

Does Blended Learning Reshape Students' Critical Thinking Skills? An Evaluative Study of Indonesian Learners

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Abstract

As a consequence of the post-pandemic situation, blended learning has been a new challenge for students as they need to adjust to the new learning model. Such a challenge stems from the requirement to improve students' critical thinking skills since, in blended learning, they need to adapt to self-directed learning. This present study explores whether blended learning correlates with the critical thinking of Indonesian students majoring in English Literature. The students' critical thinking skills and the portrayal of the learning engagement in the blended learning system were identified through questionnaires involving 259 students. The teachers' interviews were also conducted to discuss the plausible model for blended learning. The findings implied that junior and senior students have passed the minimum standard of critical thinking skills and can engage in blended learning systems. Specifically, the senior students have lower critical thinking skills and are less engaged in blended learning than their junior counterparts. It also reveals the weak correlation between critical thinking skills and blended learning system. Thus, the integration of critical thinking materials, ideal proportion of learning styles, and assignments with high-order thinking skills are needed to strengthen the students' critical thinking skills in the blended learning system.

Keywords: Blended learning, critical thinking skills, evaluative study

1. Introduction

The current post-pandemic has provided a significant task for language educators to prepare for the transition of learning mode from online to offline learning. After the students adapt to the entire online course, they need to be ready for a new learning mode namely blended learning. Ideally, students of English as a foreign language (EFL) should learn through both face-to-face interaction and online discussion (Akarasriworn & Ku, 2013) or participate in synchronous online learning (Francescucci & Foster, 2013). However, today, more asynchronous interaction occurs. It results in a more flexible classroom interaction that may support an effective learning experience (Olt, 2018). It is assumed that the flexible interaction in blended classes also supports students' critical thinking. Consequently, this research attempts to explore the portrayal of blended learning in relation to student's critical thinking skills.

To participate in blended learning, students require many critical thinking skills, including the ability to engage with various online learning resources (Indah, 2017; Indah & Kusuma, 2016), and to perform evaluative judgment on online resources (Boud & Soler, 2016). Additionally, they also need to demonstrate a reflective practice from interaction in the distance education process (Tai et al., 2018). Although students can see directly through the teachers' modeling or demonstrating problem-solving processes in offline classes, they are required to be more adaptive in blended learning mode. It is because the dynamics of thinking are continuously elaborated to develop one's critical thinking skills (Paul & Elder, 2019). Developing these skills is difficult because it requires lengthy implementation and training, which can be hindered by limited metacognitive abilities or a rigid mindset that thinking is effortful and tiring (Persky et al., 2019). The problem occurs in the blended pedagogical contexts because it requires students' willingness to develop their critical thinking skills and engagement in digital literacy skills. In blended mode, students can use either learning modules specifying to enhance students' critical thinking (McNamara et al., 2019), or the modules delivered through online facilities (Dwyer & Walsh, 2019).

Developing critical thinking undeniably requires a good interaction between students as a learning community. Some recommended learning goals in building critical thinking skills are improving students' generated case studies (Bernhardt & Richmond, 2021), implementing reflective writing assignments (Hodges et al., 2019), and applying problem-based learning to foster critical thinking skills. These strategies are recommended in the context of high school learning (Gholami et al., 2016) and university students (Firdaus et al., 2015).

Critical thinking practices combined with course content become an extraordinary challenge in the blended pedagogical context, as revealed by various research results. One study stated that students need to have a balanced learning profile to organize their critical thinking learning through the use of digital tools (Meirbekov et al., 2022). In addition, it is also necessary to ensure that students always have a positive outlook on information and communication technology (Lim & Jung, 2019). Online tools are also important facilities which can be utilized to develop student's metacognitive abilities, as one of the critical thinking skills (Visser & Flynn, 2018).

Previously, when implementing online courses, the question was whether online learning guarantees increased critical thinking. It would certainly not. Online learning does not necessarily contribute positively to forming problem-solving skills as part of critical thinking

disposition. Besides that, integrating educational technologies in personalized learning do not impact on students' self-accessed digital skills (Schmid & Petko, 2019). It supports the notion that students exhibit similar digital cyber-culture within the pedagogical context (Ayale-Pérez & Joo-Nagata, 2019).

