

RELATING THEORY AND PRACTICE IN THE TEACHING OF CONNECTORS

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Coherence and cohesion are essential elements that a well-constructed written sentence or text should consist of. Connectors are usually used to indicate coherence and cohesion between units of a discourse. A sample of academic writing with connectors present is perceived to be more logical, convincing and authoritative than the same sample with all the connectors removed. Learners of English as a second language tend to misuse connectors in their writing creating comprehensive problems that may be so impenetrable as to defy normal decoding of a text. With this background information, this paper examines the teaching of connectors using the conventional approach and the essay-based approach, which is also complemented by the Coherence and Relevance theoretical framework. The study is conducted using a pretest / posttest paradigm to test the efficacy of the two approaches of teaching connectors. Two Form three classes were sampled for this study. A pretest on logical connectors was administered in each school, marked and results recorded. The experimental class was exposed to the teaching of connectors using the essay - based approach (textual) method as a tool of teaching while the control class was exposed to the conventional approach of teaching. A posttest, the same test administered as a pretest, was given to the two groups. The scores recorded in both tests were analyzed quantitatively using the Levene's Test for Equality of Variances. The analysis is then presented in tables, graphs and findings discussed. In addition, the paper proposes recommendations for pedagogy.

Key words: Coherence, Cohesion, Connectors, Pretest, Posttest

Introduction

Connectors are linking devices that connect segments of discourse in order to develop logic and cohesion (Celce-Murcia & Larsen-Freeman, 1999). The teaching and learning of connectors has always been a challenge to linguists and researchers (Crewe, Wright & Leung, 1985). Consequently, as a way of trying to understand the mechanism in which connectors work, various terms have been used to describe them in English. Linking devices are referred to as, 'connective adjuncts' (Huddleston & Pullum, 2002, p.775), 'connectives' or 'conjuncts' (Finch, 2000, p.91), 'linking adjuncts' (Carter & McCarthy, 2006, p.539), 'logical connectors' (Celce-Murcia & Larsen-Freeman 1999, p.519), 'conjunctive adverbials' (Bussmann, 1996, p. 95), 'connective adverbs' (Huddleston & Pullum, 2002, p.1319), and 'linking adverbials' (Biber et al., 1999, p.875). For the purposes of discussion in this paper and to avoid creating confusion by using different terms, this paper will henceforth use the term connectors.

Cohesion, a concept created by connectors, is a factor that determines whether a group of sentences form a unified text or they are simply a collection of unrelated sentences (Halliday & Hasan, 1976). Generally, connectors function as cohesive "signposts" in discourse that help guide the reader or listener through the message by signalling how successive units are related (Leech & Svartvik, 1994, p. 177). The importance of connectors in a text cannot be ignored. Castro (2004), for example, notes that students use connectors to connect ideas together. He adds that lack of cohesion in students' essays is brought about by misuse of content lexical ties as well as inappropriate logical connectors that cause major breakdown in the comprehension of the written texts.

A cursory examination of Secondary school English textbooks in Kenya, show that they do not put a lot of emphasis on the teaching of connectors. Although Tella et al. (2010) found that students have generally positive perspective towards the secondary school English

curriculum in Kenya, the authors of this paper feel that there is a disconnect in the requirements of the syllabus and the teaching of connectors. Novel and learner-centered methodologies should be devised as a way of helping students achieve cohesion and eliminate misuse of connectors in their writing. Misuse of connectors leads to a potential communicative breakdown and make writing appear “dense, opaque, or even incoherent to the reader” (Hartnett, 1986, p. 146). This paper, therefore, looks at the effectiveness of the conventional approach and the essay based approach of teaching English connectors in Kenyan Secondary schools.

Statement of the Issue

Knowing a language means to be able to produce coherent verbal and written sentences to convey one’s message to the addressee. However, several studies in English as a second language have reported that learners have particular difficulty handling connectors (Crewe, 1990; Bolton et al., 2002; Field & Yip 1992; Demirci & Kleiner, 1997). This may be a pointer that the conventional methods of teaching connectors are somewhat misplaced leading to misuse of logical connectors. Such misuse of connectors may arise in students’ writing because as Zamel (1984, p. 111) notes: ‘what they have been offered, if composition texts are any reflection of teaching strategies, are lists of cohesive devices categorized according to function.’ This paper, therefore, intends to compare the efficacy of the conventional approach and the essay-based approach so that alternative teaching approach can be recommended.

