The Effectiveness of Web-Based Instruction on Writing Skill of English Department Students of FKIP Riau University, Indonesia

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Abstract

This quasi-experimental research aims to test the effectiveness of teaching writing by using web-based instruction on writing skills of English Department students of Teacher Training and Education Faculty (FKIP) Riau University.The formulation of theproblemto beaddressed is: Is there any effectiveness of web-based instruction on writing skills of English Department students of FKIPRiau University? The research was conducted at English Department ofFKIP Riau University during odd semester 2014-2015. Cluster sampling technique was used to select two classes of students to become the sample of this research. One class of students was used for experimental class and another one was used as a control class. Students in the experimental class were taught by using web-based instruction methodand students in the control class were taught by using conventional method. Instrument used in this research was a writing test and the data were analyzed by using SPSS version 19.0. The finding showed thatweb-based instruction was effectively improved the students' writing ability.

Keywords: web-based instruction, writing skill

1. Introduction

English Department is one of many departments available at Teacher Training and Education Faculty (FKIP) Riau University. The main objective of this department is to produce professional English teachers, at the same time, it is support the development of education in Riau Province. Professional English teachers are teachers who have good competence in terms of English language skills, pedagogic, personality, and social [1]. At this time, English Department of FKIP Riau University has as many as 348 students. These students, later on will become English teachers at senior high schools.

To have good competence in English language skills, the students must have two capabilities: the ability to understand the text and the ability to communicate. Both of these capabilities would be reflected in the mastery of the four language skills namely: listening, speaking, reading and writing. In other words, a successful student will be able to actively use the language as a means of communication in daily life. The ability to communicate consists of the ability to communicate orally and ability to communicate in written form. In order to have ability in written form, the students are given three levels of writing classes, namely: Writing I, Writing II, and Writing III before they get their Sarjana degree. After completing these courses, the students are expected to already have the ability to write different forms of writing: personal, transactional or academic writing [2]. This regulation, actually, is intended to fulfill the needs of the students to know how to write better for occupational or academic purposes later on.

Having good ability in English writing skills are not only an option for students-it is a necessity. Together with reading comprehension, writing skill is a predictor of academic success and a basic requirement for participation in community and in global economy [3]. However, many students consider writing as a difficult subject. It means that the

writing skill of the students is not yet satisfactory. Research conducted by Aruan and Yanti in [4] found out that writing skills of the second year students of English Department of FKIP Riau University needed improvement because the average level of their writing skills was only 64.81.

Writing skills of students can be seen from various components: grammar, vocabulary, mechanics, fluency, and organization. Research conducted by Hadriana in [5] proves that the problems faced by the students in writing related to all of these components. The major mistakes made by the students were in terms of grammar. Basically, it happened because when they wrote, the students translated the ideas they had directly word by word into English. As a result, the meaning of sentences they produced were sometimes not clear.

In terms of vocabulary, the students sometimes had problemsin determining suitablechoice of words. In terms of mechanics, the student's mistakes were related to the use of correct punctuation and capitalization. In terms of fluency and organization, the selection of grammar and vocabulary used by the students were not only inaccurate, but also they failed to give sense. Students were less capable of choosing the appropriate conjunctions or transition signals, as a result, their sentences were less organized and sometimes needs to be read over and over toget a clear idea.

Based on my experience, observation, and interviews with the students, there are some reasons why *writing* is a skill that is considered difficult for them to acquire. First, in writing class the students have to develop their communicative writing competence of the new language which probably has different rhetorical structure from their native language. As a result, the meaning of sentences produced by the students are sometimes not clear. In my opinion, this is caused by their less understanding of English grammar. Secondly, writing does not only mean applying grammatical rules, but the students have to learn how to communicate their ideas in written form. Thirdly, the students also face the problems in getting ideas, organizing ideas and developing details, choosing correct words and structuring ideas in correct sentences as well as maintaining the paragraph unity and coherence.

One way that the teachers can do to help the students improve their writing skills is by applying the use of information and communication technology (ICT) in their teaching activities [6-9]. Young in [10] says that the integration ICT and language teaching facilitated the creation of a virtual environment that transformed learning from a traditional passive experience to one of discovery, exploration, and excitement in a less stressful setting, While Jarvis in [11] argues that technological innovations have gone hand-in-hand with the growth of English teaching. The use of ICT has facilitated the growth of the English language teaching and learning, including teaching and learning of writing.

