



Battle discussion method to increase student involvement in theoretical courses



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ABSTRACT

The primary objective of higher education is to develop students' transversal skills through critical thinking and analytical reflection. The purpose of this study is to illustrate how lecturers use the dialectical technique named battle discussion to help students strengthen their critical thinking skills. A mixed method was used to conduct the study. Thirty students were chosen randomly from courses in *Nusantara* Fine Arts History as quantitative data. Throughout the learning process, structured field records were used to collect qualitative data. Field notes were used to analyse qualitative data, whereas descriptive and percentage analysis were employed for quantitative data. The study's findings demonstrated that the battle discussion method improved students' critical thinking skills, increased their mastery of the subject, and increased their engagement in class. The overall mean score for group engagement in the Battle Discussion was 5.25 out of 7.00 (75% involvement), which generally falls into the High involvement category. However, a deeper examination of the data reveals a high standard deviation (SD = 2.01), indicating significant data heterogeneity and a noticeable disparity in participation across the ten groups. These findings prove that the battle discussion method can be used as an alternative to enhance students' ability to think critically, and in the future, more comprehensive development is needed on aspects that can be transformed from theory to practice.



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1. Introduction

The mastery of fine art skills is fully supported by theoretical knowledge and empirical experience [1]. Unfortunately, material that is theoretical in nature is often taken less seriously by some students because it is considered difficult [2]. Especially if the subject matter and media presented by lecturers are not interactive, students will tend to be passive when attending lectures. It is not surprising that at the end of the semester, it is often found that the value of theoretical courses is lower than that of practicum courses [3]. To overcome this, comprehensive efforts are needed from lecturers so that they are able to activate students. Although the case-based method model that has been applied so far is considered to be quite good, its application is not optimal. It must be perfected in a new way that is more interesting and challenging as well as meaningful, in accordance with the learning trend in the post-digital era. Many ways have been used by lecturers to adapt the learning approach to the use of technology. To increase creativity, critical thinking, collaboration, and communication skills as 21st-century skills, lecturers initially pursued this through the use of digital devices [4]. However, it has now moved towards a post-digital phase where learning also requires the trend of immersive learning ("Immersive Learning, Future Learning Methods"). This learning is a method that allows students to interact directly with real-world scenarios digitally (virtually) in an interesting learning environment. This immersive learning is suitable for application in higher education [5].

A fun, meaningful learning process is seen in students' responses during lessons. High enthusiasm to master material indicates successful science transformation [6]. Applying an in-depth, AI-based discussion in university theoretical courses can benefit students. This "battle" discussion style is inspired by *breakdance*. The dance, which later became a sport competed in the Olympics, brings awareness that the transformation of knowledge indeed requires mastery across disciplines. When linked with art, there is an interconnection as in the STEAM (Science, Technology, Engineering, Arts, and Mathematics) subjects. This approach is believed to accelerate the development of creativity, critical thinking skills, and problem-solving abilities [7]. "Those who merely know about something are not as skilled as those who take an interest in it, and those who take an interest in it are surpassed by those who find joy in it." (Confucius, The Analects). This philosophy is the basis for the implementation of battle discussions. Learning and having fun are at the heart of hip-hop pedagogy [8]. To actively participate in class, students are allowed to use their smartphones. Some AI assistants that can be used to complete Q&A sessions in class include ChatGPT, Gemini, Jenni AI, and Blackbox AI [9]. With these assistants, class activities are brought to life by exchanging questions and providing answers, which are then reviewed by the class forum. Similar to the battle concept in breakdance competitions, the intensity of the contest refers to the accuracy of the answers and their relevance to the topic being discussed. In this way, lecturers apply innovative blended learning models which could improve student engagement, behavior, and performance [10]. The implementation of the battle discussion is a learning method that optimises a student-centred approach. As further explained by Ningsih *et al.*, the debate method as an active learning approach has functions: (1) providing students with the information they will need in the future; (2) aiding the learning process by encouraging them to be enthusiastic and active participants in the class beyond the usual; (3) helping students develop self-confidence, responsibility, and mutual assistance; (4) broadening [11]. Some learning theories that can be used to support the implementation of this method are:

