

Classroom Debate Strategy to Enhance Students' Critical Thinking Skills through Argumentative Writing

Naufal Fachrur Rozi¹, Yuliyanto Sabat², Siti Aisyah³
STKIP PGRI Sidoarjo, email: naufalfachrurrozi23@gmail.com

Abstract

World's massive agenda of promoting 21st century skills is a concrete truth that cannot be denied by everyone, including Indonesian students from all across range. In contrast, based on communal justification and researcher's personal justification, the lack of Indonesian students' critical thinking skills does exist. It is proven by Indonesia's latest PISA score and researcher's preliminary research at private university in Sidoarjo. In an attempt of overcoming the lack, this research aims to investigate the new paradigm that was rarely initiated to be conducted (i.e. enacting two mutually exclusive realms to be one unity), namely classroom debate to enhance students' critical thinking skills through argumentative writing. This research employs descriptive qualitative research. The data were collected through observation and documentation from 19 undergraduate students who were currently mastering argumentative writing field of study at a private university in Sidoarjo. The obtained findings show that the assumption of the researcher in bringing up a new paradigm of classroom debate can enhance students' critical thinking skills through argumentative writing is conceptually and practically correct. The result of three meetings of implementation and its seven main steps of implementation indicate that 19 research subjects' critical thinking skills were progressively enhanced.

Keywords: Classroom Debate, Critical Thinking, Argumentative Writing

INTRODUCTION

World's massive agenda of promoting 21st century skills is a concrete truth that cannot be denied by everyone, including Indonesian students from all across range. World Economic Forum's recent publication in 2019 emphasizes that there are ten top skills in 2020 that are expected to be owned by those who want to own the game and to survive the industrial revolution 4.0. Those top skills are being ranked from the most needed until the least needed, namely (1) complex problem solving; (2) critical thinking; (3) creativity; (4) people management; (5) coordinating with others; (6) emotional intelligence; (7) judgment and decision making; (8) service orientation; (9) negotiation; and (10) cognitive flexibility. Furthermore, during its process of formulating the top ten skills, World Economic Forum deliberately shifts several position regarding to its necessity. For the concrete embodiment of the shifted rank, in 2015, those top ten skills are quite different to the 2020's version.

In 2015, World Economic Forum strongly emphasizes that the top ten skills that will be needed the most are (1) complex problem solving; (2) coordinating with others;

(3) people management; (4) critical thinking; (5) negotiation; (6) quality control; (7) service orientation; (8) judgment and decision making; (9) active listening; and (10) creativity. There is a significant push on everyone's perspective in putting critical thinking as the number two out of those top ten rank; in other word, it becomes a tangible indication that 21st century skills are there and they are ready to harvest the generation. In a recent study concerning on critical thinking by Tsaniyah and Poedjiastoeti, in 2017, Indonesian children are mandated to master 21st century skills. Those skills are contained of (1) critical thinking skills; (2) creativity; (3) collaboration; and (4) communication. The urgent tendency for Indonesian children in owning a 21st century skill is growing up from the global movement that Indonesia participates, namely sustainable development goals of United Nation (i.e. SDGs). Point number four of SDGs emphasizes on quality education. Indonesia openly claims that the nation plays a tangible contribution in being the agent of change. Indonesia plays an essential role in positioning itself as a protocol. Thus, through its commitment, it is a legitimate burden for Indonesia's educational system in enhancing Indonesian students' ability in competing at a high level that requires complex skills, expertise, and creativity.

By the time 2020 comes, having a 21st century skills is a mandatory, especially one's capacity to think critically. Critical thinking is also known as a mode of thinking that related with substances and issues in which the thinkers increase their quality of thinking by skillfully handling all of the structures that attached within their minds. Thus, they can apply intellectual standards within themselves at the same time. Dealing on its elements and indicators, according to Inch E. S., et al (2006) the term critical thinking has eight main elements. Paul, Fisher, and Nosich (1993) propose a perception that the one and only way to enhance critical thinking ability of someone is through properly emphasizing their own way of thinking; metacognition. In 1989, Norris and Ennis believes that critical thinking is a rational and a reflective type of thinking in purpose to decide which one to believe and which one to do (Paul et al., 1993; Belecina & Ocampo Jr., 2018; Santika *et al.*, 2018; Sune, 2018).

