

CHAPTER 4

RESEARCH FINDINGS

4.0 INTRODUCTION

This chapter discusses the findings of the study. Presented are the statistical procedures followed and details of the results of each hypothesis in terms of the statistical tests performed on the data. There is a review of the results in terms of the aims of the present study. Reference will be made to the current debate about bilingual education and Cummins' interdependence hypothesis. Threats to this study will also be discussed. There will be a more qualitative description of the findings in the corpus and, finally, a discussion of the misuse of conjunctive cohesion in the student essays. Tables showing the raw scores for the data collected are in Appendix E.

4.1 RESULTS

This section describes the statistical procedures used, results and interpretations of the hypotheses tested.

4.1.1 Statistical procedures

To determine whether or not the intervention and control groups were matched, a two tailed *t*-test for two sets of independent data was administered on the pre- tests. The holistic coherence rating (HCR) for each script was used. The results showed that there was not a significant difference between the two groups ($p=0,17$). Since the two groups were reasonably well-matched and displayed a normal distribution, it was possible to implement parametric tests. Accordingly, one-tailed *t*-tests were applied to:

- (a) The difference between the HCRs of pre- and post-tests written by the intervention group.
- (b) The difference between the HCRs of pre- and post-tests written by the control group.
(These tests relate to hypothesis 1, the holistic coherence transfer hypothesis);
- (c) The difference between the densities of conjunctive cohesion in the intervention group's pre- and post-test essays.

(d) The difference between the densities of conjunctive cohesion in the control group's pre- and post-test essays.

(These tests relate to hypothesis 2, the conjunctive cohesion transfer hypothesis);

(e) The difference between the densities of functional relations in the intervention group's pre- and post-test essays.

(f) The difference between the densities of functional relations in the control group's pre- and post-test essays.

(These tests relate to hypothesis 3, the functional relations density hypothesis).

Finally, a *t*-test for the equality of means (a gain score test) was run on the differences between the scores achieved by the intervention and control groups in their pre- and post-test essays in terms of the HCR ratings; the density of conjunctive items used; and the density of functional relations used.

The results and interpretations of each hypothesis are discussed in the following section.

4.1.2 Results and interpretations

Each of the hypotheses was formulated to test the extent to which instruction in the primary language (L_x) is effective in promoting proficiency in the primary language (L_x) (which may be transferred to the additional language, L_y), according to Cummins' interdependence hypothesis (1998:4). In the present study for H1, the HCR proficiency (L_x) has been identified as the ability to write coherently and to structure information by linking main ideas, that is, framing ideas (macro-structures) with supporting ideas (micro-structures), to ensure text integration on the part of the reader. For H2, the cohesion proficiency (L_x) has been identified as the ability to write cohesively and use conjunctive cohesive devices (additive, causal, adversative and temporal) to create a network of relationships across a text. Such a cohesive network further ensures the accessibility of the text to its reader. In H3, the functional relations proficiency (L_x) has been identified as the ability to write coherently and cohesively and use contiguous functional relations to improve the readability of a text.

4.1.2.1 H1: Holistic coherence transfer hypothesis

This hypothesis states that 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.

The null hypothesis for H1 states that after the intervention, there will be no difference between the holistic coherence ratings of English expository essays written by the intervention and control groups.

The particular focus of this hypothesis was on the holistic coherence rating by independent markers on the levels of coherence (according to Bamberg's 1984 four-point scale) achieved by the 30 subjects in pre- and post-test essays. As described in 3.2.1, the coherence rating was out of 12 points for each essay.

The results are presented in three tables. The first two show HCR scores for each of the pre- and post-test essays written by intervention and control groups. The standard deviation and mean for the group is shown for each test. The significance of the variation in students' performance in the pre- and post-test essays is provided in each table. The third table represents the equality of means across both groups in terms of the HCRs.

Table 8: Experimental group: paired samples statistics (HCR) (n=13)

Statistics	Pre-test	Post-test
S.D.	1,39021	1,44892
Mean	7,8462	8,3462
Significance	p = 0,161	

Table 9: Control group: paired samples statistics (HCR) (n=17)

Statistics	Pre- test	Post-test
S.D.	1,92124	1,91837
Mean	8,7353	7,3529
Significance	p = 0,001	

Table 10: Equality of means: group statistics (HCR) (n=30)

	Intervention group	Control group
S.D.	2,415269	1,694498
Mean	0,00385	1,94118
Significance	p = 0,015	

Results

Table 8 shows that, in spite of the positive difference between the means of the pre- and post-test scores of the intervention group, there was no significant difference between pre- and post tests ($p=0,161$). As a result, it needs to be stated that the Zulu writing programme had no effect on the holistic coherence ratings of English expository essays written by the intervention group. This result indicates that the null hypothesis cannot be rejected. Therefore H1 cannot be accepted.

Table 9 shows that the negative difference between the means of the pre- and post-test scores of the control group is highly significant ($p=0,001$). As a result, it may be stated that at the end of the year, the performance of the control group in writing English expository essays declined significantly.

Table 10, showing results of the equality of means test (gain scores), reveals that the difference between the two groups' pre- and post HCR scores is highly significant ($p=0,015$). This variation is highly significant at the $p = 0,01$ level. As a result, it can be stated that although the intervention group's performance did not significantly improve at the end of the year, the control group's performance, by contrast, declined significantly.

Interpretation

The most important results in this section reveal that the independent variable (the Zulu writing programme) had no significant effect on the performance of the intervention group ($p=0,161$). For this reason, the null hypothesis was accepted and H1 was rejected.

Even though the difference between the two groups' HCR scores (shown in the equality of means test) is highly significant, H1 cannot be accepted since it was the profound decline in the control group's ability to write coherently which generated the result. The lack of improvement in the intervention group's scores contributed in no way to this significant result. This finding will be further discussed below in 4.2.1.

4.1.2.2 H2: Conjunctive cohesion density hypothesis

This hypothesis states that 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.

The null hypothesis for H2 states that after the intervention, there will be no difference between the density of conjunctive cohesion in the English expository essays written by the intervention and control groups.

The density of conjunctive cohesion in the subjects' pre- and post-tests was analysed by the researcher. The texts were divided into f-units and conjunctive cohesive ties were counted. The density was established by dividing the number of ties by the number of f-units in each script (see in 3.2.2).

The results are presented in three tables. The first two show the densities of conjunctive cohesion in the pre- and post-test essays written by the intervention and control groups. The standard deviation and mean for the group is shown for each test. The significance of the variation in students' performance in the pre- and post-test essays is provided in each table. The third table represents the equality of means across both groups in terms of the density of conjunctive cohesion in each essay.