During the past six years, numerous studies concerned with developing students' critical thinking through several practices which rely on onsite learning (Cáceres et al., 2020; Samani et al., 2019), and examining the progress of critical thinking in university students (Bernhardt & Richmond, 2021; El Soufi & See, 2019; Persky et al., 2019). Even before the pandemic, online learning is implemented to develop critical thinking using several methods (Dwyer & Walsh, 2019). Some studies have introduced blended learning before the pandemic (Bizami et al., 2022; Kaufman, 2019; Olt, 2018). Some other studies focused on online learning during pandemics using several techniques to enhance student's critical thinking (Lestari et al., 2021; Madya & Adurahman, 2020). While blended synchronous learning also becomes a highlight learning mode during the pandemic (Narmaditya et al., 2020). Overall, those studies focused on blended learning practices before and during the pandemic. However, the relationship between blended learning and student's critical thinking skill during post-pandemic still needs more exploration, particularly in the context of Indonesian higher education.

In essence, the relationship between students' critical thinking and their digital literacy during online learning is supported by the findings of Visser and Flynn (2018). The undergraduate students considered digital natives did not guarantee that all of them had something in common in cyber-culture. Not all net-generations today have the same skills in digital literacy, and one of the consequences is that the online learning they take also has an impact on the reshaping of critical thinking, which is also not the same for each student. This study emphasizes the relationship between the dynamic of students' critical thinking skills that are reshaped after the implementation of online learning within Indonesian Islamic higher education.

Since blended learning shares similar characteristics with online learning, one concern that must be anticipated in blended learning is the decline in students' critical thinking skills. As Gilpin (2020) indicated, students exhibit lower persistence rates in online courses than in face-to-face courses. Its importance may be attributed to the discrepancy between the students' preferred interactions and what is offered in online courses. In the online course, it is possible to have an inappropriate composition between asynchronous and synchronous discussions. In the context of English literature students of one of Islamic universities in Indonesia, they complained about the limited access to the internet network or the insufficient quota to participate in synchronous discussions. Although, in reality, they still need intensive assistance in developing critical thinking skills, online learning does not fully support their academic need. This information was obtained based on preliminary observations during the pandemic online learning process of the past two years.

By understanding how blended learning influences critical thinking skills within Islamic higher education in Indonesia, it is hoped that this evaluative research can make an accurate and fundamental contribution to curriculum development. For Islamic higher education in Indonesia, empirical research is needed to portray the factual phenomena of online courses concerning the issue of reshaping students' critical thinking. Therefore, this current study addresses some research questions as follows: First, what is the level of critical thinking among junior and senior English Literature students? Second, does blended learning reshape the critical thinking among junior and senior English Literature students? Third, how is the basic model of blended course to shape the critical thinking of English Literature students?

2. Literature Review

2.1 Blended Learning

Blended learning combines students' experiences in face-to-face interaction with online interactions. This learning experience has been increasingly prominent and applied since the twenty-first century (Dziuban et al., 2018). Current pedagogical practices also show that blended learning is dominantly chosen for various teaching contexts (Chen, 2022). However, despite the trend of blended learning, the challenge lies in the need for transformational instructional design of blended learning to enhance both active learning and student-centered learning (Kaufman, 2019).

The practice of blended learning requires techno-pedagogy mapping which is expanded through online tools such as Whatsapp, Google Classroom, Zoom, Google Meet, YouTube and several other popular tools (Bizami et al., 2022). Nevertheless, the use of the technology would be worthless in blended learning when the students still have difficulties to work on their own so that they feel isolated. Accordingly, an effective blended learning also needs the application of cooperative learning as a teaching strategy to promote self-directed learning. In this context, it requires the use of authentic materials allowing students to participate in the class activities that enhance their social construct skill (Bolsch & Laubscher, 2022).

2.2 Critical Thinking

Critical thinking offers the ability to comprehend and interpret particular information on different contexts. Although there is no definite explanation of critical thinking, the Australian Council for Educational Research (henceforth ACER) believes that a critical thinker is able to analyse and evaluate toward surrounding information and situation which effectively results in objective decision when solving particular problems (Heard et al., 2020). Understanding the situations and the following problems requires the portrayal of holistic events and an open mind to opposition ideas and reasoning.