In contrast, most of Indonesian students still have a lack in one of its 21st century skills named critical thinking. The result of Indonesian students' PISA rank becomes a valid indicator that the percentage of Indonesian students who are able in mastering critical thinking is still quite low. OECD (2016) reveals that the result of Programme of

International Student Assessment (PISA) of Indonesia is still way too far from what is being expected. Indonesia's PISA score in 2016 shows that Indonesia is ranked at the 62th position out of 70 countries that are participated. The rank of Indonesia in PISA is being listed under the red line (i.e. red-lined score is classified as the lowest chart due to its average score in a range of below 450. It is in line with what Kertayasa predicted in 2014. According to Kertayasa (2014), "those lowest ranks of Indonesian students feel like a burden to feel because it is supported by the fact that the ability of Indonesian students is able to reach the first level and the second level of HOTS solely" (p.1).

In order to prove the status quo, researcher conducts a small research and a small observation at private university. The irony is that the small research that researcher was conducted turns out strengthening the bitter truth that Indonesia's PISA rank cannot be truer than ever. In 22nd of October 2019, a small research that was done by the researcher entitled *An Analysis on Critical Thinking Elements of LPTK Students by Using Inch et al. Theory* reveals panders on scrutinizing the principle of Inch *et al* (2006) on critical thinking elements as the basis of the parameter. The small research is being pursued by 19 LPTK students that are currently mastering argumentative writing as the research subjects. As the major number, most of the LPTK students are only able to reach the 1 or D score. Furthermore, based on the further analysis in FGD, the researcher finds out that the majority of the LPTK students have a tendency and a demand to be provided a strategy to overcome their lacks in thinking critically. Hence, the small research that was done by this undergraduate thesis' researcher becomes a red alert that bringing up new strategy or new paradigm is a must.

The major concern is the minimum score of the students of targeted private university becomes an undeniable indicator that there is a concentration to capitalize and to scrutinize about why the low score can be existed. As a result, this condition strengthen the researcher's intention in finding the proper treatment to enhance students' critical thinking. The researcher presents a new paradigm on tangibly contributing to overcome the gap of the recent condition. A study that was published at LLT Journal by Handayani in 2017 emphasizes that combining three horizons of framework is a promising thing to do although it is quite rare. In her study, she elaborates debate, argumentative writing, and critical thinking. The result comes in agreement the shifting paradigm of utilizing English debate is existed. The study vividly attacks the common stigma that narrowly

generalizing the use of debate for speaking matters solely. Handayani's study shows that those three horizons work perfectly as unity. The result emphasizes that debate facilitate students' critical thinking in producing and in delivering their stances on argumentative writing. Moreover, research subjects of the research also receive a significant enhancement for their academic scoring. Hence, the new paradigm that the researcher tries to elaborate is being measured by the fact that those three horizons can be engaged into one as an advanced way to overcome the issue.

Firstly, in worldwide scope, Freeley & Steinberg (2005) believe that classroom debate is well-deserved to be framed as one of the most helpful learning strategies to both promote and enhance one's critical thinking skills for over 2000 years. Secondly, in ASEAN scope, the study of Zare and Othman in 2015 concerns on finding students' perception in using classroom debate strategy to enhance one's critical thinking ability. The participants of the research were 16 undergraduate students majoring in Teaching English as a Second Language (TESL) at the Faculty of Educational Studies, University Putra Malaysia (UPM). The result comes into an agreement that classroom debate is an innovative, interesting, constructive, and helpful approach to teaching and learning. Thirdly, in national scope, a recent study that was done by Iman (2017) and was published at the International Journal of Instruction entitled *Debate Instruction in EFL Classroom: Impacts on the Critical Thinking and Speaking Skill* indicates an agreement that the finding of the study showed that there was high contribution of classroom debate in engaging to whole aspects of critical thinking. Its approximated number is 0.821 or 82.1%. Widely, the contribution of each aspect of critical thinking towards critical thinking final achievement was classified as (1) context in practicing CT was 32.3%; (2) issue in practicing CT was 26.2%; (3) implication in practicing CT was 20.1%; and (4) assumption in practicing CT was 6.6%. Thus, the strong intention of the researcher in maximizing the use of classroom debate strategy to enhance students' critical thinking at argumentative class is increased (Scott, 2008; Rudd & Hover, 2000; Doody & Condon 2012; Najafi et al., 2016; Vasilescu, 2017).