Table 11: Experimental group: paired samples statistics (densities of conjunctive cohesion) (n=13)

Statistics	Pre- test	Post-test
S.D.	0,1226615	0,144892
Mean	0,221500	0,212485
Significance	p=0,872	

Table 12: Control group: paired samples statistics (densities of conjunctive cohesion) (n=17)

Statistics	Pre- test	Post-test
S.D.	0,0861513	0,2271035
Mean	0,217582	0,228147
Significance	p=0,734	

Table 13: Equality of means: group statistics (densities of conjunctive cohesion) (n=28)

	Intervention group	Control group
S.D.	0,197695	0,270550
Mean	0,00902	0,04116
Significance	p=0,721	

Results

Table 11 shows that the difference between the pre- and post-test densities of conjunctive cohesion used by the intervention group is not significant ($p=0,872$). Therefore, the Zulu writing programme had no effect on the density of conjunctive cohesion in the intervention group's writing of expository essays. This result indicates that the null hypothesis cannot be rejected. Therefore H2 cannot be accepted.

Table 12 shows that the difference between the pre- and post-test densities of conjunctive cohesion in the control group's writing is not significant ($p=0,734$).

Table 13, showing results of the equality of means test (gain scores) reveals that the difference between the densities of conjunctive cohesion in the two groups' pre- and post-test essays was not significant ($p=0,721$).

Interpretation

The results in this section show that the independent variable (the Zulu writing programme) had no significant effect on the performance of the intervention group ($p=0,872$). For this reason, the null hypothesis was accepted and H2 was rejected.

The rejection of H2 was further supported by the equality of means test which showed that the difference between the density of the conjunctive cohesion in the two groups' pre- and post-essays was also not significant ($p=0,721$). This finding will be further discussed in 4.3.

4.1.2.3 H3: Functional relations density hypothesis

This hypothesis states that 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.

The null hypothesis for H3 states that after the intervention, there will be no difference between the density of functional relations in the English expository essays written by the intervention and control groups.

The density of functional relations in the subjects' pre- and post-test essays was analysed by the researcher. The texts were divided into f-units and functional relations were counted. The density was established by dividing the number of relations by the number of f-units in each script (see 3.2.3). The results are presented in three tables. The first two show the densities of functional relations in the pre- and post-test essays written by the intervention and control groups. The standard deviation and mean for the group is shown for each test. The significance of the variation in students' performance in the pre- and post-test essays is provided in each table. The third table represents the equality of means across both groups in terms of the density of functional relations in each essay.

Table 14: Experimental group: paired samples statistics (densities of functional relations) (n=13)

Statistics	Pre- test	Post-test
S.D.	0,0995724	0,1599278
Mean	0,342000	0,343908
Significance	p=0,972	

Table 15: Control group: paired samples statistics (densities of functional relations) (n=17)

Statistics	Pre- test	Post-test
S.D.	0,0980354	0,0952685
Mean	0,306682	0,280324
Significance	p=0,298	

Table 16: Equality of means: group statistics (densities of functional relations) (n=30)

	Intervention group	Control group
S.D.	0,221042	0,109616
Mean	0,03478	0,03705
Significance	p=0,971	

Results

Table 14 shows that the difference between the pre- and post-test densities of functional relations in the intervention group's essays is not significant ($p=0,972$). Therefore, the Zulu writing programme had no effect on the density of functional relations in the intervention group's expository essays. This result indicates that the null hypothesis cannot be rejected. Therefore H3 cannot be accepted.

Table 15 shows that the difference between the pre- and post-test densities of functional relations the control group's essays is not significant ($p=0,298$).

Table 16, showing results of the equality of means test (gain scores) reveals that the difference between the densities of functional relations in the two groups' pre- and post-test essays was not significant ($p=0,971$).

Interpretation

The results in this section reveal that the Independent variable (the Zulu writing programme) had no significant effect on the performance of the intervention group ($p=0,972$). For this reason, the null hypothesis was accepted and H3 was rejected.

The rejection of H3 was further supported by the equality of means test which showed that the difference between the density of functional relations in the two groups' essays was also not significant ($p=0,971$).

4.2 DISCUSSION

This section reviews the results in relation to the aims of this study. Reference will be made to the current debate about bilingual education and Cummins' interdependence hypothesis. Threats to the present study will also be discussed.

4.2.1 Aims and results

The aims of this study were articulated in terms of theoretical, descriptive and applied levels. At the theoretical level, the validity of Cummins' interdependence hypothesis was tested. At a descriptive level this study investigated whether or not, in the specific situation focused on, there would be a transfer from primary language to AL writing skills following an expository writing course in Zulu to an intervention group.

Also, at a descriptive level, independent of the three hypotheses of this study, aims were to provide a text linguistic analysis of aspects of coherence and cohesion in the essays of the two groups. A further aim was to provide a text linguistic analysis of the misuse of conjunctive cohesion in the essays in the corpus. At an applied level, the aim was to contribute to information about bilingual and multilingual programmes likely to reverse the underachievement of many bilingual learners (see 1.1.3). More particularly, an applied aim was to explore the efficacy of the Home Language Project with a view to providing South African-based insights into the current debate on the value of bilingual and multilingual education (see 2.1.2).

Because the statistical analysis showed that the only significant variations were related to aspects outside the focus of this study, it was necessary to reject the three hypotheses. The first significant variation was related to the poor HCR scores of the control group in their post-test ($p=0,001$). The second significant variation was related to the difference between the control and intervention groups' HCRs for pre- and post-tests ($p=0,015$). The null hypotheses have been accepted. The additional descriptive aim, to provide more information about expository writing skills (coherence, cohesion, functional relations and conjunctive errors), will be achieved in a discussion of the more qualitative findings in 4.4 below.

Because it was necessary to accept the null hypothesis for the three formulated (in 1.3.2), it might be argued that the present study be positioned alongside those of Rossell and Ross (1986), Porter (1990), Baker (1992) and Rossell and Baker (1996), critics of the bilingual approach in the United States of America. Rossell and Baker's (1996) research, as discussed in 2.1.2 found that "the *risk* of academic deficiency in English is greater for transitional bilingual education (TBE) than for all-English instruction" (1996:43). Since this would be a simplistic response because of the complexities and difficulties encountered in the study, it is necessary to review certain findings (in terms of Cummins' hypothesis) and describe threats to the effectiveness of the intervention.

4.3 REVIEW

In this section the lack of change in the intervention group's performance according to the holistic coherence ratings will be reviewed with reference to Cummins'

interdependence hypothesis and the threats to this study. An attempt to account for the decline in the control group's writing skills will also be made.

4.3.1 Holistic coherence rating findings

The holistic coherence ratings, according to Bamberg's 1984 four-point scale, are considered to be important indicators of development (or regression) in this study for the following reasons:

- (a) they represent scores of objective and experienced English high school teachers.
- (b) they show, in many cases, that the relationship between the density of cohesive devices and coherence is not always equivalent. An example is presented in 3.2.1, extract [1].