- The constructivist theory of Jean Piaget & Lev Vygotsky is the most fundamental method supporting the debate theory. Learners do not simply receive information passively, but actively construct their own knowledge and understanding through interaction with other learners. When related to the battle pattern, it is known that students cannot debate merely by memorising facts, but also support their arguments through research, analysis, and synthesising the information obtained. If their arguments are challenged by the opposing group, they are forced to re-evaluate and reconstruct their understanding. In this position, students may find flaws in their own logic and correct them, and it becomes a strong learning process [12].
- Lev Vygotsky's sociocultural learning theory emphasises the condition where the learning process is a social process, interacting with others for intellectual development [13]. When actively participating in debate activities, students learn not only from the material but also from the arguments, perspectives, and thinking of other groups. Learning becomes more engaging when a team faces a stronger debate group, leading them to a higher level of understanding that cannot be achieved alone.
- Leon Festinger's cognitive dissonance theory explains how a person responds to conflicting information [14]. During a debate, statements from the opposing group may contradict the team's initial beliefs, leading the discussion results to produce new justifications. It is in this process that deep learning occurs, where students must think critically. The drive to re-evaluate evidence, strengthen the team's arguments, or even change views based on superior logic and evidence takes place. Additionally, this theory serves as a guide for practising respectful communication in class discussions.
- The experiential theory of David Kolb places an emphasis on learning by *doing*. Actively engaging in debate is seen as a concrete experience of applying theory and knowledge [15]. Students are also involved in reflective observation, concluding (abstract conceptualization) towards actively experimenting with applying new understandings. The discussion of battle patterns will be an arena to actively apply knowledge from both successes and failures. In this way, students can improve their ability to initially experience something directly to reflect on it, then develop a broad conception, and finally

apply these new insights to real-world situations. And at the same time, this method ensures that what is done exceeds the memorization process [16].

So far, many studies have concluded that the implementation of theoretical learning using the debate method is beneficial [11]. Debate sessions not only activate students but also simultaneously embed learning information into students' long-term memory more effectively [17]. In addition, learning with the debate method also provides space for students to interact more comprehensively [5]. However, no similar method is applied in the study of art history, especially with each party promoting its own AI assistant. Students' smartphones become the main tool for finding and exploring data, which is then disseminated and verified together by the class [18]. Previous learning activities were still rigid. Students do not look enthusiastic or active in learning activities. Although it has utilized cutting-edge learning media, such as using an LCD to display images or photos to play documentary videos, the activity is still not fully student-centered. The role of lecturers is still central. On average, students tend to wait for instructions from lecturers. In some courses, there have also been those who have taken advantage of virtual reality and augmented reality media for learning. Broadly speaking, they have not shown a thinking pattern at the higher-order level of thinking skills.

This study aims to emphasise the importance of involving all students in theoretical learning by applying the battle discussion method. In addition, the application of the battle method is considered capable of minimising the number of students who learn passively when the lecturer enters the classroom. The advantage offered by implementing the battle discussion is its ability to foster critical thinking, decisiveness, responsibility, and the ability to compete based on rational and argumentative reasoning. The selection of AI assistants helps students obtain discussion materials because the technology used facilitates instant feedback discovery [17]. This response is then followed up in the battle discussion. The ability to validate and reflect also serves as a foundation to help students adapt to changing learning trends in the post digital era [19]. Student involvement in battle discussions is designed according to the taxonomy of literature on students' engagement. In the taxonomy, there are indicators of cognitive skills and dispositions that lead to understanding of real life or developing issues. This indicator determines the quality of critical thinking during a battle discussion. Furthermore, these findings are combined with aspects of performance-based assessment. Battle discussion is suitable for application in college. At least the students' critical abilities will also serve to verify the data from the AI and validate it with the team in the classroom. By itself, this pattern minimizes teacher-centered learning, where, in previous learning activities, lecturers talked more, and students were passive. Conceptually, the theoretical framework related to the application of battle discussion in theoretical courses can be seen in Fig. 1.