The challenge to be concerned is denying the truth that debate which commonly uses as a learning strategy to enhance speaking skills being shifted as a learning strategy to enhance critical thinking skills in the written form. Practically, classroom debate majorly emphasizes on any related activities that are done orally, but, there is a top notch

that is owned by debating activity in general. In debate, on its any forms, all debaters are legitimately required to construct a proper argument before delivering their substantives. Every debater receives a case-building time to deliberately discuss the argumentation that they are going to bring to the chamber. Emphasizing on its process of case building, realistically, the note that is produced by every debater is in the form of argumentative writing. Argumentative writing is defined as the embodiment of scientific paper that contains arguments, explanations, proofs, or reasons. Normally, in an argumentative writing work, there is an objective review that is being followed by concrete instances, analogies, and cause and effect relationships. (Belmont & Sharkey, 2011; Ibrahim, Eljack, and Elhassan, 2015; Abbas, 2018). Concerning on its natural patent, debating is mainly about presenting the best argument to top the score. Hence, focusing on its fundamental process of debaters in preparing their argument, choosing classroom debate strategy to enhance one's ability to think critically at argumentative writing is no longer a delusion.

Growing up from its framework, the researcher puts its fully-charged trust when it comes to assume that classroom debate strategy can enhance students' critical thinking ability at argumentative class. As a further step, this research challenges two main statements to critically analyze, namely (1) *how is the implementation of classroom debate strategy to enhance students' critical thinking skills through argumentative writing?*; and (2) *how is the result of classroom debate strategy to enhance students' critical thinking skills through argumentative writing?*. The researcher elaborates three horizons and three frameworks in order to give birth to the rare paradigm, namely using classroom debate to enhance students' critical thinking through argumentative writing. Thus, the researcher officially opens the journey of exploration.

METHOD

This research employed qualitative research with descriptive qualitative as the research design. Enacting qualitative research with descriptive research design was an attempt to answer the research statements of this research. Mainly, the utilization of qualitative research with descriptive research design was aimed (1) to describe the implementation of classroom debate strategy to enhance students' critical thinking skills through argumentative writing; and (2) to find out the result of classroom debate strategy to enhance students' critical thinking skills through argumentative writing. Thus, employing

qualitative as the research method was an adequate move of finding the result of the research with an attempt of naturalist paradigm and widely explored (Sandelowski, 2009; Maxwell, 2010; Cresswell, 2014; O'Leary, 2014)

Respondents

The respondents or subjects of this research were 19 students with pre-requisite criteria. Those three criteria of the research subjects that need to be owned by the research subjects were (1) university students with educational basis (i.e. LPTK students); (2) students who are currently mastering argumentative writing; (3) students with dynamic progression.

Instruments

Instruments that were being utilized in this research were consisted of direct observation, observation field notes, video recording, and documents analysis. For capturing the implementation, the researcher utilized direct observation, observation field notes, and video recording as the instruments. For capturing the result, the researcher uses Inch *et al* theory in 2006 as the parameter of utilizing documents analysis. Inch *et al* theory in 2006 contained of (1) question at issue; (2) information; (3) purpose; (4) concept; (5) assumption; (6) point of view; (7) interpretation and inference; and (8) implication and consequence. The utilization of documents analysis with Inch *et al* theory covered preliminary research, classroom debate ballot for consideration, final examination analysis, and final examination scoring transcript.

