them designing modules. I could see that there are advantages because there different and iqual answers. All those answers have the same contents. Everybody in the classroom can take the advantage of everybody and it is better than just getting one solution.

Q: What materials relevant to the new curriculum have you read?
A: well, the curriculum of the basic education, we are working with a material of the National system of education. (Pause) from 1st class to 5th class. After that, there was, then, the introduction of the new curriculum for that reason, a change of working in all disciplines. For all, for our centre, I fix that, could be well come the curriculum all problems of material which we are here facing.

A question of the same material of new books which appears of the new curriculum, no, not we haven't them. And we, have got a request to our direction to see if can contact with the direction (pause) which have possibility for the distribution and until now, we haven't got a plausible answer. If we succeeded the material to utilize in school, principally for 3rd year here, that's going to start from a term of probation going to have difficulties when would be in the terrain. We are not going to trust in school. There is a school at this moment, it hasn't got material. They haven't received material yet. Then, in our province, I think that, I met of positive and that, there is a very good work faces by the teachers of primary education.

I think that, leave aside till a problem of numerous classes. (Pause) the teachers have a lot of problems with the numerous classes, they can't be able to teach (pause) because, how should, because our teacher, as they haven't habituated to work, with this work, with numerous classes, already, they are facing the difficulties. Our school has numerous classes, but it is not as, where are they going to work, when the course terminates. Therefore, they meet a difficulty, because here, classes, classes are little bit numerous, there are about 50 to 40, 40 to 50, in the class. Afterwards has a problem and this problem that at least I am noting along of this, because a presence of the project of Osuwela, we are working in the initial education which are those, our learners and a afterwards also, we had that, to work with the teacher in service training in schools, in school clusters. We had to utilize the same books which also correspond with the official programmes of the ministry, and in groups we were going to work with our teachers in service training in school clusters.

The level of the city, there are school clusters for example of Mutauanha we work with the teacher, then the centre started to wide n to the District of Nampula.

However, I worked in some schools, and the school clusters of the district of Nampula and then, the District of Nampula. Therefore, advanced to other District etc. Therefore, Nacala, Malema Angoche the Island of Mozambique, Murrupula. However, with the school cluster or may be district satellites, however these locals where I am referring are the District Headquarters. Many teachers of next Districts if they join for, then, to discuss the questions of primary (school) Education.

Q. Which transformations were the results of the new basic education? Indicate whether these can be termed organizational or pedagogical issues (What is the nature of those changes)?
A: Well, a great change that exists is exactly the disciplines, which do a part of formation, that, before, implement this curriculum here, assimilates as the curriculum of basic Education. We had in our Disciplines of plan, of the central of formation, the disciplines of physics, biology, history and geography. Therefore, when we experiment this curriculum that we were doing those discipline left them to exist.

Then, that was a great alteration we saw, in terms of mediation of contents, also, it's seen that, there was a change in the actuation form between trainers and learns. The change consists of exactly in the former who's already been conscialized that, teaching is not only based in the teacher, but, it is learner centred, also, in the proper forming to give the value the experiences which he has got. There, to create an environment more active, in terms of the presence of learners.

Q: Interdisciplinarity is one of the innovations of the new curriculum. What does it imply?

A: Eh! This integrated approach (pause) I think that was good. It is good because (pause) in fact it was like that. But we say it is innovating. In fact it was not innovation. It is not innovation properly said. We always talk about that, don't we? Although it was not written as an orientation, but we talked about it eh! Even in the previous curriculums. Because it was not possible, for someone, a teacher teaching Portuguese not to talk about science whether planned or not. He will always touch aspects of other areas in the process of communication for example Natural sciences namely parts of the human body, he will have to talk about it. He saying something (pause) in the process of communication he is obliged to sometimes touch it. When he is talking he is mentioning the parts of the body, about plants. It is all part of the communication process. It is all integrated. Eh! In general, I think that it is a good think, students do not learn in the form of drawers. This is the drawer of maths and closes it that is f that subject and close it etc. The student learns every thing at the same time. He learns maths at the same time that he learns Portuguese. He learns natural science at the same time that he learns Portuguese language. After all everything that is mentioned in natural science, the names are sad in Portuguese or any other language that is used snt it. He ends up learning Portuguese in maths, maths in science, in Portuguese. So integration as always existed. It has always existed. Eh! Teachers were not aware of that (pause) sometimes (pause) and, sometimes he is not capable of exploiting the maximum of, sometimes they are talking about leaves at Natural Science and they they should take the opportunity to talk about colours and esthetics for example, The beauty of the leaves and their shape; In terms of maths, the size (pause). They sometimes are able to explore that. But they are (pause) positive aspects. They are also necessary allow for an integrated learning because everything is related. After all there is repetition, the same thing that the student learns in maths, the Natural science may also talk about it. So this repetition helps to memorize. After still teacher say the same thing.