Rationale

Our choice of English as a subject of study is based on several reasons. First, Cook (2007, p.25) notes that English is a very important language in the whole world, as it “is now taught as the main foreign language in virtually every country, and is used for business and education.” In addition, English has become the “lingua franca” of the modern world, and as such, research into coherence and cohesion strategies in English discourse is considered relevant to all spheres of human communication (Crewe, 1990). Similarly, Crystal (2002) argues that if the aim of English teaching is to produce students who are able to encounter the English speaking world with confidence then you cannot avoid bringing global English into the classroom.

Second, our study of connectors is based on the fact that they are important in terms of how a text is perceived. The use of connectors has been identified as a problem both for foreign language learners as well as native speakers (Crewe, 1990; Field & Yip, 1992). Crewe (1990) and Hartnett (1986), for example, note that when a good writer uses connectors judiciously, they enhance the communicability of the text and when used badly, they simply create comprehensive problems. In the same vein, Mauranen (1993) argues that academic writing with connectors present is perceived to be logical and convincing than the same sample with all the connectors removed, hence the need to investigate the use of connectors in the writing of Kenyan learners.

Third, the findings discussed in this paper will form the basis for pedagogical implications. The findings will serve as useful information for planning the teaching of connectors, the writing of lesson plans and syllabuses and improving the teaching of writing to learners of English as a second language. In view of the above, it is hoped that the findings of this study would add new information to fill gaps in the existing body of knowledge regarding cohesion and coherence in learners’ writing, especially in English as a second language contexts.

Literature Review

The Notions of Cohesion and Coherence

This paper provides a general overview of the various views regarding the notions of cohesion and coherence, two essential elements that facilitate textual continuity in writing. Halliday and Hasan (1976), for example, note that “cohesion does not concern what a text means; it concerns how the text is constructed as a semantic edifice” (p.26). They add that coherence is what makes the text semantically well formed. In the same vein, Kolln (1999, p. 94) postulate that while cohesion mainly involves the semantic relations between sentences, coherence can be defined as “cohesion on a global scale.” That is, coherence primarily concerns the overall connectedness of the ideas in a piece of writing rather than (inter) relationships between sentences. Enkvist (1990) also notes that cohesion refers to the overt semantic relations in the text, whereas coherence refers to semantic and pragmatic relations between text parts that are interpretable against the background of specific world knowledge. However, according to Hoey (1991) and Hellman (1995), a text can be coherent without formal cohesive devices.

Studies on Connectors

Connectors in various languages have extensively been studied. Yankova (2005), for example, compares grammatical and lexical cohesive devices as they appear in Bulgarian and British statutory texts. In French, Granger and Tyson (1996) find clear evidence of overuse and underuse of individual connectives in their study of adverbial connectives in student essays. They also find evidence of semantic, stylistic and syntactic misuse of connectives. Wikborg and Björk (1989) establish that in Swedish students’ expository essays, both Swedish and English, one of the most common reasons for coherence breaks in the texts was underuse and/or misuse of connectives. Neuner (1987, p.101) investigates the use of cohesive devices in ‘good’ and ‘poor’ freshman essays at a US college and highlights the ways in which cohesion in essay writing is achieved through a variety of cohesive devices, including ‘chains’ of reference, conjunctions, and lexical ties.

In another study, Crewe’s (1990, p. 324) finds out that Hong Kong students’ overuse of connectors may be motivated by their ‘trying to impose surface logicity on a piece of writing where no deep logicity exists’ but that the result is typically a ‘clutter’ that ‘makes the argument extremely tortuous.’ Among other findings, Crewe (1990) noted that the reinforcing connector *moreover* was also overused by the learners and identified eight most underused connectors were *however, instead, though, yet, hence, therefore, thus, and then*. Logical connector use is also challenge for Japanese EFL learners. The findings in the reviewed literature motivated the conducting of the research reported in this paper as we wished to find out whether the same challenges are encountered among Kenyan learners of English as a second language.

