

CHAPTER 9

SUMMARY AND CONCLUSION

9.1	Introduction	266
9.2	Summary of the research process	266
9.3	Observations and recommendations	276

CHAPTER 9 SUMMARY AND CONCLUSION

9.1 INTRODUCTION

The final chapter of this study attempts to bring together the different issues discussed previously. As we shall see in the discussion below, the most prominent conclusion to be drawn is that the end of this research evidently should mark only the end of a new beginning. This is an important conclusion, since it highlights that although the research described here has come to an end, and the findings suggest that the intervention programme may be judged as relatively successful, the outcome of the study can only be viewed as partially fulfilled if some of the findings, observations, and recommendations are not researched further. The chapter sets out to examine the broad argument offered in this regard as well as the limitations of the study.

The main concern of this study has been to determine the criteria for developing relevant materials to develop the learners' proficiency in Afrikaans during a short intervention programme. Since action research was an appropriate research method for this particular problem, a number of observations made in this respect, as well as the recommendations that have been derived from the findings of this research, will be presented below.

As a point of departure, a brief summary of the intervention programme will be given, in order to establish whether the objectives and the aim of the study were reached.

9.2 SUMMARY OF THE RESEARCH PROCESS

The fact that Afrikaans was one of three compulsory language subjects at a school in the Soweto area motivated two researchers of Technikon South Africa to embark upon an outreach project. The latter entailed an intervention programme to address the lack of Afrikaans language proficiency of the Grade 12 learners at this school. My role as the teacher of this intervention and the consequent development of appropriate and relevant learning material for the intervention programme itself provided the impetus and motivation for this research.

A framework, similar to the one in Chapter 2 (Figure 2.1 and repeated below as Figure 9.1) guides a brief summary of the research process. The significance of the slightly restructured framework is that it attempts to illustrate the relationship between how the study was initially planned and how it was actually conducted. In order to highlight the divergence, it would be useful to first repeat the initial theoretical framework below in Figure 9.1.

