

Developing Thinking Reading Classrooms: Insight from Pre-Service EFL Teachers' Lesson Plans and Classroom Instructions

Dwi Puji Hastuti^{1*}, Diah Kristina², Endang Setyaningsih³

^{1,2,3}English Education Department, Faculty of Teacher Training and Education, Universitas Sebelas Maret, Jl. Ir. Sutami No.36 A Surakarta 57126, Indonesia

*) Corresponding Author
Email: dwipujihastuti@student.uns.ac.id
DOI: 10.18326/rgt.v15i2.201-221

Submission Track:
Received: 24-06-2022
Final Revision: 17-10-2022
Available Online: 01-12-2022

Copyright © 2022 Authors



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Abstract

Numerous studies have investigated the integration of critical thinking in EFL classrooms and textbooks. Still, relatively few have investigated the integration of critical thinking into reading lesson plans and classroom instructions. The current study adopted a qualitative case study approach to provide insight into how pre-service EFL teachers infused critical thinking skills into online reading classrooms. The study also gives information on pre-service EFL teachers' challenges in critical thinking integration into reading classrooms. Eight pre-service EFL teachers who completed all three phases of the faculty-mandated teaching practicum program participated in the study. Document analysis, virtual classroom observations, and semi-structured interviews were used as data collection techniques to fulfill the research objectives. As the study framework, Bloom's revised taxonomy was applied to lesson plan data to examine how critical thinking components are incorporated. Virtual classroom observations illuminated the incorporation of critical thinking into reading lessons. In addition, semi-structured interviews were conducted to gather more information regarding the challenges of integrating critical thinking skills. The present study reveals that pre-service EFL teachers integrated critical thinking aspects into reading online classes with a greater emphasis on lower-order cognitive than higher-order cognitive processes. It implies that pre-service EFL teachers had insufficient preparation for teaching practicum programs. Due to the significance of critical thinking skills for EFL students, this study recommends that teacher training institutes strengthen the critical thinking abilities of pre-service EFL teachers so that they are more equipped to teach and promote critical thinking in EFL classrooms.

Keywords: classroom instructions, critical thinking, lesson plans, pre-service teachers

INTRODUCTION

The concept of education has undergone a substantial transition in recent years. Students in this era must adapt to the 21st century's needs and acquire critical thinking abilities to participate in an ever-changing and increasingly complex world. Critical thinking has been a persistent focus for schools, companies, and policymakers since it is seen as a significant life skill and a beneficial tool in the workplace (Koenig, 2011). Critical thinking has various definitions and a wide range of meanings. The researcher considered critical thinking an internal concept essential in a person's academic learning and social life (Wilson, 2016). Interpretation, analysis, evaluation, conclusion, explanation, and self-regulation are all part of critical thinking (Facione, 1990). In addition, critical thinking includes critical thinking abilities and dispositions to think critically (Ennis, 1996). According to Ennis (1996), critical thinking is a rational, introspective thought oriented towards determining what to perceive or do. People with critical thinking abilities are capable of making well-founded choices and decisions.

Furthermore, critical thinking is defined as the capacity for investigating and assessing one's thoughts to improve them (Paul & Elder, 2009) and the ability to identify and solve problems (Wineburg, 1998). It promotes students' acceptance of information and response to it since it is a cognitive process that engages the mind and focuses on reasoning (Cottrel, 2005). Anderson and Krathwohl (2001) reexamined and updated Bloom's taxonomy's cognitive domain, known as Revised Bloom Taxonomy. It includes a hierarchical scale of skills -remembering, understanding, applying, analyzing, evaluating, and creating-which have been connected to critical thinking (Ghanizadeh et al., 2020). Critical thinking as an essential aspect has been promoted to be taught (Abrami et al., 2008). These abilities help students identify the reasons they want to learn, determine their learning objectives based on those needs, and effectively manage their practice time.

Critical thinking is essential to education, including language education (Wilson, 2016); various studies provide empirical findings on the benefit of incorporating critical thinking into foreign language instruction (El Soufi & See, 2019; Heidari, 2020). Critical thinking can stimulate the achievement of language abilities (Yanning, 2017; Wu et al., 2013; Yang & Gamble, 2013). Critical thinking enables students to explore and evaluate topics and decide their own academic choices in language learning (Nold, 2017). It also supports students in developing their

cognitive abilities to select relevant and essential information and evaluate and decide the most effective approaches for reaching learning objectives (Lin, 2018; Zhang et al., 2020). Students who strengthen their critical thinking skills improve their ability to solve problems and make decisions. Thus, scholars have placed emphasis upon encouraging this form of thinking in language classrooms (Zhao et al., 2016).

