Jurnal Pendidikan Indonesia Gemilang Vol.4, No.1, 2024, pp. 67-74
e-ISSN 2809-5073. DOI. 10.52889/jpig.v4i1.372

Efforts to Improve Writing Ability on Critical Thinking Concepts through the POE2WE Model

Submitted 28 January 2024, Revised 16 February 2024, Accepted 17 February 2024

Ade Siti Haryanti[1], Sholeh Hidayat[2], Dase Erwin Juansah[3]
Universitas Sultan Ageng Tirtayasa

Corresponding Email: *ade.siti86haryanti@gmail.com

Abstract

This research was motivated by the low ability to write arguments for 3rd-semester Indonesian and literature education students. This study aimed to improve students' argumentation writing skills on critical thinking concepts through the POE2WE learning model. This research used a class action research (CAR), which is planned to take place in 2 cycles, each containing four stages: planning, implementing actions, observation, and reflection. The research results on improving learning in the first cycle showed an increase in students' argumentation writing skills. The average score was 64.04 with sample presentations that passed 43.3% (before the cycle), 67.37 with sample presentations that passed 60% (after cycle I), and 75.8 for sample presentations that passed 100%.

Keywords: Argument Writing Skills, Critical Thinking, POE2WE Model

INTRODUCTION

Writing is a complex learning activity because it requires high thinking and creativity in expressing ideas and knowledge through writing symbols. Therefore, writing is closely related to other language skills, such as reading, listening, and speaking. In the current era of globalization, writing skills are needed to make it easier to understand science and technology; this aligns with opinion (Thiel & Conroy, 2022) that written communication has become an increasingly important part of everyday life in social, educational, and professional spheres. As global communication expands in all areas of the world, most learners will need to use their writing skills to communicate with others in their professional lives formally; effective writing skills are necessary for learners (Kawinkoonlasate, 2021). Students in facing world challenges need writing skills. By writing, students can share their experiences and knowledge through digital media.

Student writing activities are directed to be able to communicate indirectly; in this case, students are expected to express ideas using diction, good form structure according to the context, and proper spelling and punctuation. In learning to write, one of the basic competencies researchers will study is the activity of writing arguments. These basic competencies must be taken by semester 3 students to achieve one of the learning objectives. Argumentation is one type of high-level writing compared to other types of writing; this is because students must have good information and knowledge in writing arguments. According to Booth Olson *et al.* (2023), argumentative writing presents a case to support a claim in everyday matters such as science policymaking, the courtroom,

etc. Academics need to write arguments to express the results of their thoughts through writing activities. Argumentative writing aims to improve the ability to think, ask questions, criticize and present evidence in the argumentation process (Öztürk & Okumus, 2022). Argumentation is a type of writing whose truth can be accounted for, whatever is written based on correct information and science so that the reader can receive the conclusions.

The activity of writing arguments will not be separated from the ability to think critically; this is in line with the opinions Nikou *et al.* (2015), critical thinking skills, including analysis, evaluation, and inference, have a positive relationship with writing quality. Writing courses are needed to train students' critical thinking skills so they can hold high-quality writing classes. The ability to think critically is very necessary in education because all aspects of course material will be successful if students can think critically about completing coursework. This is relevant to the statement Garcia-Moro *et al.* (2024) that Critical thinking is a competency that is recommended to be studied with increasing emphasis from various national and international organizations in education and employment.

Critical thinking is a skill that must be mastered by students in lecture activities and daily life because by using critical thinking skills, students can solve the problems they face well based on analysis so that the decisions they make are right and can be accounted for. This is confirmed by Djalilova (2024) statement that *Critical thinking skills are the foundation for preparing future professionals to navigate their field's complexities: critical thinking is an essential skill for effective decision-making and problem-solving.*

Good argumentation writers must have high critical thinking skills, so students are expected to be able to solve problems based on in-depth analysis and then connect them with relevant reference sources. So as to produce a conclusion that can add knowledge to a reader. To achieve graduation competency standards, as stated in Permendikbud No. 20 of 2016 concerning the skills needed by students in the era of globalization, of course, by improving 4C skills (*Creative thinking, critical thinking, collaboration, communication*). Based on the results of observations while teaching at a private university in Jakarta, Indonesia in the writing course, symptoms or phenomena were found during learning activities, especially in the material for writing arguments as follows: (1) students find it difficult to express their ideas and ideas because of low reading and critical thinking skills, (2) students do not use proper diction in writing, (3) discrepancies between structure and the context they write, (4) not using proper spelling and punctuation, and (5) the learning model used has not facilitated students to understand writing arguments.