Theoretical Framework

This study employs the Coherence and Relevance theories. According to Khajehei and Shakarami (2012), the two approaches are pragmatic in essence and do not explain the text just in terms of linguistic factors. The Coherence and Relevance theories also look at relations created by the units in a text. The Coherence Theory, on the one hand, is concerned with the formal relations between major parts of the text. Kolln (1999, p. 94) postulates that while cohesion mainly involves the semantic relations between sentences, coherence can be defined as “cohesion on a global scale.” Similarly, Crewe (1990) argues that cohesion helps the text to be more comprehensible and, therefore, reader-friendlier by forming a unified whole rather than a collection of unrelated sentences. Thornbury (2005) succinctly argues that cohesion ‘hangs the text together’ (2005, p. 19). Thus, the overall coherence of a longer text depends on the coherence within each paragraph or section of the text (Celce-Murcia & Olshtain, 2000).

The Relevance Theory, on the other hand, sees coherence and cohesion merely as superficial symptoms of something deeper, that is, relevance relations (Blass, 1990). While coherence is the relation between linguistic units such as utterances, relevance is a relation defined not only for utterances but also for assumptions, that is, units of information and thoughts (Blass, 1990). The Relevance theory argues that instead of taking the notion of coherence as the main holder of textual relation, what is needed for comprehension is relevance relation in terms of contextual effects. This paper is of the opinion that the two theories are complementary and should be employed in the analysis and teaching of connectors.

Research Methodology

Research Design

This study adopts both qualitative and quantitative research designs. On the one hand, a qualitative research “say[s] how things are’ by informing the reader of phenomena as experienced by the study participants and interpreted by the researcher in a relevant context” (Creswell, 2007; Merriam, 1998). On the other hand, a quantitative research provides statistics to the researcher necessary for logical inferences (Kothari, 2004; Creswell, 2007). Since this study was designed to investigate the efficacy of the essay-based approach and the conventional method towards the teaching of connectors, a pretest / posttest paradigm was also conducted.

Study Locale, Population and Sample Size

One secondary school in Nyeri County, Kenya, was purposively sampled for this study. To achieve the objective of the study, data were collected from Form three students studying English as a second language. The researchers visited the school for permission from the Principal to undertake the research. The two Form 3 classes were coded as A and B respectively. The two Form 3 classes had a research sample of 25 learners each and had similar English proficiency.

The Experimental Cohort

25 students were in the experimental cohort. The experimental cohort (code A) was exposed to the essay-based approach towards the teaching of connectors. The learners were introduced to the four major categories of connectors as identified by Halliday and Hassan (1976). The teacher explained by using an essay (cf. Appendix C) how different connectors of different functions can be used in a text in order to create coherence, cohesion and relevance. The students were expected to use the different types of connectors in coming up with a creative and logical essay. The essential features of a well-written text, the unity and connectedness, which make the individual sentences in the text “hang” together and relate to one another (Celce-Murcia & Olshtain, 2000) were supposed to be obeyed. After the learners had written the essays, the researchers marked and identified the areas of misuse. Misuse of logical connectors evident in the poor choice of connectors of adversatives, and in some cases where additives were used to underline contrast was corrected. That is, the teacher developed awareness of misuse of connectors through explicit instruction, teacher feedback and essay revision.

The Control Cohort

25 students were in the control cohort. The control (code B) was exposed to the conventional approach towards the teaching of connectors. The learners were introduced to the four major categories of connectors as identified by Halliday and Hassan (1976). The teacher introduced the connectors to the learners, listed the connectors as classified according to function and gave an exercise for students to fill in the blank spaces with the correct connector. The teacher marked the exercise and indicated on the exercise books the expected answers for the incorrect responses.