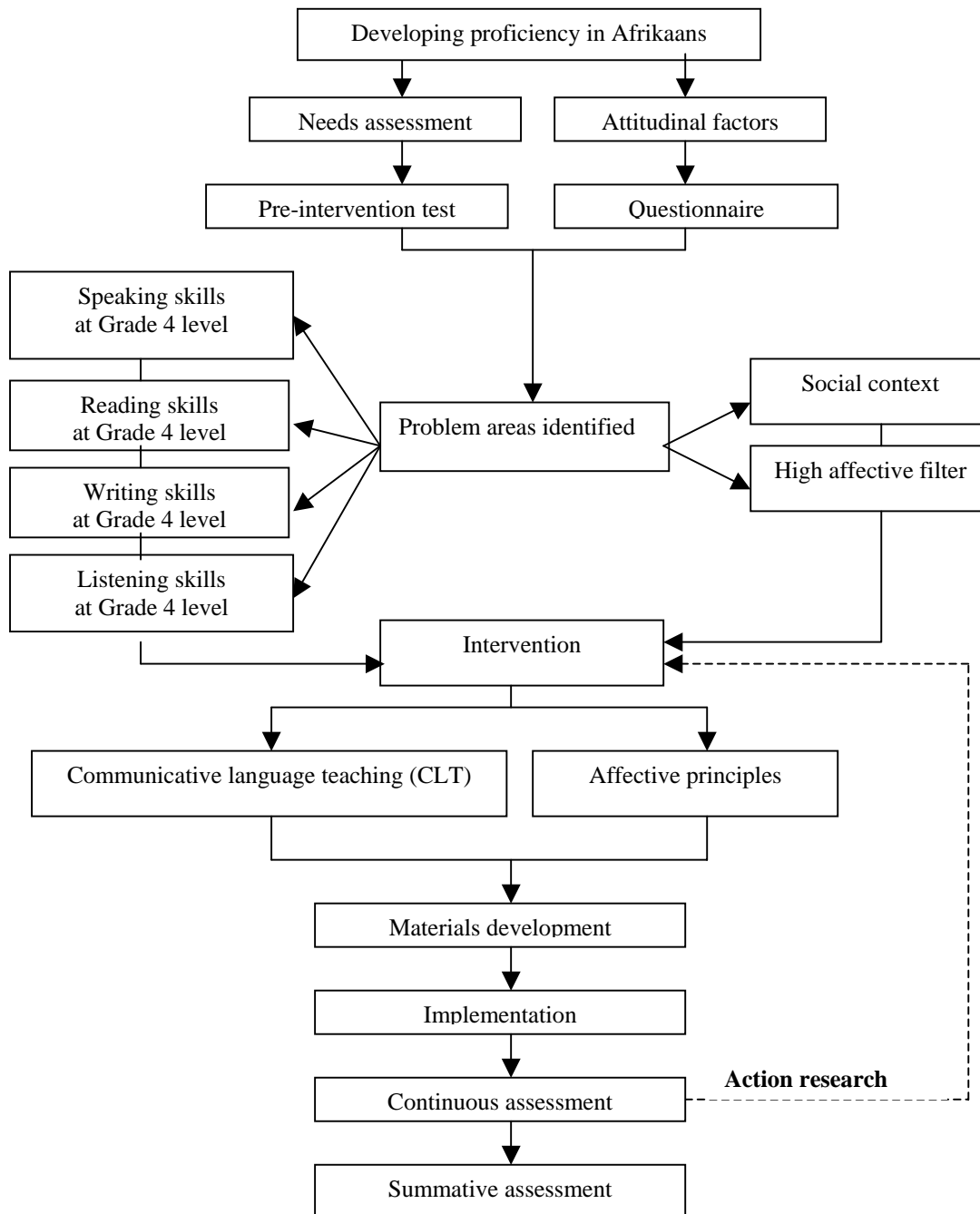


Figure 9.1 Framework of the research process (previously Figure 2.1)

We now consider the framework of the actual intervention programme. The different steps in the research process are outlined in Figure 9.2.

