

CHAPTER 7

THE MAIN FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS

7.1 INTRODUCTION

In chapter six, the results reported in chapter five were analyzed and discussed in terms of the responses collected during the investigation. The aim of chapter seven is to report on the conclusions in terms of the research questions listed in chapter one of the report. Therefore, chapter seven, preliminarily, recalls the main problem, research questions, aims and objectives of the investigation. Following the main conclusions, by means of which the lessons learned from the study are generalized, recommendations were made for successful implementation of the new curriculum for basic education throughout Mozambique. A number of limitations have also been listed, preceded by a reflection on the findings. Finally, some implications of pertinent recommendations were highlighted.

7.2 THE MAIN PROBLEM, RESEARCH QUESTIONS, AIMS AND OBJECTIVES OF THE INVESTIGATION

Mozambique has undergone profound sociopolitical changes. It has moved from a one-party state to a multiparty democracy. Currently, emphasis is placed on democracy, human rights and gender issues. In order to make the basic education curriculum more relevant to the new socioeconomic and political reality, Mozambique decided to embark on a transformation process (Mário et al., 2002; Bazilache, Dhorsan & Tembe, 2004).

However, Mozambique is a poor country, still dependent on external aid. It has also gone through a structural adjustment process and many companies were privatized. Now, it has moved from a planned to a free market economy system. Major investments are being made in the country and new skills are demanded from the work force.

A critical issue that must be addressed arises from the fact that Mozambique is not a culturally homogenous country. The reformed curriculum was, in many cases, in direct confrontation with non-formal education, which is still strong in the communities. It is equally important to note that education is a dynamic process and, as such, is subject to a continuous process of change: new technologies, methods and strategies are continually being developed. Mozambique needs to select the more relevant and updated methods to improve the quality of education delivery in schools.

Successful curriculum implementation relies on several factors, such as school environment, availability of resources, teaching-learning methodologies, evaluation strategies, sociocultural setting, and attitudes of learners, teachers and other stakeholders involved in the process (according to many writers such as Oliver 1971; Bobbitt 1971; Giacquinta 1998; Busher, Harris & Wise 2000; Fullan 2001; Hewitt 2006).

The problem is that despite efforts at implementation, it is still not clear how the learners, educators, subject specialists and principals have experienced the new curriculum introduced in 2004. It also remains to be seen whether school members are clear about the nature of the change, the reasons behind it and how it is supposed to be implemented. Above all, it is not yet known whether the classroom practices developed by educators really meet desired ends, and whether schools receive the necessary support to implement the new curriculum. These are the critical issues that will determine the success of curriculum implementation and that have prompted this study, which sought to examine the status of the new curriculum of basic education in Mozambique a year from inception.

The above considerations led to the central question of the study: *What are the factors on which successful implementation of the new basic education curriculum in Mozambique is critically dependent; and to what extent are these factors in place as required?* The following subquestions, derived from the main research question, were formulated towards addressing that question:

- What is the nature of the new curriculum and to what extent does it prescribe its implementation?

- What are the perceptions of learners, educators, subject specialists and principals regarding the new curriculum?
- How does the new curriculum find expression in the classroom practices of educators?
- What efforts are being made towards successful implementation of the new curriculum?

In response to these questions this study sought to trace the first year of progress made towards implementing the new curriculum for basic education in Mozambique, to which end particular attention was focused on classroom practices, overall school conditions, and the influence of endogenous and exogenous school factors on implementation as succinctly reflected in the following conclusions drawn from the investigation.

7.3 CONCLUSIONS DRAWN FROM THE MAIN FINDINGS OF THE INVESTIGATION

7.3.1 Nature of the new curriculum and the plan for its effective implementation

7.3.1.1 Nature of the new curriculum

Marsh and Willis (2003) hold that the curricula of contemporary schools rarely reflect a single, exclusive approach. In general, contemporary curricula have been created eclectically, using a mixture of alternative approaches, whether or not the people most concerned with their design were aware of this. In fact, the new curriculum for basic education in Mozambique does reflect features of different approaches. The characteristics of the behavioural approach are evident in the framework and syllabi philosophy of the new curriculum. Thus, as noted in section 2.3.1, the overall exercise of curriculum change started with a thorough diagnosis of the impact of the former curriculum in terms of its effectiveness in students' learning outcomes (i.e. skills, attitudes and knowledge). The general objectives set up in the National Education System Act for Basic Education were re-examined and re-elaborated as the cornerstone of the new curriculum. In the perspective of integrating the curriculum by introduction an interdisciplinary strategy, the re-conceptualised objectives build the intended graduated basic education profile or outcomes in the

domains of (1) personal development, (2) socioeconomic development, (3) technical and scientific development and (4) cultural development (PCEB, 2003). These objectives/outcomes are reflected in each curricular subject and from them the specific objectives were derived.

The features of the managerial approach are obvious in section 3.4 of this thesis. In this respect, the PCEB asserts that the success of any curriculum change initiative is unquestionably linked to the appropriate use of implementation strategies designed to offer school support for effective curriculum change. As indicated in section 2.3.3 of this thesis, the systems approach is reflected in the policy dialogue and consensus building that characterized the process of construction of the new basic education curriculum. In this context, it is worthwhile to emphasize the modalities of consultation and participation in formulating the curriculum transformation policy, the basic education objectives, integrating the curriculum through interdisciplinarity, rendering the curriculum relevant to Mozambican society, piloting and monitoring implementation of the new curriculum, et cetera. The academic approach is reflected in the three purposes envisaged for the Mozambican new curriculum for basic education, namely delivery of (1) basic literacy and numeracy, (2) basic technological skills in domain of practical activities and arts, as well as (3) patriotic education expressed in the three comprehensive curricular areas defined in the PCEB, namely:

- Communication Skills and Social Sciences;
- Mathematics and Natural Sciences; and
- Practical and Technological Arts (see sections 2.3.4 and 3.3.3 of this thesis).

The humanistic approach is reflected in the endeavour to make the new curriculum relevant to the learners themselves and to their families and communities, as well as to society at large (PCEB, 2003). It is also evident in Chapter Two of the Curriculum Framework of Basic Education (PCEB, 2003) where the political, economic, socio-cultural and educative contexts are presented that inform the curriculum design. Chapter Three of the same document presents the general policy pursued by the new curriculum, focusing especially on learner outcomes in the domains of personnel, socio-economic, cultural and knowledge development.

7.3.1.2 The plan for effective implementation of the new curriculum

Among other measures, the strategies for implementing the new curriculum include: the construction and expansion (to complete) primary schools, teachers' upgrading, and teacher education — initial teacher training (see section 3.4.1).

Another planned strategy is the support offered to schools during implementation of the new curriculum. The curriculum transformation management bodies, especially at provincial level, were instructed to monitor and provide the necessary support to schools in the process of implementing the new curriculum. Other than the curriculum design and development roles, INDE has had to perform the educational research function, for which it has set up a monitor group, known as the ethnographic group, and a supervision group in its capacity as coordinator of the overall process of curriculum transformation (see section 3.4.2).

Added to this, the preparation of school textbooks and teachers' guides in accordance with the syllabi of the new curriculum were strategies adopted within the remit of the new curriculum implementation.