The use of web-based instruction is one example of the application using ICT in teaching. Web-based instruction provides so many benefits [12]. Firstly, through the use of the web, students may get a lot of learning materials, engage in learning activities and virtual learning environment at anytime and anywhere independently. Secondly, web-based instruction helps students to improve learning achievement. Thirdly, web-based instruction presents a flexible and independent schedule of learning. Furthermore, use of the web can also increase the active involvement of students in the learning process so that in the end the students became more critical and creative.

On the other hand, the use of the web page may also give some advantages to the teachers. The teachers may get many sources form web that can be used to design their teaching materials. It means that, the teachers are not only use textbooks for their teaching sources, but they may have additional references from the web pages. Therefore, the teachers need to understand ICT and have the trust and confidence that technology can promote and direct the learning [13].

Based on the explanations, the research question of this research is that: Is there any effectiveness of using web-based instruction to improve writing skill of English Department students of FKIPRiau University? Therefore, this study aims to test whether using web-based instruction is effective to improve writing skill of English Department students of FKIPRiau University. Results of this study are expected to:

a. Provide a theoretical contribution, it means thatthe findings or the results of this research can be used as additional knowledge and information about more creative and innovative teaching writing through the use of web pages;

b. Provide information for lecturers of English Department of FKIP Riau University who are interested in using web-based teaching method to improve the writing skills of students;

c. Provide information for students of English Department of FKIP Riau University about the level of participation, engagement and interaction they should have during the writing class.

The remaining structure of this paper is organized as follows: Section 2 presents fundamental definitions writing and web-based writing Section 3 gives the description of Research Method and Procedure. Section 4 presents Result and following by Discussions. Finally, Section 5 concludes this work.

2. Rudimentary

The following will describe some of the reviews on writing and teaching writing by using web-based in struction.

2.1. Definitions of Writing, Writing Objectives and Types of Writing

Similar to speaking, writing can be categorized as a form of communication. When some one speaks or communicatever bally, he can use various aids such asintonation of voice, the speed of sound, rhythm or tone of voice to convey his thoughts or ideas that can beunder stood properly andeasily by the listener. In writing, however, he can only reveal his idea through word swith out any inter action witht he reader. Further, Chitravelu, *et al* in [14] say that, a person may obtain his speaking ability began in the early years of life with out having to follow the   systematic instructions.

But, writing is different. Although a person comes face to face with various kinds of writing every day: the daily newspaper, advertisement, bills, notices, letters, *etc.*, he need to be taught how to write both inside and outside classroom since child hood. Therefore, in writing the teacher must understand: the purpose of writing, genres, steps in writing, the characteristics of each type of writing and so forth. This opinion is in accordance with the opinion of Yahya Othman & Baki in [15] which suggests that to be able to produce a good and memorable writing is not easy, but must be through a complex process. Therefore, writing activities should be carried out in accordance phases systematically.

One definition of writing is given by Massi [16]. According to him, writing is an interactive process by nature because it evolved from the symbolic interaction between author, text and reader. Mean while, according to Chitravelu, *et al.* in [14] writing is a system for interpersonal communication using visible signs orgraphic symbols onafl at surface such as paper, clot horeven stone slabs. Every language has its own graphic symbol seach. English uses a system consisting of 26 pieces ofletters (a, b, c, ..., z).

Writing skill is a complex cognitive skill and a challenging task for writing teachers as well as the students when writing classes is in progress. The teacher sargue that teaching writing is a frigh tening task because writing activitie sinvolve various mental processes and consists of various types ofsub-skills such as *drafting, editing, revising, organizing*, and so forth. Before teaching writing, the teacher should first make students understand the existing sub-skills of writing before teaching the actual writing skills over all.

The writing can be classified in several different ways according to their functions. Chitravelu, *et al.* in [14] classify the types of writing into three different types, namely: *personal, creative* and *transactional writing*. Personal writing is informal, less structured, and private. Examples of this type of writing are: personal letters, notes, diaries, messages, shopping lists, and so forth.

Transactional writing is a kind of writing that is well-organized, pays attention to the information or message to be conveyed, as its main purpose is communication. Examples of this type of writing are: proposals, reports, government regulations, official letters and others. Creative writing is for self- expressions or leisure. Examples of this type of writing are: poetry, short stories, anecdotes and songs.

