

# Exploring Students' Critical Thinking Skills and their Performance in Writing Argumentative Essay

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## ABSTRACT

Writing is one of the academic competencies that are central vital competence for students to master. It also has become a competence promoting at the university level. However, several studies reveal that many students have not mastered this competency comprehensively even after completing their studies. Mastering writing skills is difficult as it is affected by many factors. Critical thinking is reported to be one of the variables involving in the mastery of this competence. For this reason, this study aims to explore the students' performance in writing argumentative essays and critical thinking competence. In addition, this study also examines the relationship between the two variables. This research was conducted in March-July 2021 on 54 students of the French Language Education Study Program, Faculty of Language and Arts at the Universitas Negeri Jakarta. It applies a quantitative approach using the path analysis method to measure the direct and indirect relationship between variables. Argumentative essay writing and critical thinking tests are used as the instruments in collecting the data. The finding suggests that critical thinking skills involve in the students' performance in writing an argumentative essay but it is found that the affect is indirect.

**Keywords:** Academic Competence, Argumentative Writing, Critical Thinking.

## 1. INTRODUCTION

Writing performance as productive skill is essential for student to master. Instead of a means to express notions and ideas, writing also becomes a way people to critical thinking, learning and memorizing, widening the knowledge, communicating as well as mastering another field of science (Coffin et al., 2005, p. 20) and is needed in daily lives (Green, 2011, p. 5). Students, by means of writing, basically experience the acquisition of knowledge about what they are writing. Even, Malcolm (2014) states that writing is an activity and a process a culture. Besides, writing also becomes a medium in disseminating the knowledge and technology around the world supporting by the mass development of communication technology nowadays.

Flynn & Stainthorp suggest that writing skill becomes more difficult for students to master comparing to other language skills (2006, p. 54) by specifically argue that the writing skill is more difficult than reading skill. This difficulty occurs as it involves the cognitive process requiring critical and creative thinking skills.

Writing skills, then, play important role for academic achievement for students, working places, interpersonal communication, and language learners (Ramli, Boeriswati, & Emzir, 2021). It is in line with Hyland (2003, p. xv) opinion stating that writing skills is very important for students to master especially for English as a second language learners.

As a means of communication, writing is used to express ideas by utilizing linguistic symbols. The writing can be ideas, opinion, argument or feelings (Smetanová, 2013). It also involves the process of collecting information and constructing it into many such forms as letter, paragraph, story, essay, description, narration and poet (Arora, 2012; Cox, 1999) by aligning with standardized rules applying in the language for communication purposes (Fischer, 2001, p. 12). The writing also benefits in forming the learners' critical thinking skills, autonomy, confidence and creativity (Smetanová, 2013, p. 3376).

The content of writing and the cognition process are among the factors students often experience in learning writing. The students are required to express their idea or opinion and to write it into a cohesive and coherent.

The idea or opinion is the content of the writing. To write it into the essay, the students need to practice their critical thinking and to have a language knowledge (Fischer, 2001; Rogers, 2005).

This cognition requires the students to comprehend every aspects of knowledge. Therefore, it can encourage the students to manage information they acquiring then organizing it into an essay to share with others. Besides, linguistic knowledge is also needed to form the students' writing skill. Those competences need to be frequently practiced more and more (Angeline & Rani, 2019, p. 145).

Critical thinking is a model of thinking that improves the quality of analysis, evaluation and reconstruction and it involves with interpretation, synthesis, inference, and self-regulation (Wale & Bishaw, 2020). Critical thinking is a process of analyzing and assessing as well as reasoning developing as an intellectual base for thinking and also *self-directed, self-disciplined, self-monitored, dan self-corrective* (Paul & Elder, 2007). The competence in making assessment by standards becomes the primary element to measured it (Indah, 2017).

The critical thinking skill is about how we think and not on what we think (Vaughn, 2018). Furthermore, he said that it is an evaluation or systematic forming of argument and belief in a standardized rational. Using a specific procedure and method makes it systematic while evaluation and formulation occur in evaluation and designing.

Several studies reported the issues on writing students often experience. The central issue involves the linguistic aspects. Word selection and lexicon are among of the problems (Ramli, 2015; Rus, 2016) which have been comprehensively addressed by Llach (2011) in her book *Lexical Errors and Accuracy in Foreign Language Writing*. The lexicon is the frequent obstacle students faced. And this problem may result in negative impact on the learners' motivation to practice writing (Teng, Yuan, & Sun, 2020).

Another research investigated the relationship between the critical thinking and writing skill (Wale & Bishaw, 2020) and found that research-based argumentative writing shapes the students critical thinking skill and writing skill can predict critical thinking skills (Indah, 2017).