The management bodies' main weakness during the curriculum transformation process, which impacted negatively on the implementation across the nation, was the actual project character, as the support was time specific. This means that when the time schedule for the new curriculum project elapsed, the management bodies dealing with curriculum transformation were debilitated or simply ceased to function. Yet curriculum development is an ongoing process that requires regular review and continuous support to ensure its effectiveness.

Moreover, when the active involvement of top political decision-makers (e.g. Minister of Education) and other key stakeholders is not sustained for various reasons such as removal from office, the coherence and sustainability of curriculum change and development tend to suffer immensely. In the Mozambican case, the transformation process in its design stage started with one Minister supported by a Representative and Head of Local UNESCO Office, among others. Both these people ended their term of office during the process of curriculum change and their positions were filled by new appointees. It is worth noting, that the change of Minister was also followed

by the change of Provincial Directors, who in turn made significant modifications in the composition of the management structures at provincial level. Whereas the curriculum change process proceeded, it nevertheless lost a lot of momentum before the new appointees were fully in control of implementation process. This situation is accurately described by Peretz (2003) who expresses the view that curriculum transformation is a participatory process involving diverse forces, and argues that closer and positive interaction between these forces embodied in strategically placed, individuals such as Ministers of Education, teachers and stakeholders (e.g., parents, unions and employers) have a synergetic effect that raises the feasibility of successful reform. However, he also notes that any disturbance in the positive relations between these forces could detract considerably from the effectiveness of the curriculum change process and consequently lead to its failure (see section 3.5).

7.3.2 The perceptions of learners, educators, subject specialists and principals regarding the new curriculum

7.3.2.1 The perceptions of learners regarding the new curriculum

So in the light of the above, we may conclude that, in agreement with Monyokolo and Potenza (1999:232), the three key pillars or the essential components of the curriculum were taken into consideration: “(1) curriculum development, including illustrative programmes and progress map’s or some framework for assessment; (2) learning materials based on the illustrative learning programmes and (3) teacher training that would assist teachers to translate all of the above into practice”.

The following conclusions, referring to learners’ perceptions of school and learning, were derived from quantitative analysis aligned with a factor analysis. These conclusions are also underpinned by relevant and pertinent literature (see section 6.93).

a. A friendly and supportive school environment is a key factor for successful curriculum implementation.

Indeed, according to Table 5.25, the majority of the students (86.4%) who participated in the study stated undoubtedly that they liked their schools and 81.4% of the surveyed students clearly expressed their agreement with the opinion that their teachers encouraged them to assess the quality of their own

school work. In the same vein, 81.3% of the surveyed students were of the opinion that they were attending good schools, while 72.3% felt that their schools were fun and enjoyable. Students also clearly expressed that they felt safe at their schools (73.5%) and 78.4% of the students felt a sense of belonging in their schools. Students' enjoyment of their schools is a function of how safe they feel there and their enjoyment depends on their sense of school ownership. Strikingly, as pointed out above, a relatively higher percentage of students indicated that they liked their schools and rated them as good ones. However, it is obvious that a friendly, supportive school environment should be cultivated, as can be seen from the following results (see Table 5.25):

- Teachers care about students (59.8%).
- Teachers understand when the students have personal problems (65.5%).
- Individual attention is given to each student when needed (71.3%).
- Teachers have confidence in students' ability to learn (66.1%).
- Teachers know their students well (66.5%).
- Teachers help students to gaining confidence in their ability to learn (78.7%).

In this regard, Khine and Lourdsamy (2006:31) contend:

It is important for teachers to have a caring disposition towards their students, believe in their students' ability to learn and establish a harmonious relationship with their students. Because it is from these relationships between the teacher and his/her students that student motivation to engage in learning can be realized.

Similarly, Brown, Oke and Brown (1982) note that students are very perceptive and likely respond favourably if they perceive a positive attitude or warmth in a teacher. If they sense that the teacher does not really care whether they succeed or not they will become discouraged and may even cause a discipline problem for the teacher concerned. Furthermore, still in this context, Waxman and Chang (2006) strongly suggest that teachers should make every effort to know their students well, not only in terms of basic demographic or

background information such as number of siblings, or employment status of their parents, but also about students' goals and aspirations.

The research also indicates that respectively 75.5%, 79.7% and 64.4% of surveyed students (see Table 5.25) agreed that their teachers, administrators and office staff treated them with respect. Concerning students' relationships among themselves at their schools, only 55.9% and 53.5% of the students (see Table 5.25) clearly agreed that other students treated them with respect and respected peers who look different. Impressively, 82% of participating students (see Table 5.25) agreed that in their schools they had opportunities to learn about each other. So, looking at student relationships at schools, three concerns were examined in this regard: whether a student was treated with respect by other students at the school, whether the students respected other students who are different to the norm, and whether they had opportunities to learn from and about each other at school. The results of the first two concerns were almost the same and characterized by a low rate in contrast to the high rate of the third. Consequently, there is a strong need to pay attention to the students' relationships among themselves, ensuring the effective use of opportunities to learn from and about each other at school. Gould (1996:94) recommends that teachers organize their classrooms and their curriculum so that to facilitating real learning, students can collaborate, interact, and address questions to both classmates and teacher. Indeed, Neagley and Evans (1967:34) argue that "pupils learn much from one another; those who have been together for years learn new material more easily from one of their own group than they do from strangers." Lovat and Smith (2003:3) emphasize that "it is important for students to talk to one another if they are going to learn effectively."

b. Students' attitude to learning activity is critical for successful curriculum implementation.

Referring specifically to attitude towards learning, the overwhelming majority (94.4%) of students who participated in the research explicitly expressed a positive attitude stating that they liked to learn. In the same vein, it should be emphasized that 82.4% of the students who participated in the study agreed

clearly that doing well at school made them feel good about themselves, while 79.9% of the students stated that they were doing their best at school. Added to this, 73.9% of the students stated that they actually assessed their own school work. Although 73.4% of the surveyed students expressed the opinion that their teachers were responsible for what they learnt at their schools, 74.0% of the students stated that they realized that they themselves bore the greater part of responsibility for what they learnt at school. In addition, 74.4% of the participating students expressed agreed that they had opportunities to learn from each other at their schools.

These results are in line with the sentiment expressed by 77.3% of the students that they were successful at their schools. It is impressive that 94.4% of surveyed students stated that they liked to learn, but only 77.3% of the students who participated in the research felt they were achieving success their schooling. Similarly, it is remarkable that 82.4% of participating students professed that doing well at school made them feel proud whereas only 79.9% stated they were doing well at school. In this regard, Waxman and Chang (2006:214) rightly observe that “educational failure of students is indicative of the failure of the school to teach and connect to students’ lives in meaningful ways”.