Data Collection Procedures

Since the aim of this research was to test the efficacy of using essay-based approach in the teaching of connectors in English, the tests were developed based on the revised English syllabus (Kenya Institute of Education, 2002). The tests took into cognizance the Halliday and Hasan's (1976) classification of cohesive devices in terms of *additive*, *adversative*, *causal* and *temporal* categories. Therefore, five items from each category were tested making the pretest contain twenty questions. A pretest administered by the two researchers was administered to the two Form three classes during the first day, marked and results recorded. The pre-tests were marked and the scores recorded. On the second day, the experimental group, that is class A, was exposed to connectors using the essay-based approach as a teaching method for a period of 40 minutes. The control group, that is class B, was exposed to the use of the essay-based approach as a method of teaching connectors in English. On the third day, a posttest was administered to both class A and class B. The posttest was the same test administered as the pretest. The researchers scored the pre-tests and posttests and generated quantitative data for analysis.

Data Analysis

Data analysis is the process of providing order, structure, and interpretation to collected data (Marshall & Rossman, 1999). With this in mind, quantitative data elicited from the learners' performances in the pretest and posttest was analyzed using the Statistical Package for Social Sciences (SPSS). Specifically, the Levene's Test for Equality of Variances was used to identify whether the observed differences between two sample means were purely random or whether there were real differences between the means. That is, the researchers wished to see whether variability in the dependent linguistic variables was statistically significant so that it could be concluded that the means were different. The results were then presented in tables showing means and standard deviations and levels of statistical significance.

Research Findings

Figure 1 below presents the results of data analysis and the interpretation and the discussion of the emerging patterns is based on these results.

