CHAPTER 1
INTRODUCTION

1.0 INTRODUCTION
This chapter sets out the main issues of this experimental study, which explores Cummins’ interdependence hypothesis through assessing the extent to which expository writing skills taught in Zulu (as primary language), focusing on coherence and cohesion, might be transferred into the writing of English (additional language) texts at high school. To explicate this study, the context of the problem to be explored, its aims and a preliminary perspective on key concepts are set out. The research focus is presented and the chapter concludes with three hypotheses generated by this study.

1.1 STATEMENT OF PROBLEM
The central problem to be explored needs to be investigated through a number of related issues. These are firstly, broader theoretical issues about Cummins’ interdependence hypothesis and, secondly, more specific and practical questions about teaching a Zulu expository writing course to Zulu-speaking pupils attending a school where the language of learning and teaching (LOLT) is English. The expository writing course deals with how to write coherently and cohesively, two elements requiring exploration. A third, mediating issue (connecting the first and second problems) concerns present debate about bilingual education and programmes which best suit government language policies and the needs of bilingual and multilingual learners. This is an important issue, since, according to the Language in Education Policy, the implementation of bilingual and multilingual education in South Africa will “progressively be guided by the results of comparative research, both locally and internationally” (1997:1). However, because this debate is related to the theoretical background to the problem, it will be more fully discussed in chapter 2.

1.1.1 Research questions
The central question to be examined relates to Cummins’ interdependence hypothesis, which proposes that there is “a common underlying proficiency, or interdependence, existing between a bilingual’s two languages (even given widely varying surface
features), with the development of one language strongly aiding development of the second one” (Cummins 1981b in Collier 1989:511). In other words, Cummins proposes that, under the right conditions, there will be a positive transfer of cognitive academic language proficiency (CALP) from the speaker’s primary to additional language. Since the focus of this study is on texts produced by learners whose additional language is English, it is proposed that an expository writing course in Zulu as primary language will have a positive effect on their academic writing in English. This study attempts to find a means of measuring a possible transfer of CALP-related skills from primary language to additional language (AL) through the teaching of expository writing skills in Zulu. To investigate Cummins’ hypothesis, an expository writing course (teaching the elements of coherence and cohesion) was taught in Zulu to Zulu-speaking pupils attending an English public school, formerly for white children only, i.e. an ex-Model C school. The extent of transfer of abilities to write coherently and cohesively was measured through a comparison of English essays written (at the beginning and end of 2003) by intervention and control groups. It is argued that the ability to use coherence and cohesion in expository writing shows evidence of the CALP-related skills described by Cummins.

In the light of the above, the following questions are central to the present study:

Will teaching coherence in Zulu, as primary language, lead to more coherent writing in the AL?
Will teaching cohesion in Zulu, as primary language, lead to more cohesive writing in the AL?

1.1.2 Background considerations
The two research questions will here be briefly explored in terms of some background considerations.

The writing of expository texts is a difficult task to accomplish in the primary language and, more particularly so, in an additional language. There are a number of reasons for this. Firstly, there are the differences between speaking and writing skills. Cummins’ (1986:151-156) discussion of basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP) illustrates these (see
1.2.2). Secondly, there are a number of conventions followed in the writing of expository texts which are not frequently or explicitly taught to students (see 1.2.3).

Background considerations relating to the expository writing skills course taught in Zulu as primary language need also to be discussed. Since no texts exist which teach coherence and cohesion in Zulu as primary language, the expository writing course had to be translated from English into Zulu. Concerns about the translation of materials between English and Zulu, two languages which belong to very different linguistic systems, are dealt with by Bill (2004). Although her work concerns teaching Zulu as AL (elaborated on in chapters 2 and 3), Bill demonstrates that Zulu expository writing skills may be taught (as they are in English) through developing learners’ knowledge of discourse structure (i.e. coherence) and their abilities to recognise and interpret cohesive devices (2004:24). Additionally, her categorisation of discourse markers used in Zulu is closely aligned with Halliday and Hasan’s (1976) subclass of conjunctive cohesive devices (to be discussed in chapter 3).

A further consideration related to educational reforms which have swept through this country needs also to be discussed. Since 1992 and the reconstruction of South Africa’s language-in-education policy, there has been tremendous pressure for places by black parents and their children in ex-Model C schools, where the language of learning and teaching (LOLT) is English. Presently, in Gauteng alone, up to 146,000 learners whose primary language is not English attend ex-Model C schools (Government Education Department, personal communication 2003). According to Owen-Smith (personal communication 2003), the only schools in this province providing cognitive academic language development support in the primary language for learners for whom the LOLT is an additional language, are the six which participate in the Home Language Project (see below at 1.2.5). This situation exists in spite of the injunction to “develop programmes for the redress of previously disadvantaged languages” (Language in Education Policy 1997:2). It is clear that such programmes need to be developed and their development needs to be accompanied by ongoing applied linguistic research.