Q: What kind of a change was central in this year - administrative aspects, pedagogical or organisational?

A: all I know is that there were some seminars. People needed to understand what the new curriculum was. It can be said that here at school there are no changes. There are no books for basic education; I just know that there are programmes (syllabus). I was now working wit the basic education programme (syllabus), there are no books yet. The teacher trainer make effort to train based on the new programmes and new contents, although there are no books. I thing it didn't change much, some of the change are not good.

Q: What are they?

A: first the teaching staff is not the same. Many teacher trainers left. As always, the best are the ones who leave. The worst never leave. They are some coming from ADPP. We can see differences so I don't know each teacher interprets the curriculum in the classroom. I could see the way the classrooms are organized; it is different. There was always a tendency to organize the classroom in a traditional way. He would come to the classroom and find students sitting in a certain way and he did not need to organize them because they were already in groups. And they would move another classroom and find students in semi-circle he didn't need to arrange them. Nowadays you go to the classroom and find them unorganized. As i said there was the CRE with some material which stimulated the teachers as well as the student in the teaching and learning process. These resources no longer exist. .the audio resources were not brought and none use them nowadays, we shouldn't be so theoretical if we want to improve the teaching. When these resources exist and are not used then we are in the same routine; it is the classical teaching, isn't it? The resources that should stimulate changes no longer exist. Those which exist are not used. Resources such as overheard projector are simple kept in there. Where is the improvement, the change then? During that time all these resources were frequently used. In those times i remember seeing students go to the museum, but today lessons are only taught only in the classroom, rarely they go out but the new curriculum recommends that. There is still a lot to be done. Changes should start here in the teachers training. How will the prospective teacher use the learner centred teaching if he was not taught like that? There are issues that deserve reflection.

Q: Which is a similarity that exists between the basic Education and the formation of the teachers?
A: well, there is one (pause) similarity, in fact, because we are institution of formation of teachers, the curricular, well, how I have seen, the new curriculum which is going start this year as a first year, for our case is a continuity a similarity, which I have seen, in fact, in terms of the proper curricular plan of a study. May be there is no difference in terms of designation. However in speaking, we have got in our Discipline of social Science, eh, we have got a Discipline of Natural Science and its Methodology We have got a Discipline of Mathematic and its methodology we have got (pause) … of physic Education, musical Education, Visual Education and Technologic (pause) we have got moral education and civic and crafts. However, are Disciplines which looking, also, for curricular plan of basic Education exists. Then, for me I met that similarity in terms of proper plan of the study. And well, psycopedagogy because and a Discipline already specificity for proper formation.

Q: Do you think that, your way of teaching constitutes a model for your students? Why?
A: Yes, always, I have appealed the forming that's necessary, in fact. Before exposing the contents, I find to know, if a child has some knowledge for the part of that contents, because, in fact, a child doesn't come empty from home. There is something can have, then explore first the ideals of the children and afterwards continue with the developed of the contents and involving more the children for the activities are in the knowledge.

Q: What relation does with the principal of learner centre approach, which is a base of curricular of basic Education?
A: well, I think it may be should have a relation if teaching œntred in the student, if the teacher would applied could resolve a bit this situation, in according, that, the teachers had to choose the criterion of the work in small groups, In which a teacher has to dedicate more in the planning of various activities to give the groups the end of … when the children are involved in the groups. Then, the teacher, now can do a plan per day of how many groups want to centralise more while other groups are doing other activities, from there, he can give an attention, gradually in each group to verify to end of the week, already succeed to work with all children and to know profoundly the difficulties of each group.

Q: What's the situation of the College in terms of teacher-pupil ratio?
A: Well. I think that, problem of teacher-pupil ratio on Basic Education is the same serious problem according in what happened in reality and the teacher in the classroom, form his/her proper … That's to say, the teacher, in fact hasn't succeeded to involve the all children in terms of learning. Many times the teacher works in spite to have … he has got another second shift … there are children who are risking because of high number in the class. Then, that's a serious problem, in fact. Its solution will not be easy, because this will need in terms of more, we can say, classrooms, more teachers and to decrease the excess in the shift (large class size). But, this is not a thing which will be very easy, given that, searching is the major, but the capacity of relating to school is reduced. Eh a human capacity as well as of installation.

