CHAPTER 5
CONCLUSION

5.0 INTRODUCTION
This chapter reviews the present study and examines the implications of the findings for Cummins’ interdependence hypothesis in the South African context, for expository writing courses in Zulu as primary language and, at an applied level, the efficacy of the Home Language Project as a multilingual programme which might better accommodate the requirements of additional language learners at ex-Model C schools. Each of the chapters in the study is reviewed. The review is followed by a series of questions raised by the findings of the study. Limitations of the study are identified and suggestions for future research are made. The chapter concludes with a section discussing contributions made by this study.

5.1 REVIEW
The main purpose of the present study was to investigate whether and to what extent expository writing skills taught in the primary language, Zulu, would be transferred into expository essays written in English, the additional language. The use of coherence and cohesive devices to present a well-connected composition, which is easily processed by the reader, was taught to an intervention group attending a Home Language Project-associated school. As supported by a large corpus of literature (e.g. the work of Just and Carpenter; Cooper 1988; Watkinson 1998; Van Tonder 1999; Bill 2004) in 2.3, expository writing, besides being identified by its purpose and reader, also needs to be described in terms of the structures, cues and processes necessary to ensure text integration. Coherent writing leads to the formation of well-integrated stored patterns in the reader’s long-term memory (Cooper 1988:353). Also, cohesive ties help the reader “keep relations present in working memory until they can be fully processed by applying related knowledge from long-term memory storage” (Cooper 1988:353). It was therefore argued that expository writing skills and, particularly, the use of coherence and cohesion are closely related to the cognitive academic language proficiency skills instructed in the primary language (Lx) which [might] promote proficiency in the additional language (Ly), as described in Cummins’ interdependence hypothesis:
To the extent that instruction in Lx is effective in promoting proficiency in Lx, transfer of this proficiency to Ly will occur provided there is adequate exposure to Ly (either in school or environment) and adequate motivation to learn Ly (1998:4).

An applied aim of this study was to investigate the efficacy of the Home Language Project as a multilingual programme which might promote proficiency in Lx (English as AL). This investigation is related to Cummins’ statement that it is only under the right conditions (i.e. well-implemented bilingual and multilingual programmes) that there will be a positive exchange of cognitive academic language proficiency (CALP) from the speaker’s primary to additional language (1998:4). Closely connected with Cummins’ research findings on the characteristics of well-implemented bilingual programmes (see in 2.1.2), is the request made in the Language in Education Policy paper that locally viable approaches towards multilingual education (i.e. maintaining the home languages while providing effective acquisition of additional languages) be implemented in South African schools (1997:1). The relevance of home language support was discussed in 2.2.2.

In accordance with the descriptive aims of the study (in 1.1.3), three hypotheses were formulated to determine the effects on English writing following an expository writing course in Zulu as primary language. The three hypotheses proposed that there would be significant improvements made in the English expository essays written by the intervention group as compared with the control group, in terms of holistic coherence ratings, densities of conjunctive cohesion and densities of functional relations. Additional descriptive aims, independent of the hypotheses, were also presented in chapter 1. These were to provide a text linguistic analysis of aspects of coherence and cohesion in the expository essays of the corpus. Errors made in the misuse of conjunctive cohesion were also described.

Chapter 2 presented a literature survey of research and sources relevant to the present study. Discussion was related to the theoretical, sociopolitical and practical contexts of the investigation. Reference was made to the current debate
in the United States of America about the efficacy of bilingual education and different types of programmes were discussed. Dealt with in the South African context, were the requirements of the Language in Education Policy document (1997) and recent research into the sociopolitical background of language teaching and suggestions by applied linguists (such as Chick 1992; Meyer 1993; Young 1995; Van Tonder 1998) as to how to deal with the present situation in this country. Specific issues relating to the language of learning and teaching at ex-Model C schools were discussed with reference to the many learners whose primary language is not English. The contribution made by the Home Language Project to such learners was discussed.

So as to provide background information to the challenges of teaching an academic writing skills course in Zulu and the question of transfer of skills from primary to additional language, reference in chapter 2 was made to different writing programmes taught in English. The difference between the process and product models of teaching writing was discussed, as was the need to teach learners how to write coherently and cohesively to accommodate the reader and fulfill the purpose of the text. In this regard, associated with the applied aim of this study to identify bilingual and multilingual programmes which accommodate the needs of ESL learners, it was hoped that the Zulu writing course would contribute to the development of teaching materials for expository writing skills in a primary language.

