

THE ANALYSIS OF UNIVERSITY STUDENT'S CRITICAL THINKING IN WRITING ARGUMENTATIVE ESSAYS IN THE ENGLISH DEPARTMENT OF UNESA

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ABSTRACT

Background: An argumentative essay is a reflection of students' critical thinking. Writing an argumentative essay means practicing critical thinking.

Objective: To describe how critical thinking is reflected in argumentative writing and to find out how students respond in applying critical thinking in an argumentative essay.

Methods: This research is descriptive qualitative as a research design. To obtain the data, the instrument used by the researcher was an assessment rubric and a questionnaire.

Results: This shows that students' critical thinking skills in argumentative writing are pretty good, and they can solve the problems they face by relying on their critical thinking. In conclusion, most of the students apply their critical thinking in writing argumentatively well.

Conclusion: This study found that the argumentative essays written by the research subjects were reasonable based on the scoring rubric used in this study. Students are also able to use their critical thinking in developing an argumentative essay.

Introduction

Writing is included in the productive skills that students must master. This skill can be defined as using language ability to create unity from each word and make it into a text (Suwantarathip & Wichadee, 2014). Writing is a learned skill since it needs a process for someone to master this skill. In doing good writing, (Mukhril, 2014) states that writers should start from organizing ideas, then making a clear structure before they can write a good essay (Babcock, 2011). Furthermore, critical thinking is also a necessary skill in writing (especially argumentative essays) (Nejmaoui, 2019).

Regarding critical thinking, contemplating from the previous education system when teacher-centered learning method dominated our classroom, students copied what their teacher and book said rather than thinking by themselves (Turmudi, 2020). Consequently, students were not given a chance to develop their critical thinking and write it into an essay (Canagarajah, 2018). Back then, students only copied what was written in the textbook, which affected their ability to create a writing draft.

This condition turns into a problem when they are at a higher education level. In university, writing and critical thinking are two necessary skills for students. Writing arguments, essays, and thesis are daily and essential tasks for them. Writing these tasks mirror students' cognitive skills, such as memorizing, critical thinking, and knowledge (Pei et al., 2017). This activity also improves their ability to think, especially critical thinking in the academic context. However, unfortunately, based on the study by Nguyen & Nguyen (2020), most university students could not write clear argumentation. Inevitably, their critical thinking cannot be well-developed.

To improve critical thinking, and argumentative essay works the best (Sabu & Vernandes, 2019). Argumentative writing is one of the main types of writing which involves the writer's opinion based on the topic. This type of writing is filled with the writer's arguments, reasons, and assumptions which affect logical thinking (analyzing and synthesizing ideas). Therefore, an excellent argumentative essay could reflect their writer's good critical thinking and vice versa.

As critical thinking and argumentative essay writing are two skills students need, sophomore students need to be assessed their ability in those two areas. One such student group is English education students of UNESA (State University of Surabaya). This research is interested in analyzing the student's critical thinking in writing an argumentative essay. Hence, it can be known how the quality of the sophomore students in the two skills is.

Argumentative essays and critical thinking are not new things in educational research. There is much research in this field. For instance, Atabaki et al. (2015) found a significant positive correlation between CT and writing in a second/foreign language. The higher student's critical thinking skills, the better argumentative writing they have. This research brings novelty in terms of new subjects that are examined, viz. UNESA English department students.

Departing from the facts described above, this study investigates the critical thinking skills used by sophomore students at the State University of Surabaya, particularly argumentative writing. The researcher chooses one of the argumentative writing classes in the English department of UNESA. In this research, the researcher wants to explore their critical thinking from their argumentative writing class. By investigating the student's critical thinking, this research will contribute to the reader an analysis of critical thinking skills on argumentative writing.

Research Method

This research used qualitative methodology. The result of this method is in the form of interpretation from the researcher. The purpose of this research is aimed to find out student's critical thinking in their argumentative writing. The researcher, as non-participant observation, will not be involved in the learning activities.

