# Critical thinking skills toward YouTube resources in students' argumentative texts

**Andik Nur Wijaya**[*]
*Universitas Sebelas Maret, Surakarta, Indonesia*
*andiknurwijaya@student.uns.ac.id*

**Siti Roki'ah**
*Universitas Sebelas Maret, Surakarta, Indonesia*
*sitirokiah@student.uns.ac.id*

**Recommended APA Citation**
Wijaya, A. N., & Roki'ah, S. (2020). Critical thinking skills toward YouTube resources in students' argumentative texts. *Englisia: Journal of Language, Education, and Humanities, 8*(1), 1-11. https://doi.org/10.22373/ej.v8i1.6622

## ABSTRACT

This study explored critical thinking skills toward YouTube resources in students' argumentative texts. The study was conducted at two non-English majors of the universities in the Indonesian context. The data were in the argumentative forms that were constructed by selected students. This study used a content analysis approach that was involved in coding and categorizing to analyze the data. After the data were analyzed, the findings showed that the patterns of critical thinking elements of the student's argumentative texts were varied, and the integration of technology resources was able to foster critical thinking skills. However, it is based upon the quality of the technology itself and the instruction in the classroom. Thus, technology implementation, YouTube resources should be found on the quality of the resources and teaching in the school.

**Keywords:** *Argumentative essay; Critical thinking; YouTube*

## 1. Introduction

The teachers have numerous resources to teach, and the students have numerous resources to learn since information technology advancement has significantly facilitated English teaching and learning. Owing to those various resources which may

---

[*] Corresponding author

provide different and ambiguous information, then students should process the information they receive appropriately.

In this situation, students need to have critical thinking abilities. Moreover, the implementation of critical thinking abilities can be applied at all school levels. Teachers are expected to design learning activities to encourage students' critical thinking abilities.

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 particular 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 critical thinking ability development.

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

## 2. Literature review

Nowadays, there are shifting focused from the teacher-centered to the learner-centered; the purpose of the study also changes. Teaching and learning activity is not as simple as transferring knowledge from the teacher to the students. However, students have to construct their knowledge (Holzer, 1994). Creative thinking and critical thinking should be the focus for the students to create their knowledge since the strategy of Education is shifted to the learner-centered.

Karakoc (2016) says that creativity is the human skill in a period, experiences some improvement, and possesses 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 students think beyond just emulation. Karakoc (2016) explains 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, the teacher needs more than just a textbook in the teaching and learning process. They need the latest method and mode, which are practical to foster students' critical thinking.

Various teaching and learning strategies enhance digital tools in the teaching and learning process, including in English as a foreign language. The purpose of improving technology in the learning process is helping the students to develop some skills, for instance, writing ability. There are numerous researches toward technology related to

students' writing (Liao, 2016; Fu, Lin, Hwang, & Zhang, 2019; Yang & Lin, 2015; Jiang, 2018; Ranalli & Chukharev-Hudilaine, 2018).

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

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

There are numerous findings related to the research between critical thinking ability that affects writing ability. Liu (2018) administers the research regarding the development of critical thinking ability in the English course by doing some steps. The findings say teachers have to guide the students first, which means that students need instructions in the first step of writing. It also shows that critical thinking is developed simultaneously along by doing brainstorming, editing, and revising. Another research in the same focus carried out by Afshar, Moyassagh, and Arbabi (2017) that focuses on the research is in the relationship between critical thinking ability toward Iranian EFL learners' knowledge. Its findings show that there is a significant correlation between both of them. The primary association is only at 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 amount of research that integrates the digital media or technology media as the multimodality is integrated into the study. Research by Huang (2017) examines learners' critical multimodal literacy practice with a moving image text focusing on text comprehension and interpretation rather than text production. Its findings show that students focus on the image, sound, and organization purpose; thus, they can examine a moving image text. Another research related to them is done by Sharadgah (2014), which 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 authors will analyze the pattern of students' argumentative essay. Suyono, Roekhon, and Hartati (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 thought; thus, they become critical. It is because the arrangement of that element shows how the students build their critical thinking ability since it can manifest in what ways the students develop the idea and concept in each phase they write.

A previous research that has been conducted by Suyono, Roekhon, and Hartati (2019) uses this pattern to verify the presence of critical thinking in the students' argumentative text. Students' argumentative writing in that previous research is established by reading the text with a particular topic first. It means that the argumentative text is created based upon students' reading activity first. However, this study integrates the technology, more specifically YouTube resources, as the first activity, used as references for students to write argumentative text. Thus, the references are the differences between the previous study and the current study. The previous research uses particular text types in a specific topic as the references for the students to establish the argumentative text. In contrast, this study uses the video as references. However, this study uses some formulations to analyze the text since the current research adapts that formulation from the previous research.