The researcher believes, therefore, that schools should undertake the process of resocialization (see section 1.6.5) to ensure successful learning and thereby meet their aspirations. Dorman (2006:4-5) points out that “in today’s information age, jobs are increasingly demanding higher levels of literacy skill and critical thinking and these demands require students to actively engage and monitor their learning rather than passively receive knowledge.” Indeed, Neagley and Evans (1967:20) note that “the learner should assume major responsibility for his own learning”. Echoing Wells and Chang-Wells (1992), Gould (2001:98) underscores that “another important reason for encouraging learners to take ownership of learning is that it increases intrinsic motivation to seek and carry through a way of finishing a piece successfully.” In other words, it is advocated that students undertake self-regulation which should be stimulated and guided by the teacher. This means that the teacher’s role as

facilitator is essential to ensure that the learner is taking responsibility for his own learning, which often hinges on the teaching strategies employed by the teacher. Indeed, De Vries and Zan (2001:118) rightly remark that “emphasis on the child’s self-regulation fosters self-confidence, an attitude of questioning and critical evaluation, and motivation to think about causes, implications, and explanations of physical and logical as well as social and moral phenomena.”

c. The relevancy of curriculum to real life and the student self-motivation are a fundamental condition for successful curriculum implementation.

While 91.3% of the total of the student participants in the research agreed that they found what they learnt in the schools relevant to real life (see Table 5.25), only 83.5% stated that they understood how to apply in real life what they learnt at their schools. However, concerning the work done at schools, only 60.5% of the respondents agreed that the work at their schools was challenging in context of the new curriculum. Meanwhile, 64.6% of respondents from the three participating provinces felt challenged at their schools. This apparent contradiction was explained in section 6.5.1

Regarding participation in extracurricular activities, 8.6% of the surveyed students questioned the importance of their participation in those activities, while 12.9% were undecided. Therefore, it seems that there is a need to change this perception and to involve these students, possibly by changing or extending the extracurricular activities on offer to ensure that the students emerge from the schools with more than just an academic education.

The findings of earlier studies regarding learning relevancy (Slavin, 1989; Good & Brophy, 1989; Gould, 2001; Lumby, 2001; Kyriakides, 2006) show that worthwhile learning is a very important student motivation factor. The researcher found in the study under review that the majority of the students indicated that they liked to learn and liked their schools, and that they find the new curriculum relevant. This makes the effective implementation of the new curriculum even more important.

d. The subject content of the curriculum is critical for successful curriculum implementation

The students' responses regarding the subject content of the curriculum indicated that different groups of students had different subject preferences. For instance, while some preferred subjects linked to practical activities such as arts and physical education, others expressed a preference for Portuguese, Mathematics, English, Natural and Social Sciences.

Levels of preference for favourite subjects varied considerably within these groups. For instance, while over 85% of respondents attached superior importance to Portuguese, Mathematics and the Natural Sciences, fewer than 70% considered the visual/aesthetic education and craft/art subjects to be equally important. English and physical education were rated as important subjects by between 75% and 80% by the surveyed students. Fewer than 50% of the students considered the local language as important subject. While it is true that "all of us learn by making choices" (Gould, 1996:100), it is also true that such choices are influenced by various factors. In the present case of school subjects in general, the teacher's role in motivating students to learn different subjects is crucial. As a matter of fact, the new basic education curriculum in Mozambique encourages interdisciplinary approach in order to develop learners' knowledge, skills and values in an articulated way in all the learning areas of the curriculum (see section 3.3.2). Brown, Oke and Brown (1982:4-5) observe that "if a teacher approaches a subject from a narrow viewpoint without seeing it from a wider perspective in relation to other subjects and life itself, he could be said to be teaching or training and not educating. For the benefit of our students we should attempt to do more than teach or train — we should educate." In other words, by delivering curriculum in an interdisciplinary way the teachers can show that everyone is called to be a artist in the construction of a better life and a better world (Wickersham 2002:128). This means that 'best practice' includes "developing the habits, abilities, thoughts, ideals, technical mastery, and virtues of the practice" and is intended for both teachers and students (Wickersham 2002:128). At the same time, the influence of hidden curriculum cannot be discounted here (see section 3.3.2).

In line with the discussion in section 2.2 about the curriculum as concept and specifically, concerning ‘planned curriculum’, ‘implemented curriculum’ and ‘experienced curriculum’, Von Glasersfeld (1996) observes that students perceive their environment differently from the perspective or intention of educators. Such environment includes curricula, textbooks, tasks they are given, among others. Similarly, Glatthorn, Boschee and Whitehead (2006:23) note that students learn a great deal in school from sources other than the intended curriculum, but which are relative to the school atmosphere. Therefore, while “the term hidden curriculum is often used with negative connotations that learning can be both desirable and undesirable from the viewpoint of one aspiring to optimal human development”, great importance should be attached to the school organization and the embedded environment to ensure that this hidden curriculum is a positive, rather than a negative, influence.

With regard to the specific case of the local language as a subject, or more broadly speaking, the bilingual programme, the problem is beyond the teacher’s responsibility. As shown in section 6.5.6, the local language is being introduced gradually as a subject and the materials used are still at piloting stage and in relatively short supply. In fact, putting the issue more bluntly, the materials used for this are usually photocopies (the illustrations in those texts are not coloured) and not textbooks. By contrast, in other subjects offered in Portuguese, or even better, in the Portuguese monolingual program, the materials were edited and colour printed. The recent report (2008, July) on medium term evaluation of implementation of UDEBA-LAB²⁹ strategic plan raises this problem of the dearth of appropriate school textbooks for the bilingual education programme. The evaluation report underlines that learners’ parents or tutors are concerned that the bilingual programme attended by their charges may be substandard because of the appearance and scarcity of tuition materials. This reality is reflected in the findings concerning local language teaching as contained in the present report.

²⁹ UDEBA-LAB (Laboratory Unity of Development of Basic Education based in Gaza Province) is a technical, scientific, cultural and social association that is a non-profit organisation. It convenes all stakeholders who endeavour to develop basic education in Mozambique. It is sponsored by the Netherlands a contract basis.

7.3.2.2 *The perceptions of educators regarding the new curriculum*

Concerning perceptions of educators, as a result of quantitative and factor analyses supported by the relevant literature on curriculum implementation, especially on the role of teachers, the following conclusions were determined (see section 6.9.2):

a. Leadership and rewarding are a key determinant of successful curriculum implementation

The surveyed teachers reflected little confidence in their attitudes and beliefs as factors that can assist implementation of the new curriculum. For instance, 33.9% of the teachers disagreed with the perception that teaching the new curriculum was fun at their schools. About 30% considered that they had not been given the necessary support to implement the new curriculum, and almost half of the teachers (45.3%) indicated explicitly or implicitly that they did not feel intrinsically rewarded for doing their job well in the context of the new curriculum. They indicated that the new curriculum lacks a *compatible organizational or social envelope surrounding the innovation*. This has consequences on teachers' motivation, commitment and interest in teaching the new curriculum at their schools. In fact, as Day and Kington (2008) point out, curriculum change affects not only teachers' work, but also their perceptions about their work, their emotional identities, that is, how they feel about their work and interact with the social, cultural and school environment where they work. Menter (2008:58) emphasizes that "the condition of teachers' identities — collective and individual — is an indicator not only of the condition of an education system, but also — to some extent — of the condition of democracy within a society." In other words, it seems fair in light of this observation, to conclude that the more democratic a society is, the higher the teachers are regarded. Indeed, as Grose (2001:80) asserts "schools are important democratic institutions in their local communities". This implies that the extent to which a school meets the criteria for a democratic institution directly determines how gratifying teachers find their teaching task. Lieberman (2001:161) comments incisively: "Doing good but getting grief for it takes emotional toll."