Since critical thinking highlights the importance of creating the best solutions to particular situations, this ability is closely related to the skill of thinking creatively (Samani et al., 2019). It is due to finding the best solutions that fit the particular standards requires a creative mindset to deal with any plausible situations. Heard et al. (2020) have classified the ability to have critical thinking consists of three strands. The first

strand belongs to the area of knowledge construction, and strand two focuses on evaluating reasoning, and strand three highlights decision making. Students are considered able to construct knowledge if they have successfully classified as well as realized the gaps of information and made connections among them. After classifying the information, the ability to identify assumptions and apply logic in justifying the arguments belongs to evaluating reasoning. Students are expected to master the third strand from these two strands, such as pinpoint criteria for decision making, evaluate the alternatives, and assess the implementation of decision making.

3. Method

This study is an ex-post-facto research. It examines the non-manipulative relationships of the confounding variables (Babbie, 2004). Based on this purpose, this design aims to identify trends or associations that may have practical implications. In this study, the variable of blended learning engagement becomes a factor. The engagement of the junior students is analyzed separately from the online learning involvement of the senior English literature students which affects their critical thinking disposition.

3.1 Participants and Data Collection

The population of this study was the English literature students at Maliki University, with 259 students as the cluster sampling. The junior students were from the first and second academic year with the total of 146 students. The senior students were those taking their third and fourth academic years with the total of 113 students. The students in this Islamic tertiary institution were selected since the preliminary observation showed that they had further development of critical thinking skills as reported by their teachers during the online learning. Thus, empirical data is still needed to correlate online course engagement and students' critical thinking skills.

Concerning data collection tools, this study employed a questionnaire to assess the student's engagement in blended learning course. The questionnaire consists of three parts: 1) addresses the students' academic identities, 2) evaluates the students' blended course engagement, 3) investigates the students' reflective thinking on their engagement with blended courses. The questionnaires were validated by a language education expert who evaluated the wording and gave alternative phrasing for inappropriate items. Before distributing the questionnaire, the pilot study was done to identify potential problems and misunderstandings related to the instruction and question items. The revised questionnaire was then distributed online to the students. Finally, the data collected excludes students who made double submission and those who did not answer all the questions.

Another instrument used is critical thinking assessment. This instrument aims to figure out the pattern of critical thinking disposition and the level of student's critical thinking skills. Some items of critical thinking inventory were adapted from Starkey (2010) to cope with the aim of the study as formulated in the research problems. Similar to the previous instrument, the critical thinking assessment, containing twenty items, was also evaluated or validated by an expert, or a professor on critical thinking. The inputs given were used to revise the test items. After that, the test items were tried out to students of another institution. The item analysis was completed to check its validity and reliability. The test was administered online done in a given time.

To get the data on the proposed model of blended learning course to shape the critical thinking skills of English literature students, the instrument used is an interview with the teachers of online courses. The researchers utilized an interview guide comprising five open-ended questions administered offline. The questions pertained to the teacher's experience of integrating critical thinking in their course, the assessment types they preferred for evaluating student's critical thinking, their teaching mode preferences, their most frequently employed teaching strategies, and their view on challenges in integrating critical thinking into their class. The interviewees were drawn from those teaching in the academic year 2023. The sample included ten instructors from the following courses: Language Research Methodology, Interculturality in Language Studies, Introduction to Applied Linguistics, and Science Philosophy.

As the final step, this study also employs Focus Group Discussion (FGD). It involves lecturers, the head of English Literature department, syllabus developers, and curriculum experts to assess the basic guidelines of the courses supporting the development of critical thinking skills. In addition, the FGD also includes participants from the student representatives. There were twenty students invited to join the FGD with a fair proportion between male and female students and also between senior and junior students. The FGD topics included their experience in taking courses containing critical thinking, their preferred assessment types to evaluate critical thinking, their preference of learning mode, their most learning strategies, and their view on the challenges to develop critical thinking.

3.2 Data Analysis

The analysis in this study is done to figure out the pattern of students' blended learning course engagement to answer the first and second research questions. To address the third and fourth research questions, the result of the statistical computation was explored to gain the correlation coefficient of the variables involved in this study. It is done by testing the hypothesis that the stronger engagement with the blended learning courses, the better the students' critical thinking skills. In addition, it investigates whether higher critical thinking skills are affected by the engagement of blended learning courses either for junior or senior English literature students.

4. Results

Based on the score of the critical thinking assessment and the blended learning engagement, a test of normality was done to ensure that the underlying assumptions were met. In terms of critical thinking score, senior students had a skewness of .55, while junior students had .30. In the variable of blended learning engagement, senior students had a skewness of -.35, whereas junior students had a skewness of -.20. All these variables fulfill the assumption of normality as skewness values closer to 0 indicate approximately symmetric distribution.