Many factors influence the low ability to write student arguments. But the main factor is the learning model. Lecturers act as facilitators in learning activities; in this case, lecturers must create innovative and creative learning conditions to improve learning outcomes. According to Ihsan *et al.* (2023) *Teachers are required to make changes by using appropriate learning models in the learning process*. Selanjutnya Dyamayanti *et al.* (2023) *A teacher must also be able to create a learning atmosphere that is conducive, safe, comfortable, and enjoyable because, in essence, a teacher can trigger students' creativity and critical thinking regarding the material or problems around them.* Learning models are needed in learning activities because students will not feel bored and bored in the classroom to foster interest and motivation to learn.

As previously explained, the learning model used by lecturers so far has not facilitated students to understand writing arguments, making it difficult for students to understand learning material. To follow up on the above problems, lecturers try to choose a learning model following the lecture material, namely the POE2WE learning model, to improve the ability to write arguments on students' critical thinking concepts.

POE2WE learning model (*Prediction, Observation, Explanation, Elaboration, Writing, and Evaluation*). This model can make students active in learning activities; through the six stages of applying the POE2WE learning model, students can predict what phenomena or problems will be written by using their problem-solving skills. Nurnazarudin *et al.* (2020) argues that the POE2WE learning model can make students subjects in learning activities. Learning activities using the POE2WE model will make students active because it gives them the freedom to construct their knowledge, communicate their thoughts, and write down the results of discussions to better master and understand the concepts of the material they are learning. *The POE2WE model builds knowledge in a series of processes, namely estimating or estimating problem-solving, conducting experiments to prove predictions, then explaining the experimental results obtained verbally and in writing* (Susanti & Makiyah, 2024). The POE2WE model can affect the quality of learning in the classroom and ultimately improve students' argumentation writing skills. Therefore, researchers want to conduct action research to improve learning outcomes with the title "Efforts to Improve Writing Ability on Critical Thinking Concepts through the POE2WE Model".

METHOD

This study used classroom action research with Kurt Lewin's model research design, which carried out as many as two cycles. The classroom action research process starts from the stages of planning, action, observation, and reflection to solve problems and try new things to improve the

quality of learning (Susilo *et al.,* 2011). The subjects used in this study were 30 PBSI 3rd semester students, namely 20 female students and ten male students. Data collection techniques in this study, according to (Firdaus *et al.* 2022), namely: (1) observation, (2) interviews, (3) making field notes, (4) evaluation assessments, and (5) documentation. The material to be studied is writing arguments using the POE2WE learning model.

The research procedure is divided into cycles: Cycle I and Cycle II. Each cycle ends with a competency test in which similar actions will be performed. This research will be considered successful if the learning results of the sample exceed the value of 75. If 85% of the sample has done the exercise classically, In other words, if the learning results of the sample are less than 85% to moderate, then the sample must make improvements and improvements first, then proceed with the next cycle. On the contrary, if the completeness of classical learning shown by the results of this study reaches 85%, then this research is successful and can be stopped.

RESULTS AND DISCUSSION

Cycle I

Cycle I is to facilitate samples in learning to write arguments, for which students previously got simple explanations and outlines so that many samples who had difficulty in completing the task of writing arguments were found. Table 1 provides information about the graduation rate before learning using the POE2WE model.