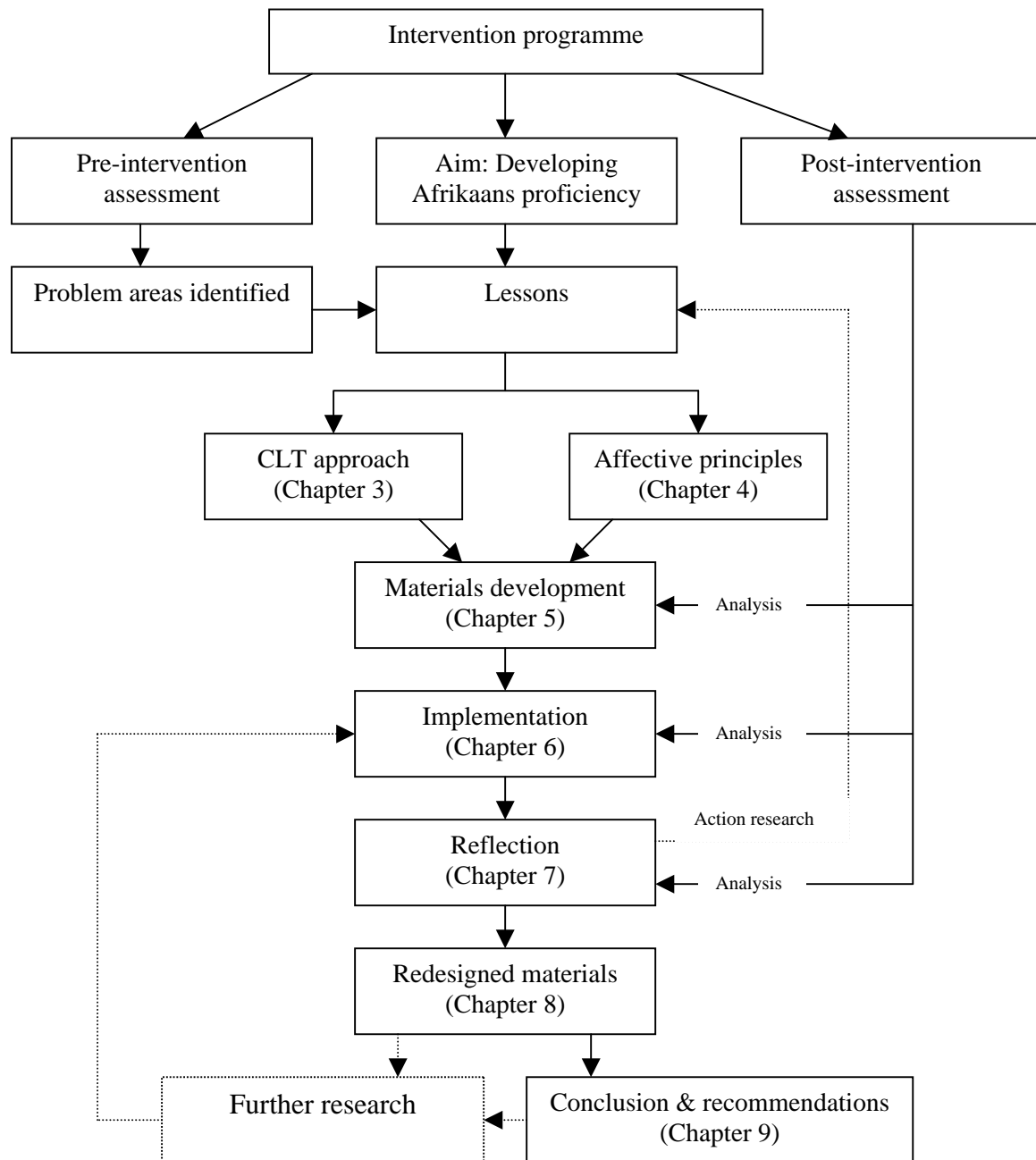


Figure 9.2 Framework of the actual intervention programme

If we compare Figure 9.1 to Figure 9.2, the similarities are quite obvious. Therefore, it must be noted that the discussion below seeks to summarise the research undertaken in this study, and only the most significant adaptations to Figure 9.2 and their justification will be examined.

The intervention programme was limited to ten lessons of one hour per week and took the form of an ongoing action research cycle as reflected in Figures 9.1 and 9.2. The first step of the study (objective 4.1) was to determine the nature of the Grade 12 learners' language proficiency in Afrikaans, and this was accomplished through the use of a pre-intervention assessment. The diagnostic report revealed that the learners' functional Afrikaans literacy was poor, as their speaking, reading, writing and listening skills were, on average, at a Grade 4 level.

From the start of the classes, and from the analysis of the first questionnaire (Appendix A), it became apparent that the influence of affective variables also had to be considered. It was found that the learners disliked Afrikaans, they struggled with negative attitudes and high anxiety levels, lacked self-confidence, motivation, and a willingness to speak Afrikaans. All of these factors influenced the planning, choice and design of appropriate materials, as well as the employment of suitable methods and techniques during the lessons.

The literature survey on the origin and history of Communicative Language Teaching, specifically the four directions in CLT (Chapter 3), served as background and emphasised the kind of teaching necessary to develop proficiency in an additional language. The literature survey also highlighted the more appropriate techniques and methods to accomplish that (reflecting the achievement of objective 1.4.4), and generated useful insights into a number of general considerations that influence the teaching and learning process. Chief among those were the identification of new roles for language teachers, language learners, and the instructional materials.

Chapter 4 took the view of the humanistic direction in CLT further by examining the influence of emotional factors in additional language teaching and learning, and addressed objective 1.4.5. The exploration of conditions necessary for successful learning allowed a better understanding of the learners' needs and ensured a learning-centred approach to facilitate the learning.

The magnitude of the proficiency dilemma in this study, as discussed in Chapter 5 (section 5.2.1), pointed towards the kind of remedies that would be necessary during the intervention, and paved the way for the development of appropriate materials for

the lessons (objective 1.4.2). It was of paramount importance to maximise the use of Afrikaans in the classroom through appropriate classroom practice, teacher-learner interaction and the use of authentic materials that would achieve impact, and supply the learners with frequent exposure to basic language functions.