Although the difference between holistic coherence ratings for the intervention group's pre- and post-essays was not significant ($p=0,161$), the result does show that the group's writing skills did not deteriorate over the year. The positive relationship between the mean (7.8462 for the pre-test and 8.3462 for the post-test) supports this finding. In contrast, the difference between the HCRs for the control group's pre- and post-essays is highly significant ($p=0,001$). The negative relationship between the means (8.7353 for the pre-test and 7.3529 for the post-test) shows a highly significant deterioration in the control group's writing skills. This finding is further supported by results of the equality of means test which shows that the difference between the HCRs in pre- and post-tests by both groups is also highly significant ($p=0,015$). This means that not only did the control group's performance in the post-tests decline significantly in comparison with their pre- test essays but also it declined significantly in comparison with the overall performance of the intervention group. This reflects a serious decline over the year.

4.3.2 The interdependence hypothesis

As stated in 1.2.1, the interdependence hypothesis 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 (Cummins 1998:4).

The second part of Cummins' hypothesis (i.e. that relating to the possible transfer of proficiency from Lx (primary language) to Ly (additional language) and the proviso that transfer will take place if there is adequate exposure to Ly) needs to be examined in terms of the intervention and control groups' performance in the holistic coherence ratings. In terms of adequate exposure to Ly (additional language), the pupils attending both HLP and non-HLP schools seemed to be reasonably well-matched. The language spoken in the playgrounds is Ly (English as AL) with all students attending lessons where English is taught as primary language. Furthermore, it was presumed that adequate motivation to learn Ly (English) was a common factor since the students and their parents had chosen ex-Model C schools as the learning environment. Therefore, it might be argued that the main significant difference between the two school environments was the input of Home Language Project at the HLP school.

Thus, with regard to the two significant differences identified through the statistical analysis (i.e. that the control group's HCR performance declined significantly, $p=0,001$, and that the difference between the HCRs in pre- and post-tests by both groups, as shown by the gain scores, was highly significant, $p=0,015$) it seems reasonable to argue that instruction in Lx (i.e. primary language support provided by the HLP to the intervention group), was instrumental in preventing the regression evident in the control group's writing skills.

The fact that the HCRs of the intervention group did not regress but improved slightly ($p=0,161$), (although not significantly enough to reject the null hypothesis) might be discussed in terms of Cummins' more tentative statement about the transference of proficiency from primary to additional language. He writes that:

much research data show clearly that within a bilingual programme, instructional time can be focused on developing students' literacy skills in their primary language without adverse effects on the development of their literacy skills in English (1998:5).

It can be stated with confidence, therefore, that the intervention group's academic

progress was not impeded by the Zulu writing programme.

4.3.3 Threats to the study

In terms of the lack of significant improvement in the intervention group's scores ($p=0,161$ for the holistic coherence ratings; $p=0,872$ for the densities of conjunctive cohesion items, and $p=0,972$ for the densities of contiguous functional relations), threats to the effectiveness of the present study need to be discussed. These are related to the South African educational environment and to the logistics of running the HLP and the expository writing course in Zulu.

Although the objectives of the Home Language Project are closely aligned with the Gauteng Education Department's requirement that effective bilingual and multilingual programmes be implemented, there have been many logistical difficulties for the project in general and the writing programme in particular.

For example, in spite of promising cooperation, funding support, and research assistance, the GDE has not assisted the HLP. Numerous meetings between Owen-Smith (founder and coordinator of the HLP) and the GDE were cancelled by the department and funding has been withheld (personal communication 2003). The HLP teachers went without salaries for months. Travelling between the different HLP schools was therefore made extremely difficult.

Additionally, the acceptability and sustainability of the HLP has been within the aegis of governing bodies, parents and teachers. Related to the straight-for-English debate (and much ignorance and prejudice on the part of parents and educators) the project is small scale, with only six schools in Gauteng agreeing to participate (four senior primary and two high schools). The status of the project in each of these schools has also been negatively affected. (Problems with perceptions in South African education about the validity of the straight-for-English approach were discussed in 2.2.2) Because of the difficulties experienced by the HLP in one of the high schools, only one was agreeable to participate in the present study. The consequence is that the study has been small in scale, with only 13 of the original 18 Grade 9 candidates having completed the pre- and post-test essays in the intervention group.

Further, because of the status of the HLP at the high school (as an optional extra, i.e. a Cinderella programme), the time-table (providing HLP with 25 three-quarter hour sessions over the year) was late in being implemented. Also, pupils were often required by the school to attend other lessons (to catch up work), choir practice and sports matches. As a result only 17 HLP lessons were run for the Grade 9s in 2003. An additional problem was that the HLP was sometimes seen as disrupting the school time table. According to the HLP teacher, at the end of the year and the Zulu programme, it was very difficult to find slots in the school time table so that the post-tests could be run. Requests were ignored and only after urgent application to the headmaster by Owen-Smith was the HLP allowed a two hour and 25 minutes session to run the post-tests. This session, however took place in the afternoon after the students had written a three-hour Geography exam. It is possible that writing three expository essays under these conditions interfered with the performance of the intervention group.

And, finally, a more generalised problem might be associated with the inherited education system in this country. According to a number of researchers (such as Hubbard 1989; Watkinson 1998; Van Tonder 1999), few ESL teachers are schooled in the methods of teaching expository writing skills to their students in English. The number, therefore, of teachers schooled to teach their students expository writing skills in a primary language, such as Zulu, must be very small. For example, before the inception of the home language project, the HLP teachers had never had training in the teaching of writing, either in English or in their primary languages. However, during 2002 and 2003, the HLP teachers were provided with some training in the teaching of writing skills. This training comprised discussing content, materials and methodology, but took place in English. The translation of the materials into Zulu and the intervention writing course were undertaken solely by the HLP teachers. No team-teaching support during the writing lessons nor administrative assistance was provided by the researcher. This situation was related to the decision taken that my perspective would be more one of an objective outsider in accordance with the experimental design of the study. It is possible that more support would have improved the results of the intervention group.

As to the more specific threats related to certain differences between the intervention

and control groups, the following issues need to be itemised:

(a) The HLP group was not required to do homework for the primary language lessons. Therefore, according to the HLP teachers, many writing exercises begun in one lesson had to be carried over to the next lesson in the following week. This meant that students having to complete unfinished exercises interfered with the provision of feedback and continuation of the course. It also meant, that on some occasions, students required to attend choir or sports practice were unable to complete certain exercises.

By contrast in the control group, homework for Zulu at the non-HLP school was compulsory. This meant that there was probably a greater sense of continuity in the Zulu course at the non-HLP school. Also, possibly more exercises were completed during the year.

