



Conference Paper

Influence of Blog Media on Improving the Essay Writing Skills of S-1 Pharmacy Study Program Students of STIKES Borneo Lestari

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Abstract

Digital education forms a fundamental part of the industrial revolution 4.0 that integrates digital technology into education. This research can be an alternative, new breakthrough or innovation to improve students' essay writing skills as an educational adaptation in the middle of the COVID-19 pandemic. Blogs are a digital learning medium used for online writing that can help students in improving their essay writing skill. The current study is a quantitative research with a pseudo-experimental design. First, two classes were randomly selected to act as the experiment and control groups. Second, both groups were asked to take a preliminary test to find out their initial ability of mastering concepts and essay writing skills on topics with pharmaceutical materials nature and health theme. Third, both groups were given a learning model with different treatments: blog media was used to measure the essay writing skill in the experiment group, while in the control group, natural/conventional treatments were used. The results of this study showed significant differences at the beginning of learning (before the treatment) with the students' understanding of essays writing between the experiment and control groups. The results of the final writing ability (after the treatment) were measured using a post-test understanding of essay writing. The result was a significant difference, in that, the ability to write essays in the experiment group was higher and many of them achieved the targeted competence. Therefore, we conclude that there was an influence of blog media use on the understanding ability of essay writing on the students of Pharmacy Program of STIKES Borneo Lestari Banjarbaru.

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Keywords: blog, learning media, essay writing

1. Introduction

Digital-based education is a renewal in the education industry revolution 4.0 that integrates digital technology. This research can be an alternative, new breakthrough or innovation to improve student essay writing skills in educational adaptation in the middle of Covid-19 pandemic. Blogs are used as digital-based learning media used in online

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writing, so that students' competency in writing essays can be improved. Education that is in the 4.0 era encourages a new revolution in the education world which is not limited to manual learning activities. Education 4.0 is an educational challenge in the digital era, especially in the development of language learning media (writing skills).

Writing skills are one of the language skills used to express ideas and thoughts by utilizing graphology, language structure and vocabulary or diction. In addition, writing is an understanding of writing basic substance, the component knowledge of writing a suitable (unity) and coherent (coherence)essay. The results of the writing can attract the reader's attention as well as be able to convey the message correctly and well. The low students writing skills require serious handling from various parties. Students' writing skills are still low. Writing skills are indeed the most difficult language skills. Writing skills and creativity must be raised, trained, and nurtured, remembering that writing is an active-productive-creative activity in language. Language learning can be used as an opportunity space for students to practice writing skills and abilities with learning media that are adapted to digital-based education (Suwandi, 2015).

Learning media that is specifically designed to express students' thoughts, feelings, concerns, and wishes so that the learning process is carried out. Learning media contains information which can be in the knowledge form or a means for students to carry out learning activities (reading, storing, trying, working on questions, answering questions, and so on). Learning media is anything that already contains learning material, thus allowing someone to use it to learn of gaining knowledge, skills, or change of attitude (Sahid, 2010).

This study used blogs as a digital-based learning media used in online writing, so that students' essay writing competences can be improved. Increasing competence is expected to have an impact of improving student language competence which includes aspects of other language skills, namely listening, reading, and speaking as well as language components. The use of blog media was expected to be an alternative and new breakthrough for problem solving for students to improve essay writing skills in online learning. Students' ability in writing essays is expected to be able to train and facilitate students in writing scientific papers.

2. Method

The method in this study is quantitative research with pseudo-experiment method which is research of causal relationship with the design of the research used is Control-Group Pre-test-design of post-test control group treatment group (experiment) and control



group, and compare treatment results with control. The stages of using this design were (1) randomly selecting one class to the experimental group and one class to the control group, (2)) the next two groups of students were given a preliminary test to determine their initial ability to master concepts and essay writing skills on the theme of phrases. (3) both groups were given a treatment learning model in the form of inquiry, an experimental group, by using blog media to measure essay writing skills, while the control group used real (real equipment), in this case the real equipment, namely the natural ability of students.

The research instrument used to measure essay writing skills was observation and tests. The research instrument that was in the form of an observation sheet with an observation instrument included indicators to analyse the essay writing skills, that was measured through student writing assessments indicators that was seen from the elements: content substance, structure, word choice, paragraph development, and writing mechanics.