This research focused on analyzing university student's critical thinking. Based on the research question, this study is aimed to describe and find out how university student's critical thinking is reflected in their argumentative writing since the purpose of

this research is to analyze and interpret the data. The result of this research will be gathered in the form of words and pictures, because it's qualitative research, to obtain unusual phenomenon

The object used is the student's argumentative writing result. The researcher chooses this object to answer the research question. This object is taken in one of the antagonistic writing classes, which contain around 17 students. The researcher chose this class since this class is filled with students who are qualified with the researcher's criteria.

The researcher chooses one class that contains approximately 17 students from an argumentative writing class. The researcher selects this class because this class qualifies with the researcher's criteria. This research used purposive sampling to obtain the sample. According to (Emmel, 2013), purposive sampling is the process of taking the model from the population for a particular reason. The population was sophomore English students in the State University of Surabaya in an argumentative writing class as a subject of the study. The researcher will take two argumentative writing samples from each participant.

The researcher needs several data and tools to conduct this research. Data will assist the researcher in obtaining the result of is student's argumentative writing result. Here, student's contentious writing result is one of the instruments of this research. The researcher collects the student's writing results through the lecturer in the class. To answer the first research question about how critical thinking is reflected in student's argumentative writing, the researcher will analyze student's critical thinking in terms of several aspects based on the argumentative writing rubric. For the second research question, the researcher will administer a questionnaire. The question is about critical thinking of argumentative writing to explore more.

The researcher uses a research instrument to obtain the data and the result. In this research, the researcher chooses two devices.

a. Argumentative writing scoring rubric

The researcher measures student's critical thinking that is reflected in argumentative writing using an analytic rubric to get specific data. The researcher uses this analytic scoring rubric because this rubric is contained with contentious writing elements. The researcher will adopt the scoring rubric for argumentative writing.

b. Questionnaire

The second instrument researcher chooses a questionnaire to answer the second research question. The questionnaire type that the researcher uses is a close-ended questionnaire. The questionnaire provides five choices which are strongly agreed, agree, neither agree nor disagree, disagree and strongly disagree. A close-ended questionnaire has a clear structure than an open-ended questionnaire; thus, it helps the researcher to focus on the data obtained.

The instrument used is student's argumentative paper, questionnaire, and observation. The data collecting technique begins with collecting student's contentious

writing results in 5 weeks from one of the antagonistic writing classes. Afterward, the researcher analyzes student's paper-based element of critical thinking, which is written in the essential skills of thinking rubric. In addition, the researcher distributed the online questionnaire to the students. The questionnaire consists of several questions related to what extent critical thinking plays a role in argumentative writing. The researcher used a close-ended questionnaire to obtain the data that the researcher wanted. The researcher will learn human behavior in written form indirectly. By analyzing the data, the researcher can get descriptive information, formalize and examine findings, and test hypotheses. The researcher will analyze the student's argumentative writing using critical thinking rubrics. In analyzing qualitative data, the processes are divided into three steps:

The first step is familiarizing and organizing. In this step, students are expected to be familiar with the topic that they are going to write. In other words, they understand the issue of their essay. This step involves pre-research on the subject of their research. Additionally, in this step, students are expected to create a draft of their writing in organized ideas.

In the second step, coding and reducing, students are expected to identify relevant arguments or ideas (reasons and claims) that support their thesis statement. The code and reduce the materials that they got from their research before present it in the form of essay writing.

The last step is, interpreting and representing. In the final step, students analyze their ideas or argumentations and represent them in essay writing. In this step, students are expected to support their claim using accurate interpreted evidences, such as expert statements, graphics, etc. Additionally, this interpretation is supported with elaboration to show their argumentation.

Result And Discussion

A. Research Result

1. Critical Thinking Reflected in the University Student's Argumentative Writing

The researcher answered the first question by analyzing the result of student's argumentative writing. There were 2 topics of student's argumentative writing, each student has 2 writing results. The first topic was fast food, the researcher divided the result into two groups, which were high and low. In the high group, filled with 11 students, and the rest is 6 students. 2 of 6 students in low group didn't load sources, therefore the researcher couldn't find out the validity of the resource. This applies equally to the second topic, the researcher divided the argumentative essays into two groups. In the second topic, drugs and alcohol, there was an increase. From 17 students, there are 14 students in high group, and the rest is in the low group.

