

A Study On The Effects Of Reading On Writing Performance Among Faculty Of Civil Engineering Students

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Abstract : This study was conducted to investigate the effects of reading on writing performance among Faculty of Civil Engineering students. A total of twenty students from the Faculty of Civil Engineering had been identified and selected for the purpose of this research. This group of students is taking an English language course that is UHB 2422 Advanced English for Academic Communication. There were two writing sessions. The first session required the students to write an essay according to the topic given without reading the materials on related topic. Then, they were required to answer the questionnaire regarding their personal views on writing without reading text. On the other hand, in the second session of writing, the students were given a text to read and later produced a mind map based on their understanding of the text. The text then was taken and they were asked to write an essay on the given topic. They were required to answer the questionnaire regarding their personal views on writing with reading text. Observation was also made during both writing sessions. The results showed that reading has positive effects on the students' writing. The findings of this study were discussed and recommendations for future research were also suggested.

Keywords : effects of reading, writing performance

Introduction

Reading is a very complex process which requires an active participation on the part of the reader. Some scholars have pointed out their point of view about the reading process to highlight the complexity of reading. According to Roy Harris (2000), the message in the printed text is not something given in advance - or given at all - but something created by the interaction between the writer and reader as participants in a particular communicative situation. To Smith (1997) reading is asking questions of printed text and reading with comprehension becomes a matter of getting your questions answered. This means reading is a thinking process in which it requires the reader to understand and perhaps to use different skills in gaining the information from the text such as inferring, questioning, predicting, and drawing conclusions.

Reading involves many complex skills that have to come together in order for the reader to be successful. For example, proficient readers recognize the purpose for reading, approach the reading with that purpose in mind, use strategies that have proven successful to them in the past when reading similar texts for similar purposes, monitor their comprehension of the text in light of the purpose for reading, and if needed adjust their strategy use. Proficient readers know when unknown words will interfere with achieving their purpose for reading, and when they won't. When unknown words arise and their meaning is needed for comprehension, proficient readers have a number of word attack strategies available to them that will allow them to interpret the meaning of the words to the extent that they are needed to achieve the purpose for reading.

Writing, on the other hand, is the learned process of shaping experiences into text, allowing the writer to discover, develop, clarify and communicate thoughts and feelings. It requires the development of thinking skills. According to Applebee (1984) and Emig (1977), writing is the externalization and remaking of thinking, and to consider writing as separate from

the intentions and beliefs of the writer is not to address composition as a reflective tool for making meaning.

In this research, the focus will be on the effects of reading on writing performance among students at the tertiary level of education. The results of this research should be able to open their mind towards the importance of reading to improve their writing performance and perhaps could motivate them to read more. Besides that, the students could see the difficulties in writing that they might face if they do not have the habit of reading.

Statement of the Problems

At the higher level of education such as college and university, writing is one of the language skills that students should perform. Usually a good reader makes a good piece of writing. This statement sufficiently shows that reading and writing have their own connection and share a very close relationship with each other.

Reading and writing are two skills which complement each other. However, many students do not realize the existence of the connection between reading and writing and how those skills influence each other.

The statement of the problem of the research is the students are not aware that reading actually can help them in writing. Therefore, this research is aimed at investigating the effects of reading on the students' writing performance. In addition, this research will also shed light on the ways reading help students in writing as well as the difficulties they face in writing without reading the text.

Objectives of the Study

The objectives of the research are:

1. To determine the effects of reading on the writing performance among Civil Engineering students.
2. To examine the ways reading help students in writing.
3. To examine the difficulties in writing without reading the text.

Significance of the Study

By conducting this research, it is hoped that the students at higher level of education especially UTM students will be aware of reading can benefits them in writing. Therefore, they will acknowledge that there is a connection between reading and writing performance. Perhaps later on the students will make reading as their hobby in their spare time. It is because to have a good piece of writing is not something that can only be learned explicitly but also through reading habits.

This research could also provide us with the knowledge of the benefits of reading and how reading can improve their writing performance. This could shed some light for the lecturers to help the students improve their writing performance. The lecturers can make use of the skills that the students already know in improving their writing performance. Other than that, lecturers can design or create activities for the students to help them to improve their writing which involves the reading skills.

Subjects of Study

The subjects selected for this study are the second year students from the Faculty of Civil Engineering who are doing Bachelor Programme in Universiti Teknologi Malaysia. The subjects were randomly chosen to participate in this study.