In order to consider the usefulness of existing materials (objective 1.4.6), an analysis of the learners' proficiency in Afrikaans, as well as some fact-finding about the learners and the resources available, was necessary. The learners' poor functional Afrikaans literacy (section 5.2.1) highlighted the problem that the currently available Grade 12 Afrikaans learning materials did not suit the learners' low proficiency levels. Hence, reviewing the literature on issues such as designing and developing materials helped me to establish an appropriate approach, and to gain an awareness of my role as a materials writer. Furthermore, it assisted me not only in establishing criteria for developing relevant and appropriate materials in general, but also in developing 'tailor made' materials for developing the learners' proficiency in a scarce resource environment (objectives 1.4.3 and 1.4.7).

In the process of materials selection, collection, reproduction, adaptation, and development, it was necessary to relate learning principles and procedure to theory, research methods and classroom practice. Nine design considerations as a set of key principles, or criteria for materials development (section 5.5.1) guided the development of materials during the intervention.

If our intention is to become a professional language teacher, an aspect that we have referred to before in this study, the matrix below may shed some more light on achieving such professionalism in terms of materials design and alignment with beliefs of language learning and teaching.

The risk is that if a teacher designs lower quality materials which are loosely aligned with his/her beliefs, their professionalism becomes questionable. If a teacher closely aligns materials design with his/her beliefs, it could work, despite the fact that lower quality materials are designed. On the other hand, it is possible that if higher quality materials are designed which are loosely aligned with his/her beliefs it may just work. However, the ideal would be if a teacher is able to design higher quality materials

which are aligned with his/her beliefs. This may be the best way to go to become a professional language teacher.

The mark of a professional language teacher is to be able to:

design	higher	may just work	will be ideal
	lower	questionable	could work
	quality materials	loosely	closely

which are aligned with his/her teaching beliefs

Figure 9.3 Mark of a professional language teacher

One may, in similar vein, examine how professionalism can be measured within the parameters of the ability to design materials and the degree of independence evident in such an undertaking.

Professionalism can be measured by:

the ability to design materials	high	±	+
	low	—	±
		low	high

with a degree of independence

Figure 9.4 Professionalism and the ability to design materials

The matrix makes it clear that a teacher’s professionalism is at stake if he/she has a low ability to design materials as well as a low degree of independence. However, one’s chances of being viewed as a professional increase slightly with a low ability to design materials, but with a high degree of independence. On the other hand, a teacher with a high ability to design materials and a low degree of independence relates to a marginal measurement of professionalism. In order to be viewed as a professional language teacher, the ultimate would be to possess a high ability to design materials with a high degree of independence.

The implementation of the materials in the classroom was a crucial stage in the action research undertaken in the study (Chapter 6). The nature of action research allowed me to study my teaching, to identify and address issues or concerns related to the problem, with a possibility of resolving them by creating and implementing a plan of action. The list of factors that influenced the learning situation during the intervention included the general atmosphere of the school setting, the physical arrangements of desks and chairs, and the time available. Without a doubt these factors significantly affected the teaching and learning situation.

The continuous monitoring of the developed materials shed some light on the effectiveness of the materials, and how the designed materials were meeting the stipulated criteria for materials development. It also allowed the reasons for choosing one kind of task over another to be articulated. The overall rating of each lesson was given in a table and the evaluation determined future actions to be taken. The matrix below attempts to explain that a reflective stance towards materials development may result in improved materials. If there is some reflection in an instance where a materials writer loosely aligns the materials with his/her teaching beliefs, it may result in marginal improvement. Some reflection, together with close alignment of one's teaching beliefs may result in positive improvement, whereas substantial reflection, with a loose alignment with one's teaching beliefs also embraces definite improvement of materials. On the other hand, substantial reflection as well a close alignment with one's teaching beliefs ensure significant improvement and better materials.

Improved or better materials are the result of:

reflection	substantial	+	+ +
	some	<u>±</u>	+
		loosely	closely
	to align them	with one's teaching beliefs	




Figure 9.5 Reflection and improved materials

Another way of interpreting this diagram in my own case would be that the reflective stance required by action research is considerably enhanced once the direction of the reflection can be guided by the requirement to bring the materials being tested out, and reflected upon, into alignment with my instructional beliefs.

Reflection on the intervention programme (Chapter 7) provided crucial feedback, and gave me the opportunity to reflect critically on what happened in a particular lesson. It also provided me with insights about the outcomes. A point worthy of note is that these aspects were depicted in Figure 9.1 merely under *Continuous assessment*. In view of the stated significance of reflection on the intervention programme, it was vital to include *Reflection* as a step in the research process in Figure 9.2.

