

CRITICAL READING SKILLS, ACADEMIC VOCABULARY MASTERY, AND ARGUMENTATION WRITING SKILLS

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Abstract. The purpose of this study was to investigate argumentation writing skills in terms of critical reading and student academic vocabulary mastery. This research was conducted at the Department of English Education, Semester VII, STKIP Kusuma Negara Cijantung. The research method used is a correlation survey with technical regression analysis. Collecting data from research variables using test instruments. The results of this study reveal that: (1) critical reading has a positive effect on students' argumentation writing skills; (2) academic vocabulary mastery has a positive influence on students' argumentative writing skills; and (3) critical reading and mastery of academic vocabulary have a positive influence on students' argumentative writing skills. Therefore, it can be concluded that the improvement of critical reading skills, mastery of academic vocabulary supports the improvement of students' argumentation writing

Keywords: argumentative writing; critical reading; academic vocabulary

I. INTRODUCTION

Writing is one of the language skills that must be learned by Indonesian students at all levels of education. Therefore, students are required to master this skill, writing is like any other skill. In learning English, the purpose of learning writing skills is so that students can write various types of writing in English such as narrative, report, recount, argumentative, and others. In the academic field, especially at the university level, for reporting research papers, argumentative is the most widely used text.

Argumentative writing which is commonly used in research papers or journals is an indicator of the quality of education. Many countries in the world are trying to increase the number of journals published, including Indonesia. Based on the latest scientific work country ranking contribution data by scimagojr.com, Indonesia contributed 212,806 scientific works, and is ranked 45th in the world. This is clearly lagging behind when compared to other countries in Southeast Asia such as Singapore, which is ranked 32 and Malaysia is ranked 34. Based on the current evidence, regarding Indonesia's small contribution to journaling or academic reports, this shows that writing tradition in Indonesia is low [1].

Writing as part of language skills has long been an issue in the language learning system. Difficulties in writing, especially in argumentative writing, are experienced not only by high school students but also by college students. To produce good arguments, students are required to pay close attention to the topics being discussed and the need for continuous writing practice, so that students will be accustomed to conveying ideas, experiences, and knowledge in writing [2]. To be able to convey ideas well, good

argumentative writing also requires information as a reference. Therefore, the ability to process information is needed. One way to get information is to read, because reading is described as an act of absorbing, understanding, and interpreting information [3]. In other words, reading skills will affect a person's writing skills. Within the reading strategy, critical reading is one of the most well-known strategies that can improve the quality of academic writing. Through critical reading, it is believed that the essence of writing will be sharper and more logical. In addition, critical reading gives students the opportunity to respond interpretatively to the text [4]. The data shows that several things affect critical reading, including the ability to read itself, the amount of vocabulary, and an increase in motivation [5]. One of the outputs of reading is vocabulary formation and most students learn vocabulary through guessing foreign words as they read. Several studies have shown a strong correlation between vocabulary mastery and reading comprehension, for example research conducted by Grabe [6], Khabiri, [5]. This very interesting effect pattern reveals that vocabulary has a significant contribution to reading comprehension. In other words, the more words students get, the better understanding they get from the text. Therefore, few studies have focused on argumentative writing and its relation to academic vocabulary knowledge. Based on the problems mentioned above, this study seeks to investigate the relationship between critical reading, academic vocabulary knowledge and argumentative writing.

II. RESEARCH METHODS

This study aims to analyze and describe the relationship between critical reading skills, academic

vocabulary mastery, and students' argumentative writing skills. The author uses a quantitative method by conducting a correlational study designed with multiple regression. Correlation is a statistical test to determine the tendency or pattern of two (or more) variables or two data sets that vary consistently [7].

The population of this study was the seventh semester students of the English Education Study Program, STKIP Kusuma Negara Jakarta, which consisted of four classes, namely grades 7A, 7B, 7C, and 7D. The total population is 120 students. The sampling technique in this study was done by simple random sampling. This means that all members of the population have the same opportunity to be used as research samples. Based on the sampling technique used in this study, 72 students were selected as the research sample.