Eh!, Back to the College, this year we are almost with these problems of elevated numbers in classroom but in the other years, we obtained a number, which we think a bit reasonable. Eeh, from 40, but our class should be 30 and 35 but we have worked with 43, 46, then, here, in this year, we are working with a class more elevated number, a maximum of 55 then, we have met that difficulty, but, the formers have sent forces to see if can succeed to involve all the learners in the base of that methodology of participative work.

Q: Can you tell me about student's number per class during the OP?
A: Well, this question related, as I said that, searching is the major, eh, and many times, when we treat of a candidate, in fact, we have defined the limit, but, many times we have surpassed the limit, in terms of over fulfilment. The over fulfilment appear exactly because because of a great pressure which exists. For us in Nampula, may be because of the provincial; she's very big and not only and

is the unique college, with an idea of wanting to represent, this is to do a representatively in each District in forming for other factors which interfere in the process. Many times are requested to come … at the last hour, and we have to attend. These factors are which have taken to terms this situation of over fulfilment of our limits.

Q: As Deputy Director has supervision assistance of lessons of formers, so that, to verify the application of the principal, of learner centred approach in classroom?
A: Yes, the assistances have possessed between (pause) trainers of the same area, besides of the assistances of the direction, from time to time have done neither, but means in the proper groups of disciplines have done its plan of mutual assistance, that is, to support, however, if, there, will be difficulty.

Q: These assistances are more in an aspect of methodology or in an aspect of contents?
A: eeh, they have been more for an aspect of methodology aah, these assistances, on attention is more for questions, aspects of methodological.

Q: What's the perspective in the future?
A: Well, our future perspective to surpass this difficulties, we should do an investment in terms of construction more classroom, because, a capacity of this college is much reduced. There are 7 classrooms... But today, we are working with 11 classes. This is because a school annexed and given in, however, two classrooms beyond of rooms which work in the CATEC, which were destined to the tradition art. And there, we succeeded to 11 classrooms, but futurity, in fact, to surpass that problem, is, we have to build more classrooms.

Q: Now, exists a guarantee of financially or only is an idea only?
A: it is still yet, premeditated idea, a premeditated idea.

Q: Initially had two alterations and now has one alteration, please explain me?
A: A reason of couldn't have two alterations is that, we had difficulties of transport, the institution has one minibus, already, it is (laughter) a situation of decadency, we have seen that, it is not, it will not guarantee, in fact, the activities of the second shift. Because will need to leave at 7.50 pm (19.50) and the factor would, afterward distance with the problems of Mechanic of the proper a minibus will not guarantee us.

Q: The resource of materials
A: Yes, so that, also it is a question, that, must do a lot of work to improve the conditions which exist. Well, in terms of books as there is that programme of the distribution of schoolbooks, it may be that had to do, was to do the impro vement service of the distribution of books, must reach very soon in the school, which hasn't been easy. Also, are problems, which still continue to exist in school. The reaching of the book very late is, many times people have started the schools year, and those are not preoccupied to investigate. In this way, they have got the major limitation, when they haven't got those materials. However, the conditions of physic, the work in the classrooms, the major part of our schools, in fact, have unfavourable conditions for the process of learning of the children. There are a lot of schools which have to do a lot of work, yes, yes, must do a lot of work, in fact, to potencies the school in school materials. In terms, of writing –desks and classroom of more spacious, well conserved can be of local materials but must be more or less organized. This needs the involvement of the Directions of schools. It may be with the support of the community to surpass some difficulties. Now, in terms of writing desks, in fact, also, needs that, the school must be together with the community, they can meet a good solution in spite to have a regular plan that the ministry has done for the distribution of writing desks.

The schools, also, must do some work. I was speaking; in fact, it is necessary that, schools should have the major work. In schools together with the community, they have to resolve gradually some problems in terms of conditions of classroom. Writing desks still leave in the plan of ministry of Education, which has been, for the distribution of writing –desk. And many times, what has

happened is that, the people stay stagnantly only to wait for the ministry to send (laughter) they haven't possessed, in fact, the initiative spirit in the major part of schools.

In relation to the college, well, in terms of writing desks, we haven't got problems its true that, the number tends to rise up. Many times, in the days to come, will have that problem, for a while, we haven't got that problem of writing desks. The unique problem, in fact, is the fewness of the classroom, which exists. However, to the materials at the moment we stand in need of programmes to that new curricular, which passes away. Well, we have got some programmes, which are those we were in experimentation. Now, we need of the definitive programmes for all areas.