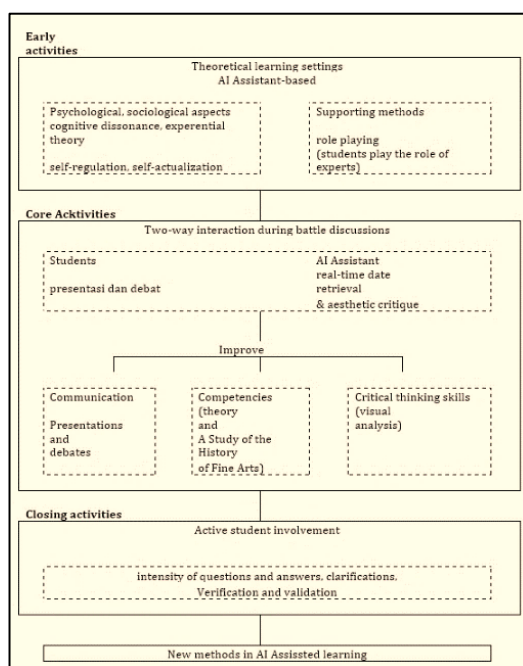


Fig 1. Theoretical framework

2. Method

The researcher employed a mixed-methods approach, integrating both quantitative and qualitative techniques to capture the complexity of the learning process and provide a deeper understanding of students' critical thinking skills. Two primary methods were applied in this process: (1) First, the survey was conducted to measure the active involvement of students in arguing in battle discussions so that the level of critical thinking can be predicted. The rubric for measuring student active involvement and critical thinking analysis has been provided on a scale of 1-7; (2) Second, a variety of textual and visual data were gathered using participatory observation, such as student assignments, field notes, individual student essays, and photographic records of battle discussions, as in thematic analysis [3]. To ensure a thorough comprehension of the research findings, all obtained data were subjected to triangulative analysis. The research design applied to this battle discussion activity can be seen in Fig. 2.

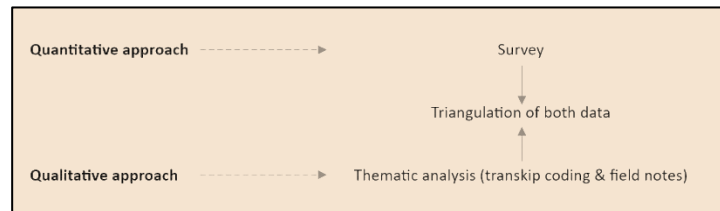


Fig 2. Research design

Before class begins, the students have been equipped with textbooks. The book contains one semester of material. Thus, students can read and review the material individually before the class starts. The 30 students were divided into small groups of 3 people. Thus, there are 10 groups. Each group has the opportunity to present the material that has been assigned for 16 meetings. When one group performs, the other group prepares to respond to the material that has been shared. This framework is the key to the implementation of battle discussions. In the theory lecture on the History of Fine Arts of the archipelago with a total of 2 credits, 2 x 50 minutes, the activity is divided into 3 parts: (a) introduction, (b) core, and (c) closing. Battle discussion scheme can be seen in Fig. 3.