The method used in collecting data in this study is the method of test documentation. Documentation method is used to obtain the value of each variable, such as argumentative writing skill test data, critical reading ability test data and student academic vocabulary mastery test data. There are several data prerequisite tests, namely validity and reliability tests. The method used to prove the level of validity of each item is 1). content validity 2). the validity of the aiken method, and 3). criterion validity. Content validity is carried out by taking into account the expert's assessment of the suitability of the indicators and items developed. In this study, 8 experts who mastered the field of writing participated to assess the validity of the content of the 6 indicators that had been made by the researcher. The content validity calculation method used by the researcher is the CVR (Content Validity Ratio) method. The third check of validity will be based on criteria related to validity. In this study, the form used is concurrent validity, one form of validity related to criteria [8].

The data analysis technique used in this research is descriptive analysis and inferential analysis. Descriptive analysis is used to describe and present the data. Descriptive analysis includes median, mean, and curtosis mean. Descriptive analysis consists of data hypotheses with tables, graphs and measurements of central tendency and variability [9], [10]. While inferential analysis using multiple regression analysis.

III. RESULTS AND DISCUSSION

The data obtained from this study are quantitative data based on the results of tests given to students from the three variables tested. The data are critical thinking skills test scores, academic vocabulary mastery scores and argumentative writing scores which are then processed using SPSS 20.00 for windows. The results of statistical analysis show that first, there is a positive effect of critical reading on students' argumentative writing ability. Second, there is a positive influence of academic vocabulary knowledge on students' argumentative writing ability. Finally, there is a positive effect of critical reading skills and knowledge of academic vocabulary on students' argumentative writing skills.

Table 1. Coefficient of Variable X1 and Y, X2 and Y

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
	B	Std. Error	Beta			Zero order	Partial	Part
1 (Constant)	1,984	6,854		,289	,773			
Critical reading	,624	,104	,557	5,980	,000	,675	,584	,501
Academic Vocabulary	,295	,101	,271	2,914	,005	,514	,331	,244

As seen in the coefficient data in Table 1 above, it is explained that the constant in column B states $b_0 = 1.984$. regression coefficient $b_1 = 0.295$ and $b_2 = 0.624$. so that it can be entered into the regression formula as $Y = 0.984 + 0.642 X_1 + 0.295 X_2$. The results of the analysis show that the coefficient value of the X1 variable is t-count = 5.980, and the value of $p = 0.000 < 0.05$. This means that H_0 is rejected, so that critical reading skills have a significant effect on the ability to write argumentatively. Furthermore, based on the results of Table 1, it is known that the value of the X2 variable is t-count = 2.914 and p-value is $0.005/2 < 0.05$. Then H_0 is also rejected. So the knowledge of academic vocabulary also has a significant effect on the ability to write argumentatively.

Based on the explanation above, there are several points that can be concluded from the relationship between critical reading skills, academic vocabulary mastery and argumentative writing skills. The first is that the relationship between these variables is positive, which means that a high score of critical reading ability has a tendency to obtain a score of argumentative writing ability, then by having a high mastery of academic vocabulary, it has a tendency to produce a high score in argumentative writing. -the variables are significant, and the last is the strength of these variables. the relationship is considered to be positively strong.

From the results that have been mentioned, it shows that students have a good response to taking the test. The time allotted for doing the critical reading test is 100 minutes. In fact, there are only 16 questions, most of which require critical understanding to work on the questions. Most students complete the test in 90 minutes. Surprisingly, however, their results weren't bad. This can be seen from their scores, there are about 25% who get a score of 70-95 and 50% of students get 50-70, then the rest get 30-50.

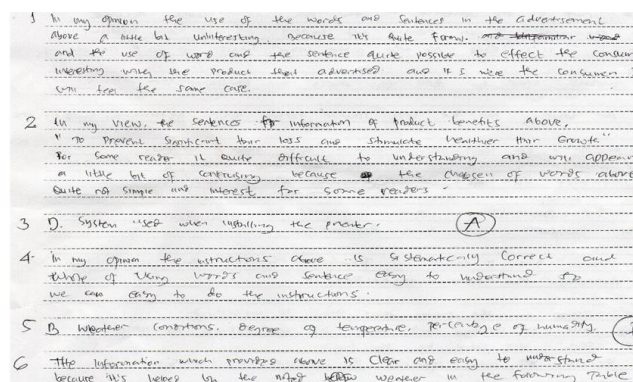


Figure 1. the students' work in the image below.