Some students in high group has no issues on making strong thesis statement, whereas low group couldn't write understandable thesis statement.

They also make arguments with weak evidence, and are not related to the other paragraphs. Low group makes each paragraph stand alone, doesn't explain the main idea and seems doesn't combined. In the last part of argumentative writing, conclusion, low group students didn't re-conclude their thesis statement, and make an unclear sentence.

The rubric also assesses their writing aspect which are grammar, spelling, punctuation, vocabulary, and capitalization. Here, some students have difficulties on vocabulary, especially word choices. Low group used the word repeatedly and out of context.

a. The Ability of Students to Formulate Thesis Statement and Clear Opinion

Fast Food

Bethenny Frankel once said, "Your diet is a bank account. Good food choices are good investments". From this we can see that it is important to pay attention to what we eat today to determine our health in the future. Unfortunately, globalization greatly affects our diet nowadays. According to the data collected by Journal of the American Dietetic Association written by Paeratakul, S., et al, (2003), fast-food were consuming by 37% of the adults and 42% of the children in America. This number has certainly increased significantly at this time. Considering the lifestyle changes that are full of busyness caused us for only have a little time to prepare such kind of healthy food for our bodies. This phenomena for sure what then force us to choose fast food as our meals which is considered very effective to meet our rquirements of food between the busy activities that we have. However, aside from the convenience offered, fast food is considered as the biggest threat for our health.
[DSA_84041_21]

Figure 1
Introduction 1

Figure 1 shows that the subject can formulate a thesis statement clearly. The opinion is clear and focus on point. The author also catch the reader attention at the beginning of the sentence. The opinion is evaluative such as good or bad.

Fast Food vs Junk Food

Many people equate fast food with junk food. Actually, fast food and junk food are different, judging by the name, fast food is food that served quickly because it has been processed beforehand so that usually fast food is semi-finished food, while junk food is food that is low in nutrients and is often said to be not nutritious. But in a line, both have a same type of substance contained in each portion even though the levels are different.
[LKW_84052_21]

Figure 2
Introduction 2

Figure 2 shows that the subject only explain about fast food and junk food, it doesn't contain supporting reasons or opinion.

b. The ability of students to give reasons for an iss

Fast food have some advantages which become the reason why they still popular until today. Buying fast food is easy, quick, filling, and relatively cheap. People these days do not want to spend their time preparing their food. With the existence of fast food they can have meal to fill their stomach for only few dollars. People can buy fast food in nearly anywhere at any time, fast food restaurant is often open for 24 hours and spread all around the city. Imagine having to spend time for cooking food while having 9-5 job or just imagine spending more money to eat food in decent restaurant when you can eat affordable food in fast food restaurant. Fast food eliminates those problem and help people to have meal in quick and convenience way.

Even though it has various benefits, I disagree that regularly consuming fast food is tolerated. Fast food has earned bad reputation due to the effects it caused to human health. St Stender, Dyerberg and Astrup in 2007, stated in his journal the relation between fast food and diabetes, obesity and heart disease. Excessive fat, sugar, and salt are what caused those health problems. Not only that, fast food is also shown to be addictive, consumption of fastfood release hormones in our brain called dopamine, hormone which is responsible for our happy feeling. With this situation, people become unconsciously addicted to fast food to keep experiencing the effect of joy caused by the dopamine. Fast food nowadays is widely known to be unhealthy and addictive.

[AKI_84045_21]

**Figure 3
Body 1**

Figure 3 shows the subject discusses facts, examples, and also quotations. Each paragraph is linked to each other. The second paragraph also uses appropriate transitions. It shows the pro's and con's about fast food.

Not all fast food is harmful to health. Fast food made from fruit and vegetables, with proper processing is better, than processed fast food with a lot of carbohydrates and fats. Fruits and vegetables contain lots of fiber, vitamins and minerals. Fast food is generally priced at affordable prices, so it is widely chosen as a main dish, especially for the lower middle class. By consuming fast food, it will actually save expenses compared to cooking yourself at home.

