**CRITICAL THINKING SKILL TOWARD YOUTUBE RESOURCES**

**IN STUDENTS’ ARGUMENTATIVE TEXT**

**Abstract -** This study explored critical thinking skills toward YouTube resources in students’ argumentative text. The study was conducted at one of the non-English majors in the state university in the Indonesian context. The data were in the argumentative form that was constructed by selected students. This study used a content analysis approach that was involved in coding and categorizing to analyze the data. After data were analyzed, the findings showed that the pattern of critical thinking elements of the student’s argumentative text was varied, and the integration of technology resources able to foster critical thinking skills. However, it based upon the quality of the technology itself and the instruction in the classroom. Thus, the implementation of the technology, YouTube source, should be based on the quality of the resources and instruction in the classroom.

Keywords - Argumentative Essay, Critical Thinking, YouTube

**INTRODUCTION**

Information technology advancement has significantly facilitated English teaching and learning. Teachers and students have numerous resources for learning media. Those various resources may provide different and ambiguous information. Students should process the information they receive appropriately. In this situation, students need to have critical thinking abilities. Moreover, the implementation of critical thinking can be applied in all school levels. Teachers are expected to design learning activities to encourage students’ critical thinking.

Video resources are the common media to apply in the classroom. The use of videos has several advantages as presenting real language, providing an authentic look at culture, giving students practice in producing videos, and motivating learners (Stempleski & Arcario, 1995). Videos enable students to learn more interestingly. To deal with it, teachers should direct students to communicative activities around the content of videos (Karn, 1995; Passero, 1996; Forster, 1997; Matsuta, 1998). Videos can stimulate students to interpret both through audio and visual materials.

The writing activities are alternatives to promote student's critical thinking ability. After watching a video, the students write an argumentative text based on what they watch and listen to in the video. Teachers train students to focus on a certain aspect to be explored and support it with supporting evidence. In completing the task, the students concern about five elements of argumentative writing. The way students present their ideas reflect how well their thinking ability development.

This study aims to investigate the use of technology (video resources) toward students’ critical thinking. By the analysis of students’ argumentative writing, the present study investigates how the videos promote students’ critical thinking at the tertiary level.

**LITERATURE REVIEW**

Nowadays, there are shifting focused on the teacher center to the learner center; the purpose of the study also changes. Teaching and learning activity is not as simple as transferring knowledge from the teacher form the student. However, the student has to construct their knowledge (Holzer, 1994). Creative thinking and critical thinking should be the focus for the student to construct the knowledge by themselves since the strategy of education shifted to the learner-centered.

Karakoc (2016) says that creativity is the skill possessed by the human in a period, experiences some improvement and possesses some features; flexibility, multiple thinking and treating easily and quickly, originality reaching for a different result. Critical thinking is more than memorization (Critical Thinking Cooperation, 2006). Thus, in this case, the student thinks beyond just emulation. Karakoc (2016) explains more, and he says that when learners think critically, they are encouraged to think for themselves, to question the hypothesis, to analyze and synthesis the event, to go one step further by developing a new hypothesis and test them against the fact. To encourage the students to think critically, it seems to need more than just a text-book, pencil enhanced in the teaching and learning process. They need the latest method and mode, which are practical to foster their critical thinking.

Various teaching and learning strategies enhance digital tools in the teaching and learning process, including in English as a foreign language classroom. The purpose of enhancing technology in the learning process is helping the student to develop some skills, for instance, writing ability. There are numerous researches toward technology related to students' writing (Liao, 2016; Fu et al., 2019; Yang & Lin, 2015; Jiang, 2018; Ranalli et al., 2018).

Liao (2016) research focus on the use of the application to develop grammar performance, Fu et al. (2019) research is about using the game to improve the writing performance, and Yang and Lin (2015) research investigate the effect of collaborative note-taking strategies toward EFL writing performance. Those researches are focus on the relationship between technology and writing ability.