(b) In contrast to the final writing conditions allocated to the intervention group, the staff at the non-HLP school allowed enough, reasonably separated intervals for the control group to write the post-test essays. Two slots were set aside: one of three quarters of an hour on one day and another of one and a half hours a day later. Such conditions were, without doubt, more accommodating to students having to write three post-test expository essays. In spite of the differences in writing conditions for the two groups' writing of the post-tests, the control group's HCRs declined significantly ($p=0,001$) and the intervention group's HCRs improved slightly ($p=0,161$) but not significantly.

(c) For different reasons, probably associated with lack of access to classrooms with overhead projectors, students not having handed in the required work and/ or interference from the school timetable, only **seven** full three quarters of an hour lessons were allocated to the HLP expository writing programme in Zulu as primary language.

In conclusion, the threats to the effectiveness of the present study complicate its alignment with either side in the debate on bilingual and multilingual education (as discussed in 2.1.2).

4.4 QUALITATIVE FINDINGS

In accordance with the additional descriptive aims (see 4.2.1), this section presents a more qualitative description of the findings in the 60 scripts of the corpus. The purpose here is to review the pre- and post-tests in terms of what, according to researchers such as Lieber (1981), Bamberg (1983 and 1984), Stotsky (1986) and Watkinson (1998), are the differences between high- and low-rated student essays. In line with the comments of these researchers, six criteria have been identified: topic specification; organisation of information; sense of closure; length and detail; vocabulary, and conjunctive cohesion. The six criteria are discussed below with examples of high- and low-rated essays from the corpus. In this analysis an attempt will be made to account for some of the holistic coherence scores provided by the external markers. Also, certain difficulties encountered by this researcher in analysing the student essays in the corpus will be discussed. Full copies of the scripts used as examples in this section are presented in Appendix D.

4.4.1 Criterion 1: Topic specification

High-rated essays, according to Lieber (1981), Bamberg (1984), Stotsky (1986) and Watkinson (1998), connect closely with the rubric of the prompt in the opening. The topic is identified in the first paragraph and the writer does not presume their reader shares background knowledge. By contrast, in low-rated essays, according to Watkinson quoting Wikborg, the topic is “unspecified” (1985:360 in Watkinson 1998: 54).

Discussion

Only half of the essays in the corpus (pre- and post-) were connected to the prompt through a clear identification of the topic in the first paragraph. Out of these essays, only a very small percentage dealt with all the issues required by the rubric: the recipients’ dilemma, the need to compare two environments and two modes of existence. In spite of this frequently identified problem, essays in which some reference had been made to the prompt were all awarded higher holistic coherence ratings than those in which no reference had been made. For example, in the pre-test:

[1]

Script T1

Dear Siph

/(1) I'm writing you a letter to tell you about the life of the city and country/ (2) (RCS) before you make a decision./ 3 (MP) (So) you can know about both places and know you won't be making a mistake. (HCR 10.5)

[2]

Script B1

Sipho

/(1)From my point of view, I think you should go live with your uncle because of better education in the city /(2) (GC) So you can study hard/ (3) and get a good job in the city/(4) you'll grow up to be responsible. (HCR 7)

It is likely that the writer of [1] has been awarded a higher rating than [2] because the first paragraph is connected with most of the issues set out in the prompt. Although no reference is made to Sipho's loss or to his uncle and aunt, the writer is clear about her purpose: to compare city and country life so that the boy should not make a mistake in his choice.

By contrast, the writer of [2] does not clearly signal to the reader that he is going to compare urban and rural life. This is an example of "unspecified topic" and is possibly the reason for the lower rating of this essay.

In comparing pre- and post-tests written by the same student, Lieber (1981), Bamberg (1984), Stotsky (1986) and Watkinson's (1998) criterion that high-rated essays open with a clear reference to the prompt has validity. For example, in the pre- and post-test introductions by the same student:

(Pre-test)

[1]

Script T1

Dear Sipho

/(1) I'm writing you a letter to tell you about the life of the city and country/ (2) (RCS) before you make a decision./ 3 (MP) (So) you can know about both places and know you won't be making a mistake. (HCR 10.5)

(Post-test)

[3]

Script T2

Dear Mrs and Mr

/(1)Sue, I'm sure is like any girl who needs to be around guys and explore her sexuality./ (2) Obviously not by having sex or anything/ (3) (MP) but to know how it feels to like a guy, /(4) to be friends with boys or more than friends. (HCR 7)

The significant drop in the HCR in the post-test may be attributed partly to the fact that the writer has not specified the topic. No reference is made to a comparison between school environments, required by the rubric. Other possible reasons for the decline in this student's HCRs will be discussed below.

In terms of evaluating pre- and post-tests by the same student, the absence of topic-related openings occasionally masked improvements made. An example has been discussed in chapter 3, where a comparison between scripts I1 (see 3.5.5.1) and I2 (see 3.5.5.2) showed definite improvements made in terms of structure and in the use of conjunctive cohesion. It would seem that the lack of topic specification in both essays may account for the low HCRs which remained the same at 6.5.

An overview of the corpus shows a decline in the post-test HCRs of three students in the intervention group (comprising 13 students) and eight in the control group (comprising 17 students). These writers had not made reference to the topic in their first paragraphs. In the pre-tests, each of these 11 students had provided a reasonable opening paragraph possibly accounting for the higher HCRs.

The overview also shows that the increase in post-test HCRs of four intervention students and two control students may possibly be as a result of these students providing an adequate opening in their post-test. These six students had not provided adequate opening paragraphs in their pre-tests.

4.4.2 Criterion 2: Organisation of information (according to a discernible plan that is sustained throughout the essay)

In high-rated essays, according to Bamberg (1984) and Stotsky (1986), the writer's organisation of information within the essay derives from the topic. So, whether or not to compare, to describe a cause-effect relationship or organise information sequentially is prescribed by the rubric of the exercise. In describing the qualities of low-rated essays, Watkinson (citing Wikborg's taxonomy), specifies organisational problems in terms of drift in topic; misleading paragraph division; irrelevance; and misleading ordering of material (Wikborg 1990:133 in Watkinson 1998:55). A poor writer will, therefore, not be able to organise information according to a discernable plan, which is sustained through the essay.

Discussion

In the following example, the text has been structured according to the rubric of the topic, i.e. to compare the positive and negative aspects of two environments. This comparison is required by the rubric of the pre-test (see Appendix B)

[1]

Script T1

Dear Siph

/(1) I'm writing you a letter to tell you about the life of the city and country/(2) (RCS) before you make a decision./ (3) (MP) So you can know about both places and know you won't be making a mistake.