Q: What about the books of new curriculum, what is the situation?
A: Yes, that is another problem which I had forgotten. We have got that problem of a shortage of books of the new curricular. Many times the directorate of the city as well as the the provincial directorate have forgotten (laughter) to supply the institutions of teacher training, but we have written a document about that this year to the directorate of the city, and they have promised to do something, they also said that they hadn't contemplated us in their plan to the institution. However, those books which will remain after the distribution are the ones which they will supply to us, and only to encourage us, a little bit, saying that, next year they are going to include us in the plan (budget). Also the Directorate of the city, they are going to give us some copies of all classes in all areas.

For resources centres (CRE), what we are thinking to the direction level and what have that to do an investment, to change, instead of fixed shelves on the walls, must be cupboard (chest), in cupboard which they will be locked, cupboard of glass but with a possibility to lock.

The books will be exposes, but with a security to avoid that if they maintain in the cupboard (closed) locked, none can see them but, of programme that the ministry ordered to rise up in the institution for the formation of teachers. To be able to speak, than, they need in terms of material and we verify that programme, we change. However, the resources centre including those cupboards. Already, we put this and sent to ministry of Education and culture. And we are waiting for some fund of investment to do this.

Q: You said that, an alteration starts in the Osuwela Project with participative methodology etc. What does it mean?
A: Eh! For me, I think, I can't see the big difference of the project here, to speak plainly, can have weakened some activities, before the engagement of preparation of didactic materials, this is, yes, has a reduction, but conditioned the shortage of some means that, the workshop of pedagogical was equipped, neither. Many times has taken a reduction of that dynamic which at that time the physic presence of the Project in the institution was doing in relation now, but not, because, the trainers have not orientated the learners for, eh, using the local resources to elaborate the didactic materials, has recommended, but, haven't been that orientation as it was formerly in fact.

Q: Speak to me about the workshop of pedagogical at the time of Osuwela Project, what was an essential of the workshop of pedagogical?
A: An essential of workshop of pedagogical, exactly, was the trainers of each area should see what kind of didactic materials can be elaborated in the workshop of pedagogical for the use of the proper learners and when they get and, can take it.

Q: Perception have you got to this problem and which would the role of institution in solution, to minimize (decrease) that problem?
A: Well, that problem has come to stay, to tell that we are going to a definitive solution (laughter) it will not be possible but, it may be, what, we would minimize the problem, is that, there would have a programme of work with those teachers. In particular those who haven't got a formation, it may be to work in a attention to have more capacitating (training)

Q: In which moment?
A: In that moment, in fact, this could be a programmed thing? And, however, at that time of interruptions. Then, we would be involved in capacitation (training), that idea, I think which will have its implementation, may be not in totality but there is a thought which the proper (Ministry of Education and Culture) already is implementing, which is a programme of CRESCER, which exactly involves in particular teac her's trainers of the institution of the formation of teacher, some technic that, in each province can work with teachers not only who haven't formation as well as with formation a long time ago, they need to activate in terms of methodology, then, this programme, I think, that will be able to answer.

Q: The basic Education is the quality. Can you comment, please?
A: well, the question to improve a quality, for me, I think that, passes necessarily by the work of the teacher, if the teacher in fact, gain the conscience of his proper performance of the in the class. I have a lot of certainty that the quality will improve (pause) I speak this because, in fact, while the teacher doesn't bet and have that conscience, we can change the curricular plans various times (laughter) we will never reach at the quality, then, I bet more that, the major work must do with the teachers, so that, have the conscience of his proper work.

Q: Can you tell me of in service training fact by the Osuwela Project?
A: Well,, in service training consists exactly of (pause) speaking more in questions and aspects of quick methodological, a teacher, there, in the field, eh. The preparation have been in the periods of evening in which before of going there to the field in the formation that, and done in Saturdays. Then, all evenings, a week before of definite Saturdays for the formation of trainers will go and will prepare of the proper material which will use in service training. Then in terms, there is a possibility that, our trainers. In the evening period as involve in that activities expecting the days of, the days of Tuesdays and Fridays which we have got our internal work in which the teacher, they do not involve in evening period in that activity of preparation, because, here, internally, also we have got our meeting (pause) of proper organisation, here, inside, in terms of meeting for the study of analysis of our pedagogical work, not only, but also some capacitating of internals between us.

Q: When do the teacher's trainers dislocate in evening to Osuwela preparing that. What to do?
A: They prepare I terms of, to review again the modulus in terms of its applicability in terms of methodology again, as that, we are going to work with teachers, that exercises, permits that, in fact, we should more actualized, in terms of that, which we are going to do with the teachers.