Assessment aspects Weighted value Relevance of Theme (written topics according to the content) 10 % Essay structure (lead, opening, content, closing) 10 % 30 % Ideas (original: presenting relatively new and unique ideas; creative: showing a new understanding of the issues being discussed; actual: ideas in accordance with current conditions by presenting data and facts) 30 % Content of contents (systematic, coherent and clear ideas; data relevance and ability to analyse & formulate conclusions) Writing (Layout, grammar, diction, coherence and Enhanced Spelling 20 % System)

TABLE 1: Assessment indicators of student's essay writing skills.

The subjects of this study were the second semester students of S1 Pharmacy of STIKES Borneo lestari. The number of samples was divided into two groups, 73 students who were experimental students (35 experimental group and 38 control student groups). The data collection required in this study was used for research in the form of an ability test to develop ideas for writing essays. The results were obtained with the following formula.

The value of g is the normalized gain (N-gain) of both approaches, Smaks is the maximum (ideal) score of the pre-test and post-test, Spost is the final test score, while Spre is the pre-test score. The level of normalized gain (N-gain) could be classified as follows: (1) if $g \ge 0.7$, then the resulting N-gain was in the high category, (2) if $0.7 > g \ge 0.3$, then The N-gain generated was in the medium category, and (3) if g < 0.3, then the N-gain generated was in the low category. Research was to get the results of the



application effect of blog learning media to improve essay writing skills in S1 Pharmacy students of STIKES Borneo Lestari.

The data analysis carried out in this study included the analysis of students' skill levels categorized into complete with a score category \geq 70 and incomplete with a score category <70. Meanwhile, to determine whether there was an effect of using learning media (blog) on the understanding of writing essays in Semester II S1 pharmacy students of STIKES Borneo Lestari of the 2019/2020 Academic Year was carried out by using sign test / Wilcoxon test. If the significant value <0.05 then HO is rejected, meaning that there is an influence between the tested variables, and if the significant value > 0.05 then HO is accepted, it means that there is no influence between the variables tested.

3. Findings and Discussion

3.1. Findings

The results of the descriptive statistics of the pre-test data in the experimental class and the control class were presented in table 2 that the mean pre-test score of the experimental class was 66.35 with a minimum score of 54 and a maximum score of 85. While the average pre-test score for the control class was 55.46 with a minimum score of 40 and a maximum score of 70. The mean difference between the pre-test scores of the experimental class and the control class was not too far away. A statistical test was carried out to see whether the difference was significant or not.

TABLE 2: Descriptive statistics of pre-test data for the experiment and control groups.

Class	N	Mean	Min.	Max.
Experiment	35	66.35	54	85
Control	38	55.46	40	70

The experimental and control class had respondents whose number was below 50 people, so what was used to test the normality of the pre-test data was Shapiro-Wilk which produced a Sig (P) value of the experimental class of 0.130, and the control class of 0.094 where both were greater than value = 0.05, or more specifically for the experimental class, P = 0.130> (0.05) and for the control class, P = 0.094> (0.05), so it can be concluded that the two data are normally distributed. Furthermore, the homogeneity test was carried out to determine the similarity of the variance in the pre-test measurement scores between the experimental class and the control class. Homogeneity testing was carried out by using the Levene's Statistic test and the results can be seen in Table 3 below.

TABLE 3: Data homogeneity test results for the experimental and the control class.

Test of homogeneity of variances							
Levene's statistic	df1	df2	Sig.				
0.405	1	73	0.526				

Sig value. (P) obtained a pre-test level measurement score between the experimental and the control class of 0.526 which was greater than the value (0.05). Because the P value (0.526)> (0.05), it can be concluded that the data comes from a population with the same variance (homogeneous). The similarity in the initial ability level of writing student essays before learning in the experimental and the control class was carried out by a parametric test, namely the t test (Independent Samples T Test) on the average pre-test score of the two classes, with a significance level of 5%. The data concluded that there was no significant difference in the level of essay writing ability between the experimental and the control class at the beginning of the lesson. Results measurement of final writing skills (after learning) was done by post-test on essay writing comprehension.

TABLE 4: Descriptive statistics of post-test data of the experiment and control groups.