/(4) The country is boring for some kids/(5) (GC) as some kids like to go out a lot with friends to the movies, mall, etc./ (6) There aren't many places to go there /(7) and its quite quiet/ (8) that's the downside./ (Ct) (9) The up side is that the air is fresh and cleaner than the city/ (10) it's peaceful and clean./ (11) People are also more friendlier.

/(12) The city has also got a downside and an upside. /(13) The city is the opposite of the country./ (14) The citys downside is that its more noisy, busy, / (GS) (15) it has a higher crime rate more than the country./ (16) The air is dirtier/ (17) the city itself is

dirty. / (18) (Ct) The upside is that there are many more things you can do than the country/ 19 and its lots of fun / (20) (CdC) if you are the wild kind of teenager who likes being out of the house a lot. / (21) You should choose where you want to stay depending on what you like to do and see./ (22) If you are the quiet type of person/ (23) (CdC) go live with your aunt./ (24) If you are loud like having ^/ (25) (CdC) go for the city./ (26) I do hope you now have an easier choice of where you want to stay now Siphso. (HCR 10.5)

Paragraphs 2 and 3 of this text clearly compare the positive and negative aspects of living in the town and country. There is no drift in topic; paragraph divisions are not misleading, and neither is there a misleading ordering of material. For these reasons it is probable that the essay was rated highly.

The same student's post-test, by contrast, has not been organised according to the rubric which specified that a comparison be made between coeducational and single sex schools.

[3]

Script T2

Dear Mrs and Mr

/(1) Sue, I'm sure is like any girl who needs to be around guys and explore her sexuality./ (2) Obviously not by having sex or anything/ (3) (MP) but to know how it feels to like a guy, / (4) to be friends with boys or more than friends.

/(5) To go to a single sex school would be a much better option for you parents/ (6) knowing that she can't get up to any mischief/ (7) (CCE) but she still could you know./ (8) I'm not saying to be lesbian is bad/ (9) (Ct) but rather to say she can still be naughty.

/(10) Also girls are very catty and are very mean/ (11) there will probably ^^ a lot of cat fights. / (12) If I had a daughter/ (13) (CdC) I'd take her to a co ed school/ (14) (SAI) not only would it be much more fun/ (15) (Cp) but also much more learning. (HCR 7)

None of the three paragraphs compares single sex and coeducational schools. Paragraph 1 immediately drifts from the topic to a discussion of *sexuality*. Paragraph 2 continues with the theme of sexuality in the context of a single sex school, but fails to present any further comparison. Paragraph 3 exemplifies what Watkinson describes as “misleading paragraph division” since the first sentence is a continuation of the discussion about single sex schools. The discussion, with its focus on sexuality, is irrelevant to the topic. This problem probably accounted for the low HCR.

Appendix D contains another example of a poorly-rated essay (script H1 with an HCR of 6.5), which, although being reasonably long (in accordance with Criterion 4, see below), has organisational problems. In this essay the writer shifts confusedly between discussing the pros of the city and the cons of country life. Further problems with this script will be discussed below.

4.4.3 Criterion 3: Sense of closure

A further structural feature of high-rated essays is that a sense of closure is provided. An explicit concluding statement, referring back to the topic and summarising the writer’s ideas accounts for higher marks being awarded.

Discussion

An overview of the corpus shows that a sense of closure was provided in nine intervention and 14 control pre-tests. It is possible that the reasonably high HCRs allocated to these 24 essays relate to the concluding statements provided by the writers. In the post-tests, a sense of closure was provided by nine students in the intervention group and nine in the control group. The decline in the HCRs of the control group’s post-tests may be related to the fact that fewer students provided a concluding statement. Conclusions provided by two students in the pre-tests are compared below:

[1]

Script T1

/(21)You should choose where you want to stay depending on what you like to do and see./ (22) If you are the quiet type of person/ (23) (CdC) go live with your aunt./ (24)

If you are loud like having ^^(25) (CdC) go for the city./(26) I do hope you now have an easier choice of where you want to stay now Siphon. (HCR 10.5)

[4]

Script B1

*/(13) The part about rural areas is that you could have to walk kilo's to fetch water, no electricity /(14) and you'll probably spend most of your time farming/ (15) *because you'll have to buy your things in the city/ (16) and you won't go to the city everyday. (HCR 7)*

The final paragraphs of pre-tests [1] and [4] show the influence of closure on the HCRs awarded. Text [1] clearly sums up the argument and connects her closing comments with the topic and her opening statement. By contrast, text [4] provides no conclusion and has a low HCR. It seems as though the writer ran out of time. But the shortness of the script (16 f-units) suggests there must be some other reason.

Abrupt closures (as exemplified in [4] script B1) are not a common feature of the pre-tests in the corpus. Because the students were writing to an orphaned black child (of about their age), they felt sympathy for the boy and their letters were warm, detailed and very considerate. Most concluded by summing up their arguments and wishing the recipient good luck. Many conclusions were quite vivacious as in:

[5] *Be wise man and follow your heart!*

[6] *Checkmate it's your move!*

Perhaps because the prompt for the post-test required students to write a more formal letter (to the parents of a girl), many of the essays concluded abruptly. Also, the level of difficulty in the post-test was increased because the writer was required to compare different aspects of two educational environments. Problems arising from these increased levels of difficulty are exemplified in the following script:

[8]

Script N2

/(1)I think they should send their girl to co educational school./ (2) She needs to see different kind of sex not the same all the time./(3) They will become one minded/ (4)

and wont experience love or boyfriends.

/(5) In a school you need to experience the different kind of sex /(6) (MP) to socialise with the opposite sex./ (7) You share ideas with each other./ (8) If they keep on seeing the same sex, each and every single day/ (9) (CdC) it would become boring./ (10) A school wich girls only go to is not good at all./ (11) they will all know each other too much./ (12) they need boys / (13) (MP) in order to talk with them./ 14 She may even find good male best friends there.

/(15) Life will become boring/ (16) (CdC) if you keep on experiencig the same thing everyday./ (17) sometimes you wont want to be with girls/ (18) you want to be with boys./ (19) They can compare their likes and dislikes with each other/ (20) they will soon become lovers. (HCR 6)

The change of person from *you* (referring to the girl) and *they* (referring to the girl, and/ or her boyfriends and/ or her parents) followed by the abrupt closure probably account for the low HCR rating. Problems in this essay are exacerbated by the poor opening statement.

4.4.4 Criterion 4: Length and detail

High-rated essays are generally longer than low-rated essays and contain detail which develops the argument. Also, the semantic units are longer and more varied in good expository essays than in the low-rated. In low-rated essays, poorly developed semantic chains and coupling takes place.