Considering the issues discussed above, there are a number of problems involving with the writing performance and cannot be researched in a hole. Therefore, this paper focuses on the critical thinking roles in forming the student writing performance. It aims to analysis the effect of critical thinking skill on the students' performance in writing argumentative essay.

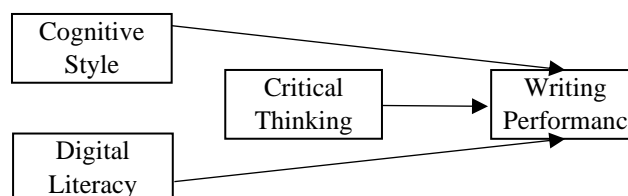
## 2. METHODS

### 2.1 Setting

This study was conducted on February to June 2021 at Faculty of Language and Arts, French Study Program.

### 2.2 Research Design

This study is associative-causal research design. It aims to investigate the effect of students' critical thinking on their writing essay performance.



### 2.3 Population and Sample

Literacy The target population are all students at Faculty of Language and Arts at the fourth year. From the population, 54 students of French Study Program were chosen as the samples of the study.

### 2.4 Data Collection

The study used instruments of writing essay and critical thinking tests in collecting the data. The former was used to measure the students' performance in writing argumentative essay while the latter was used to assess the students' score in critical thinking.

### 2.5 Data Analysis

The data were analyzed using path analysis to compute the causal relationship between independent variable and dependent variable. The effect is measured for its indirect effect.

## 3. RESULT AND DISCUSSION

The result of normality test is provided as follow:

Tests of Normality						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Gaya Kognitif (X1)	.115	54	.072	.949	54	.022
Literasi Digital (X2)	.095	54	.200 <sup>*</sup>	.971	54	.213
Berfikir Kritis (Y)	.128	54	.027	.963	54	.090
Kemampuan Menulis Argumentatif (Z)	.207	54	.000	.922	54	.002

<sup>\*</sup>. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The result show that the p-value (0.180) is greater than the  $\alpha$ -value (0.05) which means that all the data are normally distributed. Therefore, it fulfills the

requirement to analyze the data using path analysis method.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.304 <sup>a</sup>	.092	.038	1.058

a. Predictors: (Constant), Berfikir Kritis (Y), Gaya Kognitif (X1), Literasi Digital (X2)

The model summary table shows the effect of critical thinking skill on the students' performance in writing argumentative essay. It affects the students' writing performance for about 0.092 or 9.2%.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.490	1.008		15.374	.000
	Gaya Kognitif (X1)	.068	.038	.252	1.814	.076
	Literasi Digital (X2)	.026	.028	.129	.928	.358
	Berfikir Kritis (Y)	-.021	.065	-.044	-.322	.749

a. Dependent Variable: Kemampuan Menulis Argumentatif (Z)

The coefficient table show that the significant score of critical thinking (0.749) is greater than  $\alpha$ -value (0.05). It means that the effect is not significant directly.

The analysis output shows that the significant value (0.749) is greater than  $\alpha$ -value = 0.05 table which means that the critical thinking effect on writing performance is not significant. Therefore, the hypothesis stating that there is a significant direct effect of the critical thinking skills on the students' performance in writing argumentative essay is rejected. As argumentative writing requires a deep comprehension and cognitive process, the students need more a comprehensive understanding. It means high level skill is needed.

Different from Nguyen research report, she found that critical thinking enhances the student writing skill at easy and basic level (2016). Afshar, Movassagh, & Arbabi (2017) which specifically investigate the interrelationship between critical thinking and argumentative writing performance shows that only analysis and evaluation (subskills of critical thinking) that can be the predictor of students' writing ability. Therefore, to develop a skill in writing an argumentative essay the students' skill level need to be enhanced to the higher level. A research by Lu, Xie, & Lu investigating the effect of critical thinking reading teaching method in experiment design reveals that the experimented group outperformed in writing performance (2019) which suggests that the students' critical thinking skill need to be enhanced.

The finding of this study suggests that the critical thinking has no significant effect directly on the students' performance in writing argumentative skill. Although the analysis shows that it still has 9.2% effect.

Based on previous studies' report, one reason that may cause the critical thinking skill show little effect is that producing an argumentative essay needs middle-to-high level skill in writing. As a result, the students are required to already master the basic level of writing skill.

## 4. CONCLUSION

Many variables involve in affecting the students' writing performance. This study focusing on the critical thinking shows that there is no directly significant effect on the writing performance. This study was conducted in a small number of subjects. Besides, the study was conducted by online means which causes the lack of researchers' direct involvement to the subject. This may result in a weakness in collecting the data effectively.

It is suggested for further investigation in larger samples to seek for the effect of the investigated variable whether similar or gain a different result. Besides, the further research can address other variables to predict the students' writing performance.

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