Q: Which number has been comprised by the formation, which you do?
A: Each formation (pause) depends of each district there are Districts in which many times, we have wo rked with about 50 teachers (pause) because all are coordinators of school cluster who participate in formation. Teachers who are called Delegates and Technics of the districts (pause) who participate those formations.

Q: Give a formation, is there a simulation?
A: give the formation, give the simulation of those all methodological activities, do with the proper participants, who realize, when the have got difficulties. Are illustrated (explained) as to surpass those difficulties in order to go out when they are well prepared, in the form, then haven't got a lot of difficulties when, they were doing a transference to the teachers.

Q: The formation, pass way (percolate) more or less in which period?
A: the periods, starts a formation from 8am to 5pm (17 hours) however that's the period of the formation work.

Q: What is the motivation to participate in service training tend in account that, the formation passes away at the end of the week out of normal time of the work?

A: Clearly, I think that the motivation is more in terms of our mission with the teacher trainers that's an aspect, another, is, we understand that, in fact, without us (laughter) the teachers are not going to have a support (pause) clearly, there more a lot of problems about the time of Saturday about the time of Saturday, that the teachers trainer in occupied. Have claim (reivindicated) the salary in term of remuneration, it hadn't been, from the principal would be paid by that work of Saturday, but hadn't been, but, there is a problem which we have already spoken, always, in our meetings, and, we leave in the level of the Ministry of Education and Culture, to see, what modality must adopt for the acknowledgment of the work of the teachers trainer in Saturdays, and simplily when he goes out, what does he take? Merely subsistence allowance, but he doesn't account of the work which is going to do.

Q: Can you tell me what the relation between the teachers training curriculum and the basic education curriculum is?

A: we had the opportunity to see that curriculum in a quick approach. We could that it was coherent because first it contained contents of science and methodologies which make the teacher become more technician. It consolidates the bases from grade 7. It makes a teacher more technicians than professionalizing in the sense that the most difficult contents such as the chemistry and physics subjects were removed and new subjects have been introduced that conform to the new curriculum. So i hope that the present and the future results will be better. Now, if a teacher finishes 7+2+1 i know he can go to IMAP and after that? Will he be able to go to UP? He may even go. But will he cope with the subjects? As far as I know UP is less pedagogical. I mean less technical. I have just done bachelors at Up and it is more science than pedagogy. So how is the he going to compare to a student coming from grade 11 at UP. We see people going to UP and do Management. Why don't they do Maths courses, Physics teaching courses or Portuguese teaching courses? The y take management, psychology or pedagogy. Myself I wouldn't feel comfortable taking these courses. I want see my progression. I think that it is technically well designed, but let us wait for the future to see; maybe i will have a different opinion.

Q: Has the change of the basic education made any changes in the college, in pedagogical, organizational or administrative terms?

A: all I know is that there were some seminars. People needed to understand what the new curriculum was. It can be said that here at school there are no changes. There are no books for basic education; I just know that there are programmes (syllabus). I was now working with the basic education programme (syllabus), there are no books yet. Teacher trainers make efforts to train based on the new programmes and new contents, although there are no books. I thing it didn't change much, some of the change are not good.

Q: What are they?

A: First, the teaching staff is not the same. Many teacher trainers left. As always, the best are the ones who leave. The worst never leave. They are some coming from ADPP. We can see differences so I don't know how each teacher interprets the curriculum in the classroom. I could see the way the classrooms are organized; it is different. There was always a tendence to organize the classroom in a traditional way. Teachers would come to the classroom and find students sitting in a certain way and they did not need to organize them because they were already in groups. And they would move to another classroom and find students in semi-circle they didn't need to arrange them. Nowadays you go to the classroom and find them unorganized. As I said there was the CRESCER with some material which stimulated the teachers as well as the student in the teaching and learning process. These resources no longer exist. The audio resources were not brought and none use them nowadays, we shouldn't be so theoretical if we want to improve the teaching. When these resources exist and are not used then we are in the same routine; it is the classical teaching, isn't it? The resources that should stimulate changes no longer exist. Those which exist are not used. Resources such as overheard projector are simple kept in there. Where is the improvement, the change then? During that time all these resources were frequently used. In those times I remember seeing

students go to the museum, but today lessons are taught only in the classroom, teachers rarely take students out but the new curriculum recommends that. There is still a lot to be done. Changes should start here in the teachers training. How will the prospective teacher use the learner centred teaching if he was not taught like that? There are issues that deserve reflection.