The majority of teachers who participated in the study showed that they identified with some aspects linked to leadership that are worthy to be preserved, consolidated and improved: (1) mutual respect among teachers (88.3%); (2) school ownership (81.9%); (3) sharing innovative ideas about curriculum implementation (81.9%); and (4) parents' and other stakeholders' involvement in curriculum implementation (81%).

These findings are clear indications that schools' potentialities should be explored by the leadership to promote collegial learning, which is essential for successful curriculum implementation (Van den Akker, 2003; McCallister, 2001; Fullan, 2001; Richert, Stoddard & Kass, 2001; Bernhardt, 1999).

b. Innovative classroom practices and capacity building is an essential factor for successful curriculum implementation

Of the total of the teachers who participated in the study, only 72.8% endorsed the view that student achievement could be improved by resorting to active learning methods. Only 75.1% of the surveyed teachers expressed the view that their principals were effective instructional leaders, and that they had enough opportunities to grow professionally in the context of implementing the new curriculum. Therefore, it seems that the principals' ability to deal with pedagogical issues and use active methods effectively was questioned by teachers. This attitude might be prompted by common problems such as inadequate professional preparation (training) of teachers, difficulties experienced as managing large classes, and generally poor, often very poor working conditions. Such environments negatively affect the efficacy of active learning methods which are at the core of the new curriculum. Hall and Hord (2001) contend that regardless of the best possible support (which is always necessary) teachers will tend to be sceptical even about promising and brilliant innovations. Why? There are moments of enthusiasm when proposed changes seem bound to succeed, and moments of frustration when they seem to be doomed to failure. Therefore, strong leadership is needed to ensure teachers' resilience (Waxman & Chang, 2006). In this regard, Bernhardt (1999:84) avers that "while teachers need the opportunity to be cathartic, leadership needs to keep staff positive, perhaps, by celebrating how far they

have come already.” Most importantly, it should be remembered that a teacher cannot implement the new curriculum successfully unless he/she has a thorough knowledge of the subjects he should teach, a good general knowledge, the ability to apply active teaching and learning methods effectively, and the will to learn and implement new practices. Consequently, effective capacity building is required that includes the establishment by teachers of “professional learning communities” within their schools (Fullan, 2001; Freidus, Grose & Mcnamara, 2001; Middlewood, 2001; Erickson, 2007).

7.3.2.3 Subject specialists’ and principals’ perceptions regarding the new curriculum

The attitudes of participating principals regarding their leadership role in the process of curriculum implementation in their schools were very positive. The principals revealed that they were well aware of their responsibilities for which they needed better guidance and support from ZIP, District Office and higher hierarchical levels to enable them to implement the new curriculum successfully. According to Middlewood (2001) observed, such attitudes show that the school principals believe that their organizational leadership is primarily centred on the curriculum or on learning, since this is the core purpose of schools. The surveyed school principals’ responses to the research questionnaire in this regard confirmed the findings of earlier studies concerning the key role of school leadership in the process of curriculum change. This key role is emphasized in the theoretical framework (see section 1.6.7).

Thus, in virtue of the quantitative analysis and the associated factor analysis of principals’ perceptions of the new curriculum and the findings of previous studies as reflected in the literature on curriculum implementation, with particular emphasis on the role of principals in curriculum implementation, this study reached the following conclusions (see also section 6.9.1):

a. Leadership and capacity building are a critical factor of successful curriculum implementation

In response to questions regarding principals’ endeavours to ensure that student’s achievement increase in the context of the new curriculum (see

Table 5.10), the surveyed principals explicitly expressed agreement with the following actions or strategies:

- Developing close relationships with teachers, other staff members, students and parents (92.8%);
- Bring into operation an action plan produced collectively in school for effective implementation of the new curriculum (87.9%);
- Rendering effective professional development program on new curriculum (88.7%);
- Challenging teachers and students continuously to fulfill curriculum goals (80.7%);
- Undertaking regular and productive staff meetings on the new curriculum (84.6%);
- Promoting collaboration among teachers through which they were developing new skills by sharing professional knowledge regarding to new curriculum (94.4%);
- Monitoring continuously teachers' performance on new curriculum (87.1%).

However, the principals revealed that they had some concerns regarding the maximization of the amount of school time used for learning (only 79.9% of principals who participated in the study clearly stated that they agreed with this strategy). Strikingly, only 20.1% of the surveyed principals implicitly expressed their dissatisfaction with the level of school climate already created in their schools in terms of sharing and cooperation on all issues towards effective implementation of the new curriculum. Worst of all, 29.8% of principals expressed their unhappiness concerning the achieved stage of design and implementation of 'local curriculum' in their schools.

b. Innovative classroom practices

Concerning innovative classroom practices for successful curriculum change implementation, the principals rated the relevance of:

- The new school organization was being implemented to cope with the requirements of the new curriculum (87.9%).
- Coordinating and managing learning process in the context of the new curriculum (91.9%).
- Considerable efforts of teachers to observe the interdisciplinarity principle in the lesson plans they were making as set up in the new curriculum (92%).
- The use of a variety of active methods by teachers in classroom practices as required by the new curriculum (92.7%).

These findings clearly provide the key issues, which should be stressed during the preparation of school principals in Mozambique for successful performance of their school leadership role under the new curriculum, starting from school resocialization in its complex three dimensions: restructuring, reculturing and retiming (see section 1.6.5). Furthermore, the findings show that the school principals should spend as much time focusing on curriculum leadership tasks as on school administration. The Mozambique experience in the education field shows that, as in other parts of the world, school principals have concentrated more on administrative tasks than on pedagogical issues (Marsh & Wills, 1999).

7.3.3 The new curriculum and classroom practices of educators

When responding to questions on innovative classroom practices for successful curriculum change the principals who participated in the study emphasized:

- The use of a variety of active methods by teachers in classroom practices as required by the new curriculum.
- Considerable efforts from teachers to observe interdisciplinarity principle in the lesson plans they were making as set up in the new curriculum.

The students' opinions about time use in their classes in the context of the new curriculum confirmed that a variety of strategies were applied in this regard. However, the data show that some of the strategies seemed to be used more frequently than others. For instance, analyzing individual or class performance (60.8%), reading (63.5%), working in small groups (69.7%) and answering questions from a book or

worksheet (71.5%). The strategies that reportedly were used less frequently are whole-class discussions with the teachers (50.1%) and listening to teachers talk (50.9%), which should be seen as positive development in classroom practices as opposed to those used in the past.

These findings confirm the principals' efforts towards moderation and variation in strategy used in classroom practice as required in the context of implementing the new curriculum. This trend is supported by Good and Brophy (1989:25), who argue that "no single model is appropriate for all situations. What constitutes effective instruction varies with the subject matter, students, and other factors." Brown, Oke and Brown (1982) also aver that a variety of teaching methodologies is advisable, for at present no known single approach can work with all kinds of students or enable the achievement of all curriculum goals. However, the students' perceptions about their school performance reveal that the effectiveness of the existing variety of teaching and learning strategies needs to be optimised to ensure effective learning.