The analysis in this study aims to uncover the level of critical thinking of junior English literature students compared to that of senior students obtained from the score of the critical thinking assessment. The statistics of the result of the assessment of critical thinking are summarized in Table 1.

Table 1. The Result of The Critical Thinking Assessment

Measures	Junior students	Senior students
Skewness	.30	.055
Cases	146	113
Mean	66	62
Median	65	55
Mode	55	55
Standard Deviation	4.1	3.9
Range	15	16
Highest score	100	100
Lowest score	25	20

The result shows the similarity and differences in the scores of critical thinking at both student's levels. Although the number of participants taking the critical thinking test is not the same between junior and senior students, all of them have the mode 55 which means the score most appear is still low compared to the maximum score 100. Meanwhile, the average score of the senior student is lower than their junior counterparts. More students in the junior level scored close to the mean of 65 compared to the senior students as represented by the median. In this case, the junior students show a more extensive spread of scores as indicated by the higher standard deviation. If the passing grade is 60, it can be inferred that all of the students have reached the minimum passing grade of critical thinking but are still far from the ideal competence standard. The analysis of the difference between both groups is significant as the confidence level is below alpha .05. In a one-tailed test, the t-statistic (1.86) is greater than the critical t-value (1.65). Therefore, it can be inferred that there is a statistically significant difference, meaning that the junior students have significantly higher critical thinking scores. The analysis of the elements of critical thinking skills interpreted from the result of the test is presented in Table 2.

Table 2. The Critical Thinking Skills Assessed

Critical thinking skills	Questions	Correct responses
Classification/ Categorization/ Differentiation	Which is NOT a fact?	88%
	Which is an example of hyperbole?	72%
	Which one does NOT require problem-solving?	69%
	Which is NOT an example of a persuasion technique?	65%
	Which would NOT be a suitable category?	64%
	Which statement represents a judgment?	26%
		(mean 64%)
Evaluation/ judgment/ comparison	What should you NOT rely on?	86%
	Which is the most important reason?	85%
	Which scenario best represents the situation?	79%
	What is wrong with the logic?	69%
	Which is a sound argument?	66%
	Which is NOT a sound argument?	58%
	Which of these problems is most severe?	55%
	Which is NOT a valid argument?	45%
	Which explanation is weakest?	37%
	Which is the best conclusion?	37%
What is wrong with this argument?	24%	
	When would it be better to do it?	15%
		(mean 55%)
Deductive reasoning/ inference	Which is NOT a likely cause of this situation?	87%
	What can you infer from this?	58%
		(mean 73%)

Based on the tendency of critical thinking shown in Table 2, students had varied skills. The skill of making inferences is the highest (73%), which means the students can draw conclusions or make guesses based on the information provided. This skill allows them to make reasonable inferences and connections between pieces of information to arrive at a deeper understanding or insight. The second rank is on the ability to make classification, categorization, or differentiation (64%). It means a moderate level of the ability to differentiate between various elements, concepts, or examples and determine which one does not belong to or is unsuitable for a particular category. This skill allows students to recognize the item or concept that stands out as inappropriate or misplaced among the given options. The worst critical thinking skill is making judgments, critical evaluation, or comparison (55%). This type of critical thinking is related to evaluating reasoning, evidence, and logic presented in each argument to determine if it meets the criteria for being sound. This skill enables students to identify arguments that contain flaws, fallacies, or weak support among the given options.

To confirm whether the low achievement in critical thinking assessment is related to the engagement of the students in blended learning, the

following analysis presents the data taken from the questionnaire. The comparison of the engagement to blended learning of the junior and senior students is presented in Table 3.

Table 3. The Score of Blended-Learning Engagement

Measures	Junior students	Senior students
Skewness	-.20	-.35
Cases	146	113
Mean	73	74
Median	70	70
Mode	70	70
Standard Deviation	9	11
Range	40	40
Highest score	100	100
Lowest score	60	60

The result shows the similarities and differences in the scores of blended-learning engagements at both student's levels. All of them have similar median and mode 70 which means the score most appear is still low compared to the maximum score 100. Although they have a similar range of scores, the average score of the senior student is lower than their junior. In this case, the senior students show a more extensive spread of scores as indicated by the higher standard deviation. If the passing grade is 60, it can be inferred that all of the students have reached the minimum passing grade of blended learning engagement. However, since the t-statistic (-1,13) is still not less than the critical t-value (-1,97), the null hypothesis is accepted. This suggests that there is no statistically significant difference in scores between the two groups.