Quantitative studies on the relationship between coherence, cohesion and the rating of student essays were also discussed in chapter 2. Findings generally showed that the length and density of cohesive chains contributed to the holistic coherence rating of any essay. There was a negative relation between a sparse network of cohesive ties and the HCR. In terms of errors made (particularly lexical errors), a negative relation was also found between the density of errors and writing quality. It was also noted that although cohesion errors in the corpus of the present study are not a major focus, the misuse of conjunctive cohesion has been identified and discussed. The work of Lieber (1981) and Hubbard (1989) was discussed as providing a framework for error analysis in the present study.
Chapter 3 outlined the analytical framework and research procedures of the study. The research design was described as being quasi-experimental and operating within a quantitative paradigm. Intervention and control groups (comprising Grade 9 Zulu-speaking learners) were identified and asked to write expository pre-test essays in English. The intervention group then experienced the expository writing course (in Zulu) and, at the end of the year, the two groups wrote expository post-test essays in English. The essays were then scored according to three taxonomies: (1) Bamberg’s (1984) four-point holistic coherence scale; (2) Halliday and Hasan’s (1976) four-way classification of conjunctive cohesion, and (3) Hubbard’s (1989) adaptation of Crombie’s taxonomy of inter-propositional general semantic relations (i.e. functional relations). Comparisons were then made between the control and intervention groups’ pre- and post-test essays in terms of the HCRs and according to the densities of conjunctive cohesive items and contiguous functional relations used. The HCRs and densities were statistically analysed through one tailed $t$-tests for related data to compare student performance across the two groups. Gain scores for the HCRs, conjunctive cohesion and contiguous functional relations were also analysed statistically.

In chapter 4 the findings of the study were discussed. Because the results of the statistical analysis showed that there was no significant difference between the intervention group’s pre- and post-test scores for the HCRs, the densities of conjunctive cohesion or for the densities of contiguous functional relations, all three hypotheses were rejected. However, the statistical analysis showed that although there had not been significant improvements made in the intervention group’s post-test essays in all three counts (HCRs, densities of conjunctive cohesion and functional relations), the group’s holistic coherence ratings did not decline but improved slightly ($p=0.161$). By comparison, the HCRs in the post-test essays of the control group declined significantly ($p=0.001$). The gain scores, indicating differences between the HCR ratings of pre- and post-tests for the intervention and control groups was highly significant ($p=0.051$). However, in terms of the densities of conjunctive cohesion and functional relations, the equality of means test showed that there was no significant difference between the two groups’ pre- and post-test essays, i.e. no improvements had been made by either group over the year. These findings raise a number of questions related to
Cummins’ interdependence hypothesis, bilingual and multilingual education programmes and expository writing courses in the primary language.

The qualitative discussion in chapter 4 was conducted according six criteria identified by researchers (Lieber1981; Bamberg 1983; 1984; Stotsky 1986; Watkinson 1998) to differentiate between low- and high-rated student essays. It was suggested that, in terms of the decline of the control group’s essay-writing skills and the maintenance of levels in the intervention group’s writing skills, the qualitative findings in many ways supported the quantitative findings.

5.2 QUESTIONS
The less than significant improvements made by both groups in their post-tests (intervention group HCR: p=0.161; density of conjunctive cohesion: p=0.872; density of functional relations: p=0.972; control group HCR: p=0.001; density of conjunctive cohesion: p=0.734; density of functional relations: p=0.298) raise the following questions:

(a) In spite of the large body of research studies indicating the opposite, do these findings show that Cummins’ interdependence hypothesis has serious flaws? Is there little or no chance that the promotion of proficiency in Lx transfers this proficiency to Ly?

(b) Do these findings align this study more with what the opponents of bilingual education write (i.e. with Rossell and Baker (1996), whose findings claim to show that “the risk of academic deficiency in English is greater for transitional bilingual education than for all-English instruction” (1996:43))? Is it possible that these findings be used to support decisions made to eliminate bilingual education, here and in the USA, in accordance with Propositions 227 and 203 (see 2.2.2)?

(c) Do the findings of this study indicate that perhaps, in accordance with the threshold hypothesis, expository writing skills should be taught to learners in their home language at primary school level? Perhaps waiting until high school to develop such a CALP-related skill is too late?
(d) Do the differences between the findings in the intervention and control group’s pre- and post-test scores for the HCRs (intervention p=0.161 and control p=0.001) show that there was some element in the environment of the HLP school which prevented deterioration?

The following section presents a discussion of limitations of this study in terms of suggestions for future research. This description will provide a partial answer to the questions posed above.

5.3 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The most notable limitations of the present study are those related to scale, scope, time, organisational and educational issues.

5.3.1 Scale

Since only 30 subjects were eventually identified for this research project, it was relatively small in scale. Additionally, because of circumstances there was focus on only one type of expository writing, the contrastive (see the discussion in 3.3.2). It was decided that such limitations were acceptable, given the intensive analysis of the data required in this limited scope dissertation.