1.1.3 Aims
The aims of this study are articulated in terms of theoretical, descriptive and
applied levels. At a theoretical level, this study investigates the validity of Cummins’ interdependence hypothesis through assessing the effects on bilingual students’ English writing following an expository writing course in Zulu as primary language.

At a descriptive level, this study describes certain of these effects in a specific situation by determining 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.

These aims link directly to the three hypotheses of the study (see 1.3.2).

At the descriptive level the study does, however, have another aim that is independent of the hypotheses, namely that of providing a well grounded text linguistic analysis of aspects of the cohesion and coherence in the expository essays of specific groups of Zulu-speaking pupils for whom English is an additional language. In this analysis, the misuse of conjunctive cohesion will also be discussed.

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 large 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 debate about bilingual
and multilingual education in this country.

1.2 PRELIMINARY PERSPECTIVE ON KEY CONCEPTS OF THE STUDY

The following section presents a preliminary perspective on key concepts of this study: the interdependence hypothesis; BICS and CALP; expository writing skills; coherence; cohesion; errors in conjunctive cohesion and the Home Language Project.

1.2.1 The interdependence hypothesis

Cummins’ interdependence hypothesis, generated by his research into additional language acquisition, proposes that:

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).

Therefore, under the right conditions, it is proposed that a common underlying proficiency (CUP) “underlies academic performance in both languages” (Cummins 1998:4). The development of such language abilities is closely related to cognitive academic language proficiency (1.2.2). It is also argued that the positive transfer of such skills would be an outcome of a well-implemented bilingual programme, the structure of which rests on three theoretical principles according to Cummins (1998:3). These principles are discussed in 2.1.2.

1.2.2 Basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP)

There are a number of differences between cognitive academic language proficiency (CALP) and basic interpersonal communication skills (BICS). Because BICS (associated with speaking) is context-embedded and less formal, additional language learners can “quickly acquire considerable fluency in the target (AL) language when they are exposed to it in the environment or at school” (Cummins 1989:3). Comparatively, because CALP involves context-reduced and more cognitively demanding communication skills such as reading and writing, “it
takes generally a minimum of about five years (and frequently much longer) for additional language learners to catch up to native-speakers in academic aspects of the language” (Cummins 1989:3).

In terms of assessment, therefore, Cummins makes the point that superficial conversational fluency is not a good indicator of long-term academic growth. He indicates that research has shown that students who are encouraged to give up their primary language and switch to English as the primary language of communication and learning, suffer retardation of their academic progress in the additional language and are “likely to underachieve in both languages” (Cummins 1998:3). Studies by researchers such as Fitzgerald (1995) and Lasagabaster Herrarte (1997) clearly show that “instructional time can be focused on developing students’ literacy skills within their own language without adverse effects on the development of their literacy skills in English” (in Cummins 1998:4–5). Furthermore, “the relationship between first and additional language literacy skills suggests that effective development of primary language literacy skills [i.e. CALP] can provide a conceptual foundation for long-term growth in English literacy skills” (Cummins, 1998:4-5).

1.2.3 Expository writing skills: coherence and cohesion

Expository texts explain and discuss ideas, theses or hypotheses and play an important part in “communicating facts, or evidence in formal education, in job-related contexts and to further an argument” (Just and Carpenter 1987:249). This type of writing involves using structures, cues (signals) and processes to create a global relatedness of the text so as to ensure a smooth processing of the text. Being cognitively challenging and context-reduced, the writing of expository texts is therefore associated with cognitive academic language proficiency (CALP). Such texts are difficult to write, particularly in an additional language. At high school level, 80% of the additional language learner’s output in subjects such as English, History of Art, Drama, Business Economics, History, Geography, Biology and Environmental Science is in writing. Further, in English, 80% of their final year marks lie in written proficiency (Terblanche personal communication 2005).

Many applied linguists, such as Brostoff (1981), Witte and Faigley (1981),
Lautamatti (1982), Stotsky (1983), Just and Carpenter (1987), Carpenter and Hunter (1981), Zamel (1981) and (1987), Cooper (1988), and Van Tonder (1999), have investigated the components of expository texts needed to be written at student level. In spite of the two schools of thought which emerge (one focusing on product and the other on process, discussed further in 2.3), researchers do agree that teaching coherence and cohesion is important for the development of expository writing skills.