Currently the reputation of fast food restaurants is very good. as evidence there are still many people who are interested in coming to fast food restaurants. For them fast food restaurants serve good, fast and cheap food. The place is also comfortable and clean. so that they are suitable for people who are generally very busy employees or workers. according to them fast food is very suitable to be the choice when hungry.

[STP_84060_21]

**Figure 4
Body 2**

Figure 4 shows the subject discusses a new point and begins with a topic sentence but does not have unity and coherence. The paragraphs are fewer facts and examples.

c. The ability of students to make conclusions.

In conclusion, drug dependence can still be cured like other chronic diseases. A person who is still addicted to drugs can do therapy to stop drug use. However, this is certainly not possible alone, the support of the family or the surrounding environment is very necessary to help the recovery run optimally and successfully. In my opinion, drug addiction is a disease that must be treated immediately, because if left untreated it will cause other harmful effects aside from physical and mental health disorders. In fact, it can refer to more severe things like death. Therefore, having good understanding about the drug use is important to avoid from the dangerous effect of drugs and alcohol.

Figure 5
Conclusion 1

Figure 5 shows the subject summarizes the main topics, the author's opinion, and suggestion are well-thought-out.

In conclusion, it is clear that drug and alcohol addiction is a very dangerous health problem. Chronic addiction to those two substances might cause alteration in the brain works. The body of a drug and alcohol addict is also prone to various organs destroying diseases. We should treat it addiction as a disease. Only by classifying it as disease we could prevent it to happen on people and can provide treatment for those who suffer from it. Drug and alcohol addiction is a mental and physical disease.
[AMI_84045_21]

Figure 6
Conclusion 2

Figure 6 shows the sentences doesn't link to each other, the author's opinion doesn't reinforce the main idea. Each sentence looks like introducing new material.

2. The Student's Responses of Applying Critical Thinking in Writing Argumentative

For the second research question, the researcher wanted to know how the student's responses of applying critical thinking in argumentative writing. The researcher provided questionnaire contain of 5 questions. The first question is "*Is critical thinking important to you?*", all the students answered yes. The second question is "*Did critical thinking help you in evaluating the data and information?*", all the students answered yes. The third question is "*Did critical thinking help you in choosing valid sources?*", all the students answered yes. The fourth question is "*Have you ever found a problem in writing argumentative?*", all students answered yes. They often found a problem in looking for an evidence,

finding valid sources, and paraphrasing. There were two students answered they struggled to start writing thesis statement. The last question is “*How did you solve the problems?*”, they answered that they will look for another sources, and doing paraphrasing. They make the simple sentences first using their words to understand the basic.

From the students’ responses, it can be seen that they have a positive opinion regarding critical thinking in writing argumentative essay. It helps them in formulating and organizing their essays. Additionally, it also helps them in delivering their arguments. In short, critical thinking has a big correlation in creating argumentative essay.

This finding is in line with (Lu & Xie, 2019) findings in their research. The textual analyses from the essays of students of Chinese university indicate that that students who have higher critical thinking were excels in relevance, clarity, logicity, perceptiveness, and flexibility rather than students with lower critical thinking. These are important aspects in creating argumentative essay.

Therefore, it can be inferred that the good result of the students essay in this research is related to their positive opinion regarding applying critical thinking in writing argumentative essay. They realize that it is important aspect in creating argumentative essay.

B. Discussion

1. Critical thinking reflected in the university student’s argumentative writing

Based on the results of the analysis, the researcher considers some students belong to low group because of the analysis result, they didn’t write a clear argumentation such as completing argumentation, asserting elements of argumentation, supporting their argument, understanding other point of view.

Based on (Putri, 2018), in his book titled “*The Common Core Writing Handbook*” concluded that argumentative, advertisement, or exposition text are included in persuading text. Here, the writer should convince the reader of his opinion whether it’s pros or cons. According to (Samanhudi, 2018) concluded that the element of critical thinking which usually occurs on argumentative essay consists of four elements, which are (1) clarify in arguments and reasons, (2) relevance and logical for data and evidence, (3) accuracy of the arguments, (4) precision in every detail. Argumentative writing generally has the same generic structure with other types of writing. Argumentative writing has introduction, body, and conclusion, but the difference is in the content, however, each paragraph should contain argument, logical reasoning, and facts which are interrelated with the purpose of strengthening. The argumentative writing should be organized as good as possible.