The students' positive responses to questions concerning teachers' classroom procedures and practices were as follows:

- only 68.8% agreed that their teachers listened to them individually.
- barely 65.5% agreed that their teachers understood when they had personal problems.
- just 66.5% stated clearly that their teachers knew each of them well.
- scarcely 59.8% agreed that their teachers cared about each of them.

These results support the finding recorded by Fisher, Den Brok and Rickard (2006) that close cooperation between teacher and student declines as class populations grow (hardly surprising, but overcrowding is endemic in Mozambique), and in fact the teachers stature (i.e. prestige) as a beacon that can guide students in their quest to learn diminishes. However, this study found that 75.5% of students agreed that their teachers treated them with respect, which seems to contradict the findings discussed above (see also section 7.3.2).

It is, therefore, worth reiterating that for successful curriculum implementation, it is crucial that teachers listen and talk to learners, and that they react sensitively,

intelligently and constructively to what the learners tell them (Gould, 2001). So, the teachers may help their learners to improve their school performance, to become critical thinkers and responsible citizens, who thoroughly analyze and practice in real life what they learn and experience at school.

7.3.4 The efforts which are being made towards successful implementation of the new curriculum

According to Good and Brophy (1989), the findings concerning the students' opinions about their teachers in the context of the new curriculum reveal the extent to which *teachers' positive expectation* that is manifested in their belief that their students can learn and consequently in their expectation that students will do their best at school. The findings also show the extent to which students' *supportive learning environment* is expressed in opportunities to learn and to receive appropriate encouragement, including support for their learning efforts at school, especially from the teachers.

In effect, students generally (81.7%) felt that their teachers expect them to do their best, although a slightly lower proportion (79.9%) agreed that they were doing their best at school. This finding not only reveals the level of students' commitment regarding learning activity and individual efforts of the students but also the level and effectiveness of guidance and support they receive to aid their endeavours especially from their teachers and families. Notably, only 66.1% of participating students agreed that their teachers had confidence in individual student's capacity to learn, while 71.3% agreed that their teachers were paying individual attention to them when needed. Therefore, in view of these findings, a great deal of effort should be focused on translating what students consider an achievement into a desirable learning performance.

The study also shows to some extent, how the implementation of the new curriculum for basic education in Mozambique meets the essential knowledge requirements that should be provided by primary education, namely writing, reading, arithmetic, communication and technology. Thus, the majority of participating students agreed that they were learning for the real world (writing 90.6%; reading 91.6%). While 87.9% felt that the new curriculum contributes to their education for the real world, enabling them to deal better with mathematical issues, 81.8% of the students

believed that the new curriculum helped their education by enhancing their ability to present information. However, only 72.2% agreed that the new curriculum enhanced their education for the real world by enabling them to cope with new technology. So, the findings indicate that reading and writing are perceived as skills to be mastered by every student. Regarding mathematics and communication in general (information presentation), there is a need to adopt strategies, through which the students' motivation and mastery of these subjects can be improved.

The technology findings correspond with expectations in the context of the new basic curriculum. It is important to note that:

- technology in the context of this curriculum includes arts and crafts; and
- the main objective of the new curriculum is to develop not only knowledge, but also the relevant skills and values in an integrated and interdisciplinary way (see section 1.5).

The level of importance of delivered subjects and the preferred textbooks, as discussed in section 6.5.6, reveal that special attention should be given to the approach adopted to such subjects, particularly with reference to the teaching-learning strategies applied in classroom practices in order to promote students' interest in subjects taught under the new curriculum.

It is remarkable that 20.1% of the surveyed principals implied that in their view the extent to which a conducive climate had been created in their schools by sharing and cooperation on all issues concerning effective implementation of the new curriculum had been unsatisfactory. The research shows that the success of principals' meetings with teachers on the new curriculum was questionable. Indeed, 30% of the surveyed teachers revealed that they had not been given the necessary support for the implementation of the new curriculum. This observation is in line with the finding that 15.3% of participating principals disagreed with the statement that they were making efforts to ensure good performance by students by holding regular and productive meetings on the new curriculum. These findings also suggest that even external support, that is, from ZIP (Pedagogic Influence Zone, a cluster of schools in Mozambique), DDE (District Education Office), DPE (Province Education Office) and MINED (Ministry of Education) was deficient.

7.4 REFLECTIONS ON THE FINDINGS

As stated earlier, the essential purpose of this study was to investigate the **classroom practice** within the context of Basic Education Curriculum change in Mozambique, as well as **overall school conditions** influenced by endogenous and exogenous school factors that **may affect it**.

This study contributes to the literature and analysis of curriculum implementation, particularly in Mozambique and throughout in southern Africa. The focus on classroom practice is of particular importance due to the lack of field studies carried out in the southern African region.

As reported earlier, (*cf.* Silins and Mulford, 2002:571), the relationship between variables such as effective leadership, organizational structure and learning, classroom performance of teachers and the learning of children, has been overlooked in the literature on curriculum implementation. This view is echoed by Jansen (2003:471-478) in his contention that although studies on curriculum in southern Africa cover a considerable range of important issues, they nevertheless fail to address the above-mentioned relationship, which cries out for attention.

Therefore, this research has shed light on a problem that has been outstanding for too long. It is a contribution to the critical analysis of new curriculum implementation, offering empirical evidence relevant to school resocialization in terms of restructuring and reculturing towards successful reform.

The current study explores the seven basic conditions for effective change identified by Giacquinta (1998). In the researchers' view, supported by the literature review, these conditions summarize the research findings concerning successful implementation of curriculum change. This research therefore has the merit that it relates these factors to each other, thus serving as an important guide for monitoring and implementing education change of which curriculum reform is a basic element.

With this foundation and curriculum theory in mind, the present research is focused on three distinct levels or perspectives, namely, the "intended", "implemented" and

“attained” curriculum. These levels are often confused and superficially conceived, particularly, in the case of curriculum change, hence the new curriculum will fail. Consequently, the behavioural, managerial, systems, academic, humanistic and reconceptualist curriculum approaches, among others, are succinctly explored, and accurate analysis and understanding of curriculum implementation are enabled in the process of dealing with the curriculum concept, the various perspectives on and approaches to school curriculum theory and curriculum development. In this way, and taking into account the curriculum concept, the different perspectives and approaches of school curriculum, the curriculum theory and curriculum development, an accurate analysis and understanding of curriculum implementation was undertaken.

The study indicates the need to reconsider the current teacher training strategy, especially for primary education, to ensure successful implementation of the new curriculum. In-service training cannot be effective without career incentives. Teachers are concerned with the improvement of their living conditions. Consequently, short-training courses that are not supplemented by in-service-training are doomed to failure.

In fact, while it is true that the government may be unable to offer better salary to teachers, it is also true that the teachers are working in a stressful environment for low salaries. This needs to be addressed as soon as possible to ensure effective change and a better quality of education. The initiatives that the government are currently taking to motivate the teachers and to make them more effective, such as loan schemes in agreement with the financial institutions such as commercial banks and the teachers’ health insurance scheme that translates into effective medical assistance, need to be expanded to reach more teachers.

In this research a plea is made for a productive partnership between parents (members of community around the school) and teachers in the interest of achieving education goals. This relationship between parents and teachers requires a change of attitudes and beliefs on both sides, especially from the teachers, who should open the doors, allowing the parents to become effective participants in school functioning. Such collaboration help to put an end the parents’ accusation that schools are

inefficient. It may also serve to develop a congenial and conducive school atmosphere that will promote implementation of the school curriculum and the achievement of desired results.