Procedures

In this research, the researcher was positioning himself as an active observer or participant observer. There were two ways of enacting data collection procedures as an active observer. Firstly, the researcher collected the data for the implementation (i.e. the first research statement) from the utilization of observation field notes and video recording as the concrete proof. Secondly, the researcher collected the data for the result (i.e. the second research statement) through document analysis (e.g, preliminary research, classroom debate ballot with Inch *et al* theory parameter, case building paper, final examination result and its analysis).

Data analysis

There were three main steps of conducting data analysis. Firstly, the first step was the data reduction. In this undergraduate thesis, there were two classifications of sources of data were being reduced, namely data that were accumulated from observation field

note and video recording (i.e. data that were constructed to answer the first research question) and data that were accumulated from the analysis of students' scoring transcript along with its consideration as supplementary data (i.e. data that were constructed to answer the second research question). Majorly, this research employs the parameter of critical thinking skills from Inch et al theory in 2006. Inch et al theory mainly used to clarify every part of students' enhancement in practicing their critical thinking skills. Thus, in reducing data for both of research statements' concentration, there is a utilization of Inch et al theory to cover it.

Secondly, the next step to conduct in analyzing the data was known as the data display. Data display was used to simplify the reduced data in the form of sentence, narrative, pie and bar chart, or table. Thus, this research was displayed both of data that were collected from observation field note (i.e. data that were constructed to answer the first research question) and the analysis of students' scoring transcript along with its consideration as supplementary data (i.e. data that were constructed to answer the second research question). Both of the data were in a narrative form of deep and scientifically-tested analysis and bar chart.

Thirdly, the final step to do in analyzing the data was the conclusion drawing or verification. In line with the value of credibility, it was essential for the data that were accumulated by the researcher to be evidenced its validity and its consistency. Thus, both of the data that were accumulated from observation field note (i.e. data that were constructed to answer the first research question) and the analysis of students' scoring transcript along with its consideration as supplementary data (i.e. data that were constructed to answer the second research question) were being drawn into one unity in the part of conclusion drawing or verification. The research subjects' lecturer of argumentative writing held a crucial role of being the validator for the final justification in conclusion drawing or verification (Cresswell, 2007; Sandelowski, 2009; Maxwell, 2010).

RESULTS AND DISCUSSION

Dealing with the fact that there are two research statements that were addressed in this research, describing results and discussion is also being categorized into two main explanations, namely (1) the implementation of classroom debate strategy to enhance

students' critical thinking skills through argumentative writing; and (2) the result of classroom debate strategy to enhance students' critical thinking skills through argumentative writing.

The Implementation of Classroom Debate Strategy to Enhance Students' Critical Thinking Skills through Argumentative Writing

In conducting the implementation of classroom debate strategy to enhance students' critical thinking skills through argumentative writing, there were seven main steps that were legitimate to be pursued and to be conducted. Pandering on the researcher's framework of seven steps of implementation, the researcher described the first meeting of the implementation of classroom debate strategy to enhance students' critical thinking skills through argumentative writing in detail based on those seven steps. They were contained of (1) informing the rules of classroom debate; (2) displaying the matchups (i.e. debaters organization and roles within the classroom debate); (3) publishing the motion for each matchup; (4) setting up the case building time or discussion time; (5) starting the classroom debate that is being organized based on debater's role; (6) adjudicating through debating ballot; and (7) conducting a communal evaluation. Thus, all of those seven main steps became to stepping-stone to conduct the implementation.

Due to its main function during the implementation, those seven steps of the implementation were conducted three times (i.e. three meetings). The date was (1) 26th of November 2019 for the first meeting; (2) 3rd of December 2019 for the second meeting; and (3) 10th of December 2019 for the third meeting. The decision of conducting three meetings of implementation was mainly initiated from Creswell's framework in 2007. In qualitative research, especially an observation with active observer, Creswell (2007) stated that the use of proper timing of conducting an observation with researcher as an active observer is a must. Three batches of conducting an observation with researcher as an active observer is a must was considered as one of the most proper timings. This belief grew up from the possible arrival of research subjects' boredom. In the worst-scenario of this research, the research subjects could be possibly think that the researcher might shift the role of the teacher, thus, it could be possibly generating a tendency within the students to not completely concerned with the implementation. Moreover, choosing three meetings

of the implementation was also made by the researcher's concern on research subjects' possible hectic date. In this case, the researcher tries to pick a day that was not too close from final-term examination, but it was also not too far. Hence, the researcher purposively explained all of those meetings by these following discussions.