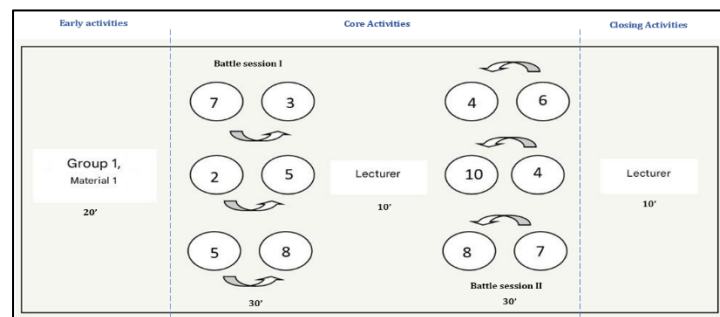


Fig 3. Battle discussion scheme

In the theory lecture on the History of Fine Arts of the archipelago with a total of 2 credits, 2 x 50 minutes, the activity is divided into 3 parts: (1) introduction, (2) core, and (3) closing. The lecturer's introduction and the chosen group's material presentation take up roughly 20 minutes of the introductory activities. A 30-minute battle discussion session, a 10-minute lecturer verification session, and a second combat discussion session comprise the key activities. During the final exercises, the instructor requested the students to summarize all of the topics that had been covered. Additionally, students receive follow-up assignments that require them to write essays by hand and upload them to the university's learning management system. The analysis of critical thinking skills exhibited by students when engaging in discussions using this battle pattern includes: (1) the ability to analyse and identify arguments; (2) the ability to evaluate reliable evidence; (3) the ability to reason logically before concluding; (4) the ability to present and explain arguments; (5) demonstrating open-minded thinking in self-reflection [14], [20]–[22]. Furthermore, this domain of critical thinking skills can be presented in the form of a matrix, shown in Table 1 [23].

Tabel 1. Critical thinking domains in the battle discussion

Skill Domain	Not Visible (0-1)	Developing (2-3)	Advanced (4-5)	Proficient (6-7)
Analyze & identify arguments	Failure to understand or misidentify the main topic and argument.	Able to identify main arguments, but lacks detail or misses hidden assumptions.	Able to accurately identify the interlocutor's main arguments and underlying assumptions.	Sharply dissect complex arguments, including identifying sub arguments and unstated assumptions.
Evaluation of evidence & credibility	Accept all information questioning its source or validity	Starting to questioning the evidence, but the evaluation is still superficial or general	Able to evaluate the quality and relevance of the evidence presented, and identify potential bias.	Consistently assessed the credibility sources, identify logical fallacies, and distinguish fact from opinion.
Inferences & conclusion drawing	The conclusion drawn is illogical or not supported by the existing premises.	Able to draw simple conclusions, but sometimes too hasty or not supported by strong data.	Able to formulate logical and relevant conclusions based on analyzed evidence.	Able to draw in-depth conclusions and consider various possibilities or implications of those conclusions.
Presentation of arguments & explanationns	The opinions expressed are unstructured, difficult to understand, and without a clear basis.	Able to express one's own opinion, but the arguments are poorly structured or not supported by strong evidence.	Able to present arguments clearly, logically, structured and supported by relevant evidence.	Able to articulate complex arguments in a highly persuasive, systematic manner, and using effective examples or analogies.
Openness & self-reflection	Rejecting all differing views outright and refusing to admit the weaknesses of one's own arguments.	Shows some openness, but is still reluctant to change his views or acknowledge the validity of the opponent's arguments.	Willing to listen to other views, consider alternatives, and acknowledge if there are valid points from the other person.	Proactively seeks out other perspectives, is able to revise one's own arguments based on feedback, and demonstrates intellectually humility.

3. Results and Discussion

3.1. Results

This section outlines the outcomes of the study investigation, which is divided into three phases and details the involvement and domain critical thinking skills. In the first phase, the findings include: team scores, mean, and standard deviation, as seen in [Table 2](#). The second phase focuses on evaluating five domains in critical thinking measurement: (1) analysis and identify argument; (2) evaluation of evidence and credibility; (3) inferences and conclusion drawing; (4) presentation of arguments and explanation; (5) openness and self-reflection. The third phase analysed the field notes as participatory observation from the lecturer.