Q: Can it be inferred that the classes are not learner centred?
A: I think yes… I have not had the opportunity to observe a colleague's lesson. I just teach my lesson and go away. The observation sessions are starting now, we have planned that. Each teacher plans lesson their own way. Some teachers have initiative others have little. Each teacher does things his own way and according to the available resources.

Q: Relate learner centred approach with ratio teacher-student?
A: It is a problem. I think it is the problem of underdevelopment. The good idea was to provide more teachers, classrooms and we would probably decrease the ratio. But I think this problem will persist for long time here at Marrere. But some measures may be taken at pedagogical level. Teachers should be taught how to manage large classes. I think that one strategy is to divide the class into groups. It can minimize the problem of lack of material as well. Also, activities should be diversified and some groups may work outside the classroom. This can help, I think. If I have 50 students and take some to another; classroom where my presence is not relevant I can stay with other group for some minute the one that needs much teacher supervision. Then I may exchange them. I think that is possible in 90 minutes. So using some techniques can help. But the state must train more teachers and build more schools.

Q: You talked about inside and outside. What is the ratio teacher-pupil situation?
A: we are now doing what we were doing before. We used to have 50 or 60, when the Osuwela project arrived it decreased the number to 30 or 35. We have now come back to 60. But I know that the demand was high either before and now.

Vacancies have always been limited. I do not know why we have gone back. I think it has to do with directorate objectives, but they say no. I think there is this problem also in the cities. I have visited some schools in the countryside and I didn't see this problem. They even look for students. I think it is the problem of the Ministery because sometimes they tell a teacher here in the city that there are no streams, but the classrooms with 90 students.

Q: What relation can you draw with the principle of learner centred teaching?
A: I should have explored better this issue. I don't know maybe you may help. But there are many factors involved. The teacher is the key of the change. If he does not feel the change himself...so I think we should bet on the teacher, or make him feel the need for change.

Q: What about the trainees?
A: They will feel that it is necessary to change. Maybe we should pay much attention in initial training. These old people will not change. They are too old to do that easily. We should change first, we teacher trainers. Trainees will just copy what we are doing, how we teach, how we interpret the curriculum.

Q: In your case, are you 100% sure of that?
A: Sure, I am aware of that. One is always optimistic. The teachers say always that the lesson was good. Well, don't say I do, but the most important thing is to expose.

Q: Do you do it with other partners from the same subject?
A: Yes, but when teachers study more they tend to be less cooperative, collaborative. Each teacher wants to do what he thinks their own way. They find it boring to meet and share our plans, but it is good. If we could maintain the routine of observing lessons and planning classes maybe there would be more exchange. Here we plan. It was the first think we did. We have the observation plan now but I don't know if we will follow it.

Q: Relating the resources and learning conditions at college?
A: There are no material resources. Everything is related. In some schools conditions are better. Some schools have some resources and don't have others. It varies. Schools in the countryside, for example, have good conditions for learning subjects such as natural sciences. Other subjects such as Portuguese have good conditions for their learning in the city. The learning of a language is not only in the classroom. So if the environment is not favourable people don't speak well the language. The lack of audio visual material in the countryside is also a problem.

Q: You talked about research how is it possible, the library does not have books?
A: The research always limited. It varies from teacher to teacher. There is such research as bibliographic one, to refer to books. However I think that research maybe done using other techniques or strategies.

Q: What does your investigation consit of?
A: Last year I carried on a research on some comum deseases as a didactic approach. Just to show how a research can be made. They have just published gone out to publish it and make some interview. In this research some results were published. It was an aspect to illustrate, to see. We also made some visits. We had a talk with the director about those frequent diseases. There were also some statistics. So I did it with some colleagues. It was a coordenated work. In these last two years I started classes in the second semester from then on. I haven't made a great research. But based on some texts that I distribute I get students read and get the content to learn and understand how the teaching is oriented and at the end they also do the work in small groups and present it.

Q: What are the main objectives of pedagogical practice?
A: One of the objectives of the teaching practices is to put the methodological practices acquired in pedagogy and psychology in practice. It is to plan, teach, observe and reason about one´s performance.

Q: How long do pedagogical practices take?
A: They usually take place all year long, according to the existing planning.