Participant teachers' responses observed that they lacked confidence in their ability to fulfil the requirements of the new curriculum. About 30% of the teachers indicated that they had not received the necessary support towards implementing the new curriculum.

This investigation proceeds from the premise that student learning is an active and enjoyable commitment for the student in the process of acquiring knowledge and skills grounded on prior skills or information: therefore (*cf.* Schubert, 2005) the learning process is typically *incremental and developmental* and requires sustained academic motivation, sufficient devotion of time for study, perseverance, and obviously need necessary support, especially from teachers, colleagues and parents.

A feasible strategic plan is needed in each school to meet the challenges of implementing the new curriculum. There should be clarity among members about and receptiveness to the pursuit of new goals and role expectations, to which end members should be suitably equipped with the capacity to meet the relevant challenges as noted earlier.

The results of the study show, to some extent, how implementation of the new basic education curriculum for Mozambique meets the basic primary schooling needs of writing, reading, arithmetic, communication and technology. In fact the results indicate that reading and writing are acknowledged as basic skills to be mastered by every student, followed by mathematics and communication in general (information presentation).

The findings regarding technology show that the expectations embodied in the new basic curriculum were not being realised to best advantage. Therefore, in order to achieve the goal of the new curriculum, the approach to technology should be reviewed and suitably adopted.

Textbooks are essential resources of curriculum implementation. Consider in this regard that if textbooks are not available for each student, teachers will tend to remain exclusive repositories of information or content transmitters, thus relegating students to the role of mere receivers or receptacles of knowledge. The attitude underlying this situation should be changed in order to enable student-centered learning. An important proviso in this regard is that the appropriate use of textbooks requires good preparation by the teachers.

Real change translates into a positive school climate achieved by means of effective teaching and learning, innovative classroom practices and effective school leadership.

In a nutshell, successful implementation of curriculum change in Mozambican schools will depend on fulfilment of the seven basic conditions for effective change, as identified by Giacqinta (1998): The conditions are as follows:

- For principals:
 - Leadership and capacity building
 - Innovative classroom practices
- For teachers:
 - Leadership and rewarding
 - Innovative classroom practice and capacity building
- For students:
 - Student expectations, learning opportunities and outcomes
 - Subject preference
 - Friendly and supportive environment.

It was clear from participating principals' and teachers' responses that school leadership is an essential factor in assuring the presence and maintenance of all necessary conditions for successful implementation of the new curriculum. The school, through its leadership, must have a shared vision, translated into a feasible plan based on the values and beliefs of school staff, parents and the broader community, reflecting clarity among members and stakeholders about receptiveness to the pursuit of new goals and role expectations.

Bernhardt (1999) and Schubert (2005) realized that the major elements of change are internal rather than external, requiring a transformation of all individuals' thinking about school, students, teaching and learning. Thus, the whole chain of change should be school based as a unit. For that, a strong school leadership is needed to stimulate and sustain high levels of student motivation, and of enthusiasm among school staff, especially teachers who are expected to display sincere commitment to achievement of the new curriculum goals.

Bernhardt (1999:84) remarks that "the lack of enthusiasm is often replaced by cynicism. While teachers need the opportunity to be cathartic, leadership needs to keep staff positive, perhaps by celebrating how far they have come already." It is striking that in Bernhardt's view school leadership is closely linked to teachers' enthusiasm. Its primary function is to keep staff positive by instilling confidence in teachers that they will be able to live up to the new role expectations, avoiding cynicism. Instead of falling pray to cynicism teachers should commit themselves to successful implementation of the new curriculum and working in a collaborative setting, seeing all obstacles as challenges. Moreover, Bernhardt (1999) emphasizes that teachers need the opportunity to be cathartic, that is, to openly express strong feelings related to their work or daily life, suggesting regular and constructive review of the state of school affairs, exemplified in the wholesale overhaul of curriculum. In this regard, rewarding from teachers' perspective is an important component of school leadership over and above mere monetary considerations.

Another indispensable factor derived from participating principals' and teachers' responses concerning successful implementation of the new curriculum, is capacity building, which is viewed as an important condition for creating and maintaining teachers' confidence in their ability to fulfil new role expectations.

According to Monyokolo and Potenza (1999:237), "the point is that unless teachers are properly trained and supported and unless they develop a sense of ownership of the process, the implementation of the new curriculum will simply not be realized." In similar vein, Schubert (2005: 64) emphasizes that teacher development is at the heart of the improvement process; improved school management and organization is essential to support teachers' capacity to implement. Schubert (2005) also underlines

the role of school leadership in building teachers' capacity towards successful implementation of the new curriculum.

In addition, principals and teachers identified innovative classroom practices as an important condition for successful implementation of the new curriculum.

On the one hand principals' responses showed that it is important to recognise the association between leadership, innovative classroom practices and capacity building, while on the other hand participating teachers' responses show that there is an equally important link between capacity building and leadership, rewarding and innovative classroom practices.

An important factor for successful implementation of the new curriculum that emerged from participating students' responses comprises an association of students' expectations, learning opportunities and outcomes. On the one hand, this finding is in line with the following assertion by Good and Brophy (1989:33):

It is important to realize that the levels of success that students are likely to achieve on a particular task depend not only on the difficulty of the task itself, but on the degree to which the teacher prepares them for that task through advance instruction and assists their learning efforts through guidance and feedback.

On the other hand, this finding is consistent with the following assertion by Slavin (1989:10):

Incentive is high when the level of instruction is appropriate for a student, so that the student perceives that with effort the material can be mastered, so that the payoff for effort is perceived to be great.

Another finding derived from students' responses, shows that successful implementation is linked to student's subject preferences. In this regard, the main lesson learned is that not every subject can be made intrinsically interesting to every student at all times. Most students need some sort of extrinsic incentive to exert an adequate level of effort. The teachers' guidance of learning may exert a major influence on students' subject preferences.

Finally, the students' responses confirmed the results of studies undertaken by Good and Brophy (1989), in which it is shown that a friendly and supportive environment is a distinct enabling condition for successful change.

7.5 LIMITATIONS OF THE STUDY

As indicated, the purpose of the study was to trace the first year of progress made towards implementing the new curriculum for basic education in Mozambique. From the previous researches it is known that most changes in education achieve a high level of implementation, at least, after three to five years (Hall & Hord, 2001; Fullan, 2001; Bernhardt, 1999). Therefore, many findings may indicate that the introduction of the new curriculum made little difference in the course of the first year of implementation when compared with the period prior to curriculum change. Consequently, the depressing conclusion that the new curriculum does not work could be drawn or, given the short period since inception, it may be concluded that it was too early for this kind of study to produce significant results. However, it was felt that the availability of resources, synergies, support and commitment to implementation of the new curriculum should be tracked from the outset despite the knowledge that the desired impact will only be visible at a later time. Fullan (2001:67) asserts that "poor beginnings can be turned into success depending on what is done during implementation. Promising start ups can be squandered by what happens afterward." Therefore, the process of monitoring curriculum implementation should start right at the beginning and continue each year so that adjustments can be made in good time when needed to achieve successful curriculum change.