From all of those meetings of implementation, the communal justification was made. There was an enhancement of research subjects' critical thinking skills in which it was grew up from the first meeting until the last meeting. Firstly, during the first meeting, the researcher claimed that the first meeting was the rawest phase of the implementation. There were numerous inadequate moves of creating an argument. It was vividly captured through shyness, unnecessary jokes, and non-scientific argument. Mostly, the research subjects were unable to leave a highlight on how they have to argument to begin with. The researcher considered that the condition of the first meeting was a normal move because of the tendency of adaption. Serious note was made and it was the fact that there must be an enhancement in the second meeting and the third meeting. Luckily, in the second meeting, there was a highly rocketing manifestation of research subjects' enhancement in thinking critically. All students proudly showed their excitements in debating. Most of them were unable in providing scientific argument, including adding credible references. Most of the research subjects also had a very proper manner in debating. There was a concrete manifestation of enhancement during the second meeting. Thirdly, similar to the second meeting, the academic nuance of debating was still envisioned. The third meeting of the implementation was still conducted in a very well-made condition, but, unluckily, it was not as outstanding as the second meeting. There were some students in one team (i.e. affirmative team) that were being misunderstood in defining the motion. On the other hand, most of students were still presenting advanced arguments. Hence, the researcher concluded this section of discussing into one communal agreement that the implementation of classroom debate strategy to enhance students' critical thinking skills through argumentative writing was conducted properly. The enhancement in every meeting became a valid indicator that both researcher and research subject were able to build an academic nuance under the proper utilization of classroom debate.

The Result of Classroom Debate Strategy to Enhance Students' Critical Thinking Skills through Argumentative Writing

Pandering on Bowen (2009) challenge in providing a credible documents analysis' findings, the researcher had a mandatory to examine the result of classroom debate strategy to enhance students' critical thinking skills through argumentative writing through two lenses of analysis. For the first lens of analysis, this research examined the consideration proof that was captured through classroom debate ballot and its case building papers. For the second lens of analysis, this research examined the document analysis in the form of subjects' final examination result and its analysis. Hence, it was mainly purposed to strengthen the validity and the legitimate value of capturing result.

First Lens of Analysis (i.e. Consideration)