To produce a piece of writing requires process. There are many experts who give their opinion about how the process of writing should be done. According to Ilona Leki in [17] the writing process consists of: exploring and generating of ideas, seeking out of feedback, and reworking and revising the presentation of those ideas. According to Ur in [18] writing process consists of: (1) Preparation; (2) Process; and (3) Product. Another opinion expressed by Brown [19] that classifies writing process in to three stages: Prewriting; drafting; and revising.

After the writing process is completed, the teachers have to evaluate the students' work. Hughes [20] suggested two ways that can be used to assess the results of the writing, namely: (1) holistic method, and (2) analytic method. In holistic assessment, the score is given based on the overall impression of the students' writing. In the analytic assessment the score is given based on the range scale 1-6 for every aspect of the assessment component. Components assessed are: grammar, vocabulary, mechanics, fluency, and organization. According Chitravelu, *et al* in [14] an assessment of writing can also be done in discrete feature test, where assessment is done separately for each component of the writing to be tested. For example, an assessment of punctuation, grammatical structures, vocabulary and others carried out separately.

2.2. Web-based Writing Instruction

Over the years, computers have been used by language teachers in their teaching and learning activities. The use of computers is known as Computer Assisted Instruction (CAI). Another form of language learning by using computer is called Computer Assisted Language Learning (CALL). Research on language learning by using computers was started around 50 years ago. Various studies in Europe like in the United States and United Kingdom prove that the teaching and learning process by using computers can increase the students' interest.

The use of computer sand internet in teaching and learning activities in a language class requires the teachers to be able to create a new learning environment. Besides the use of audio-visual media such as television, video and tape recorders that have bee nused extensively to bring the reality of life situations into the English class, the use of computers and internet al soffers many learning resources and creates an interactive atmosphere. Furthermore, the computer can be used as a tool in the learning process that raises motivation for teachers and students. The subject matter is obtained by the students are also always authentic and up to date [21].

Integrating technology, pedagogy and human resources, in this case is a teacher, in the process of teaching and learning English will facilitate the need sand interests of students in learning the language better. There fore, the use of computer sand internet in teaching and learning process open the possibility that students can reach the level of required communication skills.

One of the interesting teaching strategies that allow the teachers to combine English and technology is through a web-based teaching. One form of web-based teaching in learning is called Web Quest [12]. Web Quest is a learning structure in which partially or all the required information the students need come from sources on the internet. The

authentic function of Web Quest is to increase motivation, work around on open-ended questions, develop individual skills, and increase participation in groups [22]. In principle, Web Quest serves as a frame work that can be used by teachers to develop learning materials by using the internet. Web Quest provides authentic materials and a learning environment that uses technology for problem solving, information processing, and cooperation. As a result of this learning experience, students are able to analyze an in-depth know ledge, demonstrate an under standing of the subject matter as well as demonstrate a response. Important components in a Web Quest consists of: (1) *Introduction*, this section usually contains the title of the material and exposure to interesting information about the back ground of a problem; (2) *Task,* this section contains a brief description of things that should be achieved by the students at the end of the activity, and also the tasks that must be done; (3) *Process*, in this section introduced steps that must be followed by students in completing a given task. The process is a major step learning activity, where students are looking for a source in Web Quest pages and use the information they get to complete a given task; (4) *Resources*, is a set of web addresses that can be used by the students to do the work; (5) *Evaluation,* containing the assessment rubric that will be used by the teacher together with students to assess their work; and (6) *Conclusion*, the statement reminded the students on what they have learned.

3. Research Methodology

The design in this research is aquasi-experiment. This research aims to test the effectiveness of web-based instructionon on writing skill of English Department students of FKIP Riau University. Before this research was conducted, the researcher designed activities of teaching writing and web-based learning materials called Web Quest. The learning materials, then, presented in web pages.

This study was conducted at English Department FKIP Riau University on odd semester 2014-2015. The population of the research were all of students who were following Writing class. Cluster sampling technique was implemented to choose two classes of students to be became the sample. One class of students was used as an experimental class and another class of students was used asa control class. The students in the experimental class were taught by using Web Quest and the students in the control class were taught conventionally.

The instrument used in this study was a writing test which was used to determine the level of students' writing ability. This test was given before teaching activities carried out to determine the base score of the students. The next step, the students of both classes were given the treatment, studying writing for 8 weeks (8 × 100 minutes). Post-testwas given after the completion of learning activities by using the sametest as the pre-test.