In this study, the Zulu expository writing course presented to the intervention group relates to, and in many ways is based on a course book, *Think Write* (1992), prepared for learners at levels from Grade 8 to Matric. This course (extracts of which have been translated into Zulu) involves teaching expository writing skills through the practical analysis and construction of coherent and cohesive texts. Phelps’ (1985) definitions of coherence and cohesion (cited in Cooper 1988) provide a theoretical understanding of the main concerns of the expository writing courses:

Coherence is a property of intentional global relatedness that readers ascribe to textual meaning ... [and] ... they perceive their own integration as strongly correlated with the intentions of the writer. Just as coherence is the semantic and pragmatic integrity discovered by readers in textual meaning, cohesion is broadly the verbal relatedness of the text as a cuing system (Phelps 1985:21–4 in Cooper 1988:354).

1.2.3(a) Coherence

Many applied linguists write about the difficulties of defining and, therefore, identifying the concept of “coherence”. It is frequently described as “the extent to which a sample of language-use forms a unified whole” (Hubbard 1993:56) and ultimately can best be judged impressionistically and not scientifically (i.e. quantitatively), as can be the density of cohesive devices used by a writer.

Cooper’s statement that “coherence is a property of intentional global relatedness that readers ascribe to textual meaning” (1988:354) is supported by Brostoff, who writes that coherence is “the internal set of consistent relationships perceived in any stretch of discourse” (1981:279). Lautamatti writes that “propositional
coherence can be considered as a means of linking different parts of a [...] frame by proceeding most commonly from top to bottom in the structure of hierarchically ordered information, that is, from more general to more particular concepts” (1982:35). So, generally speaking, the creation of a “unified whole” (i.e. the connection of meaning relationships) in written discourse might be achieved structurally by linking main ideas, that is framing ideas (macro-structures) with supporting ideas (micro-structures), and so increasing the accessibility of the text to its reader.

1.2.3(b) Cohesion

Coherence is aided by cohesion. In general terms, cohesion is the use of language connectors as a “cuing system” to refer the reader back and forward across sentences (i.e. intersententially) to elements occurring in the text. As such, the internal relatedness of a text (cohesion) assists the reader to process and ideate a coherent understanding of the writer’s main propositions.

This study focuses on cohesive ties belonging to the *conjunctive* class of relations identified by Halliday and Hasan (1976). Conjunctive elements, according to Halliday and Hasan, are not in themselves cohesive, but “indirectly, by virtue of their specific meanings [...] express certain meanings which presuppose the presence of other components in the discourse” (1976:226). The subclasses of conjunction cohesion taught to the intervention group in the Zulu expository writing course are: (a) additive (*and, for example, e.g., that is, i.e., or, in other words, namely, I mean, for instance*); (b) adversative (*but, on the other hand, however, nevertheless, still, while, instead, although, whereas*); (c) causal (*because, therefore, as a result, consequently, due to, owing to, leading to*); and (d) temporal (*before, then, after that, when, firstly, secondly, before, later, finally, at this stage*). The HLP writing course learners were made aware of different cohesive devices used to signal relationships between different parts of the discourse.

1.2.4 Errors in conjunctive cohesion

The focus of the error analysis in the present study is on the misuse of conjunctive cohesion. In describing conjunctive errors in the corpus, reference is made to Halliday
and Hasan’s (1976) four-way classification of cohesion and to Hubbard’s (1989 and 1994) process-oriented analysis of errors in which Lieber’s (1981) taxonomy is adapted (see in 2.5). Although the errors have been identified and described as items interfering with the links made across a student’s essay, they have not been subjected to a statistical analysis.

1.2.5 The Home Language Project
An applied aim of this study is to investigate the efficacy of the Home Language Project as a multilingual programme which might promote proficiency in English as AL (see in 1.1.3).

The Home Language Project was started by Owen-Smith in 2000. She states that “the purpose of the HLP programme is to address the problem of mother-tongue loss through providing facilities in which additive bilingualism can be fostered in a way which is currently practical and cost effective” (2003:1). Additionally, the Home Language Project:

- aims to improve students’ general cognitive, metacognitive and communicative abilities through developing thinking skills (i.e. categorising, analysing, synthesising, comparing, sequencing, examining cause and effect and transforming information) in their primary language (Owen-Smith 2003:1).