Discussion

95% of the high-rated scripts in the corpus were comprised of 19 or more f-units. Three essays in the corpus which were longer but poorly-structured (such as script H1), however did have low HCR ratings. The lowest-rated (as in scripts Q2, X2 and AA2 presented in Appendix D) were made up of fewer than 9 f-units. The semantic chains across these poorly rated essays are short and the few points made about sex and sport are only loosely associated.

A further comparison between scripts T1 and T2 (by the same student) will exemplify

criterion 4 more clearly.

[1]

Script T1

Dear Siphho

Dear Siphho

/(1) I'm writing you a letter to tell you about the life of the city and country/(2) (RCS) before you make a decision./ (3) (MP) So you can know about both places and know you won't be making a mistake.

/(4) The country is boring for some kids/(5) (GC) as some kids like to go out a lot with friends to the movies, mall, etc./ (6) There aren't many places to go there /(7) and its quite quiet/ (8) that's the downside./ (Ct) (9) The up side is that the air is fresh and cleaner than the city/ (10) it's peaceful and clean./ (11) People are also more friendlier.

/(12) The city has also got a downside and an upside. /(13) The city is the opposite of the country./ (14) The citys downside is that its more noisy, busy, / (GS) (15) it has a higher crime rate more than the country./ (16) The air is dirtier/ (17) the city itself is dirtier. / (18) (Ct) The upside is that there are many more things you can do than the country/ 19 and its lots of fun / (20) (CdC) if you are the wild kind of teenager who likes being out of the house a lot. /(21)You should choose where you want to stay depending on what you like to do and see./ (22) If you are the quiet type of person/ (23) (CdC) go live with your aunt./ (24) If you are loud like having ^~/ (25) (CdC) go for the city./ (26) I do hope you now have an easier choice of where you want to stay now Siphho. (HCR 10.5)

Paragraph 2, discussing the country, comprises four sentences of varying length and two continuous functional relations signaling Grounds-Conclusion and Contrastive chains across the seven f-units. The writer does not drift from the topic and six details are provided about country life (it is boring, there are no places to go, it is quiet, peaceful, clean and friendly). The writer has not used adversative connectors (such as *but, whereas, on the other hand*) to enhance the contrastive nature of her statement.

Paragraph 3 is longer and provides a little more detail than paragraph 2. Each of the points made about rural life is presented with its opposite. City life is noisier and dirtier than in the country. A detail about safety has been added. The *fun* aspect of city life is contrasted with *boring* rural existence. A drift in topic is evident in f-unit 20. Here the writer introduces a series of Condition-Consequence functional relations so as to sum up Sipho's options in terms of his character and preferences. It seems that, because this final section (f-units 20 to 26) is so successful in summarising the details provided, the topic drift was unnoticed by the markers and not penalised.

[3]

Script T2

Dear Mrs and Mr

/(1) Sue, I'm sure is like any girl who needs to be around guys and explore her sexuality./ (2) Obviously not by having sex or anything/ (3) (MP) but to know how it feels to like a guy, /(4) to be friends with boys or more than friends.

/(5) To go to a single sex school would be a much better option for you parents/(6) knowing that she can't get up to any mischief/(7) (CCE) but she still could you know./ (8) I'm not saying to be lesbian is bad/ (9) (Ct) but rather to say she can still be naughty.

/(10) Also girls are very catty and are very mean/ (11) there will probably ^^ a lot of cat fights. /(12) If I had a daughter/ (13) (CdC) I'd take her to a co ed school/ (14) (SAI) not only would it be much more fun/ (15) (Cp) but also much more learning. (HCR 7)

Not only is the structure of this script problematic, but the details provided are scant, ideas are only loosely associated and there is a drift in topic in the last paragraph. By contrast with the pre-test, where the semantic chains are rich and varied, in the post-test these chains are sparse. Although the writer has included adversative conjunctive items (*but* in f-units 3, 7, 9 and 15) which enhance an argument in which comparisons are made, these devices do not really work here. The prompt required that the pros and cons of single sex and coeducational schools be compared. In this script, the adversative devices in units 3, 7 and 9 are used in the writer's discussion about

relations between the sexes. Only in f-unit 15 does the writer use *but* to indicate that aspects of an educational environment are being discussed. However, the statement here is too general and comes too late.

It is interesting to note that within the corpus there are many examples of pre-tests which have rich and varied lexical chains and good detail which develop the argument. By contrast, there are fewer post-test essays with these qualities. The reason for this, as discussed above, may be related to the increased level of difficulty of the post-test. Not only had the letter to be more formal in the post-test, but the writer was required to compare different aspects of two educational environments. This is arguably a more remote topic than comparing city and country life.

In terms of the statement that information in low-rated scripts is only loosely associated is a little more complex to explain as to the HCRs awarded in the corpus. In many essays with reasonably high ratings (such as script A1 discussed in chapter 3), it would seem that, through the provision of a good opening and closure, coupling has been unnoticed by the independent raters. However, in some cases, coupling seems to have been recognised and penalised as in script N2 (HCR 6).

[8]

Script N2

/(1)I think they should send their girl to co educational school./ (2) She needs to see different kind of sex not the same all the time./ (3) They will become one minded/ (4) and wont experience love or boyfriends.

/(5)In a school you need to experience the different kind of sex /(6) (MP) to socialise with the opposite sex./ (7) You share ideas with each other./ (8) If they keep on seeing the same sex, each and every single day/ (9) (CdC) it would become boring./ (10) A school wich girls only go to is not good at all./ (11) they will all know each other too much./ (12) they need boys / (13) (MP) in order to talk with them./ 14 She may even find good male best friends there.

/(15) Life will become boring/ (16) (CdC) if you keep on experiencing the same thing everyday./ (17) sometimes you wont want to be with girls/ (18) you want to be with

boys./ (19) They can compare their likes and dislikes with each other/ (20) they will soon become lovers. (HCR 6)

Here, information in f-units 1 to 8 is only loosely associated. Three contiguous functional relations have been counted in paragraph 3, but these are very weak links, all related to socialising with the opposite sex. In the third paragraph, recycling occurs in five f-units. The contiguous functional relation counted is another example of a very weak link focussing, again, on socialising. Arguably, it is not only the coupling in this script which accounts for the low HCR. There are many other problems such as poor opening and closure, weak vocabulary use, and the many reference errors related to the writer's use of pronouns. Since discussion about reference cohesive devices is outside the scope of this study (see in 3.3.4), no further reference will be made to such errors.

In comparing the different performances of the two groups in terms of length and the density and richness of semantic chains across the essays, there were many more writers in the control group whose HCRs declined for the same reasons as scripts T1 and T2. In the intervention group, improvements in HCRs were not so much related to the increased length of post-tests but rather to improved organisation, richer semantic chains and more varied use of detail (scripts F1 and 2 are examples, see Appendix D).