4. Results and Discussion

As mentione dear lier, the research was conducted to test the effectiveness ofweb-based instructions on writing skills of English Department students of FKIP Riau University. The results of the research will be described as the following.

The first analysis carried out was an analysis on the scores of the student spre-test, both scores of students from experi mental and control class. This analysis aims to ensure that both groups are homo geneous sample, and at the same time to avoid biased results in this research. Kolmogorov Smirnov analysis showed that there is no sign ifycant values for each variable (at the level of $p> 0.05$) which sig. = 0.098. This indicates that the two groups are homo geneous in terms of know ledge of writing. Meaning, this research can be continued.

Analysis of the value of post-test conducted to test the effectiveness of using Web Quest. Results of the analysis are shown in Table1 below.

Table 1. Independent Samples Test

	Levene's Test Equality of variences		t-test for Equality of Means					95% Confidence interval of the Difference	
	F	Sig	t	df	Sig (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Gain Equal variences assumed	-939	.337	-4.619	58	.000	-.14333	.03103	-.20545	.08122
Equal variences not assumed			-4.619	56.460	.000	-.14333	.03103	-.20548	-.08118

The result of test was obtainedsig (2-tailed) <0.05 so there are differences in writing skills of bothgroups of students. The group that was given instruction by using Web Quest have better writing skills than the control group of student sin classroom learning with conventional methods. The effectiveness of teaching based Web Quest can be seen in Table 2 below.

Table 2. Analysis of the Experiment Class and Control Class

Class	N	Mean	Std. Dev	Std. Error Mean
Gain	30	.1367	.10981	.02005
Control Class	30		.12972	.02368
Experiment Class		.2800		

Value of Gain control classis equal to0.13367x100% =13.67%, while the value of Gain the experimental class $0.2800 \times 100\%$ =28.00%. Thus, the effectiveness of teaching writing by using Web Quest is as many as 14.33%.

Analysis of the data shows that students learned by using Web Quest has higher level of writing skill compared to students studying with conventional method. It means that the use of Web Quest was able to improve writing skill of English Department students of FKIP Riau University. This is due to several things. First, teaching by using Web Quest is able to give a concept that is easily remembered by the students through the displays of interesting pictures. The pictures make the students easily understand the concept of the subject being taught. The findings of this research is in line with the findings of Almekhlafi [23] which says that there is a significant difference in the ability of students studying with the use of a computer than the ability of students studying by conventional methods.

Second, by using WebQuest teaching activities became more effective because the input of writing on learning by conventional methods derived from textbooks, teacher's explanation and oral discussion. Meanwhile, the input of learning by using Web Quest is a lot of reading materials provided on webpages. In other words, the students read a lot of material related to the topics to be written on the webpages before they write about a topic. Such teaching methods supported by Krashen in [24], which says that the best way to learn writing is to get a lot of input thorough reading. Furthermore, this research also

supported the findings of Chuo in [25], which examines the use of WebQuest on writing skills of 54 students of a high school in Taiwan. Chuo [25] proves that writing achievement of students taught by using WebQuest is better compared to the achievements of students in conventional writingclass.

Another thing is that the animation and images presented in Web Quest provide convenience to students to enhance their understanding ofthe material being studied. However, there is one situation where the skills and know ledge of students on the use of technology is not the same. This statement supports the opinion given by Kosnin and Abdullah in [26] which state that differences in knowledge and computer literacy of students can be a barrier for the teacher to carry out teaching activities by using technology. It may cause that the improvement of the student's ability is more visible to students who have the skills to use of technology.

However, teaching and learning activity by using Web Quest can be conducted to English Department students of FKIP Riau University. Most of the students already have a laptop, although not all of them are familiar in using it efficiently. The use of computer sin teaching and learning activities of writing in English Department students of FKIP Riau Universityis still not widely used. This may be due to lack of available learning materials that can be used by the teachers. How ever, the use of computers in teaching writing should be continued because it is able to give a positive effect on the ability of students.

5. Conclusion

In this paper, we have discussed the effectiveness of web-based instruction on writing skill of English Department students of FKIP Riau University. The Results of this research have proven the effectiveness of using Web Quest as one of the applications of web-based instruction through the use of computers and internet in the activities of teaching and learning of writing. Results of this study proves that web-based instruction in teaching writing is important because it can help students in understanding the concept of what is being learned better.

Acknowledgement

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