The researcher used a scoring rubric adopted from (Srinawati & Alwi, 2020) who rate this argumentative writing from 5 points, introduction, body, conclusion, grammar and structure, and mechanics. Introduction must catch the reader’s

attention at the beginning. Thesis statement is filled with the main case which will be explained in the next paragraph. In line with ([Setyaningsih & Rahardi, 2018](#)), thesis statement must be (1) a complete sentence, (2) explain clear opinion, ideas, and attitudes, (3) focus on one concept.

The next part is body. Body explains the thesis statement and states the arguments and claim to support the thesis statement, usually contains 2-3 paragraphs. The writer could provide some actual data such as evidence, graphic, or statistic to strengthen writer's claims. Adding a counter-argument in the body also helps the reader to better understand the other side of the author's arguments. Each paragraph should be continuous.

The last part of argumentative writing is filled with restating thesis statement (conclusion). Restating thesis statement should use convincing words by using other words with the same meaning, called topic sentence. Also, in this section, the writer provides short review of main points and closing. This contains at least 3 paragraph. According to ([Samanhudi, 2018](#)), each paragraph must support each other and discuss one main idea, every sentence and word goes together (coherence and cohesion).

The aspect of writing is also the focus of researcher's assessment. In writing, grammar reflects the writer language acquisition. The wrong grammar cause miscommunication to the reader, it must be considered in writing. The final assessment point was mechanics (spelling, punctuation, capitalization, and vocabulary).

2. The student's responses of applying critical thinking in writing argumentative

At this part, the researcher presents the result of the student's responses of applying critical thinking in writing argumentative. Based on the student's answer, it can be concluded that their critical thinking is well-applied. Critical thinking skills help students in making decisions, selecting relevant information, evaluating information, and conveying it ([Murtadho, 2021](#)). They use their critical thinking to solve problem in writing argumentative essay in order to get logical argument.

Writing argumentative is complex, ([Pei et al., 2017](#)) stated that Argumentative writing is complicated, it requires deepening of the points discussed, developing and conveying ideas, and being coherent. Student's attempt to solve problems encountered such as looking sources, paraphrasing, or obtaining the point of argumentative are related to 6 aspects of critical thinking including interpretation, analysis, evaluation, inference, explanation, and self-regulation. Those aspect contributes to produce good writing. According to ([Cottrell, 2017](#)), with aspects of critical thinking will bring actual facts, logical ideas, and theories from experts that can convince readers. The author's attitude must be clear, positioning himself in responding to issues by involving reliable sources.

This will assist students to develop their critical thinking to the higher level, in line with argued that the effective way to develop critical thinking by asking important question, collecting and evaluating information, communicating clearly, and obtaining logical conclusions for complex problems.

Conclusion

Based on the result and discussion above, the researcher concluded that the analysis of critical thinking in argumentative writing was good. There were 5 aspect in scoring rubric by Indah Nova which help the researcher to assess the argumentative aspects. The first is introduction, the introduction should consist of clear thesis statement, clear explanation topic and problem, the writer should focus the reader on the topic that will be discussed. The second is body, each paragraphs should consist of topic sentences, facts, examples, evidence. It should be paraphrased. The writer should strength the topic sentences using valid facts or evidence. Each paragraph must be related and clear.

The third is conclusion, it summarizes the summarize the discussion into a thesis statement with different sentences or re-stating thesis statement. The author's opinions should be rational in a clear delivery. Clear conclusion and closing are also needed. The last is mechanics, the essay should be no grammatical errors and well-structured sentences. Speeling, punctuation, and capitalization should be correct. Word choice must be considered, the usage of words must be based on the context. Regarding to the questionnaire result, students applied their critical thinking skills in a great way, they could solve their problem in arranging argumentative writing using their critical thinking. Students used their critical thinking in developing a paragraph foundation, making thesis statement, looking for sources and evidence and paraphrasing.

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