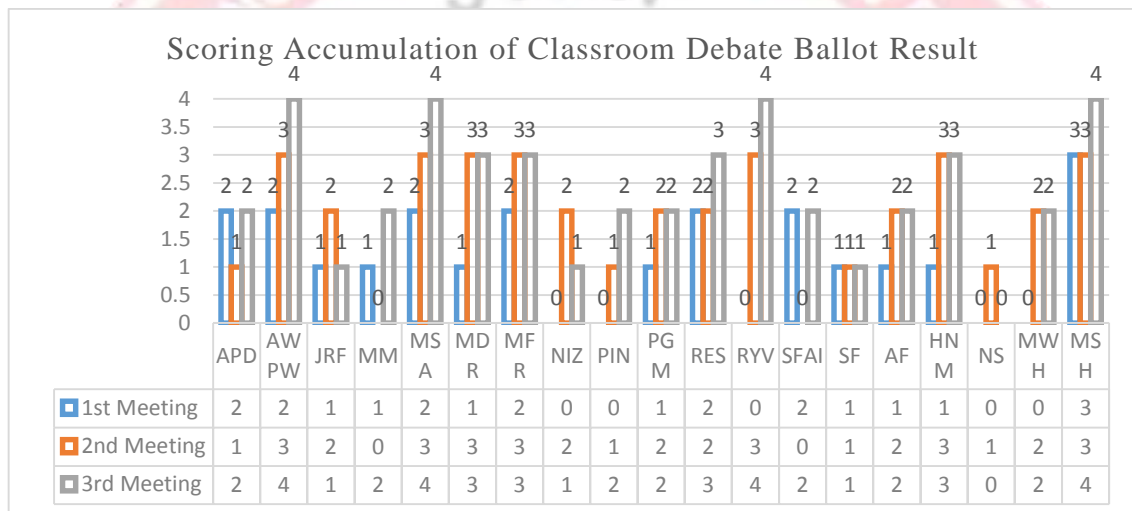


Figure 1. The Scoring Accumulation of Research Subjects' Performance during the Implementation (i.e. Consideration for the Validator or Lecturer of Argumentative Writing)

The first lens to be discussed was the lens of analyzing the research subjects' result during the implementation of classroom debate strategy. Based on the result, the researcher polarized or categorized the result of the implementation of classroom debate strategy to enhance students' critical thinking skills through argumentative writing into two main categories. The first category was research subjects with dynamic enhancement and the second category was research subjects with static enhancement. The communal result for the first category (i.e. research subjects with dynamic enhancement) came in

agreement that there were twelve research subjects with dynamic enhancement. The decision of labelling those twelve research subjects as the research subjects with dynamic enhancement mainly came from the fact that all of those research subjects always had an enhancement within their classroom debate strategy implementation. The quality of their arguments was enhanced throughout times and it was proven through the case building paper. Their case building papers became a concrete proof of how enhanced the quality of their arguments in which it also reflected their critical thinking skills. Furthermore, for the second category (i.e. research subjects with static enhancement), the researcher's result of analysis came in agreement that there were seven research subjects with static enhancement in the implementation of classroom debate strategy to enhance students' critical thinking skills through argumentative writing. Moreover, the decision of labelling those seven research subjects as the research subjects with static enhancement mainly came from the fact that all of those research subjects unfortunately had an unstable enhancement within their classroom debate strategy implementation. Some of them were having plain progress and the rest of them was jumpy from enhanced into decreased. Thus, the first lens mainly concerned on providing the validator of this research a wider understanding in making the final justification.

Second Lens of Analysis (i.e. Final Justification)

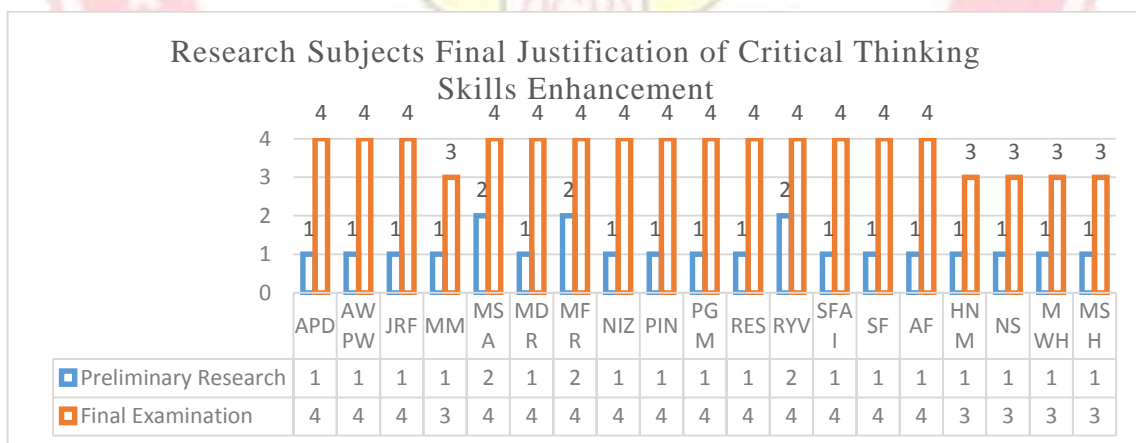


Figure 2. The Final Justification of Research Subjects' Critical Thinking Skills Enhancement (i.e. Validator for the Lecturer of Argumentative Writing)