Class	N	Mean	Min.	Max.
Experiment	40	82.20	75	93
Control	35	61.63	55	76

Based on the data in table 4 above, it can be seen that the average post-test score for the experimental class is 82.20 with a minimum score of 75 and a maximum score of 93. While the average post-test score for the control class is 61.63 with a minimum score of 55 and a maximum score of 76. Statistical tests were performed to indicate significant differences. The difference in the ability to write essays at the end of the lesson between the experimental class and the control class is quite significant after learning. This difference is evident in the table above where the mean score of the experimental class who received treatment writing on blogs was 82.20 and the mean score of the control class who treated conventional was 61.63.

3.2. Discussion

The development of current technology is inevitable, it is very useful for the learning process one of them by creating new innovations in learning, especially language learning. One of the technological developments in learning media is to use blog media. This can be seen from the research that has been done that learning using the media

blog of students in training the ability to write shows significant results after treatment namely the ability to write essays in higher experiment classes and the quantity of students who achieve a score above 40% competency compared to the control class of 10% as illustrated in the following chart:

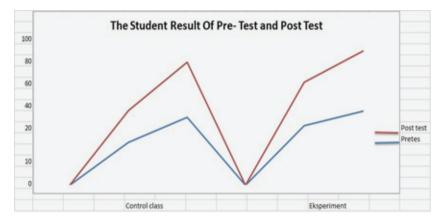


Figure 1: Student pre- and post-test results.

Innovations are created to provide positive benefits for learning life. Especially in the field of language learning, lecturers and students have enjoyed many benefits from the innovations that have been produced in the last decade. The era of sophistication of internet sites academics is very familiar with the use of a blog.

The ability to write essays is carried out with 3 exercises on the topic of pharmacy (natural ingredients) and health. Observations were carried out on student activities for 6 meetings with three stages of essay writing practice. The use of blog media as a learning medium can provide new enthusiasm for students to write essay ideas on personal blogs. Web-based learning or blog media is software used in online learning activities. The development of learning designs for the web is designed in such a way that the online learning process can run effectively. Three main elements must be present in the design of a web-based learning model, namely learning tasks, learning resources, and learning supports. Learning tests include activities, problems, interactions to engage students. Learning resources contain content, information and resources that can be accessed by students. Learning supports related to learning instructions, motivation, feedback, and easy access for students (Sari, Yusak, & Rahmad, 2017).

Along with the development of technology today, there are many free online media that are used as learning media. Tools such as blogs, webpages, and media are used to help improve students' language skills. To increase students' writing skills, one of the effective media is blogging. The reason of choosing use blog media use is because blogs are no stranger to students because now is a digital era that utilizes internet



technology that utilizes other blogs to find learning resources, so logs are nothing new and complicated for users (Shavab & Gurdjita, 2017).

The results of this study concluded that there is a significant difference at the beginning of learning (before being given treatment) with the material of understanding the writing essays substance between the experimental and the control class. The results of measuring the final writing ability (after being given treatment) were carried out by post-test on understanding essay writing, the result was that there was a significant difference, namely the ability to write essays in the experimental class was higher and achieved a lot of competence by 40%, while the control class was only 10%.

Improving students' writing skills by utilizing blog media is very appropriate to the characteristics of online learning. Students can practice any writing skills on the available blog sections, including providing additional emphasis or information with other available media, such as audio, video, or links to other relevant page (site) addresses. The technique of creating a blog is not difficult, because it does not require complicated programming knowledge. The ease of access on the blog page shows the results that 100% of students who take Indonesian lessons have and can operate personal blogs. Students only need to fill in the available layouts, then publish them and the student's written blog can be seen by all people in the world. Blog as a forum for outpouring ideas / ideas and writing because blogs as an online medium are able to provide a real audience for student writing. The real potential audience can provide "demands" as well as an opportunity for students to show their best work. The use of blog media will provide better motivation for improving students' writing competence, because blogs are able to provide a real audience in writing activities.

Based on the results of the observation tests that had been carried out, the results of the pre-test and post-test showed that the use of blog media for the ability to write essays is categorized as effective. The exact sig value for the two-party test (experimental and control class) is 0.000 < 0.05. This shows that there is an effect of the use of blog media on the ability to understand the substance of writing essays in S1 Pharmacy students of STIKES Borneo Lestari.