Tabel 2. Descriptive statistics of group involvement (N= 30)

Variable	Minimum	Maximum	Mean (<i>M</i>)	Standard deviation (<i>SD</i>)
Team performance/ involvement	0.00	7.00	5.25	2.01

Based on the descriptive statistical analysis in [Table 2](#), the overall mean score for group engagement in the *Battle Discussion* was 5.25 out of 7.00 (75% achievement), which generally falls into the High Engagement category. However, a deeper examination of the data reveals a high standard deviation (*SD* = 2.01), indicating significant data heterogeneity and a noticeable

disparity in participation across the ten groups. This wide variance is primarily driven by two contrasting performance poles. On the upper bound, Group 7 and Group 10 achieved perfect scores (7.0), demonstrating flawless human AI collaboration and intense critical discourse. Conversely, an extreme outlier was observed in Group 9, which recorded a score of 0.00. Contextual field notes from the participatory observation confirmed that Group 9's zero score was not caused by a lack of student motivation, but rather by total technical failure (severe internet disconnection) during the session. Consequently, they were completely unable to access the AI Assistant to retrieve data, halting their ability to engage in the battle syntax. This finding aligns with the study's stated limitations regarding digital infrastructure dependencies. If Group 9 is excluded from the calculation as an anomaly, the adjusted classroom mean rises to 5.83 with a significantly stabilized standard deviation ($SD = 0.84$), proving that the *Battle Discussion* method inherently works effectively when basic digital necessities are secured.

Lecture activities are carried out with a student-centered approach. Students dissect the lecture material together. Class activities are more evenly distributed because each student has the opportunity to ask questions and express their opinions. The main topic of the lesson was already known to all students, and small groups had been formed. Group 1 had the first opportunity to present material according to the RPS in PowerPoint (PPT) format and was allowed to play one or two documentary videos with a duration of 3 to 5 minutes at most. Then, two question-and-answer sessions were held, where the first session consisted of three questions from three groups being asked of other groups at random. Likewise, in the second session, groups that had not had the opportunity in the first session asked questions of other groups.

Additionally, the forum group was permitted to add material or correct the answers provided by other groups. So in one face-to-face lecture, on average, there were 7 to 9 active groups. The other students in the class pay close attention when one group member speaks. This section contains conversations and questions that call for students to use critical thinking. The primary topic that is reviewed at a time that is thought to be quite sufficient is material that is not covered in the textbook but is deemed significant and pertinent. Ten minutes are allotted for the completion of a single inquiry and response. In this instance, the group members who deliver the content serve as speakers. They are the ones who pose important questions to the class, and they receive prompt, accurate responses. Here, the AI Assistant feature serves as a tool to supplement and support the previously provided information.

Students look serious with their smartphones and look for loopholes for each member to be chosen to represent the group. The random group formation makes this battle discussion more exciting because members also compete to find the answer that is considered the most appropriate to challenge the issue raised by the class. Especially because in the final assignment, students are asked to submit essays related to periods and unique things in the timeline of the development of Indonesian art that are discussed in class. And this assignment must be submitted in handwritten format.

The fun thing is that the handwriting is photographed and uploaded to the university's learning management system. It is the lecturer's responsibility to keep an eye on the discussion's tempo and make sure the content stays within the discussion's framework. The questions posed by the groups are thought to have the ability to deepen the understanding of the class participants, even though they might not be precisely the same as the presentation of the topic made by the presenting group. Higher-order questioning stimulates higher-order thinking abilities. Table 3 describes observations based on the domain references in Table 1. Based on the descriptive statistical data presented in Table 3, overall, the implementation of the AI Assistant-assisted *Battle Discussion* method has a significant and positive impact on students' critical thinking skills in the cultural arts theoretical class. After issuing out-of-the-box data due to technical constraints (Group 9), the performance of the nine active groups showed high consistency of achievement, where the mean values of all dimensions were above the score of 5.00 on a scale of 1–7.