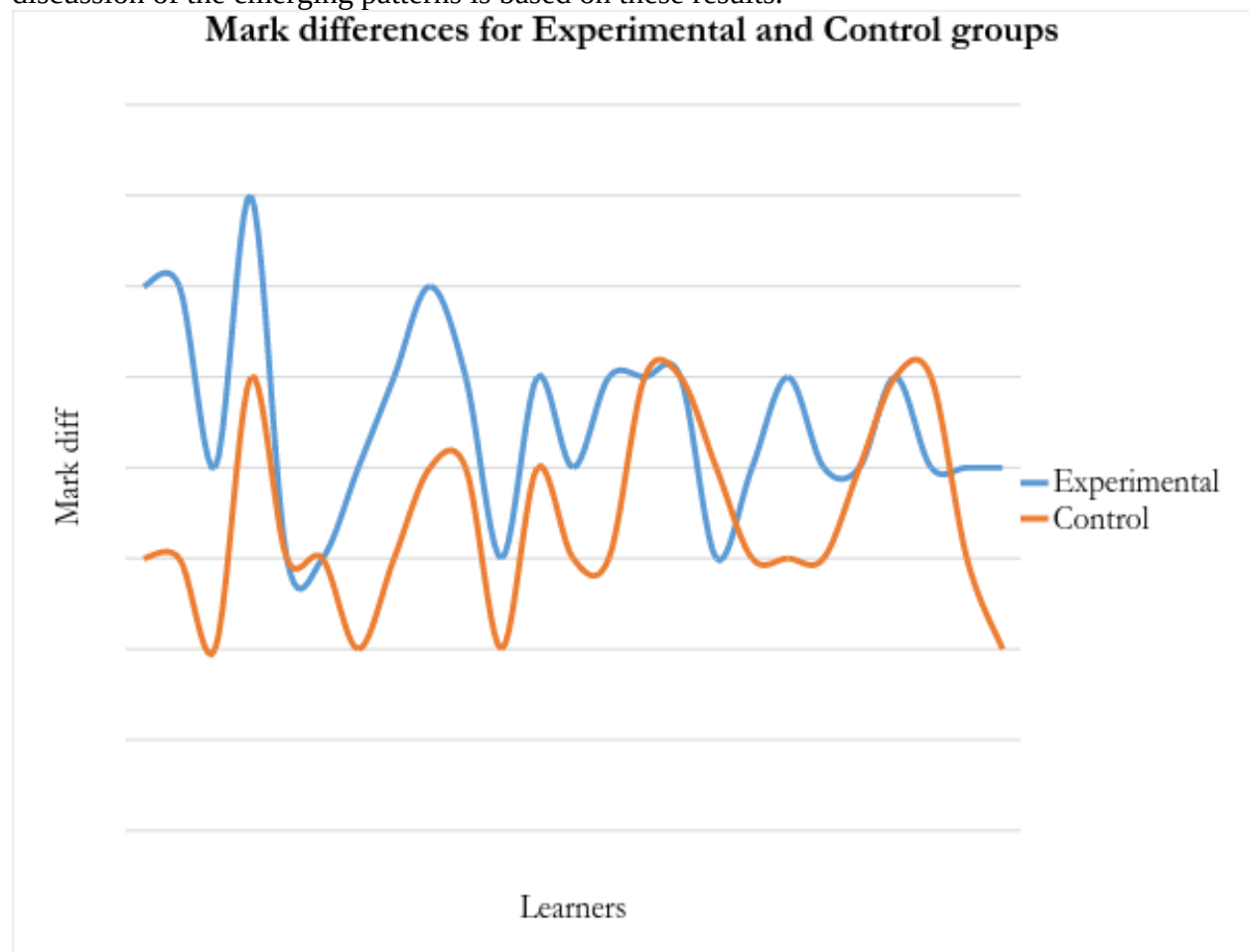


Figure 1: Test Differences Between the Experimental and the Control Groups.

Figure 1 above indicates that generally, the difference between the pretest and posttest among the experimental group is higher than that of the control group. This is also confirmed in the descriptive statistics below which shows that the average difference is higher in experimental group than the control group; hence, the learners responded positively to the test.

Table 1: Descriptive statistics of the experimental and control groups
Descriptive Statistics

Group		N	Minimum	Maximum	Mean	Std. Deviation
Experimental	Pretest	25	9.00	16.00	12.3600	1.95533
	Posttest	25	13.00	20.00	16.8800	1.92180
	Diff	25	3.00	7.00	4.5200	1.04563
	Valid N (list-wise)	25				
Control	Pretest	25	10.00	16.00	12.5200	1.66132
	Posttest	25	14.00	19.00	16.0000	1.47196
	Diff	25	2.00	5.00	3.4400	1.00333
	Valid N (list-wise)	25				

The results of the independent t-test as well confirm that the mean of the experimental group is higher than that of the control group, which clearly shows the positive effect of the essay-based approach (textual) method on the retention of English connectors (cf. Tables 1 & 2). That is, the results obtained reveal a significant difference between the two groups, implying that the experimental group significantly outperformed the control group with regard to the performance of English connectors.

Table 2: T test and group statistics
Group Statistics

		tt	N	Mean	Std. Deviation	Std. Error Mean
Diff	Experimental		25	4.5200	1.04563	.20913
	Control		25	3.4400	1.00333	.20067

Table 3: Differences between pre-test and post-test scores
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Diff	Equal variances assumed	.007	.933	3.726	48	.001	1.08000	.28983	.49726	1.66274
	Equal variances not assumed			3.726	47.918	.001	1.08000	.28983	.49724	1.66276

In Table 3 above, the Levene's Test for equality of variances column has sig value of 0.933, which is higher than the p value of 0.05; hence, we conclude that there is no statistically significant difference between the two variances. On the other hand, on the Equality of means, we get sig (2-tailed) of 0.001 which is lower than the p value = 0.05 at 95% confidence level; hence, we conclude that there is a statistically significant difference between the means therefore confirming our earlier observation. Therefore, the results reveal

that the essay-based approach (textual) method is significantly more effective than learning English connectors using the conventional method. It can be concluded that the essay-based approach (textual) method helped the learners to figure out the meaning of the English connectors.

Implications of the Study

This study has implications for teaching and learning processes. First, the findings of the study indicate that the essay-based approach can help learners understand and retain English connectors they are exposed to. This is because instruction should be based on putting connectors into a context because the learners' ability of comprehending new words in general increases when being used in a meaningful context (Kolln, 1999). Second, the findings could, therefore, persuade teachers of English in Kenya on the importance of using the essay-based approach in the teaching of English connectors. Based on the findings of this paper, we suggest that teachers of English use this technique in their classes and encourage learners to use this technique rather than asking them to memorize the connectors in a rote fashion. Third, the Kenya Institute of Curriculum Development (KICD) and other stakeholders in language learning and teaching should frequently induct teachers on the essay-based approach to the teaching of English connectors. Moreover, the KICD should give the essay-based approach to the teaching of English connectors a more prominent role in second language learning.