Some research also focuses on the writing and multimodality since technology is the representative of the multimodality in teaching and learning English as a foreign/ second language. The research of Bazalgette and Buckingham (2012) raises some critical about the newest issue i.e., multimodality. Another issue comes from Liu and Stapleton (2018), which focuses is investigating the effect of prompt on students' writing performance and critical thinking. Meanwhile, Hidayah et al. (2018) focus on the definition and indicator in critical thinking toward writing skills. They are focus on the theory of critical thinking and writing ability. Jiang (2018) conducted the research related to digital multimodal composing in changing writing ability. Then, McKinley (2013) focuses on the issues in the Japanese university toward students' writing ability. Those are research in which have done regarding critical thinking toward writing ability in the English Language as the foreign language context.

There are numerous findings related to the research between critical thinking ability that affects writing ability. Liu (2018) administered the research regarding the development of critical thinking ability in the English course by doing some steps with the findings says that teachers have to guide the students first, which means that students need instructors in the first step of doing the writing. Its findings also show that critical thinking is developed simultaneously along doing some brainstorming, editing, and revising. Another research in the same focus done by Afshar et al. (2017) that focused on the research is in the relationship between critical thinking ability toward Iranian EFL learners' ability. Its findings show that there is a significant correlation between both of them. The primary correlation was at only an organization correlated with certain sub-skill of critical thinking.

Researches on the critical thinking concern to writing ability have numerous attentions from the researchers. However, there is a smaller number of researches that integrates the digital media or technology media as the multimodality integrated into the research. Research has done by Huang (2017) Examine learners' critical multimodal literacy practice with a moving image text focusing on text comprehension and interpretation rather than text production. Its finding shows that students focus on the image, sound, and purpose organization; thus, they able to examine a moving image text. Another research related to them was done by Sharadgah (2014), in which his research focuses on the effectiveness of using an Internet-Based writing program to develop students' critical thinking ability. The results say that the experiment group (the group which used IBWP) showed significant improvement than the control group (the group which did not use IBWP).

Since this study focuses on investigating the use of technology (YouTube resources) toward students' critical thinking in the argumentative text, the author will analyze the pattern of students' argumentative essay. Suyono et al. (2019) say that the arrangement of interpreting, analyzing, influencing, and evaluating as a form of critical thinking activity appeared in the students' argumentative text to show how students' process of thought, thus, they become critical. It is because the arranging of that element shows how the students build their critical thinking ability since it can show in what ways the student develop the idea and concept in each phase they write.

Previous research that has been done by Suyono et al. (2019) uses this pattern to verify the presence of critical thinking in the students' argumentative text. Students' argumentative text in that previous research established by reading the text with a particular topic first means that the argumentative text established based upon students' reading activity first. However, this study integrated the technology, exactly YouTube resources, as the first activity, used as references to students to write argumentative text. Thus, the references are the differences between the previous study and the current study. The previous study used particular text types in a particular topic as the references for the students to establish the argumentative text. In contrast, this study used the video as references. However, this study will use some formulation to analyze the text since the current study adapted that formulation from the previous study.

**METHODOLOGY**

This study analyzed students’ argumentative essay to investigate their critical thinking ability. Thus, this study used a qualitative approach with a content analysis method. Creswell (2012) argues that a qualitative approach is used to explore the interpretation meaning since one of its characteristics is analyzing data to describe the theme using text analysis and interpreting the meaning. On another side, content analysis is used to examine the concept and idea that has been written by the students in their argumentative text to reveal critical thinking patterns in the text. Holsti (1969) says that content analysis as “any technique for making inferences by objectively and systematically identifying specified characteristics of a message”.

This study examined the students’ written ideas and concepts in the argumentative text. Thus, the data were written by the students. The participants were three female students from Universitas Muhammadiyah Semarang, Central Java, Indonesia and two male students from Institut Agama Islam Negeri Cirebon, West Java, Indonesia. They were early semester students of non-English majors.