Most students can comment critically, especially in the section on criticizing advertisements. They try to express ideas from their point of view. Students are able to correlate sentences with their style.

The results of this study are in line with various types of previous studies that have tried to examine the relationship between reading, writing and vocabulary. For example, the results of research conducted by Youngsun Moon, Jihye Choi, and Yusun Kang revealed that there was a significant direct effect of reading comprehension ability on students' writing performance. Meanwhile, vocabulary knowledge also has a significant direct influence on reading comprehension. But there is a significant indirect effect of vocabulary knowledge on students' writing skills. The sample of this study was 146 collage senior students in Korea who were pursuing a bachelor's degree abroad in an English-speaking area. As a result, it was found that there was a significant relationship between writing, reading and vocabulary knowledge, a strong relationship between literary reading and creative writing [11] (Moon et al., 2018: 108).

In addition to the research conducted by Youngsun Moon et al [11], a similar study was also conducted by Abdel-Khalek. In more detail, it can be shown from the results of research conducted by Tengberg and Olin who chose critical reading and argumentative writing as research variables. The two researchers used classroom action research in the form of a pretest and posttest design and conducted a reading test three times during the writing class. The results show that there is a significant effect between critical reading and argumentative writing on low and middle achieving students, while for high achieving students the intervention does not seem to have any effect [12], [13]. (Abdel-Khalek, 2018:19). Although there are differences between their research and this study, for example, both types of their research were carried out with reading or writing specifications, while this research was carried out with certain variable criteria, such as in this study extensive reading was chosen and for texts only academic texts had to be written in the form argumentative essay [14], [15].

The third hypothesis is that there is a positive relationship between the two independent variables (critical reading and academic vocabulary) which simultaneously affect the ability to write arguments. The results of statistical calculations can be presented in the following table2.

Table 2. ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12460,475	2	6230,237	36,725	,000 ^b
	Residual	11705,400	69	169,643		
	Total	24165,875	71			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

As shown, the data in Table 2 shows that the value of column F is F count = 36,725 and p-value 0.000 < 0.05. then H0 is rejected. This means that there is an effect of critical reading skills and academic vocabulary on students' argumentative writing skills.

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,718 ^a	,516	,502	13,025	,516	36,725	2	69	,000

a. Predictors: (Constant), X2, X1

Based on the data above, it can be concluded that the multiple correlation coefficient $R = 0.718$ and Fcount (change in F) = 36,725 P value = 0.000 < 0.05. This means that H0 is rejected, and the multiple regression coefficients of critical reading (X1) and academic vocabulary (X2) on students' argumentative writing ability (Y) are significant. This means that the effect of critical reading and mastery of academic vocabulary on students' argumentative writing skills is 51.16%. So, it shows a strong effect, indicated by a correlation coefficient of 0.718 which means influence. Because the correlation range 0-1 is considered a positive effect and 0-1 is considered a negative effect. Therefore, the relationship is positive and there is a tendency in this case that high critical reading scores and academic vocabulary are most likely to lead to high scores of argumentative writing.

IV. CONCLUSION

First, critical reading has a significant effect on students' argumentative writing ability. Students' argumentative writing ability is determined by critical reading skills. Therefore, the improvement of critical reading will improve students' argumentative writing ability. In other words, in learning English, the critical reading variable plays an important role in improving the quality of students' argumentative writing skills. Second, academic vocabulary has a significant effect on students' argumentative writing ability. The students' argumentative writing ability is also influenced by the mastery of academic vocabulary. Thus, this factor has a major role in terms of the quality of argumentative writing. Third, critical reading skills and mastery of academic vocabulary have a significant effect on students' argumentative writing skills. In line with the previous conclusion, the last conclusion also finds that there is a significant effect between the variables. Therefore, increasing critical reading and academic vocabulary will improve students' argumentative writing skills. In other words, this factor plays an important role in terms of the quality of argumentative writing. In this study, there are still several things that still need to be developed, one of which is the use of content validity by using the assessment of experts. The use of expert judgment is a fairly common approach to strengthen the validity of the instrument. This study does not provide a complete expert assessment of all instruments, only an argumentative writing test that validates the assessment. Furthermore, critical reading instruments and academic vocabulary mastery were adapted from several available sources. Other researchers can do better research by developing instruments based on a theoretical framework.

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