Conclusions

The findings of this paper have shown that the class that used the essay based approach as a method of learning English connectors performed better in the posttest than the control class which points to the need for the teachers of languages to apply this approach in their teaching instead of the conventional approach that is commonly used in the language classroom. Thus, the study concludes that the essay-based approach is an effective strategy of teaching English connectors. This is made possible by relating theory and practice in the teaching of connectors. Teachers of languages should, therefore, utilize the essay-based approach to create a learning atmosphere that is conducive for the learners. This will in turn help in the improvement of learners' performance in English connectors.

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Appendix A: Pretest

Join each of the following pairs of sentences using the correct sentence connector

1. The cost of living has gone up. Many families are having financial problems.
2. I tried to warn the rangers not to use the road by sending a written note. I sent a smoke signal.
3. Fran ignored the doctor's advice and refused to take the prescribed medication. He is complaining about not getting better.
4. She was an orphan. She was well behaved as any other child.
5. I dislike filling in questionnaires. I agreed to help Moina do her research.
6. The singers stopped to rest. The drummers stopped
7. The building collapsed that morning; consequently, the live performance was cancelled.

8. Many companies do not provide lunch for their employees. They provide cafeteria services within their premises.
9. He didn't get proper sleep that night. He chaired the meeting successfully.
10. It was raining very hard. The children did not go to school.
11. The careless driver argued with the police. He was arrested.
12. They lost the war because they did not plan well. They did not have enough soldiers.
13. Warm the water for about two minutes. Add a pint of milk.
14. Groundnuts can be used to make a variety of sauces. They can be used as snacks.
15. Kenya is a good tourist destination because of its wildlife. It has a national park within its capital City.
16. They refused to pay for their licences. Their businesses were closed down.
17. Our college offers preparation for the professions, business and industry. Students can prepare for transfer to a university.
18. Working full time for most breastfeeding mothers can be stressful. Many of them have learnt to manage their stress levels.
19. They lost the war because they did not plan well. They did not have enough soldiers.
20. She is our Member of Parliament. We expect her to air our grievances.

Appendix B: Expected Answers for Pretest

1. The cost of living has gone up; **as a result**, many families are having financial problems. (Causal)
2. I tried to warn the rangers not to use the road by sending a written note; **in addition**, I sent a smoke signal. (Additive)
3. Fran ignored the doctor's advice and refused to take prescribed medication; **consequently**, he is complaining about not getting better. (Causal)
4. She was an orphan; **in spite of that**, she was as well behaved as any other child with parents too. (Adversatives)
5. I dislike filling in questionnaire; **although**, I agreed to help Moina do her research. . (Adversatives)
6. The singers stopped to rest; **similarly**, the drummers stopped. ((Additive)
7. The building collapsed that morning; consequently, the live performance was cancelled. (Temporal)
8. Many companies do not provide lunch for their employees; **however**, they provide cafeteria services within their premises. (Adversatives)
9. He didn't get proper sleep that night; **nevertheless**, he chaired the meeting successfully. (Temporal)
10. It was raining very hard; **therefore**, the children did not go to school. (Causal)
11. The careless driver argued with the police; **thus**, he was arrested. (Causal)
12. They lost the war because they did not plan well; **firstly**, they did not have enough soldiers. (Temporal)
13. Warm the water for about two minutes; **after that**, add a pint of milk. (Temporal)
14. Groundnuts can be used to make a variety of sauces; **besides**, they can be used as snacks (Additive)
15. Kenya is a good tourist destination because of its wildlife. It has a national park within its capital City. (Additive)
16. They refused to pay for their licenses. Their businesses were closed down. (Causal)
17. Our college offers preparation for the professions, business and industry; **moreover**, students can prepare for transfer to a university. (Additive)
18. Working full time for most breastfeeding mothers can be stressful; **nevertheless**, many of them have learnt to manage their stress levels. (Adversatives)