The data were in the written argumentative text form and they were collected by assignment based on the instrument given. The students were asked to access a link that was connected to the YouTube resources that the researchers provided in the instrument. The students were asked to watch the video carefully on some aspects of the video to stimulate their critical thinking while and after watching the video. The video was chosen since it was a short video and it related to the Indonesian culture. After watching the video, the students were asked to make an argumentative text based upon the guided instrument.

The instrument was as follows:

1. Go to this link and watch the video carefully.

<https://www.youtube.com/watch?v=3M7xFOsn0EI&list=LL9in111cxXsrQpowlM29sTQ&index=95>.

1. How do you think about the aspects of the video (the pictures, the sounds, and the characters) that help you to understand the story?
2. Write an argumentative text (consists of a thesis, arguments, and a recommendation) about how the video aspects facilitate you to understand the story.

The data analysis was adapted from Suyono et al. (2019) that applied six stages. First, preparing and organizing the data to be analyzed. The students’ argumentative texts were collected and marked based on their parts. Second, the coding process was to initiate exploring the data. The researchers coded the thesis, the arguments, and the recommendation. Third, developing a more general description of the data and theme was conducted by using the code. The thesis, the arguments, and the recommendation were analyzed to find a similar theme and the different patterns. Fourth, representing findings was done through narration and visual. Each pattern was interpreted based on the researchers’ investigation. Fifth, interpreting the meaning of the result was performed from the findings. The researchers explained how the students created patterns in their argumentative texts. The last was data validity and reliability (Creswell, 2012). In this step, the researchers made sure that all of the students’ writings discussed the aspects of the video and the students wrote the texts based on the video they watched.

**FINDINGS AND DISCUSSION**

The study revealed the pattern of the students’ argumentative text based on the six cores of critical thinking (Facione, 1998). Those critical thinking cores are interpretation, analysis, evaluation, inference, explanation, and self-regulation. There were six argumentative texts analyzed using critical thinking cores. The pattern shown in the students' argumentative text was varied.

1. Interpretation – inference – analysis – evaluation

The first pattern of the text was starting from interpretation. The students began the text by revealing the implied meaning of the video that researchers asked to be analyzed. Then, the students identified the element which was needed to make a rational conclusion. The students identified the aspects of the video, for instance, the sound and the image. It was an element that they used to conclude the video’s acceptance to be a medium of teaching and learning. In identifying some elements, the students analyzed the relationship of the situation (sound and image of the video) to the concept.

1. Inference – analysis – interpretation – evaluation

The second pattern of student argumentative text was from the inference to the evaluation. The text was started by investigating the issue by providing the evidence. The student’s argumentative text was come from identifying some elements needed to make a rational conclusion. The students started from the importance of technology as a medium of teaching and learning process. Then, the students continued to analyze the meaning that was implied in the text. The students integrated some elements that delivered meaning by some aspects in the video such as images and sounds. Then, the students tried to analyze the mistake or the weakness of the video and concluded that analysis.

1. Interpretation – inference – analysis – evaluation

The third pattern of the students' argumentative text was starting from interpretation. The students tried to identify and reveal the implied meaning by interpreting the video as a whole. After identifying implied the meaning of the video, the students tried to analyze the conclusion of the video that related to the title of the students' argumentative text. After the analysis, the student tried to identify each element of the video that established implied meaning to make some arguments at the end of the paragraph. The argument was related to the elements of the video such as the duration, image, and sound.

1. Inference – interpretation – analysis – evaluation

In writing an argumentative essay, began with an inference element, the students recognized the problem by giving valid evidence. The evidence proposed as the basis of the argument and the evidence was interpreted by recognizing it. In recognizing activities, students explained the relationship between the provided evidence and explained the effects or particular results of existing problems (Marzano& Kendall, 2007). Students then generalized and concluded after they supported the argument by giving evidence. It seemed that the students had demonstrated their critical thinking by writing in the form of argument essays. Furthermore, the element of critical thinking emerging in this pattern seemed simple. Students utilized the four elements to develop critical thinking. Those elements were inference, interpretation, analysis, and evaluation.