Tabel 3. Descriptive statistics of critical thinking dimension ($N = 9$ active teams)

Critical Thinking Dimension	Mean	SD	Mean (M)	Standard Deviation (SD)
Analyze & Identify Argument	4.00	6.00	5.11	0.60
Evaluation of Evidence & Credibility	5.00	6.00	5.44	0.53
Inferences & Conclusion Drawing	5.00	6.00	5.44	0.53
Presentation of Arguments & Explanations	5.00	7.00	5.89	0.78
Openness & Self-Reflection	5.00	7.00	5.89	0.78

The Presentation of Arguments & Explanations and Self-Reflection dimensions received the highest ratings with similar mean values ($M = 5.89$; $SD = 0.78$), according to an analysis by dimension. This accomplishment theoretically validates that the Battle Discussion syntax, which employs role-playing strategies, effectively compels students to methodically present their creative arguments to an audience. High scores on the Openness & Self-Reflection dimension, on the other hand, demonstrate that having an AI assistant in the classroom does not eliminate critical thinking; rather, it teaches students to be receptive to fresh data perspectives, monitor the veracity of art history in real time, and reevaluate the position of their aesthetic arguments based on digital feedback. On the other hand, the Analyze & Identify Argument dimension recorded the lowest average value ($M = 5.11$; $SD = 0.60$). Although this score remains in the High Category (73% achievement), this relatively lower score indicates a greater *cognitive load* when students have to identify and dissect complex art argument structures in a time-limited format. Students need a longer duration of adaptation to sift through raw information before compiling it into a debate rebuttal.

Methodologically, the most crucial thing found in this data is the Standard Deviation (SD) value in the five dimensions, which is consistently below 1.00 ($0.53 \leq SD \leq 0.78$). This very small standard deviation value indicates a very high level of data homogeneity. This finding is strong empirical evidence that the *Battle Discussion method* has succeeded in equalizing the critical thinking skills of students in all active groups, while reducing the bias of dominance of certain students (*social loafing*). This increase in intellectual capacity occurs collectively and equally, making this hybrid method highly recommended as a visionary new learning model for cultural arts theory classes in the era of artificial intelligence. Especially in the qualitative analysis related to what was discussed, lecturers found that students were able to dig up information that was not available in the textbook. Following up on the initial information presented by the presenting group (students who present weekly material), several findings can be recorded as evidence. Student "A" (Team 7) to student "B" (Team 2): *"What fundamental difference is seen when Raden Saleh depicts the figure of Daendels and the Regent of Cianjur," "Why does Raden Saleh depict Daendels so dashing, with the aura of his ruler and in stark contrast to the painting of the Regent of Cianjur who looks depressed?" "Is it true that Daendels paid the people who built Anyer Panarukan, but the Regent did not hand over the money to the people of Rodi's workers?"*. Respon team 2: *"We found information that there are two versions of the response in this regard: the first is the Colonial Archive Version: Daendels' Claim to Provide Money. The narrative that 'Daendels paid but the money was folded by the Regent' comes from an official report written by Daendels himself in his book, Staat der Nederlandsche Oost-Indische Bezittingen (1814), as well as the records of several Dutch officials.*

- Initial Fund Facts: In the early stages of road construction (from Anyer to Karangsambung, West Java), Daendels did allocate funds from the government treasury. The colonial government paid workers wages of 10-15 *keteng* per day, plus rice and salt guarantees.
- Regent's Corruption Claim: When the funds ran out, and the project had to penetrate heavy terrain (such as the prince's rocks in Sumedang to East Java), Daendels claimed that he still sent a certain amount of compensation money to the Regents to be distributed to the people. In colonial documents, it is often alleged that the feudal bureaucratic system of the traditional regents did not distribute the money in its entirety to the workers.