Table 1. Data on the Percentage of Completeness of Learning to Write Arguments Before the Cycle of 3rd-semester Indonesian and literature education students

No	Description	Results
1	Sample	30
2	Samples passed	13
3	Samples that did not pass	17
4	Percentage of sample passed	43.3%
5	Percentage of samples that did not pass	56.7%
6	Number of scores	1921
7	Average	64.03

Note: Passed : Score > 70
Not Passed : Score < 70

This contextual approach to improving the ability to write arguments increases the activities of lecturers and students (sample). The first cycle of lecturers uses a knowledge-increasing approach to enhance the ability of samples to make argumentation writing. Table 2 shows the improved results of the first cycle of learning.

Table 2. Data on the Percentage of Completeness of Learning to Write Cyclical Arguments I of first cycle grades sample of 3rd-semester Indonesian and literature education students at a private university in Jakarta, Indonesia

No	Description	Results
1	Sample	30
2	Samples passed	18
3	Samples that did not pass	12
4	Percentage of sample passed	60%
5	Percentage of samples that did not pass	40%
6	Number of scores	2021
7	Average	67,37

This contextual approach to improving the ability to write arguments increases the activity of lecturers and students (sample). Similarly, learning completeness at the beginning before the cycle was 43.3%, rising to 60% in the first cycle. However, these results are still far from the minimum score set of 75% for the general category and 85% for learning completeness, so this learning activity needs to be continued to cycle II.

Cycle II

In the results of observations in cycle II, researchers tried to change student behavior, for example, by inviting students (samples) to hold *ice-breaking* before learning. After that, samples were invited to look for environmental problems and then look for relevant sources in libraries and on the internet. The sample is expected to follow the steps contained in the POE2WE learning model so that it is easier for the sample to analyze using critical thinking skills. Lecturers monitor all sample activities to improve sample argumentation writing skills; cycle II also produces correlations for improvements, which can be seen in Table 3.

Tabel 3. Data on the Percentage of Completeness of Learning to Write Cyclical Arguments I of cycle II grades sample of 3rd-semester Indonesian and literature education students at a private university in Jakarta, Indonesia

No	Description	Results
1	Sample	30
2	Samples passed	30
3	Samples that did not pass	0
4	Percentage of sample passed	100%
5	Percentage of samples that did not pass	0%
6	Number of scores	2274
7	Average	75.8

Based on the results of the analysis above, learning to write arguments on critical thinking concepts through the POE2WE learning model can increase lecturer and sample activities. This can be seen from the average results of argumentation writing tests from the initial cycle (64.04), cycle I (67.37), and cycle II (75.8). Similarly, the completeness of sample learning from the initial cycle was 43.3%, cycle I increased to 60%, and cycle II to 100%. This means that the minimum passed criteria was set at a class average of 75%, and the complete sample learning of 85% has been achieved. So, the researchers stopped improving learning in cycle II.

The POE2WE learning model has proven effective in improving the ability to write arguments. The results of increasing the ability to write sample arguments through the POE2WE learning model align with learning outcomes. The POE2WE learning model can grow the sample's critical thinking skills so that the sample can easily implement its analysis in the form of argumentation writing. Writing arguments is a type of high-level writing because in carrying out its activities, the sample conducts analysis using critical thinking skills and connects it with relevant reference sources to account for the truth.

The POE2WE learning model is structured to make the sample active in evaluating problems that occur around the sample, making it easier for the sample to understand learning. There are 6 stages that must be undertaken by the sample in learning activities including (1) Prediction, this first step invites the sample to be able to predict a problem that occurs around the sample so that it makes it easier for the sample to think critically, (2) Obsevation, then after predicting the problem, the sample can make observations that aim to collect supporting evidence (reference sources) both from the internet and literature to test the truth or conjectures that have been made, (3) Explanation, the sample provides an explanation of the problem being analyzed through discussion activities both from peers and supervisors, (4) Elaboration, this stage gives freedom to the sample to provide relevant examples between the problem being analyzed and daily life, (5) Write, this stage the sample communicates in writing to the information it gets through the results of analysis and discussion What he has done, (6) Evaluation, samples can evaluate knowledge, skills, and changes in thinking processes. The sample must be able to go through 6 stages in learning activities, making it easier for the sample to write arguments and accustom the sample to think critically in solving problems.