This study consisted mainly of a survey of educators' and learners' opinions concerning endeavours to implement the envisaged new Basic Education Curriculum in Mozambican schools in three selected provinces, Niassa, Sofala and Maputo City. Broussard (2002:71) rightly observes "each student is different, and each situation is unique and must be handled with lots of thought." In spite of this uniqueness of individual situations, as shown in the current study, common features may be identified from which factors could be extracted that were bound to impact positively or negatively on the curriculum implementation. However, proper heed should be paid to Fullan's (2001:71) warning that: "we should avoid thinking of sets of factors in

isolation from each other. They form a *system of variables* that interact to determine success or failure.”

As noted by Cramer (2003) and Garson (2006), the actual confirmatory factor analysis can be conducted with the aid of several structural equation modeling packages (computer programs) such as AMOS or LISREL. In this report, the confirmatory maximum likelihood factor analysis was undertaken as a reasonable alternative due to technical constraints (explained in section 5.6).

7.6 RECOMMENDATIONS

7.6.1 Revitalization of schools' support local system

A team of teachers, including retirees should be nominated to work permanently at resource centres linked to ZIP as a voluntary (but remunerative) collegial support base covering all curricular areas of basic education, selected on the basis of their acknowledged pedagogical expertise, judged according to the academic competence displayed by their learners.

The members of this support team should work together and share their expertise on the new curriculum. In this context, the team should be involved in the production of the content of framework of basic education, syllabi, textbooks and other documents produced at central, provincial or district level. They should visit schools of their ZIP and assist the teachers. Since the resource-centre team have to act as change agents they should know as Lieberman (2001:161) states: “how to build trust, organize, manage, and empower groups” with a view to ensuring that the new curriculum is debated and critically implemented in every school. According to Richert, Stoddard and Kass (2001:38), the purpose is “to turn our schools into learning organizations that promote and support the learning of children and adults”. The schools could, therefore, rely on systematic and regular external support, especially from the ZIP resource centre, while developing a strong partnership internally, thus establishing a collaborative partnership with a view to optimally realising curriculum goals. In matters of curriculum implementation, Mahomed (1999) emphasizes the need to turn obstacles into challenging opportunities. In fact,

sustained cooperation towards acquiring new teaching skills is the key to success. Mentz and Xaba (2007:43) note that “a spirit of investigation should be developed and an open mind kept accommodating any kind of solution to existing problems.”

The number of teachers in each local support team at ZIP should be defined in accordance with the extension of ZIP, the geographical location of schools and their proximity to the resource centre. Ideally, each ZIP should have more than one resource center whenever justifiable, in such a way to ensuring systematic and regular contact with schools.

The ZIP resource-centre teams should establish a partnership with teacher training institutions and they could also act as supervisors of student teachers during the practical teaching term. So, effective development of ZIP resource centers not only could contribute towards revitalizing the role of the ZIPs but would also solve the problem of trainee supervision during the practical term. Indeed, it has already been discovered that an effective teacher education course depends on a strong relationship between teachers training institutions and schools (Down, Hogan & Madigan, 1995). Moreover, the ZIP resource- centre teams should be functionally linked with district and provincial supervisory and inspectorate bodies that could serve as conduits for liaison with central government.

7.6.2 Training and upgrading of school principals

In addition to the management skills necessary for administrative duties, school principals should be trained to manage school curriculum, since the main purpose of their institutions is to ensure effective teaching and learning (Middlewood, 2001). The work with parents, communities and stakeholders in general also needs particular attention to be addressed in the training and upgrading of school principals. The ZIP resource-centre teams should work closely with school principals and organize regular meetings to discuss particular problems and share knowledge and experiences about school resocialization in terms of *restructuring*, *retiming* and *reculturing* towards effective realisation of curriculum goals (see section 1.6.5).

7.6.3 Initial and in-service training of teachers

Extension of the current one-year preparatory training courses for primary education should be considered.

If these courses are maintained in view of education millennium goals, then the trainees should be divided into two groups, one to teach Grades one to five and the other to teach Grades six and seven. Due to the complexity of the curriculum content for Grades six and seven, and contingent on trainees' wishes and inclinations, the group should be divided into subgroups centred on certain subjects, for instance Mathematics, Natural Sciences and Physical Education or English, Technology and Visual/Aesthetic Education. The training methodologies applied during the course should help the trainees to become familiar with effective teaching strategies. The aim is to ensure that the trainees are well prepared for successful fulfillment of their role as teachers, including the mastery of curricular content that they will teach. Lovat and Smith (2003:74) insist that "the quality of student learning outcomes is directly dependent on the quality of the teacher and essential components of effective teaching are command of subject, and knowledge of and capacity to implement effective pedagogical practices."

In-service training should be undertaken within the school as a collaborative endeavour, that is, in close partnership with the ZIP resource-centre team. Indeed, Grose (2001:80) correctly comments: "The history of education reform shows that educators at all levels participate in workshops on 'best practices', but rarely have the ongoing support to integrate these new practices into day-to-day lives in the school – as principals, teachers, or other school personnel." So, the proposed in-service training strategy facilitated by the ZIP resource-centre team and learning communities built within schools, is aimed at ensuring that ongoing school support is appropriately linked to teachers' real professional-development needs.

That is to say, it is envisaged that the suggested training strategy will contribute to improved teaching practices, thus ensuring effective schooling.

7.6.4 School resources provision

Tedesco (1997) argues that the crisis in education resides in the link between quality and quantity, rather than in the quality of education itself. On the same tack, Sedel (2005) observes that the problems of quality in basic education in most African countries are attributable to a scarcity of resources for education and inefficient use of the available resources. According to Burton (2001:60), “the more efficiently resources can be used, the greater curriculum provision can be”. Steyn (2007) emphasizes that effective education may be understood in terms of four interactive dimensions: inputs, process, outputs and outcomes. Inputs limitations and/or process imply limitations on outputs and outcomes. (It is worth noting that inputs are the resources needed for the education process, including school characteristics and facilities, educators’ characteristics (personality traits), availability of teachers, quality of training, age/experience; and the characteristics and needs of learners — abilities, attitudes, interests, socio-economic backgrounds, home language). The education process transforms educational inputs into measurable outputs, observable as the direct and immediate impact of the education process — acquisition of knowledge and skills, and behavioural change in learners. Outcomes are the impact of the education process shown by school leavers’ state of preparedness for further education or training or for remunerative employment including self-employment. (Burton, 2001:59) avers that “restrictions on educational resources may affect the curricular provision that the institution is able to offer. Institutional plans for the curriculum will need to be constructed within the constraints of resources availability.”

Briggs (2001:176) points out that “the physical environment — the building and the resources within it — contributes directly to a climate conducive to learning”. So, the provision and efficient use of resources are a basic condition for successful curriculum implementation (see section 1.6.3).