The second version, a historian's perspective, relates to Daendels' political alibi. Modern historians (such as Peter Carey, who delved into the history of Java in the 19th century) view Daendels' claim very critically. The narrative of "Regent of corruption" is largely Daendels'

political alibi to clear his name of international public condemnation and the Council of the Indies in the Netherlands for the deaths of tens of thousands of human lives. Here are the structural facts of why the money never reached the people:

- Bankrupt State Treasury: Daendels was sent to Java when the Netherlands was controlled by France (Napoleon Bonaparte) and was in a state of bankruptcy due to the war against the British. The state treasury in Batavia is very depleted. It is not economically logical for Daendels to have enough money to pay the wages of hundreds of thousands of workers along 1,000 kilometers.
- Policy Change to Compulsory Work (Heerendiensten): Because it ran out of funds halfway through, Daendels officially issued a decree that changed the wage work system to a Compulsory Work System (*Rodi*). He used Javanese customary law (*gogol* or *kerigaji*), where a king or ruler had the right to mobilize his people for community service for public facilities without pay.
- Regents as Pressure Tools, Not Recipients of Money: Daendels threatened the local regents: if the road project in their area was not completed on time, the regents would be sentenced to death or removed from their positions. Out of fear, the regents mobilized their people by force. So, let alone receiving wage money to be corrupted, the regents themselves often have to spend their personal pockets or rice barns just to feed them at a minimum so that their workers do not starve to death while working.

This is a snippet of the discussion that was originally not found in the textbook but appeared and developed as the battle discussion progressed. Each team competes to test the other team's knowledge. The main study of art history and aesthetics that emerged in the early period of the pioneering of modern art is interesting to dissect in detail.

3.2. Discussion

The results of the open debate between the team were not released just like that, but were consolidated in a lecture session from the lecturer. An important part where lecturers play a role in verifying and validating. In the example of the battle discussion quote above, there is additional information that is shared that: *"Was there a corrupt regent at that time? It is unlikely that the scale of food logistics exists, as the feudal system demands tribute. However, to impose all the blame for the Anyer-Panarukan humanitarian tragedy on the regents is a wrong conclusion and a colonial bias. The main reason why the people did not receive money and suffered in the project was that the Daendels Colonial Government had indeed run out of funds and consciously legalized the brutal system of rodi labor for the sake of pure military (resisting the British attack), then using the regents as "shields" and scapegoats for the atrocities."*

When students convey the information they get from their AI Assistant, there is a process of repeating the data as well as transforming the text on the smartphone, and the intonation of each class member's voice. What is spoken back is the material or data that will be stored in the student's memory. This process also strengthens the search for information raised in class discussions. Good questions will be responded to immediately and shared in the discussion room. Although the focus of this method's implementation is more oriented towards increasing student engagement in class, the matrix guide in the critical thinking domain can be used to evaluate how students utilize AI prompts to discuss course material. Active student engagement is key to mastering the material being studied [24], [25]. Question quality is conceived from confirmation of the domains existing in the quality of answers. At the very least, the description of question quality formulates high level thinking at the level of higher order thinking skills by asking higher-order questions. Some students believe that theoretical courses focus solely on understanding and memorization and are often uninteresting [24], [26]. The battle format, however, introduces a practical element into theoretical learning. Reading, validating, and correctly summarizing information after a thorough discussion and dialogue activates the psychomotor domain while simultaneously practicing the theoretical coursework in class [27]. At the very least, crafting a well-structured narrative and effective delivery in class can serve as a practical way to master the material being discussed [28].

Lectures conducted using the battle discussion method are believed to increase awareness and encourage deeper exploration and discovery of the material. Furthermore, the discussions