Q: How is it organised? Who is involved in this process? What is the main task of each?
A: The adjacent school (the one receiving the trainees) receives the information in advance that some trainees are going there for pedagogical practices. The diractorates of both schools are involved in the arrangements, particularly the pedagogical directors. The pedagogical director of the training centre is in charge of deciding on the trainees going to pedagogical practices and the teacher trainers' accampanying them. The receiving pedagogical director decides on the shift, number and classes where to allocate the trainees in, in conformity with the number of the trainees and the capacity of the school.

Q: How is pedagogical practice assessed?
A: We try to follow the assessment regulations. The assessment regulation tells how pedagogical practices must be assessed. They first happen at the adjacent school and then at their own schools.

Q: Where does the pedagogical practice take place? Why?
A: They take place at the adjacent schools and at others belonging to the ZIP. Taking into account that trainees have just had simulation in the classroom during their classes, the adjacent school is a sort of a laboratory for Teachers Training Schools. By policy, the adjacent school is a part of the teacher's training school, where trainees get familiar with the pedagogical activities such as planning; observing classes, dealing with the summary book etc. Finally, trainees teach themselves in a number of three, depending on the size of the school.

Q: What are the main constraints? Why?
A: Firstly, the biggest difficult is the acompanying activity because the number of trainers is much reduced compared to that of the trainees. Secondly, because of the high number of trainees and the small size of the school, there is need to allocate more trainees in one class. The more the trainees the likely it is to disturbe the students. Moreover, the classrooms are small.

Q: What kinds of materials are used in the teaching activities?
A: In pedagogical practices, trainees must have lesson plan, didactic material etc in accordance with the lesson he is going to teach.

Q: What kind of report is produced? Mention the main components.
A: At the end of the pedagogical practices trainees have to write a small report describing all they have done at school. It is handwritten and free. They are not provided any structure to follow.

Q: Relating to the teachers with no training. How do you perceive and what is the role of the college on it?
A: For these… we only have trainees with 7+3 and they need to be accompanied. In fact, what is lacking is just accompanying them. If we could do that it would be good. Maybe seminars could help, even if they were like those organized by the Programme Crescer. Maybe they could somehow help, although it is expensive. .the Centre doesn't have financial capacity. However I think it´s the crucial point of the problem. Trained or not, with good accompanying, constant and periodic visits it could help in concret programmes. For example, we go and leave activities and orientations and we go back later to check for the result and to provide more help. It could help. Even among those who have not undergone a training there are some with talent. I have seen teachers with no training with good capacity to lead. All they need is being accompamied.

Q: Can you tell me about the INSET training carried out by the Osuwela project, what is its essence?
A: Eh! There (pause) the difference is just the injection of new strategies that are more active. That will make the student more active. The strategies that are there are those that make of the student the owner of his own knowledge. He is an active element and not passive one. That is the philosophy of Crescer Programme and it was also designed from the evaluation of the model we saw; maybe it would help for teacher training.

Q: When does INSERT take place?
A: It has been at weekends during break time, it is sometimes difficult at the weekends because sometimes there is coincidence of programmes. The school directorate has also its programmes, the distrital directorate and the ministries also. Preparation has been in the afternoon. The teams prepare themselves in the afternoon. Since classes are in the morning, they go there in the afternoon and provide training at the distrital level.

Q: In those training was there production of didactic materials?
A: Yes, although teacher trainers are not much involved in the production of that material. The material is almost already designed. It just lacks production… they organize the production activity. Sometimes they just take photocopies and in other times they need to go to the swimming pool. We have a specialised technician for these things. But if they were also involved it would be good.

Q: About the quality of the basic education. What comments do you have?
A: There is a great problem. Many things are still to be done. If we look at the students that are graduated we can see that there is still a lot to be done. Technically, in all curricular areas there are gaps. They can't read, they have problems in maths. The quality is low in basic education. We have come to a situation where the student has too many difficulties that he cannot progress. The students that we receive have too many problems that even with the great effort they make they

don't cope with the tests. The students are not to blame. The quality is low, we have to do something.

Q: Have you got anything relevant to add?
A: Eh! I think that (pause) may be I should the state difficulties I have, for example: the progression of trained teachers. I don't know how it was designed at the level of the ministry of education. If it is prescribed or not. If Chemistry and Physics were taken out any student would have advantages of changing the course if they felt like. But I don't know (laughings) but (pause) maybe that … (pause).

By the way, of the aspects we have spoken about is there anything which I have forgotten? I have got, (laughter) but the important is that I have spoken, perhaps, I can increase, in fact, that, there is a necessity of having more attention to the training of the teachers, and that, many times, the Ministry of Education and culture when the alterations (or changes) are made or even by the INDE, they are made with no previous planning. That is what i wanted to observe. It can't be like this at the next times. It has to be included in the plan of the teachers training institutions. After all, there are those, who are preparing the teachers, what happens with the curricular plan we have seen the last time, perhaps, they would have a thought in the reformulation of the curricular plan of teacher training (laughter) before of the plan of curricular of basic Education.