The importance of reflection in an intervention programme is further highlighted by the following matrix which deals with the successful outcome of an intervention programme (even one conducted on a modest scale, such as in this study) in a low average proficiency environment, which also typifies this study. The matrix shows, for example, that little reflection on an intervention programme and a half-hearted attempt by a teacher to secure the trust of the participants, will result in an unsuccessful intervention. If there is little reflection with serious attempts, average success may perhaps be achieved. However, if there is sufficient reflection, but only half-hearted attempts are made, the successful outcome of the intervention may be viewed as average. If, on the other hand, there is sufficient reflection, and serious attempts are made to secure the learners' trust, the conclusion of this study is that it is highly likely that an intervention programme may be judged as relatively successful.

In a low average proficiency environment, even modest scale interventions can work if there is:

	sufficient		
reflection		No	
	little	half-hearted	serious

and there are attempts to secure the trust of the participants

Figure 9.6 The successful outcome of an intervention programme

The final analysis of the efficacy of materials indicated, nonetheless, that there was scope for improvement. This also applied to the way they should be implemented in the classroom. This critical reflection resulted in a redesigned set of materials for Afrikaans as an additional language, as discussed in Chapter 8.

If we reflect on the theoretical framework in Figure 9.1, *Summative assessment* marks the final step in the research process. Unlike formative assessment which “points to the future, summative assessment points to past performance” (Sieborger & Macintosh, 1998: 24), and thus “provides a final snapshot” of a learner’s achievements during the learning programme (Smith & Hurley, 1996: 260). Therefore, I felt that it was necessary to indicate the post-intervention assessment more prominently in Figure 9.2. As Saunders, Lewis and Thornhill (1997: 287) correctly point out, almost all research involves some numerical data, or contains data that could be quantified to help answer the research questions and to meet the objectives. Hence, it was essential to acknowledge data analysis in the study, as reflected in Figure 9.2. The data analysed were obtained from the post-intervention assessment, as well as from the questionnaire (Appendix F), and the results were given in tables and diagrams, which allowed me to compare and correlate, and to indicate learners’ responses and perspectives on the intervention programme in the study.

The post-intervention assessment showed that there was indeed an improvement in the problem areas of vocabulary, dictation, and reading, as discussed in section 5.2.1, thereby supporting stated hypothesis 1.7.4. A second finding is that there was an overall improvement in the learners’ proficiency grade levels (Figure 5.5) and that the average grade of the Grade 12 learners’ proficiency in Afrikaans improved slightly to an average grade of 4/5 (supporting the stated hypotheses in 1.7.1 and 1.7.2). Other findings likewise suggested the probability of the learners’ positive attitude change, as discussed in Chapter 7 (providing [some] evidence of having achieved objective 1.4.5 and supporting hypothesis 1.7.3). Let us extend the latter finding by looking at the following matrix which attempts to show that interventions appear to work when a communicative language teaching approach is employed and affective factors are taken into account.

An intervention appears to work when use is made of a

CLT approach	deliberately	perhaps	definitely
	half-heartedly	doubtful	perhaps
		seldom	frequent
	and there is	attention to affective factors	

Figure 9.7 Influence of approach and affective factors on interventions

If one employs a CLT approach half-heartedly, and seldom pays attention to the influence of affective factors on language teaching and learning, an intervention programme which aims to develop the low proficiency levels of learners may no doubt be unsuccessful. There is a slight possibility that the intervention may work if CLT methods and techniques are half-heartedly employed, but frequent consideration is given to affective factors. However, if one is just a little more committed to use a CLT approach, but neglects to consider affective factors, the intervention may also yield less effective outcomes. It appears, then, that the best results will be obtained if a CLT approach is used deliberately with frequent attention to affective factors.

Finally, Figure 9.2 also gives account of the conclusion and recommendations of the study, as well as the recognition of future research. As suggested in the introduction of this chapter (section 9.1), present findings may possess some generality. I therefore fully realise that the precise extent to which they may be generalised can only be established through further research conducted, ideally in a variety of different settings.