The selection was made because the subjects have taken or currently taking the UHB 1412 English for Academic Communication or UHB 2422 Advanced English for Academic Communication. Both reading and writing skills have been included within the English language courses. The subjects also have varied language backgrounds such as Bahasa Melayu and Mandarin. They also have at least ten years exposure to English in primary and secondary schools.

Research Instruments

This study utilized both the quantitative and qualitative research methodology. The main instruments used for data collection in this study were reading text, mind mapping, and writing a short essay and followed by questionnaires. Besides that, the observation checklist was used as the supplementary instrument.

Reading text, mind mapping and writing a short essay

The first writing session required the students to write an essay according to the topic given without reading the materials on related topic. The question paper is shown in Appendix A.

One reading text as shown in Appendix B entitled Applications of Hydrology that was adapted from a website was given to the subjects in the second session of writing. In this session, they were asked to read the text and later to produce a mind map based on their understanding of the text. The text then was taken away and they were asked to write an essay on the given topic. The question papers for mind mapping and essay writing are as shown in Appendix B.

The text used in this study was chosen because its suitability for the subjects of this study. The suitability of the text refers to its level of difficulty, the length of the text and its genre.

The Flesch Reading Ease test was devised by Rudolf Flesch, is one of the Flesch-Kincaid Readability Tests used to test the readability of the text. It indicates how difficult a reading passage is to understand. In the Flesch Reading Ease test, higher scores indicate that the passage is easier to read. Meanwhile lesser numbers indicate that the passage is harder to read. The Flesch Reading Ease Score (FRES) used the following formula:

$$206.835 - 1.015 \left(\frac{\text{Total words}}{\text{Total sentences}} \right) - 84.6 \left(\frac{\text{Total syllables}}{\text{Total words}} \right)$$

According to American standard, scores of 90.0 to 100.0 are considered easily understandable by an average fifth grader. Meanwhile a score of 60 to 70 are considered could be easily understandable by the eighth and ninth grade students and the range of 0 to 30 is considered best understood by college students.

As mentioned earlier, the text entitled Applications of Hydrology was used in this study. The text used for this study was mainly about the used of knowledge on hydrology and the tasks

as hydrologists. This text consists of 74 lines with total of 924 words. The readability of the text had been calculated by using The Flesch Reading Ease Score (FRES) formula.

Total of words = 924
 Total of syllables = 1825
 Total of sentences = 46

$$206.835 - 1.015 \left(\frac{924}{46} \right) - 84.6 \left(\frac{1825}{924} \right)$$

Score = 19.4

Referring to the range of score, the text fall into the average group in which it was considered suitable for the subjects of this study.

Questionnaires

There were two writing sessions in this study. The different sets of questionnaires were distributed after each writing session ended. The questionnaires consist of different types of questions: open-ended and scales.

As for the first writing session, a set of questionnaire containing twenty two questions which divided into two sections as shown in Appendix C was developed in order to gather the information for this research. The different sections of questionnaire are personal information (Section A) and personal views on experiencing writing without reading text (Section B).

Meanwhile as for the second writing session, a set of questionnaire containing twenty three questions which divided into two sections as shown in Appendix D was developed in order to gather the information for this research. The different sections of the questionnaire are personal information (Section A) and personal views on the subjects reading experience as well as views on experiencing writing with reading text (Section B).

Observation

The observation was a supplementary instrument of this study. Two observation checklists for two different sessions were developed as shown in Appendix E and Appendix F. The observation was made when the reading and writing sessions take place. The purpose of observation was to observe the subjects behaviors towards reading and writing.

Findings

To know the perception of the respondents on what are the difficulties in writing that they faced without reading the text, an open-ended question were attached in the questionnaire for Session 1. The respondents were asked what other problems they faced when writing the essay. The answers were illustrated as the following:

Table 1 Problems faced by the respondents in writing without reading text

No.	Problems	Number of Respondents
1	Limited information/knowledge regarding the topic.	7
2	I have no ideas what to write in the essay.	15
3	I do not have much vocabulary.	11
4	I do not know what the topic all about.	3
5	I do not know how to organize ideas into paragraph.	10
6	Grammar	8
7	Transferring the words from first language (L1) to English (L2).	6
8	I do not know how to elaborate the ideas.	5

Table 1 presents the findings for problems faced by the respondents in writing without reading text. From Table 4.16, the first significant problem that the respondents had in writing is they have no ideas what to write in the essay. The majority of the respondents (15 respondents) agreed on the same idea that they have difficulty in getting started on the writing because of lack of ideas. Even though the problem had been highlighted in the Likert Scale question but again they mentioned the same problem in the open ended question.