The second lens to be discussed was the lens of analyzing the research subjects' result during the implementation of classroom debate strategy. It was also referred to the

final justification of the enhancement. It was mainly purposed to decide whether the classroom debate strategy did work or not. Moreover, the second lens was capturing the decision-making process of the researcher based on the legal authority (i.e. the lecturer of argumentative writing). In analyzing the second lens, the researcher accumulated and absorbed the insight through two main sources to analyze. Those two main sources were accumulated from the third party (i.e. document analysis). Those two main sources were research subjects' preliminary research result and research subjects' final examination result). Furthermore, those two main resources were in line because both of it were having the same aim, namely creating an argumentative writing work.

Communally, the final result of classroom debate strategy to enhance students' critical thinking skills through argumentative writing came in an agreement that classroom debate strategy was progressively enhancing students' critical thinking skills. It was legitimately proven from the fact that all of those 19 research subjects' critical thinking skills were enhanced. Every critical thinking element (i.e. CT elements of Inch et al. theory in 2006) of those 19 research subjects were progressively enhanced. In detail, from all of those 19 research subjects, there were three types of the classification of the enhancement. The first one was the enhancement from preliminary research result with 2 or C score into 4 or A score as the final examination result. In the first type of enhancement, there were three students or research subjects that were classified in the first type, namely MSA, MFR, and RYV. Moreover, the second one was the enhancement from preliminary research result with 1 or D score into 4 or A score as the final examination result. In the second type of enhancement, there were eleven students or research subjects that were classified in the second type, namely APD, AWPW, JRF, MDR, NIZ, PIN, PGM, RES, SFAI, SF, and AF. Lastly, the third one was the enhancement from preliminary research result with 1 or D score into 3 or B score as the final examination result. In the third type of enhancement, there were five students or research subjects that were classified in the third type, namely MM, HNM, NS, MWH, and MSH.

As a communal justification, classroom debate strategy was progressively contributing the enhancement of research subjects' critical thinking skills. Its entire progress of enhancement was captured in legitimate manifestation, namely (1) classroom debate ballot; (2) observation field notes; (3) case building papers of three meetings

implementation; (4) preliminary research result from argumentative writing's lecturer of the research subjects; and (5) final examination result from argumentative writing's lecturer of the research subjects. Furthermore, dealing with its verification and validation, the research was verified by the lecturer of argumentative writing's lecturer because the scoring and the justification were received from the lecturer. Thus, as a communal statement, the assumption of believing that classroom debate strategy can enhance students' critical thinking skills through argumentative writing was conceptually and practically correct.

CONCLUSION

Communally, implementing classroom debate strategy to enhance students' critical thinking skills through argumentative writing and needs seven main steps to conduct. Due to the performance of the implementation, the performance of every research subject is progressively enhanced from the first meeting to the third meeting. Furthermore, dealing with its findings, the findings come in agreement that the assumption of classroom debate strategy to enhance students' critical thinking skills through argumentative writing is conceptually and practically correct. In proving the assumption, the researcher employs two lenses of analysis, namely analysis for consideration (i.e. classroom debate ballot result) and analysis for final justification (i.e. subjects' scoring transcript and analysis). 19 research subjects' critical thinking skills that engaged to this research were enhanced. The detail of the enhancement was (1) enhancement from 2 or C to 4 or A had three subjects; (2) enhancement from 1 or D to 4 or A had eleven subjects; and (3) enhancement from 1 or D to 3 or B had five subjects.

REFERENCES

- Abbas, M. F. (2018). Assessing EFL Students' Ability in Developing Idea to Organize Academic Essay. *IOP Conference Series: Earth and Environmental Science*, 175(1), 012-074.
- Bellecina, R., & Ocampo Jr, R. (2018). *Effecting Change on Students' Critical Thinking in Problem Solving*. Philippine: Philippine Normal University.