Thank you, for your collaboration and patience.

APPENDIX M: MATHEMATICS LESSON DESCRIPTION

Maths Lesson

49 present's   6 rows   1a A   4 desk

Teacher: What are the conventional models?

Student: Rope

Teacher: What and how it is doe with that rope? Can someone explain?

Student: It happened with my father. Example of stones. Sty. As an animal was moving out a stone is taken out.

Teacher: Did your father use to measure or to count the cows? What we want is measurement.

Student: Rope, farm.

Professor: You didn't have another measure?

Student: Steps.

Teacher: Come to the front to demonstrate how it is done. The classroom width. Two students.

Student: Preciosa = 9 steps to the exit door. = got 7 ½ steps.

Teacher: Who has got more steps?

Student: Preciosa (**in chorus**)

Teacher: Are these steps equal?

Student: No. (**In chorus**)

Teacher: what is the other measure?

Student: palm.

Teacher: Measure the desk. How many palms?

Student: 5 5 1/5 5 6 ½

Teacher: what is the other non conventional measure?

Student: Jumps

Teacher: Come and show us the jumps.

Student: Adélia got 5 ½.and the other student got 6

Teacher: Are there more? Can't you measure with the foot? Come and demonstrate.

Student: Janete got 39. He got 37

Teacher: Which conclusion can we draw?

Student: We can't draw any definite. (**In chorus**)

Teacher: Who wants to come e do measuring? (*Capulana*)

Teacher: How do you know it is one metre and sixty centimetres? These kinds of measurements are …

Student: They are non conventional measurement.

Teacher: Why aren't they conventional?

Student: Because they don't have a fixed measure.

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

Student: length measure unit.

Teacher: so the topic today is...Length unit

You mentioned that the universal measure is the metre

Student: Metre

Teacher: metre has its sub multiples. Let us organize them.

Multiples	The main unit	Submultiples
Kilometre (Km)	Metre (m)	Decimetre (dm)
Hectometre (hm)	M	Centimetre (cm)
Decametre (dam)	M	Millimetre (mm)

Teacher: I don't know that multiple. I don't know them.

Student: There was a volunteer to the blackboard

Teacher: What is the symbol? Think on the symbol of decametre.

An hm can be used to measure cloth, a Capulana for y mother.

Student: No.

Teacher: When do we it?

Student: in the streets

Teacher: Long distances.

Have you ever been to the civil registration to have your ID? What is the unit they use?

Student: Metre

1km = 1000 m

Teacher: How do we know they are millimetres?

Who has another idea? You have been to the blackboard today. Someone else.

Student:

Teacher: When we move from kilometres to metres, do we move from left to right or from right to left?

Student: From left to right.

Teacher: 1 hm = 100m

Student: 100 m

Teacher: Who is going to do that? How do you know it is 100m?

Student: 1 hectometre o decametre o metro

Teacher: Write 1 decametre. How many metres are they?

Student: 1 dam = 10m   1 decametre o metro

Teacher: We want to know how many metres there are in 1 dm. Isn't it possible? We move from…

Student: We move from the left to the right

Teacher: And in the submultiples, we start from…

Student: We start from the right to the left.

1 dm = 0.1 m

Teacher: As you can see 1 dm is one tenth of the metre.

Km, hm, dam, m, dm, cm, mm (joint work)

Isaura come and say how many metres are there in 1 cm.

Student: 1 cm = 0.01 m

Teacher: How do you read? One cm is one hundredth of the metre.

Student: 1 mm = 0.001 m

Teacher: How do you read?

Student: 1mm is one thousandth of the metre. (**In chorus**)

Teacher: any doubt, here? So, you can take the notes.

1st complete (9h 35 m) starting time

    a) 1m = 0,001 km

    b) 1m = 0,01 hm

    c) 1m = 0,1 dam

    d) 1m = 10 dm

    e) 1m = 100 cm

    f) 1m = 1000 mm

Teacher: You can discuss in pairs. Pair works activity. Can we correct?

Student: Yes.

Teacher: Who is going to do a)

How do you read?

1m is one thousandth of the km.

Teacher: Are there any doubts here?

Student: No.

Teacher: So, go to the library and read the other three Mathematics books, page 92, 93, 94, 95, 96, 97, 98, 99 (homework)