It is clear that the research project has a number of weaknesses, deriving partly from the conditions under which it was conducted, and partly from the time limitations that applied. However, from the results reported, the findings strongly reinforce the conclusions I have reached, and I therefore believe that the objectives of the study were achieved, thereby fulfilling the aim of this research.

At this point, it seems important to comment on some significant observations made, and to present recommendations that have been derived from the findings of this research.

9.3 OBSERVATIONS AND RECOMMENDATIONS

The challenge in this study was to develop the Grade 12 learners' proficiency in Afrikaans during a short intervention programme. The main contention is that Grade 12 learners' academic programme is generally packed with revision, finalisation of portfolios, and preparations for the aggregate examination. It is likely that an intervention programme will be viewed as an encroachment upon the time available for studying, rather than a constructive endeavour. Thus, to ensure more beneficial intervention programmes that equip learners with a functional literacy in a second or additional language, institutions embarking on community outreach projects should preferably concentrate on other, lower Grades than Grade 12, or even on primary school learners.

The above argument may be taken a step forward by noting that outreach projects perhaps should aim to support teachers rather than concentrate only on the learners. One would feel justified in recommending that the great need for support and continuous training of teachers should be recognised and catered for in outreach projects. The emphasis should be on workshops that assist teachers to overcome their insecurity in introducing learner-centered additional language classes, rather than merely attempting to bring about change in the learners' performances through intervention programmes. Doing so may be more beneficial for the overall teaching and learning situation, since teachers would potentially be applying their newly acquired knowledge to their classroom practices to the benefit of all their learners.

Another observation that we can make from the outreach project under discussion is that the regular Afrikaans teacher was forced to play a passive role in the intervention programme. It can be argued that an outreach project would be more beneficial for language teachers if the intervention programme were more participatory and collaborative, and a team-teaching approach were adopted. Rather than limiting the teacher's role to that of observer in the classroom, the teacher should also become

involved in lesson planning, developing relevant materials, and implementing them. The outcomes might then be more rewarding, since the teaching and learning situation in which the action research is being conducted becomes also ‘in-service-training’ for the teacher in which he/she is given the opportunity to take a critical look at her/his teaching, with the possibility to change and improve his/her teaching style, so that the endeavour becomes a more meaningful one for all those involved in it. In line with this, Duke (1990: 281) asserts that although a teaching career exposes a teacher to an “array of formidable challenges”, ranging from predictable to unexpected challenges, a successful teacher is one who is “prepared professionally and personally to confront these challenges and to keep confronting them”.

An additional suggestion that originates from the research is that teachers should also be involved and encouraged to arrange their own workshops to collaborate, discuss problems, plan improvements, share decision making processes, and to motivate one another. It became apparent during the course of this study that the teachers of Afrikaans at the school in question felt unsure about the syllabus, the learning material, teaching methods and techniques, and consequently struggled with feelings of insecurity and loss of motivation. The idea of synergy in teamwork, where the individual qualities of the different teachers are combined, and where the focus is on group assistance, may instigate improvements and facilitate change.

Regarding the viability of the two aforementioned recommendations, viz. in-service training and workshops for teachers to change their teaching, or to reflect on, and improve their teaching methods, there is much to be said about teachers’ resistance to change in language teaching (cf. Shaalukeni, 2000; Tesfamariam, 2000; Weideman, Tesfamariam & Shaalukeni, 2003). Thus, worthwhile as these recommendations might be, one cannot but be doubtful about the successful outcome of these types of endeavours if they do not aim also at changing language teachers’ teaching beliefs.

One of the recurring observations in this study was that affective variables have an enormous influence on language teaching and learning. Thus, without wishing to preempt the significance of a CLT approach, it would be advantageous for teachers to be mindful of the important role that context plays in the additional language learning situation (see Figure 9.7). Insights into the influence of aspects like social context,

educational context, and individual learners' interests, needs, attitude and motivation, may lead to a better understanding of the kind of teaching and instructional materials to be used that are appropriate, and to establish conditions conducive to learning an additional language.