- Belmont, W., & Sharkey, M. (2011). *The Easy Writer: Formal Writing for Academic Purposes*. Sydney: Pearson Australia Group.
- Cresswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Doody, O., & Condon, M. (2012). Increasing Student Involvement and Learning through Using Debate as an Assessment. *Nurse Educ Pract*, 12(4), 232. doi:10.1016/j.nepr.2012.03.002
- Freeley, A., & Steinberg, D. (2005). *Argumentation and Debate: Critical Thinking for Reasoned Decision Making* (11th ed.). Belmont, CA: Wadsworth.
- Handayani, R. (2016). Students' Critical Thinking Skills in a Classroom Debate. *LLT Journal: A Journal on Language and Language Teaching*, 19(2), 132-140.
- Ibrahim, M. E., Eljack, N. S., & Elhassan, I. B. (2015). To What Extent Can Argumentative Essay Writing Help Develop Learners' Critical Thinking. *SUST Journal of Humanities*, 16(4).
- Iman, J. N. (2017). Debate Instruction in EFL Classroom: Impacts on the Critical Thinking and Speaking Skill. *International Journal of Instruction*, 10(4), 87-108.
- Inch, E. S., Warnick, B., & Endres, D. (2006). *Critical Thinking and Communication: The Use of Reason in Argument*. Boston: Pearson Education Inc.
- Maxwell, J. A. (2010). Using Numbers in Qualitative Research. *SAGE Journals*, 16(6), 476-482.
- Najafi, M., Motaghi, Z., Bakhtiyar, N. H., & Kamal, N. H. (2016). Debate Learning Method and Its Implications for the Formal Education System. *Educational Research and Reviews*, 11(6), 211-218.
- OECD. (2016). *PISA 2016 Results: What Students Know and Can Do*. New York: OECD Publishing.
- O'Leary, Z. (2014). *The Essential Guide to Doing Your Research Object*. London: Sage.
- Oshima, A. & Hogue, A. (2006). *Writing Academic Writing English (The Longman Academic Writing Series, Level 4)*, USA: Pearson Longman.

- Othman, M., & Zare, P. (2015). Students' Perceptions toward Using Classroom Debate to Develop Critical Thinking and Oral Communication Ability. *Canadian Center of Science and Education, 11*(9), 158-170. Retrieved October 2, 2019, from <http://dx.doi.org/10.5539/ass.v11n9p158>
- Paul, R., & Elder, L. (2004). *The Nature and Functions of Critical and Creating Thinking*. Dillon Beach, CA: The Foundation for Critical Thinking.
- Paul, R., Fisher, A., & Nosich, G. (1993). *Workshop on Critical Thinking Strategies*. Sonoma State University: Foundation for Critical Thinking.
- Rudd, R., Baker, M., & Hover, T. (2000). Undergraduate Agriculture Student Learning Styles And Critical Thinking Abilities: Is There A Relationship? *Journal of Agricultural Education, 41*(3).
- Sandelowski, M., Voils, C. I., & Knafl, G. (2009). On Quantizing. *Journal of Mixed Method Research, 3*, 208-222.
- Santika, A. R., Purwianingsih, W., & Nuraeni, E. (2018). Analysis of Students Critical Thinking Skills in Socio-scientific Issues of Biodiversity Subject. *IOP Conf. Series: Journal of Physics, 1-8*.
- Scott, S. (2008). Perceptions of Students' Learning Critical Thinking through Debate in a Technology Classroom: A Case Study. *Journal of Technology Studies, 34*(1), 39-44.
- Sune, M. (2018). *An Analysis of Debaters' Critical Thinking in Argumentative Writing*. Gorontalo: Universitas Negeri Gorontalo.
- Tsaniyah, A. B., & Poedjiastoeti, S. (2017). MOGE Learning Model to Improve Creative Thinking Skills. *International Journal of Education and Research, 165-172*.
- Vasilescu, L. (2017). *General Rule for Class Debate*. Colegiul Tehnic "Elie Radu" Ploiești. Retrieved from Colegiul Tehnic "Elie Radu" Ploiești.
- World Economic Forum. (2019, January 19). *Top 10 Skills You Need to Thrive in the Fourth Industrial Revolution*. Retrieved from World Economic Forum.