Perhaps, if the GDE became involved (in terms of funding and research support), as promised, in research studies investigating the work of the Home Language Project, future research will be on a larger scale. A large scale study would provide more information about Cummins’ interdependence and associated hypotheses (see question (a) in 5.2), and the debate about the efficacy of bilingual and multilingual programmes in the South African context (see question (b) in 5.2). Additionally, the GDE’s involvement would give the HLP added status which would probably reduce such organisational difficulties as experienced by the present study (see 4.2.4).

5.3.2 Scope

The present study was focused on a quantitative examination of expository writing using measures for coherence and cohesion (in 5.1). Although more qualitative descriptions of the corpus are provided, a research project with a broader scope
may provide more information on the current debate on the efficacy of bilingual and multilingual education. Studies which include investigations of developments made in reading skills, across-the-curriculum performance (such as in science and maths) and also of affective factors, both quantitative and qualitative, would provide information which would guide the GDE in the complex choices to be made about the implementation of effective educational programmes in this country.

Currently the READ project is running a research project at Roseneath Primary school to investigate the HLP’s effect on reading development at the junior primary level. The affective qualities (such as the interest, excitement and pride generated by home language support) of the programme are also being studied. Results should be available at the end of 2005.

Further research in the primary school context is required to investigate whether or not it would be more advantageous to teach expository writing skills to primary school learners (in accordance with the threshold hypothesis, 2.1.4c). This research would provide answers to question (c) in 5.2.

Additionally in terms of scope, further research is also required to find reasons for the significant decline in the control group’s academic performance (see question (d) in 5.2).

5.3.3 Time allocated

It is probably correct to argue that, had more time been allocated for the expository writing input with the intervention group (i.e. for a longer time than seven 45 minute lessons), the results of the present study would have carried more weight. Future researchers need to be in a position to ensure that adequate time be provided for interventions such as has been attempted by this study. Perhaps a research project on a larger scale would have more status, allowing the researcher to make more demands on the school staff and timetables. Such a situation would provide more objective answers to question (d) in 5.2.
5.3.4 Organisation

Because of the lack of support from the GDE and the school involved, organisational issues limited this research project. As discussed in 4.3.3, classroom facilities and the allocation of time to the intervention and pre- and post-tests affected this study. With adequate departmental and school support through the provision of classroom facilities, overhead projectors and structured times for homework and for testing, more thoroughly-run experimental interventions could take place.

Adequate support for a research project such as this would probably be found more easily at a senior primary school. Here there is more flexibility in the curriculum and less focus on end of year exams. However, the materials used (i.e. the workbook in Zulu) would have to be radically reworked, as shown by the pilot study for testing Cummins’ hypothesis run at Rosebank and Parkview Senior Schools in 2002. The Grade 7s soon became bored with the models and exercises in the expository writing course. The students found the focus on developing expository writing skills less interesting than more creative exercises such as providing news programmes and social commentaries in their first language.

5.3.5 Education background

As discussed in 2.2, the inherited language-in-education policy in South Africa has been “fraught with problems and underpinned by racial and linguistic discrimination” (Language in Education Policy 1997:1). In the traditionally black community, teacher education has been poor, and materials and resources most inadequate. Most teachers would not have had training in how to teach expository writing skills in English, let alone in their home language. Therefore, adequate teacher-training needs to be included in projects similar to the present one. The difficulties in training the HLP teachers were described in 4.3.3.

Additionally, in terms of the educational background of many black students (as described by Chick 1992; Walters 1993; Meyer 1995 in 2.2), primary language support in teaching expository writing skills should probably take place at primary school level. This suggestion is supported by Collier’s studies which indicate that uninterrupted cognitive academic development in all subjects throughout students’
schooling is more important than the number of hours of AL instruction for successful academic achievement in an additional language (1989:526–527).

5.3.6 Conclusion
In conclusion, in terms of investigating Cummins’ interdependence hypothesis and the current debate on the efficacy of bilingual and multilingual education, the present project possibly had too many limitations to adequately achieve the aims and answer the questions posed. However, what could be said about this study is that one of the findings (i.e. that the intervention group’s HRCs held steady while those of the control group decreased) accord with Cummins’ recent comment about the interdependence hypothesis, that:

Promoting literacy in students’ primary language will provide a foundation for the development of literacy in English such that no deficits in English language development result as a consequence of spending less instructional time through English (Cummins 1988:9).

This comment, Cummins notes, is a more positive “spin” on what Rossell and Baker identify as meaningful from the Ramirez report, that “large deficits in English language instruction over several grades apparently make little or no difference in a student’s achievement” (Ramirez et al 1992:183).