It is fair to say that authenticity, as one of the nine design considerations for materials development (section 5.5.1), provided an additional difficulty in the study. As may be recalled, the unusual circumstances of the educational environment necessitated careful consideration of the meaningfulness and realism of the communicative tasks, activities and role plays used during the lessons. Although the interpretation of authenticity in this study can best be viewed as the interaction between the learners, the material and the context, as well as the way I used Afrikaans in the classroom, a solution to the challenge of providing authenticity was offered in the redesigned set of materials. However, it is fully realised that the precise extent to which the authenticity aspect in the redesigned set of materials (Chapter 8) may be generalised is questionable, and that true authenticity can only be established through further research conducted in a variety of different settings.

The fact that the 86 learners were grouped together in one classroom for the intervention programme presented considerable problems, as we have noted in previous chapters. Admittedly, some of the difficulties encountered with the large class served initially as confirmation of the existing beliefs and perceptions of teachers that a communicative approach is not feasible with large classes. However, both the research literature and my own observations during the intervention programme seem to refute these beliefs and perceptions, to the point where I feel justified in agreeing with Tesfamariam (2000:100) that a communicative approach is in fact the most suitable methodology for large language classes. Underlying this conclusion is the fact that pair and group work provide learners with ample opportunities to practise the target language.

Sometimes designing and producing communicative tasks can be costly and time consuming, and teachers need to realise that it is not always necessary to design and develop new materials, since most commercially produced materials can be successfully adapted to fit the teacher's need for materials. However, in extreme,

problematic teaching and learning environments as experienced in this study, the designing of appropriate, ‘tailor-made’ materials may be necessary. For example, designing a page or two of one’s own newspaper, as proposed in Chapter 8, might prove to be a suitable (though perhaps partial) solution to the problem of providing affordable materials in a scarce resource environment. However, the general value of a self-designed newspaper as teaching material, its practical implications and its usefulness await confirmation in further investigations.

The action research in this study was aimed at improving practices, understandings and situations. Evaluative feedback led to a revamping of the materials. To what extent did the action research also lead to an interaction between practice and theory, that allowed both theory to be enriched, and practice to be further developed? Chief among the observations in this study is that, although an attempt was made to address the shortcomings of the developed materials, the justification for the redesigned set of materials rested on theoretical criteria and the newly introduced *National Curriculum Statement*. It is generally agreed that theory and practice should be integrated and therefore, without proper implementation in the classroom, the effectiveness, relevance and value of the redesigned set of materials in a scarce resource environment may remain debatable. However, it was beyond the scope of this study to evaluate the appropriateness of the redesigned set of materials. The important point that needs to be recognised, then, is that a materials writer cannot disregard or ignore the practical nature of a teaching and learning environment and its influence on the developed materials, which might result in gaps between theory and practice. Therefore, further studies and investigation will be required to ensure validation for the final developed set of materials (Chapter 8), as well as to determine the efficacy of these materials.

If one has to sum up today’s (2004) teaching environment, it is that it is characterized by **change**. The introduction of the *National Curriculum Statement* is an example of such change. With the implementation of this new curriculum, the Department of Education visualises that all teachers and other educators should become “key contributors to the transformation of education in South Africa” [National Curriculum Statement Grades 10-12 (General), 2003: 5]. Unquestionably, this visualisation of the role of teachers in teaching and learning is commendable. However, the point here is

simply whether teachers will use the curriculum to transform their teaching, or whether they will merely fall back into their old ways and beliefs, by resisting change. Critical reflection, as discussed in Chapter 8, section 8.3, has raised a number of issues in this regard. A critical stance towards the significance of the new curriculum in further research might be useful.

Other recommendations regarding the newly implemented curriculum are tied up with the widespread practice of teachers to discard the guiding principles of syllabuses and curriculum in favour of regarding previous year-end examination papers as learning materials or as a ‘handbook’. In fact, this was the case in this study. Apparently the learners hardly ever received other learning material than previous examination papers, and a few handouts about their prescribed book, *Kinders van die aarde*. We have learned from the discussions in the previous chapters (Chapter 4, section 4.4.1.2; Chapter 6, lesson 7 Observation) that the regular Afrikaans teacher felt unsure about the Afrikaans syllabus and therefore opted to structure her lessons and tests on the final National examination papers of previous years. Moreover, it is likely that her interpretation of the syllabus was substantially influenced by her authoritarian approach, as well as her lack of proficiency in Afrikaans (Chapter 7, section 7.2.1 and section 7.2.4), and therefore she probably felt more comfortable to teach the learners *about* Afrikaans, than to provide opportunities for the learners to use the target language (Chapter 7, section 7.2.2).