Other than that, they also admitted that they have limited vocabulary. This caused the repetition of words in which the same words were used repeatedly in the essay writing. A total of 11 respondents agreed on this statement. The majority of 10 respondents agreed that they do not know how to organize the ideas into paragraph. This is because most of the respondents failed to plan their writing.

Besides that, eight respondents revealed that they have grammar problems. This can be proved by the awkward phrasing and inaccurate sentence structure in their essay. Seven respondents agreed that they have limited information or knowledge regarding the topic. This also had been the obstacle for the respondents to write a good essay. The most common problem that the second language (L2) learners have is to convert the words from first language (L1) to the second language (L2). In addition, the respondents also have difficulty in generating ideas or elaborating them. According to Levine, all these problems can be categorized into several categories:

- i. Attention Problem
 - a) Difficulty getting started on the writing
 - b) Poorly planned writing
- ii. Memory Problem
 - a) Poor vocabulary
 - b) Misspelled words
 - c) Frequent grammar errors
- iii. Language Problem
 - a) Poor vocabulary
 - b) Difficulty with word spelling and meaning
- iv. Higher-Order Cognition Problem

- a) Problem in generating ideas or elaborating them
- b) Difficulty in developing and organizing ideas

As similar to research question two, an open-ended question was attached in the questionnaire for Session 2 in order to find out the respondents' perception on what ways reading help them in writing. The data were presented in Table 2.

Table 2 Respondents' views on the ways reading helps them in writing

No.	Responses	Number of Respondents
1	It gives some ideas/information in writing the essay.	15
2	It helps to understand the topic better.	5
3	It helps me to elaborate the ideas.	8
4	I reused some words from the reading text.	11
5	It is as a guideline to write an essay.	5
6	Help me to construct the sentence.	7
7	Reading helps me to enrich my vocabulary.	10
8	I can write a better piece of writing rather than writing without reading the text.	6

Table 2 shows some of the respondents' views on the ways reading helps them in writing. It is obvious from this table that majority of the respondents (15 respondents) have the same view that reading gave some ideas or information in writing the essay. When reading the text, the readers actually capture the information in their memory and construct an understanding as they read the text. The information was reused as the previous knowledge in the writing. It is the cognitive process as it involves the thinking skill.

It is not impossible if the readers tend to copy or used the words from the text in their writing. A total of 11 respondents agreed that they reused some words from the text. Other than that, 10 respondents thought that reading helps them in vocabulary enrichment. As they read, they might discover new vocabulary that they never heard before. We have to understand that understanding a text requires more than just knowing to read individual words. We need to have vocabulary knowledge in order to comprehend the text. The more we read then more words we are likely to know. It is not just the words but we also gain the knowledge on how the words are used in the sentence. Perhaps we can use the words in writing the essay.

Furthermore, eight respondents stated that reading helps them to elaborate the ideas and seven respondents agreed that reading helps to construct the sentence. Only a small number of respondents implied that reading helps them to understand the topic better and as a guideline to write an essay.

Discussion

This study investigated the effects of reading on the writing performance among students in Faculty of Civil Engineering, Universiti Teknologi Malaysia. Primary data were collected by conducting two different writing tests and by distributing questionnaires to the group of subjects.

As mentioned earlier in Chapter One, the purposes of this study were to investigate the effects of reading on students' writing performance. Furthermore this study was conducted to find out the difficulties in writing without reading the text as well as to find out the ways reading help the students in writing.

The following conclusions can be drawn from the study:

- i. Reading has positive effects on the students' writing performance in which they scored better in the second session of writing that is writing with reading the text. Krashen (1984) theorizes that writing competence derive from large amounts of self-motivated reading for interest or pleasure. It is reading that gives the writer the feel for the look and texture of reader-based prose.
- ii. As the students read and write, the processes of comprehending and composing reinforce each other. The findings also revealed that the students thought about the reading that they had done previously during the writing and the students agreed that they used some words from the reading text in their writing. These have been the evidence that reading and writing are two skills that are connected to each other.
- iii. Generally the students faced the difficulties in writing without reading the text. The students agreed that they have no ideas what to write in the essay. Lack of vocabularies is also one of the constraints that they have in writing the essay.
- iv. Reading can help students in writing in several ways. Referring to the findings, the students stated that the reading gives them some ideas and information in writing the essay. According to Krashen (1984) reading is the appropriate input for acquisition of writing skills because it is generally assumed that reading passages will somehow function as primary models which writing skills can be learned.

Generally the results of this study indicated that reading and writing are connected to each other. It is effectively help students in writing in several ways.

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