4.4.5 Criterion 5: Vocabulary

In contrast to high rated essays, where vocabulary use is rich and varied, a limited use of vocabulary is a feature of low-rated essays.

Discussion

Within the corpus many essays reveal the limited vocabulary of the students. These students are, after all, second language speakers of English, many of them having suffered from a poor education at primary and even high school. The following example shows how vocabulary limitations seriously affect the quality of an essay.

[9]

Script H1

Dear Siph

/(1) I think you should go and live with your uncle in the city/(2) (GC) because there is more chance of you getting a good education here in the city./ (3) Now you must also be aware of crime and drugs in the city/ (4) (GC) because it is the last thing you need to get stuck in. /

/(5)In the country they have very little schools/(6) and the schools there are not very good./ (7) Living in the country is very hard/ (8) (GC) because you have to walk a very long distance to get water/ (9) (GC) because you don't have your own tap that you can use /(10) (TO) whenever you feel like drinking water./ (11) It is very hard living in the country. /(12) In the city there is a lot of schools to choose from./ (13) There are water taps/ (14) (GC) so you don't have to walk to get water./ (15) Those are just the advantages/ (16) (CCE) but there are a lot of disadvantages/ (17) (GC) because people in the city don't have jobs/ (18) (GC) so they just steal from people/ (19) and kill those who would resist.

/(20) If you wish to go to the country, / (21) (CdC) go./ (22) I was just helping you./ (23) If have been used) you have completed your matric / (24) and ^^ yourself in university./ (25) You have a lot of options/ (26) and when you complete your university/(27) (CS) then you are going to get a job. (HCR 6.5)

Limited vocabulary use in this script accounts for the repetition of words such as *water* and *city*. Synonyms are used by learners with a rich vocabulary. Also, the use of *small* to describe country schools is perplexing. Is the writer referring to size, location or number? Further, colloquialisms such as *get stuck into*, reveal the style of a writer with a limited vocabulary. Finally, the repetition about the completion of *university* is clumsy and also reveals the writer's limitations.

There are however a number of examples of students who have excellent vocabulary skills. Examples are the writers of scripts O1 and 2 and P2 (see Appendix D). It is possible that such students had a very good primary school education.

A close analysis and count would be required to assess the corpus in terms of developments made in vocabulary used. However, it would seem that the HCRs awarded quite accurately account for vocabulary used in the pre- and post-test essays of both groups. The vocabulary used in low-rated essays, such as scripts D1 and 2, Q1 and 2, S1 and 2, AA1 and 2 and DD2, was poor: unvaried and repeated (see Appendix D). High-rated essays showed examples of good vocabulary use as in A1, O1 and 2, P2 and T1.

4.4.6 Criterion 6: Conjunctive cohesion

In terms of cohesive ties, there is a greater variety and density of ties across a high-rated essay. Since the focus of the present study was on students' use of conjunctive cohesive devices, this will be the focus of the discussion on the variety and density of ties in the corpus. The misuse of conjunctive cohesion will be discussed below at 4.5.

Discussion

Since the prompts for the pre- and post-tests required that comparisons be made between the pros and cons of two situations, it was assumed that the students would use a predominance of adversative conjunctions in their scripts. This was not the case. Most of the conjunctives used in the corpus were causal, *because*, *if* and *so* being predominant. Only 19 students in the pre-test and 14 in the post-test used adversative conjunctives. The variety was very limited, *but* being used 32 times in pre-tests and 18 times in the post-tests. Only once used in different essays were *whereas*, *on the other hand* and *although*. It was interesting to note that students who did use more than one adversative conjunction in their essays (such as the writers of scripts L1 and 2, O1 and 2 and CC1 and 2, see Appendix D), received higher ratings.

Conclusion

In conclusion, the evaluation of the corpus from the perspective of the six criteria provides an insight into the quantitative findings of this study. It is argued that in most cases, the ratings of the external markers have been accurate in terms of essays' openings and conclusions, organisation of information, detail used to extend an argument, vocabulary and cohesive devices. It seems reasonable to comment that the qualitative findings in many ways support the statistical findings of the present study.

4.4.7 Difficulties

In identifying, analysing and counting the conjunctive devices used and contiguous functional relations evident in the corpus, this researcher encountered a number of difficulties. These were related to the absence of punctuation, omissions, uninterpretable vocabulary and misleading paragraphing in many of the student essays. For example, the following script shows the difficulties experienced through the writer not using adequate punctuation.

[10]

Script D2

/(1) I think Sue's parents should take her to a co educational school./ (2) The school should be close to where she lives/ (3) (GC) so she doesn't spent to much money on her transport to school.

*/(4) A co educational school is the same as a sex single school./ (5) In a sex single school it has very strict rules./ 6 this may not be good/ (7) (GC) because the primary she whent to was co educational /(8) *so the high school must be co educational.*

/(9) A co educational school is better/ (10) (GC) because she can adamp^t quickly to the rules at school/ (11) and the rules are not so strict, / (12) they ^^ concintrate to the work.

(13) Whel if she doesn't not like the co educational/ (14) you can transform her to a sex single. (HCR 5)

An interpretation of paragraph 2 was made extremely difficult because of the absence of punctuation across f-units 5 to 8. In this situation, f-unit 7 can be interpreted in two ways. It would not be a good idea to send the girl to a single sex school *because* they have strict rules, or *because* she went to a coeducational primary school she should go to a coeducation high school.

The following script shows difficulties experienced through attempting to interpret the text because of omissions.

[11]

Script K2

/(1) I could suggest that you girl should go to a single sex school/ (2) (GC) because it should help her on seeing in herself/ (3) what weaknesses and strengths she has got.

/(4) Advantages of being in a single sex school is that it helps you focus on what you want to do in the future, doctor, accountant etc. /(5) It also will help her on the mind set of herself,/(6) (P) i.e. not trying to please others etc. only herself. /(7) Single sex schools will help her on her discipline to have more ^^^/ (8) and be more aggressive in the form of extra murals and academics.

/(9) A single sex school can equal a single mind to focus./ (10) Being in these kind of schools, it will help her not to be distracted/ (11) (GC) and in life she will succeed,/ (12) the teachers can help her on decide what's going on in her life.

/(13) I tell you that I'm talking from experience./ (14) I'm disciplined/ (15) (GS) I'm a gentleman with honour and motivation. (HCR 9)

The omission in f-unit 7 makes understanding the meaning of the sentence (extending across units 7 and 8) difficult. After time deliberating, it was decided that the functional relation intended was not interpretable.

The following script shows difficulties experienced through attempting to interpret the text because of uninterpretable vocabulary use.