The students ability to develop ideas and effectively ideas increases. The ability to understand the essay writing theory, students can master aspects of substance in essay writing after getting treatment. The substance of writing essays has characteristics, among others; 1) the relevance of the theme (the topic is written according to the content), 2) the structure of the essay (lead, opening, content, and closing), 3) ideas (original: presenting relatively new and unique ideas; creative: showing a new understanding of the problem discussed; actual: ideas in accordance with current conditions



by presenting data and facts), 4) content (systematic, coherent and clear ideas; data release and ability to analyse & formulate conclusions), 5) writing (layout, grammar, diction, coherence paragraph and Enhanced Spelling System)

Learning by utilizing blog media based on several learning models can improve the results of understanding in essay writing, one of which is the inquiry learning model. Learning media are integrated with the aim to produce learning that enable students to develop their potential optimally so that students have the knowledge and skills to write with digital media. Learning is emphasized on the use of applied technology to equip students to recognize and solve problems, and to demonstrate the existence of a scientific self in the digital era. Learning that is designed is not just knowing, remembering and understanding science, but is directed at creating something useful for an all-digital life. This is consistent with the theory that the selection of blogs as learning media is based on several factors, including: (1) blogs have become popular because they are relatively inexpensive to manage, easy to develop and easy to use; (2) blogs can be easily used to provide homework to students, where each student can independently do their own assignments; (3) blog allows users to publish essay results that are sorted in reverse chronological order (the latest post is at the top); 4) individual tasks can be allocated or negotiated in groups; 5) can add text, graphic images, information links with other relevant sites, and other data; and (6) writers can edit posts at any time and allow readers to leave comments for the original post and comment on each other (Sari, Yusak, & Rahmad, 2017)

4. Essay Writing

Writing skills include being active and productive by carefully expressing and developing thoughts, ideas, in a written structure, logically, systematically, so that they are easily understood by readers. Writing is a communication activity in the form of delivering ideas, messages, and information in writing to other parties by using written language. Writing is a productive competency that can be developed with practice and treatment in addition to one's talents. This ability is different from the speaking ability which is more performance. This is shown by the results of writing student essays that have improved (Dalman, 2011).

A significant increase in the experimental class, where previously the pre-test results obtained a fairly low score, and after being given treatment, the knowledge results of the writing essays substance increased by 40% in the treatment given, namely by using blog media as a medium for writing essays. Before the increase results were measured



by the writing essays results, the scores increased more systematically than before the treatment. The indicator exposure in essay writing is explained as follows:

4.1. Relevance of the theme (the topic is written according to the content)

One of the interesting essays is the choice of themes / topics that is discussed on the paper. The choice of theme or topic is very important because it relates to students' interest or interest in reading. There are a few weaknesses for some students in writing their ideas into essays. The explanation of the topic from the beginning of the paragraph to the end of the paragraph is only a general description. The results of the study concluded that the students' ability to choose themes and formulate titles in the second cycle had increased significantly. The themes chosen by the students were quite specific. Students in general were able to choose a specific theme, the theme that they chose was quite interesting and current. Students were able to choose a specific theme, with the formulation of their titles. There were 16 out of 40 students (40%) who could choose a theme to formulate an interesting title. The theme / topic chosen by the students was able to connect it to the problems of natural medicine and the latest health problems that are of concern to the public today.

4.2. Essay structure starting from lead, opening, body, closing

There are several things that become benchmarks in the structure of an essay. The structure of the essay includes four main parts, namely lead, opening paragraph, body of essay, and closing paragraph. An unclear essay structure was still found in the students' writing. The results of student essays in exercise 1 still have errors in this section due to students' incomprehension in compiling sentences in the opening paragraph of the essay. The exercise of second stage and after getting treatment in each class showed better improvement, although there was still one student essay written of using two paragraphs in the opening section.

The flow of reasoning of the writing done by students in this second cycle had increased quite well. Students were accustomed to start an article by using an introductory paragraph as an introduction to an article. Then the content, which offers ideas and ways of solving the problem. Closing, which then concludes the content of an essay. The structure of essays written by students was getting organized. Students were able to write in a coherent writing organization, so that in general the students'



ideas were well organized. Based on the research results, 30 students were able to organize their ideas well. The remaining 4 students out of 40 students (10) had not been able to organize their ideas well. This of course still requires further guidance, as in the results of other mistakes made by students, the absence of an essay statement in the opening paragraph. The essay opening paragraph starts with general sentences and then narrows down to be more specific and pinches. The last sentence that is most specific is called the essay statement.