CONCLUSION

Based on the study's results, it can be concluded that the ability to write arguments on critical thinking concepts can be improved through the POE2WE learning model for 3rd-semester

Indonesian and literature education students at a private university in Jakarta, Indonesia. This statement is acceptable because students' ability to write arguments has improved. It is known that the average initial data is 64.04 with a sample presentation that passes 43.3%, the first cycle averages 67.37 with a sample presentation that passes 60%, and the second cycle averages 75.8 with a sample presentation that passes 100%. Thus, the research was limited to cycle II because the results have improved students' argumentation writing skills.

REFERENCES

Booth Olson, C., Maamuujav, U., Steiss, J., & Chung, H. (2023). Examining the impact of a cognitive strategies approach on the argument writing of mainstreamed English learners in secondary school. *Written Communication, 40*(2), 373-416.

Djalilova, Z. (2024). ADVANCING CRITICAL THINKING PROFICIENCY THROUGH OPTIMIZED PEDAGOGICAL APPROACHES. *Центральноазиатский журнал междисциплинарных исследований и исследований в области управления*, *1*(2), 24-29.

Dyamayanti, L., Fatimah, S., Lestari, I. D., & Kurniawan, D. D. (2023). The Effect of Discovery Learning Model on Students' Learning Outcomes on the Protists Concept. *Jurnal Pendidikan Indonesia Gemilang*, *3*(1), 15-19.

Firdaus, F. M., Lubis, M. A., Azizan, N., & Razak, A. (2022). *PENELITIAN TINDAKAN KELAS DI SD/MI DILENGKAPI TUTORIAL OLAH DATA DAN SITASI BERBANTUAN SOFTWARE (Statcal, SPSS, Anates, Microsoft Excel, Publish or Perish, Mendeley)*. Samudra Biru.

Garcia-Moro, F. J., Gadea-Aiello, W. F., Nicoletti, J. A., & Gomez-Baya, D. (2024). A Mixed Study of Beliefs about Critical Thinking in a Sample of Trainee Teachers in Argentina and Spain. *Education Sciences*, *14*(2), 142.

Ihsan, R., Feronika, T., & Bahriah, E. S. (2023). The Effect of Search, Solve, Create and Share (SSCS) Learning Model on Students' Scientific Literacy. *Jurnal Pendidikan Indonesia Gemilang*, *3*(2), 295-305.

Kawinkoonlasate, P. (2021). A Study of Using E-Writing Instructional Design Program to Develop English Writing Ability of Thai EFL Learners. *English Language Teaching*, *14*(6), 43-61.

Susanti, E., & Makiyah, Y. S. (2024). Training on Making Physics Teaching Modules Based on the POE2WE Model to Implement an Independent Curriculum for High School Teachers in Tasikmalaya Regency. *ABDIMAS: Jurnal Pengabdian Masyarakat*, *7*(1), 9-16.

Nikou, F. R., Bonyadi, A., & Amirikar, N. (2015). Investigating the Relationship between Critical Thinking Skills and the Quality of Iranian Intermediate TEFL Students' Writing. *Advances in Language and Literary Studies*, *6*(2), 57-64.

Nurnazarudin, I., Nisa, S. K., Nurmayanti, D., & Nana, N. (2020). Penerapan Model Blended POE2WE Terhadap Pemahaman Konsep Dan Motivasi Belajar Siswa Berbasis Video

Animasi Pada Materi Perpindahan Kalor. *JPFT (Jurnal Pendidikan Fisika Tadulako Online)*, *8*(1).

Öztürk, B., & Okumus, S. (2022). Evaluating Prospective Elementary School Teachers' Written and Oral Arguments on Ecology. *International Online Journal of Education and Teaching*, *9*(1), 343-360.

Susilo, H., Chotimah, H., & Sari, Y. D. (2022). *Penelitian tindakan kelas*. Media Nusa Creative (MNC Publishing).

Thiel, L., & Conroy, P. (2022). 'I think writing is everything': An exploration of the writing experiences of people with aphasia. *International Journal of Language & Communication Disorders*, *57*(6), 1381-1398.