Table 4. Correlation Between Critical Thinking Skills and Blended Learning Engagement

	CT Junior	BLE Junior	CT Senior	BLE Senior
CT Junior	1	.05*	CT Senior	1
BLE Junior	.05*	1	BLE Senior	.14
			BLE Senior	1

Based on Table 4, it is clear that a positive relationship exists between critical thinking skills and blended learning engagement in both junior and senior students. However, the coefficient is very small, showing that the relation between both variables is very weak. The weak relation between critical thinking and blended learning implies that blended learning may not have a substantial impact on improving critical thinking skills in students.

The Focus Group Discussion resulted in the basic guidelines of the courses that can enhance the critical thinking skills of English Department students. There were four proposed models: First, the instruction method potential to develop critical thinking skills covers: (a) Project-based learning; (b) Onsite QA discussion in small groups; (c) Fieldwork problem-based learning; and (d) Case study. There are some recommended courses to boost student's critical thinking skills, such as Research Methodology, Introduction to Applied Linguistics, Intercultural Language Studies, Philosophy of Science, and others.

Second, the learning types supporting students' critical thinking skills as suggested from the FGD cover: (a) Onsite courses; (b) Onsite discussion with online project. Third, potential forms of learning evaluation to integrate critical thinking skills: (a) Article journal review; (b) Self-evaluation and peer-review on assignment completion; (c) Giving opinion in a discussion forum; (d) Essay writing; (e) News article analysis; (f) Face to face oral test/interview; (g) Creating a video reviewing a product; and (h) Essay test.

Fourth, the forms of effective blended learning are (a) Online material given before onsite discussions; (b) Blended learning with more exposure to onsite material than online; (c) Online material for topics that are easy to understand, onsite discussions for evaluation/quizzes to check student understanding; and (d) Totality of lecturers explaining the material (not just sitting in front of the class) builds more thinking and interaction. The lecturer asked a lot of questions. The lecturer asks about the complaints of students who are still confused without judging.

Regarding the challenges of developing critical thinking skills in the era of 5.0 which addresses digital literacy challenges such as AI and Chatbot, the following were the responses from the students in the FGD: (a) To be wise or just use it to look for references, not doing copy paste; (b) Need AI as a brainstorming tool, to provoke developing ideas; (c) Quite helpful but many AI answers are not valid so they need to be verified; (d) AI and chatbot can reduce students' critical thinking abilities if they depend on them; and (e) It is necessary to check AI similarities and impose sanctions on those who abuse AI.

5. Discussion

5.1 The Level of Critical Thinking among Junior and Senior Students

The finding of the critical thinking assessment demonstrates that junior students do not reach the ideal competence standard within the blended learning system (see Table 1). Similarly, the senior English literature students also attained the same tendency in the context of critical thinking performance, indicating that their current learning approach may not have fully addressed their critical thinking skills. While all students have met the minimum passing grade for critical thinking, there is room for improvement as they are still far from the ideal competence standard.

Furthermore, the result of the analysis shows a significant difference in the critical thinking score between junior and senior students. The senior students have lower critical thinking skills than their junior counterparts. There are some potential underlying reasons reflecting the low critical thinking in language class. First, based on the findings of Yuan et al. (2022) there is still a discrepancy between classroom reality and curriculum rhetoric which is due to the lack of attention to critical thinking in current language teacher education. In this study, critical thinking may not have been given enough emphasis in the syllabus of English Literature department. Second, the assessment method implemented in the courses does not prioritize analytical thinking that encourages students to develop critical thinking skills. For instance, in this study, the instrument does not employ essay question type. In several courses of English literature, close-ended questions such as multiple choice, matching, true/false, and others are more used than open-ended questions. It highlights the necessities of authentic assessments concentrating on higher-order critical thinking and the demands of a reevaluation of conventional assessment as suggested by Ifebugu (2023). Third, easy access to information technology can lead students to rely on quick searches. Moreover, with the help of online AI chatbots, the students do not engage in deep critical thinking. The chatbot may cause severe problems to academic integrity as it can bring a more significant possibility for student abuse that discourages the development of critical thinking (Ifebugu, 2023). Fourth, it demonstrates a lack of student engagement. Students that are not actively engaged in their learning are less likely to enhance their critical thinking skills. In this case, students with a lack of engagement in blended learning may have issues with technological readiness, learning motivation, and self-directed learning habits (Fitriani et al., 2022; Geng et al., 2019).