In spite of the limitations described above, this study made a number of contributions to applied linguistic research. These contributions will be discussed in the following section.

5.4 CONTRIBUTION MADE BY THIS STUDY
In terms of the theoretical, descriptive and applied aims of this study, it is suggested that the following contributions have been made to applied linguistic research.

5.4.1 Theoretical
At a theoretical level, an experimental design was constructed to assess Cummins’ interdependence hypothesis in the South African context. Intervention and control
groups were identified and pre- and post-tests were run to investigate whether or not a transference of CALP-related proficiencies (i.e. the abilities to write coherently and cohesively) from primary to additional language had taken place. In order to investigate Cummins’ hypothesis, the materials and methodology for an expository writing course in Zulu as primary language were created. A workbook was designed to teach learners how to write coherently and cohesively and translated into Zulu.

Chapter 2 presents, as a theoretical background to the study, the current debate in international circles about the efficacy of bilingual education and different types of bilingual programmes. This background provides a context for any specific research work to be done within the debated areas in the South African education environment. Such research, in accordance with Luckett’s (1995:59) recommendations, would be more likely to take into account the complex subtleties operating in the South African context.

Furthermore, chapter 2 includes descriptions of the sociopolitical background to language teaching and applied linguistic research in South Africa. Here the studies and related questions of many South African applied linguists have been presented. These studies provide inspiration for future research which needs to incorporate issues such as our political history, socioeconomic levels, parental and learner attitudes and motivation, school experience and the culture of home and community (Luckett 1995:59).

5.4.2 Descriptive

At a descriptive level, this study attempted to describe a particular situation in terms of whether and to what extent:

(a) the holistic coherence ratings of the learners’ expository writing in English increase following an expository writing course in Zulu as primary language;
(b) the density of conjunctive cohesion devices in the learners’ expository writing in English increases following an expository writing course in Zulu as primary language, and
(c) the density of functional relations in the learners’ expository writing in English
increases following an expository writing course in Zulu as primary language.

Further descriptive aims, independent of the hypotheses, were to provide a text linguistic analysis of aspects of coherence, cohesion and errors in the expository scripts of specific groups of Zulu-speaking students.

Although problems were experienced in achieving the descriptive aims associated with the three hypotheses, it is hoped that this study will provide more information on aspects of teaching expository writing skills and such errors that seem to be prevalent in the writing of additional language students at the Grade 9 level in ex-Model C schools.

5.4.3 Applied
At an applied level, it is hoped that this study will contribute to the identification and possible adoption of bilingual and multilingual programmes which will accommodate the requirements of bilingual and multilingual learners. Such programmes, according to a wide body of literature (provided in chapter 2), would probably have the effect of reversing the underachievement of many bilingual learners. More specifically, it is hoped that an investigation into the efficacy of the Home Language Project as a multilingual programme which might promote proficiency in English as AL will be helpful to the current questions about bilingual and multilingual education in this country.

Also at an applied level, it is hoped that the materials and methodology used to teach expository writing skills will be of benefit to writing teachers at high school level and, particularly, to those who are interested in teaching expository writing in Zulu as primary language.

As Bamberg indicates, we need a more systematic approach to the teaching of expository writing skills, based on “a better understanding of the linguistic features and rhetorical structures that create coherence as well as greater insight into the problems students experience in trying to use them” (1984:305-306). More profound insights result in better teaching.
5.5 CONCLUSION

In conclusion, this study has attempted to explore the effects of teaching an expository writing course in Zulu as primary language at an ex-Model C school where the language of learning and teaching is English. Despite the fact that there are many limitations to the study and many areas which require further research, it is felt that this limited scope study made an important contribution the teaching and learning of expository writing skills and, particularly to the teaching of coherence and cohesion in Zulu as first language. Additionally, it is felt that the study contributed to investigations into the efficacy of bilingual and multilingual programmes called for in the Language in Education Policy paper:

With regard to the delivery system [i.e. the implementation of additive bilingual programmes in South African schools], policy will progressively be guided by the results of comparative research, both locally and internationally (Language in Education Policy 1997:1).

It is further felt that, in terms of comparative research, this study has been conducted in accordance with Cummins’ request that applied linguists create an ideological space in which collaboration may take place for the planning of quality programmes for bilingual students (1998:32). Cummins also suggests that by working together to disseminate information on the effectiveness of bilingual programmes, researchers will help diffuse acrimonious debate and highlight the “deep structure of interactions between educators and students [which is] a primary determinant of students’ academic engagement or withdrawal” (1998:32). It is hoped that this study will serve that purpose.