## 3. Method

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 the other hand, content analysis was used to examine the concepts and ideas written by the students in their argumentative text to reveal their critical thinking patterns in the text. Holsti (1969) says that content analysis is "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 writers shared the instrument to several students from which five students from two universities filled out the instrument. Non-English department students were selected to investigate how they were fostered in writing English by using YouTube resources. The participants were three female students from Universitas Muhammadiyah Semarang, Central Java, Indonesia, and two male students from Institut Agama Islam Negeri Syekh Nurjati

Cirebon, West Java, Indonesia. They were early semester students of the Health Analyst Department and Islamic Economy Department.

The data were in the written argumentative text form, and they were collected by an assignment based on the instrument given. The students were asked to access the link that was connected to the YouTube resources researchers provided in the instrument. The students observed the video. They focused 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 instrument as follows:

1) Go to this link and observe the video. https://www.youtube.com/watch?v=3M7xFOsn0EI&list=LL9in111cxXsrQpowl M29sTQ&index=95. After watching the video, answer the questions below by writing a hortatory exposition text.

2) What message does the video maker try to deliver?

3) How do you think about the aspects of the video (pictures, colors, sounds, and characters) in helping you to understand the story?

4) Write an argumentative text (consisting of a thesis, arguments, and a recommendation) about how the video aspects help you understand the story.

The data analysis was adapted from Suyono, Roekhon, and Hartati (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 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 video aspect, and the students wrote the texts based on the video they watched.

## 4. 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

> From this video, we know that betrayal is a bad character. The bat is refused by the beasts and the birds. The two groups hate that the bat is not a loyal animal. The bat joins the winning animal group to take advantage.
>
> The sound and the image in this video are clear and understandable. They help the viewers to understand each scene. The story is lively and interesting.
>
> The sound and image in this video represent the animals' characters. The disloyal bat plays his character in persuading to join the groups and regretting after he gets a refusal from the two groups very well.

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 the elements, students analyzed the relationship of the situation (sound and image of the video) to the concept.

2) Inference – analysis – interpretation – evaluation

> The bat is a distrust character in the video. He cheats to every group he joins just to make him happy. At first, he tries to convince that he will help the groups. In the end, he joins the other group to get his satisfaction.
>
> The sound and the image in this video are clear and understandable. They help the viewers to understand each scene. The story is lively and interesting.
>
> The color, sound, image, and characters in the video are simple and helpful for the viewers to understand the content. Even if they are at the beginner English level, they can still understand what the story about. But when the viewers are at a higher English level, they should not use this kind of video to improve their English.

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 with 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 of 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.

3) Interpretation – inference – analysis – evaluation

> The video maker tries to teach the viewers that a cheating person will get disrespect from others. The real thing of a person will be revealed at one moment.
>
> The bat at the beginning is trusted by both the beasts and the birds. After those groups know the bat's real character, they do not want the bat to be a member of their groups. The bat realizes that his bad character brings him into loneliness.
>
> The duration of the video is too short for university students. The image is attractive and interesting to watch. The sound gives a special effect that makes the story runs attractively.

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 video elements, such as duration, image, and sound.

4) Inference – interpretation – analysis – evaluation

> A betrayal always gets a refusal in any community. People will not tolerate it when they know that someone cheats on them.
>
> In the video, we can see that the bat experiences a refusal after the animal groups know the bat's disbelief character. Any argument gives no effect to the animal groups for giving a second chance to the bat. They seem not to take any risk to allow the bat to join their groups.
>
> The video maker supports this video with an appropriate image, sound, and characters. They help us in understanding what the video maker delivers to the viewers.

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.

5) Explanation – analysis – interpretation – inference

> The characters in the story are showed clearly by the image and sound. The bat as the main character is shown by his agility and persuasion ability. He influences the beasts and the birds to accept him as a member. In another moment, the bat is sad because the animal groups do not trust him anymore. He feels lonely and rejected.

> To join a group, we need to persuade the group members to accept us. The bat comes to the groups' leaders and convinces them to accept him. But after his disloyalty is revealed the bat is rejected by both groups. The bat turns sad and regretful.

> The video shows us that verbal communication and body language give a certain impact on persuading other people. On another occasion, the character proves that it is the strongest thing in convincing people.

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 they 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 readers to investigate in what way the evidence strengthened his/her thesis. It proved that 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 an argumentative text called a hortatory exposition text since the final part of the text should be recommended. 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 in 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, Maratos, Elander, and Hunt (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, Roekhon, and Hartati, 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 that the elements of critical thinking skills demonstrated in the argumentative text have various patterns. However, not all the elements of critical thinking skills are revealed in the argumentative text. The study that is conducted by Suyono, Roekhon, and Hartati (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 critical thinking skills are found in their argumentative texts.

The integration of technology influences the reason for lacking the critical thinking element in the student's argumentative text, in this case, are YouTube resources. The video's duration makes the student confused about making 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 skills, as Sharadgah (2014) argues. Some factors influence the success of fostering critical thinking ability through the integration of technology. 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.

## 4. 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. Some factors influence the presence of a few elements of critical thinking ability in the students' argumentative text. 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 skills, 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.