Another significant finding in this research is that the skills of critical thinking which need a lot of support are the ability in making judgments, critical evaluation, or comparison. In addition, more practices are still needed to help students gain better critical thinking skills in classification, categorization, or differentiation (see Table 2). These critical thinking skills are required in courses that involve project-based learning, whether situated in blended learning or not (Bezanilla et al., 2019). Therefore, teachers can use concept-mapping and problem-solving scenarios to foster the ability to make classification, categorization, or differentiation.

5.2 The Blended Learning Engagement of Indonesian EFL Students

The finding of the blended-learning engagement demonstrates that all of the students did not fully engage in blended learning as some of them tend to prefer onsite learning. It suggests that a significant portion of the student population is not actively participating or benefiting from the blended learning approach (see Table 3). Not to mention, the senior students' lower average score suggests that they may be struggling more with blended learning, though they are typically more experienced. The senior students had been engaged in complete onsite learning before the pandemic, while junior students started their English courses during the pandemic that required whole online learning. Accordingly, it may result in various factors, such as the complexity of their coursework or a lack of familiarity with the blended learning format. These findings suggest that educational institutions should consider offering flexible learning options to cater to the varying preferences of their students.

The higher variability in the scores of senior students also suggests that among senior students, there may be a broader range of responses to blended learning, with some students highly engaged and others not engaged at all. However, the fact demonstrates that there is no significant difference in the blended learning engagement among junior and senior students (see Table 3). The plausible factor could be related to the fact that both the junior and senior students were taught by the same teacher staff or instructors. It demonstrates that the delivery of blended learning needs improvement to make it more appealing and effective for all students.

5.3 The Correlation Between Critical Thinking and Blended Learning Engagement

The finding obtained from the critical thinking assessment scores and blended learning questionnaire demonstrated a positive relationship between critical thinking skills and blended learning engagement in both junior and senior students. However, the coefficient showed a very weak correlation (see Table 4). It suggests that simply implementing a blended learning approach may not be sufficient to enhance their critical thinking abilities significantly. The weaker relationship might have been due to the ineffective control of the quality of instruction in blended learning. Consequently, the blended learning approach needs to be supplemented with other strategies to promote critical thinking skills among junior and senior students.

While the relationship is weak, it does not necessarily mean that blended learning is ineffective for enhancing critical thinking. Ma and Lee (2021) states that blended learning is more effective than pure online learning in motivating learners and enhancing their learning achievement. However, in the context of this study, it demonstrates that the current implementation of blended learning needs to be refined. In other words, it requires additional support mechanisms. In this case, it is understandable that the students are still in the adaptation process to blended learning after the pandemic. Further investigation and potentially targeted interventions may be needed to strengthen this relationship.

Another reason for the weak relation between blended learning and the enhancement of critical thinking deals with the need for a significant strategy to be implemented aside from the blended learning mode, for instance, blended-problem-based learning (Lukitasari et al., 2019) and blended-project-based learning (Eliyasni et al., 2019).

5.4 The Model of Blended Learning to Shape Critical Thinking Skills

Based on the result of FGD, some components for a blended learning model that integrates critical thinking instruction, namely (a) the critical thinking material integrated into the course material; (b) the proportion of blended learning effective for critical thinking practices; (c) the assessment method to monitor the development of critical thinking skills; and (d) the involvement of digital literacy supporting

critical thinking.

Blended learning design that effectively integrates critical thinking instruction covers some recommended elements. First, it ensures that students have been exercised within the field of the course and class work, guiding them through critical thinking and analysis of information. Second, this model seeks to establish the optimum ratio of blended learning approaches between digital mediums of online classes and traditional classroom methods for the highest gains of the effective engagement of critical thinking practices. A mixture will require one to be designed to ensure deep engagement, enable interactive learning experiences, and support the different learning styles of the learners. Third, an adopted monitoring mechanism over the development of critical skills for thinking by the students. Among those formative assessments, reflective journals, peer reviews, and critical analysis essays can be used as methods of ongoing feedback to gauge critical thinking. It finally appreciates the embedment of digital literacy within the curriculum on the realization that effective use of digital tools and resources would be very imperative for students to improve their ability to access, analyze, and evaluate information critically. All this, therefore, presents an all-inclusive approach to blending critical thinking instruction with blended learning for the development of skilled, reflective, and analytical thinkers.