7.6.5 Topics for further studies

The following topics are recommended for further studies to be conducted as action research projects with a view to promoting the establishment of learning communities in schools with the support of ZIP resource-centres acting in liaison with faculties of

education at universities and teacher training institutions as a strategy to ensure effective collaborative change as proposed in the present study:

- Adding value to the teaching profession and financial constraints: impact of new approaches.
- The new role of supervision and inspectorate bodies at different levels in coordination with ZIP resource-centres in schools.
- Parental involvement in school initiatives for increasing students learning achievements.
- The use and quality of textbooks in official use under the new curriculum.
- Experiences of development of local curriculum and its implementation at school level.
- Lessons learned from positive experiences of semi-automatic promotion of learners.

The action research method is suggested because it includes three inseparable elements: research, participation and action (Greenwood & Levin, 1998). So, the researchers from INDE, faculties and teacher education institutions could serve as facilitators (researchers) while the ZIP teams and school teachers could be participants (co-researchers). In this regard, the research is not end in itself, but must be followed by action that is conducive to desired change and improvement. In other words, as McNiff and Whitehead (2006) note, action research is a “process of *observe-reflect-act-evaluate-modify-move in new directions*” or a participatory “*action-reflection*” process.

7.7 IMPLICATIONS

The revitalization of schools’ local support system as recommended above implies a redefinition of the ZIP Supervision and Inspectorate bodies’ role, establishment or improvement of ZIP resource centres, reconsideration of staff involved and duly integrated accommodation of the ZIP function within their education careers. In this regard, a clear understanding is required that curriculum implementation is not a linear process. Curriculum implementation is a complex and dynamic web of interactions implying vision, knowledge and skills, investment of time and money,

hard work and perseverance. The school as the primary unit for change must do a lot by itself. However, effective school support coming from other components of the education system is essential (Fullan, 2001; Hall & Hord, 2001; Bernhardt, 1999).

In addition, society as a whole, with a view to developing the entire country must prioritize investment in the education sector. Still in this context, given the pivotal role played by the teacher in the curriculum change process, employment, careers, teaching and learning conditions should be revisited with a view to making teaching profession more attractive and to retain the services of qualified teachers. With this aim, the Education Sector Strategic Plan (1999-2003) and the 2005 Pretoria Declaration on Teachers following the Southern African Policy Dialogue Forum on Teachers for the Future provide valuable hindsight in this regard. Above all, it is crucial to reconsider the issue of a low wage ceiling, especially for the education sector where wages are ostensibly cubed to ensure low inflation and macroeconomic stability. As Mendonça and Moussié (2007:39) rightly aver, it is important to “consider teachers and health workers as a long term investment rather than a recurrent cost. Consequently, the level of the wage ceiling should reflect staffing and pay levels that are sustainable and consistent with their national education goals.” House (2000:15) notes that “the mistake is not one of applying economic concepts to education but of applying them badly, without understanding the effects they are likely to have.”

It has been claimed that the alignment between curriculum development, teacher development and learning materials is consolidated with the active involvement of teachers through ZIP resource-centres. INDE, as the national institution entrusted by the Ministry of Education and Culture with the function of curriculum development, must therefore be involved so that:

- ZIP resource-centres can perform their supporting role for the maximum benefit of schools, creating an environment that produces reflective teachers in terms of self-evaluative teaching and learning experiences that will help to improve their classroom practices.
- ZIP resource-centre can help schools to analyze the official textbooks and use them critically in context with the new curriculum.
- ZIP resource-centres can become a bridge that links INDE with teacher training institutions (including faculties of education and schools) to ensure

effective monitoring, support and in the final analysis education of good quality.

School principals should be regarded not only as school administrators or managers, but also as curriculum leaders. In effect, since the main function of schools is to ensure effective learning, those who are appointed as school principals should be familiar with the school purposes, to which their managing role should be oriented. The criterion of selecting principals from teachers who maintain the best classroom practices, as well as good interpersonal relationships by virtue of their communication ability and cultural sensitivity, is consistent with the above statement. However, it is important to ensure that all principals are prepared to meet the obligations of their school leadership role, to best advantage, not only through induction workshops and courses, but also by providing clear guidance (basic school norms, syllabi and other legislation) as well as the opportunity to share school leadership experiences, for instance at ZIP level. A constant turnover of school principals is not advisable for good and effective school functioning as such discontinuity undermines school leadership. Excepting unavoidable cases, a principal should remain with the same school for at least five years.

A coherent and consistent policy for initial and in-service teacher training is needed with a view to ensuring that current and future teachers receive adequate training and upgrading so that justice can be done to the critical strategic importance of the teaching profession and that education of good quality can be maintained in Mozambique. Naturally such policy will have to be devised and executed with the consideration of the economic constraints referred to above. As with ZIP resource agents, particular attention must be paid to the selection of trainers of trainees. Similarly, school resource provision and school physical conditions require due attention, which implies a clear specification and requisitioning of basic infrastructure and equipment, including prescriptive guidelines for their adequate use. In this regard, it is important to recall the observation by Glatthorn, Boschee and Whitehead (2006) that through the hidden curriculum students can learn both desirable and undesirable things, hence the importance of a good school environment.

7.8 SUMMARY

In general, contemporary curricula have been created eclectically, by mixing a variety of approaches. Specifically, the new basic education curriculum of in Mozambique presents features of different approaches.

Among other measures, the strategies for implementing the new curriculum include: the construction and expansion (upgrading to “complete” status) of primary schools; upgrading of teachers’ qualifications; initial teacher training; and support for schools’ endeavours to implement the new curriculum.

The only possible weakness, if at all, that may have detracted from the effectiveness of the study, was the brevity of the review period of one year into the beginning phase of the practical implementation of the new curriculum in schools across the nation.

With reference to learners’ perceptions of school and learning, the following key factors were derived from quantitative analysis, aligned with factor analysis as a result of learners’ responses to the research questionnaire:

- Friendly and supportive school environment;
- Student attitude to learning activity;
- Curriculum relevancy to real life and self-learning motivation; and
- Subject content of the curriculum.

Concerning perceptions of educators, using quantitative and factor analyses supported by the relevant literature on curriculum implementation, especially on the role of teachers, the following key factors were determined:

- Leadership and rewarding;
- Innovative classroom practices and capacity building.

The attitudes of the surveyed schools principals regarding their leadership role in the process of curriculum implementation in their schools were highly positive. The principals were able to identify the responsibilities for which they wanted better guidance and support from ZIP, the District Office and other higher hierarchical levels

towards successful implementation of the new curriculum. Thus, by the quantitative analysis in alignment with factor analysis of the perceptions of principals regarding the new curriculum and the findings of the previous studies reflected in the literature on curriculum implementation — particularly concerning the role of principals in curriculum implementation — the research led to the following key factors:

- Leadership and capacity building;
- Innovative classroom practices.

The results of the study show, to some extent, how the implementation of the new curriculum of basic education in Mozambique meets the primary education requirements in the critical areas of writing, reading, arithmetic, communication and technology. A concerted effort should be made to translate what students consider to be academic achievement into desirable learning performance. The following recommendations were considered apposite for successful curriculum implementation:

- Revitalization of schools' support local system;
- Training of school principals and upgrading of their expertise;
- Initial and in- service training of teachers;
- School resources provision.

The broad implication of the above recommendations is that there is an urgent need to review the conditions of employment and careers, prospects of teachers, as well as the teaching and learning conditions prevailing at schools, with a view to making the teaching profession more attractive and to avoid undue turnover of qualified teachers.