19. They lost the war because they did not plan well; **firstly**, they did not have enough soldiers. **(Temporal)**
20. She is our Member of Parliament; **therefore**, we expect her to air our grievances. **(Temporal)**

Appendix C: Connectors in an Essay

Complete the following passage with appropriate connectors

¹.....in school we are taught to be kind to animals, paradoxically while we preach kindness we practice butchery. ².....there are experiments in the Biology Laboratory in which the frog's brain is destroyed while the animal is still alive; to test its reflex action. ³.....live insects are pinned on boards to study their different organs. Vivisection of animals has become an integral part of the Science syllabus. ⁴... the more advanced the course gets, the more brutal the experiments on animals become. The mouse is often the victim. It is not uncommon to find mice kept under deplorable conditions for the purpose of experimentation. ⁵... there are reasons that would back up the use of animals in experiments. ⁶ the health service benefits ⁷.....the health service benefits from animal - tested and animal-derived medicines. ⁸...hospitals stay of patients is greatly reduced and home treatment is made possible. Diseases such as pneumonia, measles and whooping cough have remedies (courtesy of the animal-experiment.) ⁹.....children have benefitted most through the vaccines produced. ¹⁰.....If practiced with moderation, animal experiments would be acceptable.

Appendix D: Expected answers for the Connectors in an Essay

¹**Although** in school we are taught to be kind to animals, paradoxically while we preach kindness we practice butchery. ²**To begin with**, there are experiments in the Biology Laboratory in which the frog's brain is destroyed while the animal is still alive; to test its reflex action. ³ **In addition** live insects are pinned on boards to study their different organs. Vivisection of animals has become an integral part of the Science syllabus. ⁴**Consequently**, the more advanced the course gets, the more brutal the experiments on animals become. The mouse is often the victim. It is not uncommon to find mice kept under deplorable conditions for the purpose of experimentation. ⁵**However**, there are reasons that would back up the use of animals in experiments. ⁶ **First**, the health service benefits. ⁷ **Indeed** the health service benefits from animal - tested and animal-derived medicines. ⁸ **Moreover**, hospitals stay of patients is greatly reduced and home treatment is made possible. Diseases such as pneumonia, measles and whooping cough have remedies (courtesy of the animal-experiment.) ⁹ **In fact** children have benefitted most through the vaccines produced. ¹⁰ **All in all** if practiced with moderation, animal experiments would be acceptable.

Appendix E: Experimental Group

NAME	Pretest	Posttest	Diff
Student 1	11	16	5
Student 2	12	18	6
Student 3	13	17	4
Student 4	11	18	7
Student 5	10	13	3
Student 6	11	14	3
Student 7	12	16	4
Student 8	09	14	5
Student 9	10	16	6
Student 10	12	17	5
Student 11	13	16	3
Student 12	10	15	5
Student 13	12	15	3
Student 14	11	15	4
Student 15	11	16	5
Student 16	15	20	5
Student 17	13	16	3
Student 18	11	15	4
Student 19	13	18	5
Student 20	16	20	4
Student 21	16	20	4
Student 22	13	18	5
Student 23	14	18	4
Student 24	15	19	4
Student 25	15	19	4

Appendix F: Control Group

NAME	Pretest	Posttest	Diff
Student 1	11	14	3
Student 2	11	14	3
Student 3	15	18	2
Student 4	13	18	5
Student 5	12	15	3
Student 6	13	16	3
Student 7	16	18	2
Student 8	16	19	3
Student 9	13	17	4
Student 10	14	18	4
Student 11	15	17	2
Student 12	11	15	4
Student 13	12	15	3
Student 14	13	16	3
Student 15	11	16	5
Student 16	10	15	5
Student 17	11	14	4
Student 18	12	15	3
Student 19	12	16	3
Student 20	12	15	3
Student 21	12	16	4
Student 22	13	18	5
Student 23	10	15	5
Student 24	12	15	3
Student 25	13	15	2