## References

Afshar, H. S., Movassagh, H., & Arbabi, H. R. (2017). The interrelationship among critical thinking, writing an argumentative essay in an L2 and their sub skills. *The Language Learning Journal, 45*(4), 419-433. doi: http://doi.org/10.1080/09571736.2017.1320420

Andrews, R. (2007). Argumentation, critical thinking and the postgraduate dissertation. *Educational Review*, *59*(1), 1–18. doi: http://doi.org/10.1080/00131910600796777

Barnet, S., & Bedau, H. (2014). *Critical thinking, reading, and writing: A brief guide to argument.* Boston: Bedford/St. Martin's.

Bazalgette, C., & Buckingham, D. (2012). *Literacy, media and multimodality: A critical response.* Oxford: Blackwell Publishing.

Creswell, J. C. (2012). *Education research, planning, conducting and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson

Facione, P. A. (1998). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction.* Available as ERIC Doc. No.: ED 315 423.

Forster, D. (1997). Stand by me revisited: Group presentations through character studies. *ELERI Journal, 5,* 4-l2.

Fu, Qing-Ke et al. (2019). Impacts of a mind mapping-based contextual gaming approach on EFL students' writing performance, learning perceptions and generative uses in an English course. *Computers & Education, 137,* 59–77.

Hidayah, R., Salimi, M., & Susiani, T. S. (2018). Critical thinking skill: Konsep dan indikator penilaian. *Jurnal Taman Cendekia, 1*(2), 127-133.

Holsti, O. R. (1969). *Content analysis for the social sciences and humanities*. MA: Addison-Wesley.

Holzer, S. M. (1994). From constructivism to active learning, *The Innovator*, *Spring* (2). Retrieved from: http://www.succeed.ufl.edu/innovators/innovator_2/innovator002.html.

Huang, Shin-ying. (2017). Critical multimodal literacy with moving-image texts. *English Teaching: Practice & Critique, 16*(2),194-206.

Jiang, L. (2018). Digital multimodal composing and investment change in learners' writing in English as a foreign language. *Journal of Second Language Writing, 40,* 60–72.

Joiner, R., & Jones, S. (2003). The effects of communication medium on argumentation and the development of critical thinking. *International Journal of Educational Research*, *39*(8), 861–871. doi: http://doi.org/10.1016/j.ijer.2004.11.008

Kadayifci, H., Atasoy, B., & Akkus, H. (2012). The correlation between the flaws students define in an argument and their creative and critical thinking abilities. *Procedia - Social and Behavioral Sciences*, *47*, 802–806. doi: http://doi.org/10.1016/j.sbspro.2012.06.738

Karakoc, M. (2016). The significance of critical thinking ability in terms of education. *International Journal of Humanities and Social Science, 6*(7), 81-84.

Karn, R. (1995). Advanced EFL concepts: Teaching double entendre and euphemism through film. *ELERI Journal, 3,* 51-66.

Liao, Fang-Yu., & Hanauer, D. I. (2016). ESL students' perceptions of creative and academic writing. In s*cientific approaches to literature in learning environments.* Amsterdam: John Benjamins Publishing Company.

Liu, Fulan., & Stapleton, P. (2018). Connecting writing assessment with critical thinking: An exploratory study of alternative rhetorical functions and objects of inquiry in writing prompts. *Assessing Writing, 38,* 10–20.

Liu, J. (2018). Cultivation of critical thinking abilities in English writing teaching. *Theory and Practice in Language Studies, 8*(8), 982-987. doi: http://doi.org/10.17507/tpls.0808.09

Marzano, R.J., & Kendall, J. S. (2007). *The new taxonomy of educational objectives.* Corwin press: A sage publication company

Matsuta, K. (1998). Applications for using authentic materials in the second language classroom. *ELERI Journal, 6,* 41-44.

McKinley, J. (2013). Displaying critical thinking in EFL academic writing: A discussion of Japanese to English contrastive rhetoric. *RELC Journal. 44,* (195), doi:http://doi.org/10.1177/0033688213488386.

Passero, T. (1996). Melting down stereotypes using the film: Torch song trilogy. ELERI Journal, *4*, 153-159.

Ranalli, et al. (2018). Exploring the potential of process-tracing technologies to support assessment for learning of L2 writing. *Assessing Writing, 36,* 77-89.

Sharadgah, T. A. A. (2014). Developing critical thinking skills through writing in an internet-based environment. *International Journal of Humanities and Social Science, 4* (1), 169-178.

Stempleski, S. (1995). Teaching communication skills with authentic video. In Stempleski, S., & Arcario, P. (Eds.), Video in second language teaching: using, selecting and producing video for the classroom (pp.7-24). *Alexandria, VA: TESOL. Summary: The Delphi Report*. Millbrae, CA: The California Academic Press.

Suyono, S. M., Roekanh., & Harsiati, T.(2019). Critical thinking patterns of first-year students in argumentative essay. *Journal for the Education of Gifted Young*, *7*(3), 683-697.

Tai, Hung-Cheng., Lin, Wen-Chuan., & Yang, S. C. (2015). Exploring the effects of peer review and teachers' corrective feedback on EFL students' online writing performance. *Journal of Educational and Computing Research, 53*(2), 284-309.