4.3. Ideas

The ideas in essay writing skills in the form of student's imagination according to the experience. Ideas becomes a benchmark in understanding more about what he will or has done. Students determine ideas according to the knowledge of the field of pharmaceutical natural materials or health, because idea is sourced in the mind and developed into something valuable that is one of them through a paper. The results of such thinking need to be conveyed and poured into the essay writing, both in observing health phenomena. The results of the evaluation of essays on the training of 89% of students determine the idea that is still weak in terms of original and unique. The improvement in the results of writing exercise essays to 2 students obtained after getting treatment is the actual aspect where the idea fits the current condition was still not visible, was indicated by the lack of facts that are presented in the content. The ideas in the essay writing in the second exercise began to show original, unique & creative characteristics by linking health facts about Covid-19.

4.4. Content of contents

The interesting content of the essay is not only always dingat, but makes the reader repeat to read, and becomes a source of reading reference. Content that not only mimics other writing, but is quality, interesting, and has a passion in it. Effective use of sentences, coherence of paragraphs, relevance of data and information, determining conclusions to be assessor indicators in the content of essay content. Paragraphs composed in a coherent or coherent way can produce good discourse. Coherent ness between sentences with each other has a reciprocal relationship and simultaneously lays out one main idea (Zaimar & Harahap, 2011). The content of the content presents a clear and clear idea, and the relevance aspect of data and information is seen in the final result of writing an essay as much as 86%.



4.5. Writing (grammar layout, diction, coherence and Enhanced Spelling System)

The ability to arrange layout, grammar, diction, coherence and Enhanced Spelling System on the results of students' essays had begun to be skilled as shown in the 2-3rd exercise. Based on this, it is concluded that blog media enables students to have better essay writing skills than learning without blog media. The evaluation results of the experimental class showed that 93% of the students were good and neat in terms of writing mechanics and writing systematics. It was good seen from the accuracy and clarity of the expression, the standard language was good and correct, communicative, and relatively easy to understand. Grammar and sentence structure, the results showed that the improvement in each stage of the exercise. These results indicate that the students' initial ability in writing essays needs improvement. Meanwhile, the control class showed that the results of writing essays which were in the poor and good enough category had various mistakes made by students. Student essays often placed or put a conjunction at the beginning of a sentence. The word and that is placed at the beginning of the sentence is wrong because the function of a conjunction is to connect one part to another. Another problem faced by students in writing is the use of correct grammar and sentence structure, such as idiomatic use, distinguishing the use of prepositions and several paragraphs in the body of the essay, there is no good coherence between one another.

The writing skills (grammar, Enhanced Spelling System) of students in this second exercise experienced a very good change. Only a few students, 87.5% meant that 35 out of 40 students still needed improvement. The grammar skills of students can be seen from the layout, grammar, coherence diction and Enhanced Spelling System. The use of punctuation marks is an initial ability that students must have in developing writing skills. There were still many student essays that were found in paragraphs written in various spoken languages. The result of writing that was scientific and popular, the use of non-standard words was the most mistakes made by students. The diction or choice of words in writing an essay requires skill in choosing and using appropriate or proper words to make it easier for readers to understand the ideas expressed in the essay. The use of plural words that are ringing is found in essay writing errors, namely in the form of reduplication. Essay writing refers to the six aspects above, and specific aspects relates to the ability of the writer (skill writing), considering essays as subjective writing. The integrity of the essay can be built through cohesion tools, both lexical and grammatical.



This research can provide theoretical benefits in the form of a writing theory in terms of essay substance, while for the practical benefit students gain practical experience by showing the existence that is written through digital media (blogs) which are provided as learning media. This experience is expected to be beneficial for the individual intelligence and social intelligence of students.

5. Conclusion and Suggestion

Based on the results of research and discussion, it is concluded that there is a significant difference at the beginning of learning (before being given treatment) with the material for understanding the substance of writing essays between the experimental and the control class, besides that there is an effect of using blog media on the ability to understand the substance of writing essays in Pharmacy students of STIKES Borneo Lestari. The significant difference was the ability to write essays in the experimental class was higher and the quantity of students who achieved scores above the competency of 40% compared to the control class, namely 10%.

This research can be an alternative, new breakthrough or innovation to improve students' essay writing skills. The use of blogs as digital-based learning media can develop models and language learning media in further research in educational adaptation in the middle of a Covid-19 pandemic.

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