1. Explanation – analysis – interpretation – inference

The contents of the argument contained elements of an explanation. In this pattern, students elaborated more accuracy in producing their arguments. It could be seen when students began their writing by integrating the supporting features, then explained it in detail and specified how the features played a role in developing comprehension. The students recalled ideas about how the information facilitated the readers to receive the author’s implicit purpose. After this step, the author stated his/her inference to persuade the readers to investigate in what way the evidence strengthened his/her thesis. It proved the students’ competence in the critical thinking process had improved since people who were able to think critically interpreted and inferred things based on evidence to make a decision.

The students created argumentative text that was called a hortatory exposition text since the final part of the text should be a recommendation. The students’ argumentative text was the response of the video that was watched in the YouTube resources as a medium of teaching and learning.

The purpose of this study is to identify students’ critical thinking on their written argumentative text. That is a form of the response of integrating technology in classroom teaching and learning. The idea and the concept of the students in their written argumentative texts reveal their critical thinking ability since there is a relationship between critical thinking ability and argumentation. Stupple et al. (2017) argue that to measure critical thinking skills, argumentation can be used. The first question of this study is aimed to identify the pattern of the students’ critical thinking elements based on Facione’s (1998) theory that is revealed in the argumentative text.

From the findings, the patterns of the critical thinking element that are demonstrated in the students’ argumentative text are varied. Most of them start with interpretation and inference, while only one argumentative text starts with an explanation. The varied pattern of critical thinking element is based upon the students’ understanding and interest in the reference text issue (Suyono et al., 2019). Since this reference of this study is video, which means that the video should be responded by the students, the pattern of the elements of critical thinking ability is based on the students’ focus on the aspect of the video. Some students start with the general issue of integration of technology in the educational system and the others start with the implied meaning of the text. It proofs that argumentation is the space for critical thinking skills (Andrews, 2007; Joiner & Jones, 2003; Kadayifci et al., 2012).

The argumentative text reveals the elements of critical thinking skills that are demonstrated in the argumentative text have a various pattern. However, not all the elements of critical thinking skills are revealed in the argumentative text. The study that is conducted by Suyono et al. (2019) also indicates that only some elements of critical thinking skills are found in the early semester students’ argumentative texts. Moreover, this study is conducted in a non-English major, thus, only a few elements of the critical thinking skill are found in their argumentative texts.

The reason for lacking the critical thinking element in the student’s argumentative text is influenced by the integration of technology, in this case, are YouTube resources. The duration of the video makes the student confused to make another idea and concept to write the argumentative text. The limitation of the aspect in the video makes the limitation for students to create and develop their ideas. The integration of electronic learning can foster critical thinking skill as Sharadgah (2014) argues. The success of fostering critical thinking ability through the integration of technology is influenced by some factors. One of the factors is the technology resources itself. Thus, it is concluded that the pattern of the students’ critical thinking element that has been demonstrated in their argumentative text is varied. The variation of the pattern is influenced by the focus of the student in analyzing the video and their choice in the development of the idea. Furthermore, not each technology can foster critical thinking skills if there is no maximizing in the use of technology.

**CONCLUSION**

From the findings that have been revealed above, the pattern of the students’ element of critical thinking ability is varied. The pattern of the element of critical thinking ability is based on the students’ understanding, interest and focus on analyzing the video. Most of them start with interpretation and inference. Meanwhile, the presence of the six core elements of critical thinking ability is not found in the students’ argumentative text. The presence of a few elements of critical thinking ability in the students’ argumentative text is influenced by some factors. The video selection is the most influential factor in the critical thinking of students in this study. The limitation of the aspect of video makes the students disrupted in getting and developing the idea. However, the better selection of video is possibly fostering students’ critical thinking skill and it can be measured in the argumentation form whether in spoken or written. The video selection including the duration and the genres of the video should be done to get some points of view in fostering critical thinking ability in the argumentation form.

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