Concerning integrating the critical material into the course, the FGD results in suggested methods covering project-based learning and problem-based learning, small group discussion, and case study. It is in line with the recommendation from other studies in EFL contexts (Bernhardt & Richmond, 2021; Bezanilla et al., 2019; Eliyasni et al., 2019; Gholami et al., 2016; Hakim et al., 2016; Khoiriyah et al., 2015). However, the delivery of the materials should go with the ideal proportion of blended learning. The participants in this study suggested the emphasis on onsite learning for discussion forums compared to online learning platforms that can be used for sharing materials and for submitting assignments.

The assessments recommended in the FGD to monitor the development of critical thinking vary and require a higher order of critical thinking. Some assessment techniques demand analytical thinking, such as producing article journal review, self-reflection paper, essay-writing, news article analysis, or creating short review videos. For bringing the critical thinking assessment into the blended learning context for EFL learners, the target is to prepare the students for the demands of the technological era (Eliyasni et al., 2019). Accordingly, it also requires the students to practice their digital literacy despite the current challenges, such as the ease of using AI and chatbot. There are some advantages that students may take (Corder, 1981). It is also noted that learning from students' errors is important. First, students' errors describe to the teacher what students have learned and what they have not yet achieved. Second, the errors provide evidence on how to learn language best. Third, students could learn English grammar through the errors they made (Imaniar, 2018). It means that errors contain a lot of information about which part of the students' difficulties that are hard to produce correctly. On the other hand, Al-Khasawneh (2014) states that teachers may benefit from knowing students' error that is as the basis for designing and preparing effective teaching materials. Prediction of errors would also help teachers to be well-prepared to provide aids to solve and avoid similar problems in writing a thesis.

6. Conclusion

This study found that the level of critical thinking among junior and senior students of English Literature department met the minimum standard of critical thinking skills and can engage in blended learning. In detail, the senior students have a lower score than their junior counterparts. They have the least critical thinking competence in making judgments compared to classifying and making an inference.

The findings also confirm that blended learning is not the key factor of reshaping the critical thinking ability of senior and junior students. It implies that blended learning does not contribute much to the enhancement of students' critical thinking. Therefore, it can be inferred that the development of students' critical thinking cannot stick just to the traditional settings within the purview of blended learning. It could involve a more purposeful infusion of pedagogical approaches, particularly toward developing these skills, such as active learning strategies that encourage students to think deeply about diverse points of view, and make their reasoning explicit through the course materials integrated with the critical thinking disposition.

Concerning the proposed basic model of blended learning, this study offers some guidelines, such as ensuring that students are engaged in activities within the subject area of their course, guiding them in critical thinking and analysis. Second, it determines the ideal balance between online and traditional classroom methods to maximize engagement. Third, it introduces a method to assess students' development of critical skills using tools such as reflective journals and critical analysis essays. Finally, it integrates digital literacy into the curriculum, acknowledging the significance of digital tools in information access and evaluation. This strategy combines critical thinking and blended learning to cultivate proficient and reflective thinkers.

Based on the findings of this study, there are some recommendations for curriculum developers and teachers of the English Literature department. First, to enhance critical thinking skills through blended learning, it is crucial to integrate specific critical thinking content directly into the course material. In the teaching-learning process, they can incorporate modules or activities that specifically target critical thinking skills, such as problem-solving exercises, debates, or case studies relevant to the field of English literature. Second, since the students prefer on-site discussions, teachers should create opportunities for in-person interactions and discussions among students. Plan regular in-class discussions, seminars, or workshops encouraging active participation and critical analysis of literary works and relevant topics. Third, to assess critical thinking skills effectively, pedagogic practitioners and teachers can incorporate analytical thinking assignments that require students to review, analyze, and critically evaluate scholarly papers or literary works. Encourage students to delve deep into the content and develop their perspectives while avoiding the use of AI or chatbots for the analysis to promote authentic critical thinking engagement. In addition, teachers should implement a continuous assessment system that provides regular feedback on students'

critical thinking progress.

From this study, future researchers should enlarge the scope of this study not only by relating to critical thinking skills and blended learning, but also involving digital literacy. It is because digital literacy has a significant contribution toward the higher performance of blended learning. Discussing digital literacy in such studies provide a reflection on how all these components could contribute to the success of a blended learning. It strives to understand how learners gain access to and process information through active applications of learning technologies.

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