are believed to accelerate the acquisition of reflective knowledge [29]. This is key to truly utilizing technology as a tool for meaningfully mastering the knowledge learned [24], [30]. The battle method has also been shown to accelerate the dissemination of the material summaries presented by each group representative. This analysis aligns with similar research findings that examine the application of the debate method in theoretical learning [17], [31]. When the group asking questions can present meaningful questions, the answers they provide will also be meaningful. At the very least, the group asking questions can present questions that truly stimulate the emergence of good critical thinking patterns. Open-ended questions, containing descriptions, analysis, and evaluation, are not closed-ended questions that only yield conclusions based on "yes" or "no," "date," or "place," but rather comprehensive descriptions that demonstrate a complete and unified cause and effect relationship. In this way, students can present themselves as intelligent individuals during battle debates. Everybody participates in certain sessions. A novel learning experience is produced by using an AI assistant in the middle of boisterous classroom disputes and role playing as an expert resource person [9]. This exercise turns into a profound emotional and cognitive experience (deep learning event) that will stick in the student's long term memory rather than just being a typical lecture assignment. Accurate data validation and verification are also necessary in this procedure. In order to address this difficulty, teachers and students work together.

This study acknowledges several contextual limitations that warrant consideration when interpreting the findings. First, constrained time allocations within single lecture sessions restricted the depth of argument exploration and the full execution of the battle discussion syntax. Second, the emergence of *social loafing* was observed, where certain students relied heavily on more dominant peers during intense debates. Third, the instructional efficacy was highly contingent on internet connectivity; technical disruptions in network stability directly impeded real-time access to the *AI Assistant*, which served as the primary data retrieval tool. Lastly, psychological barriers, specifically low self-confidence among introverted students, significantly impacted vocal articulation and the clarity of argument delivery in the classroom. These limitations present valuable avenues for future research, particularly in developing flexible time-management strategies, reinforcing digital infrastructure, and implementing psychological interventions to mitigate student speaking anxiety.

4. Conclusion

The application of the battle discussion for developing discussion is very useful for increasing active student involvement. This method is not just an ordinary discussion, but a sharp instrument to be able to dissect the complexity of art theory. The courage to speak out is very meaningful in the context of mastering the knowledge and skills learned in the courses followed. When students are actively involved with their respective assistants, lecturers can direct students to simultaneously become reliable evaluators to jointly re-check. The stages that are no less important than expressing opinions in front of the class, including if they make mistakes, students are invited to respond well. In this way, students are forced to engage in class discussions but in a way that is fun, challenging, and meaningful because it directs students to dare to compete. The battle pattern is also seen as suitable for other theoretical courses. This study has important theoretical and practical ramifications with regard to how cultural arts theory is taught. The study's findings theoretically contribute to the literature on concurrent mixed methods by offering empirical evidence that the theoretical learning paradigm, which was initially passive, can be reconstructed into a dynamic discourse ecosystem through the integration of Battle Discussion and AI Assistant. This method provides a novel conceptual model of how a hybrid partnership between artificial intelligence and human intelligence (human AI collaboration) can speed up student self regulation and role playing. Practically, this study offers educators a tactical instructional use of AI as a co-pilot of aesthetic data tracking and real-time art criticism rather than as a plagiarism tool. It has been demonstrated that the Battle Discussion approach consistently boosts active participation (student involvement), refines scientific communication rhetoric, and develops teachers' critical-thinking abilities while tackling complex creative challenges. As a result, in the digital age, higher education institutions can use these tools and linguistic techniques as a new benchmark for developing adaptable theoretical cultural arts learning curricula. The depth of students' critical thinking is

reflected in the mature dialectical process during the battle discussion, where this method manifests arguments that function as a catalyst to test, reflect, and improve mastery of the material. Building on these foundations, future implementations should investigate how battle discussion can tackle new issues in arts education. Ethical algorithm design and more critical thinking skills are needed to come up with prompts; all ideas as a framework offered here serve as a foundation for this crucial arts educational transformation.

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Declarations

- Author contribution** : Yofita Sandra conceived the original research idea, developed the conceptual framework, and designed the intervention schemes using the novel pedagogical methods. Syerlie Annisa was responsible for data collection and formal analysis. Dini Faisal managed the documentation and prepared the research appendices. Anggun Anugrah performed the final critical review of the manuscript and conducted the grammatical verification and linguistic proofreading prior to submission. All authors have read and agreed to the published version of the manuscript.
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