The HLP objectives are in accordance with the Language in Education Policy Paper (1997) which states that:

- Whichever route is followed [in] the implementation of locally viable approaches towards multilingual education, the underlying principle is to maintain home language(s) while providing access to and the effective acquisition of additional language(s). Hence, the Department’s position that an additive approach to bilingualism is to be seen as the normal orientation of our language-in-education policy (Language in Education Policy 1997:1).

The underlying principle mentioned here is clearly related to Cummins’ interdependence hypothesis.
Presently in South Africa, however, there are many approaches in education which have not followed the Education Department’s recommendations. As a result it is possible that, in accordance with Cummins’ interdependence hypothesis, the transfer of cognitive linguistic proficiency across a bilingual’s two languages is not facilitated in many school situations. This point is pertinent to teachers at ex-Model C schools as well as to those parents of children whose first language is not English. Here, the language of learning and teaching (LOLT) is English, with the Nguni and Sotho languages being taught only as additional languages. Therefore, most of the 146,000 learners at ex-Model C schools, whose primary language is not English, are in a “straight-for-English” situation. These learners suffer from “mother-tongue loss”. Researchers such as Cummins argue that this is the type of intervention not likely to reverse the underachievement of many bilingual students (Cummins 1998:1).

1.3 RESEARCH FOCUS
The following section provides information about the texts examined and the hypotheses generated by this study.

1.3.1 The corpus
So as to investigate the validity of Cummins’ interdependence hypothesis in a particular South African context, experimental and control Grade 9 groups of learners attending two ex-Model C schools were identified. One school was part of the Home Language Project and the other was not. Thirteen learners comprised the intervention group at the HLP school and 17 the control group at the non-HLP school.

Three pre-tests were administered to the experimental and control groups involving expository writing in English in an exam situation, responding to prompts (see Appendix A).

The intervention group was then given a Zulu expository writing course, which followed certain translated chapters in Think Write (see chapter 3). Their expository texts written in Zulu were monitored and marked by the Zulu teachers.
At the end of the year, three post-tests were administered to the experimental and control groups involving expository writing in English in an exam situation responding to prompts (see Appendix A).

The pre- and post-intervention expository essays written in English by both groups were then examined in two ways: First, they were assessed separately by three independent raters for their coherence level using Bamberg’s (1984) four-point holistic coherence scale (see Appendix B). Secondly, the essays were analysed by the researcher for the density of conjunctive cohesion devices and functional relations evident. In addition, errors made in the use of conjunctive cohesion were identified and described. The pre- and post-test scores for each group, intervention and control, were then compared in terms of the specific aspects of coherence and cohesion mentioned above and further described in chapter 3, which describes the analytical framework of this study. It could be argued that any significant improvements made by the intervention group, especially relative to those of the control group, might be accounted for in terms of Cummins’ interdependence hypothesis.

1.3.2 Hypotheses
As supported by a wide corpus of literature (see 2.3), expository writing, besides being identified by its purpose and intended reader, also needs to be described in terms of the structures, cues and processes necessary to ensure text integration on the part of the reader. Coherent writing leads to the formation of well-integrated stored patterns in the reader’s long term memory (Cooper 1988:353). 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 learned in the primary language which might promote proficiency in the additional language, as described in Cummins’ interdependence hypothesis. In relation to Cummins’ hypothesis, three hypotheses have been generated for the present study. Each is directional, since much research on the interdependence hypothesis has shown a positive relationship between the
development of primary language literacy skills (i.e. CALP) and academic performance in an additional language.

**H1: Holistic coherence transfer hypothesis**
At the end of the Zulu writing programme, the holistic coherence ratings of English expository essays written by the intervention group will have increased significantly more than in the control group.

**H2: Conjunctive cohesion transfer hypothesis**
At the end of the Zulu writing programme, the density of conjunctive cohesion devices in the English expository essays written by the intervention group will have increased significantly more than in the control group.

**H3: Functional relations density hypothesis**
At the end of the Zulu writing programme, the density of functional relations in the English expository essays written by the intervention group will have increased significantly more than in the control group.

**1.4 STRUCTURE OF THE STUDY**
Chapter 2 presents a survey of the sources and research contributing to this study. Chapter 3 outlines the analytical framework of the study and research procedures adopted within which to carry out the study. Chapter 4 presents the findings of the study and provides an interpretation of these findings. And, finally, chapter 5 assesses the findings in terms of their applicability to writing instruction and reviews the limitations of the study. Also, suggestions are made there for possible future research.