As we noted above, teachers are often found to be ignorant about the syllabus or curriculum, and plan their teaching activities exclusively around the information contained in these examination papers. They feel that this is justified by the quest for symbols and good matriculation results. So, considerable teaching time is spent on coaching learners in the skills of answering examination papers. Davidoff and Van den Berg (1990: 20) correctly point out that the greatest obstacle in innovative teaching is the “threat of the ever-present exams”. Moreover, teachers are “pressurised to deliver the goods”, a notion that is the trademark of traditional teaching (Davidoff and Van den Berg (1990: 11). The irony of this is, of course, the fact that the emphasis is then more on preparing the learners for better results and symbols (which are seen as a reflection of a teacher’s outstanding teaching abilities), than on providing the learners with opportunities to practice the target language.

Perhaps the reason for this common practice is the fact that examination papers are set the same way year in, year out. This could be an interesting topic for further research and could perhaps be expanded to investigate ways to address the problem of the exclusive use of examination papers as learning material, and suggest alternatives that would combat such practices.

If one considers the learners' pass rate of 73% in Afrikaans during the matriculation examination, one cannot help but express some concern. As pleased as I (as well as the principal) was with this fine achievement, it is somewhat alarming that such an accomplishment was possible in view of the fact that the learners' proficiency levels averaged Grade 4/5 on a standardised literacy test. We have also learned that there was a 100% pass rate in the other language subjects (see Figure 5.7). If we consider the learners' proficiency in English as displayed in some examples given in previous chapters, questions arise also about their language proficiency in English. Obviously, this brings the issue of standards to the fore, which is an ongoing debate in education in South Africa. In a recent article, Van Rensburg and Weideman (2002) highlight the language proficiency dilemma among young South Africans and predict that the situation is likely to worsen. In order to meet the challenge, the situation necessitates consideration to curriculum issues, classroom practices, instructional contexts, teaching and learning materials and beliefs about language learning and teaching (Van Rensburg & Weideman, 2002: 152-164). All of these aspects and their practical implications on language learning and teaching were addressed during the study. I am in agreement with Van Rensburg and Weideman (2002: 160) that the role players most likely to bring a solution are parents, government, and especially learners and teachers because "they have the daunting responsibility of bringing about changes within what is often a negative framework and a set of conditions that is detrimental to learning and teaching".

The study has attempted to show how to design appropriate and relevant teaching materials guided by a set of criteria. Thus, through different action research cycles, the developed materials were scrutinised in terms of the theoretical criteria, implemented in the classroom to establish their effectiveness, and refined to suit the proficiency level of the particular learners. The stipulated criteria proved to be useful and provided the materials writer with guiding principles for the design and

development of appropriate and relevant materials for enhancing learners' proficiency in an additional language. Full comprehension of these mechanisms may add appreciably to our understanding of the process of developing appropriate and relevant materials. Thus, the criteria for developing materials themselves also seem worthy of further, detailed study.

This intervention programme has provided me with an enriching and rewarding experience. My sentiments regarding the action research undertaken in the study are summed up by Carr and Kemmis (1986: 182) in the following way:

Any action research study or project begins with one pattern of practices and understandings in one situation, and ends with another, in which some practices or elements of them are continuous through the improvement process while others are discontinuous (new elements have been added, old ones have been dropped, and transformations have occurred in still others).

I am grateful for what I have learnt from this action research project, which has enabled me to improve my teaching, and my materials design abilities. Mistakes have been made, but lessons have also been learnt in the process. I hope that the knowledge gained through the establishment of a set of criteria for the development of resources and materials for teaching Afrikaans in a scarce resource environment will be applicable to similar contexts.

It is often said that there are those who know and those who don't want to know. If the latter remains the predominant attitude of the majority of teachers, and we prove to be so uninspired, self-centred and resistant to change, there can be no growth and empowerment. But, if language teachers are prepared to take a critical look at their own style(s) of teaching, at their beliefs and their assumptions about learning, and are willing to change accordingly, the knowledge gained constitutes the basis for becoming true professionals.