[12]

Script K1

Dear Siphon

(12) Services are poor / 13 through policemen via fixers of things the communication might be also poor from the lines you have./ (14) Will your basic NEEDS OR WANTS be fulfilled by your uncle or aunt? (HCR 9.5)

What the writer means by *through policemen via fixers of things* is uninterpretable, resulting in an inability to count functional relations across f-units 12 and 13.

The following script shows difficulties experienced through attempting to interpret the text because of misleading paragraphing.

[13]

Script J2

Single sex school: / (1) I think she should be sent their/ (2) (GC) because its good way for kids with same gender to be in one school/ (3) (GC) because they are able to communicate with each other more easily.

/(4) It also benefits her in adolescence/ (5) (TO) when she starts developing things on her body/(6) (GS) e.g. hair, breasts/ (7) she can talk to a teacher/ (8) (CdC) if she can't ^^ her friends.

/(9) Co education school is also good/ (10) (CCE) but the problem is that Sue becomes shy because there are boys at school.

/(11) If she does something wrong/ (12) (CdC) the boys will laugh at her/ (13) tease her about it / (14) and end up hating/ (15) (SAI) or she could have an interest in boys/ (16) (TS) which might affect her school.

/(17) So, I think she should go to a single sex school. / (18) (GC) Believe me its nice,/ (19) I know. (HCR 8)

The first two “paragraphs” deal with the same topic, single sex schools. They should not, therefore have been presented as two separate statements. Such a presentation would have made counting the contiguous relations across f-units an easier task. The same presentation and resulting problems are repeated in paragraphs 3 and 4.

4.5 ERROR ANALYSIS

The misuse of conjunctive cohesion in the corpus has been tabulated below. Presented in two tables are the different types of error identified in the pre- and post-tests of the intervention and control groups. Discussion follows the tables.

Table 17: Conjunctive errors - Intervention group (continued)

Table 17: Conjunctive errors - Intervention group

Category 1: resolution achieved	Pre-test	Post-test
(a) Extraction		D2
(b) Form		
(c) Omission	(B1, C1, E1, G1, I1)	(K2, M2)
(d) Replacement	F1, L1	
Category 2: resolution not achieved		
(e) Zero-relation	B1, I1	

Table 18: Conjunctive errors – Control group

Category 1: resolution achieved	Pre-test	Post-test
(a) Extraction		
(b) Form	S1	R2, R2, Z2
(c) Omission	(N1, S1, U1, W1, BB1)	(N2, P2)
(d) Replacement	R1, R1, R1, W1, W1, Y1	
Category 2: resolution not achieved		
(e) Zero-relation	CC1	Q2, X2, DD2

Discussion

One extraction error was identified in the corpus. Attempting to extract an interpretation in essays which were arbitrarily punctuated and paragraphed was extremely difficult. In some cases, after much deliberation, errors which at first looked like extraction errors were later relegated to the zero-relation category.

There were no examples of errors of form encountered in the intervention group's pre- or post tests. In the control group one form error was identified in the pre-tests and three in the post- tests. These were not serious errors, each being related to the use of *where* instead of *whereas*. These errors are probably the result of the influence of colloquial use, evident in some of the vocabulary used in the corpus.

In the category of omission, missing words and parts of sentences made interpreting the intended contiguous functional relations difficult. However, in many cases the inclusion of conjunctive devices made interpretation possible, in spite of the omissions as in the following example:

[14]

Script J1

/(7) *Also you have an advantage living ^ your uncle/* (8) *(GS) your school is close by/*
 (9) *water and electricity, shops etc. are also close by./*(10) *You even have transport. /*
 (11) *(CdC) But the crime might also ^^^^ (omission). (HCR 7)*

It was reasonably difficult to identify errors of omission in terms of conjunctive devices. As a result, it was decided to identify essays in which the inclusion of conjunctive devices would have improved the cohesive chains and, possibly improved the ratings. In the following example:

[15]

Script E1

/(9)*Your life in the country would be very hard/* (10) *each day you wake up , /* (11)
fetch water from the nearest tap/(12) and that's 100m/ (13) *do your chores /* (14)
(GS) like clean the house, feed the animals / (15) *(TS) e.g. cows, chickens etc/(16)*
walk to school on a dusty road there and back/ (17) *do your homework/* (18) *feed the*
animals again./(HCR 9)

The inclusion of sequence connectors such as *first, second, then, after that* etc. would have created denser and more varied cohesive chains across the paragraph.

In only 28 essays of the corpus were adversative conjunctives used. The other 32 would have been vastly improved through the use of such adversatives. Also, had the writers of the 28 essays used a greater variety of adversative conjunctives (*but* was used 50 times and *whereas, on the other hand* and *although* only once) their ratings would probably have been higher.

In terms of assessing omissions, more causal conjunctives could have been used. Since the assessment of omissions of conjunctive cohesive items in the corpus could not really be described as an objective count, omissions noted in the tables are parenthesised.

Eight replacement errors were counted in the pre-tests, the largest amount in the corpus. Two were counted in the intervention group essays and six in the control group. Most of these errors were related to the fact that the writers had used causal

conjunctive items rather than adversatives. In my experience, this is a frequent mistake made by inexperienced writers who do not really understand the differing functions of these two types of conjunctive devices.

As Watkinson notes, it is important for a writer to learn how to use adversative conjunctive devices since students often have to respond to essay topics which call for comparisons and contrasts to be made (1998:38). It is also important for a writer to understand the function of causal connectors and their importance in signalling topic development.

Six zero-relations were counted, two in the intervention group and four in the control group.

In conclusion, in spite of the small number of errors identified in the corpus, the error count in this section seems to indicate that the intervention group did, in fact, improve in its use of conjunctive cohesion in comparison with the intervention group. **Four** errors were counted in the intervention group's pre-test while **one** was counted in the post-test. By comparison, **eight** errors were counted in the control group's pre-test while **six** were counted in the post-test.

4.6 CONCLUSION

The results of the tests on the hypotheses and interpretations of each were given in this chapter. Because the statistical analysis showed that the only significant variations were related to aspects outside the focus of this study, it was necessary to reject the three hypotheses. However, in a discussion of the threats to the effectiveness of the present study, it was argued that more research is required in the South African context to explore Cummins' interdependence hypothesis and the debate on bilingual and multilingual education (as discussed in 2.1.2).

In terms of the significant findings (i.e. that the control group's HCRs for the pre- and post-essays declined significantly, $p=0,001$, and that the differences between the pre- and post-test HCRs for both groups was significant, $p=0,015$) a more qualitative investigation of the corpus was made. This investigation followed six criteria. The investigation showed that the qualitative findings support to some extent the statistical

findings of the present study. The error analysis showed that there was a slight improvement in the intervention group's use of conjunctive cohesion. Replacement errors were found to be the most prevalent, indicating that writing lessons should focus more on the different functions of conjunctive cohesive devices.