As required in today's world, learners must communicate effectively, analyze messages, draw arguments and conclusions, and critically construct their own opinions. Many studies argue that critical thinking is required for effective language learning regarding these demands. Therefore, training in critical thinking should be incorporated into the ELT program (Bağ & Gürsoy, 2021). However, there are some challenges in critical thinking integration in EFL classrooms. Some factors listed are time constraints, material resources, and L2 proficiency (Floyd, 2011; Li, 2016a; Manalo & Sheppard, 2016). Students' insufficient mastery of English makes it hard for them to communicate their thoughts and feelings. Due to the difficulties inherent in integrating critical thinking, EFL teachers must construct the most effective classroom activities.

Planning a lesson is essential in the realm of education. Lesson planning is a crucial aspect of teaching since it provides teachers with a roadmap to follow during a class. A lesson plan is an invaluable tool that embodies the teaching philosophy and learning objectives (Nesari & Heidari, 2014). Effective lesson planning supports successful teaching and curriculum policy implementation. In addition, it is essential to comprehend the distinction between conventional and critical thinking classes. The teacher, throughout a traditional class, constantly instructs students. Since reading is a complex activity, lesson plans must require teachers to choose the most effective exercises. Diverse cognitive skills are needed for textual meaning extraction, and students gradually gain literacy (Huang & Yang, 2015).

Some studies have found that critical thinking integration in EFL courses yielded positive effects in Indonesia. Critical thinking can develop higher-order thinking in students because it compels them to distinguish between fact and opinion (Haryati & Hidayati, 2017). In addition, mobile learning applications can improve critical thinking skills in assessing, reasoning, and drawing conclusions (Agustina et al., 2022). However, challenges to incorporating essential thinking remain, including lack of clarity in the curriculum, unfriendly culture, and teaching-learning

approaches to promote students' critical thinking (Lamb, 2004). Teachers' lack of critical literacy comprehension also contributes to highlighted factors (Gustine, 2018). Several studies have also shown the presence of critical thinking in EFL textbooks. Solihati and Hikmat (2018) used content analysis to determine whether textbook assignments improve students' critical thinking skills. The study showed that textbooks provide few critical thinking exercises. Aside from that, there was a lack of variety in tasks that encouraged students to think critically.

In addition, the pandemic COVID-19 led to a shift in teaching and learning from face-to-face learning mode to the online mode. This transition presented some daunting issues for teachers and students alike. Several studies highlighted critical thinking integration in online language learning. Tathahira (2020) identified several obstacles to critical thinking integration into online language learning, including the socio-cultural issue, the student's learning habits, and their experience with utilizing modern technology for learning. In addition, Loo (2020) found that recognizing sentence functions in a paragraph, identifying sentence functions in connection to verbs, and completing grammar quizzes are tasks that facilitate the incorporation of critical thinking into online academic writing classes.

Despite a growing number of research studies on critical thinking integration in EFL classrooms and textbooks, exploring critical thinking integration in online reading classes, from lesson planning to classroom instructions, has received little attention. Therefore, the purpose of the present study was to examine how pre-service EFL teachers infuse critical thinking skills into online reading classes, from lesson planning to instruction. The study also aimed to shed light on pre-service EFL teachers' obstacles when infusing critical thinking into classroom instruction.

RESEARCH METHOD

This study utilized a case study to understand a phenomenon's context comprehensively. The present study aimed to investigate how pre-service EFL teachers infuse critical thinking abilities into their online reading classes and identify obstacles in critical thinking integration. Altogether, eight pre-service EFL teachers, six females and two males participated in the study. The participants were recruited through the technique of convenience sampling, which includes readily available individuals who volunteer or can be quickly recruited (Johnson, R. B., & Christensen, 2017). The participants were students in the English Education Program at an

Islamic University in Indonesia who had completed the faculty-mandated teaching program. All participants in this study are presented with pseudonyms.

Data Collection

The researchers used document analysis, virtual classroom observation, and semi-structured interviews to collect data. The use of document analysis illustrated how parts of critical thinking were incorporated into reading lesson plans. This study includes ten lesson plans from eight pre-service EFL teachers, as two participants created two lesson plans each. In addition, five recorded virtual classrooms were scrutinized to see whether pre-service EFL teachers integrated critical thinking into classroom instructions. The virtual classrooms observation data demonstrated the instructional activities of two to three pre-service EFL teachers teaching in teams. Each participant was given the opportunity to teach the lesson twice with different partners in the teaching practicum program. For further investigation, semi-structured interviews with eight participants attempted to elucidate the perspectives of pre-service EFL teachers on the challenges of integrating critical thinking into online reading classes. This method promotes consistency and flexibility in investigating teacher perceptions and practices, as it is organized sufficiently to answer specific interview questions while allowing participants to contribute additional meanings. The interview with each participant lasted between 20-30 minutes via Google Meet and WhatsApp. The researchers used Bahasa Indonesia in the interview to get precise information and reduce misunderstandings.

Data Analysis

Lesson plan data, including assignments and activities, were categorized into potential themes. Pre-service EFL teachers' lesson plans were analyzed using revised Bloom's taxonomy by Anderson et al. (2001) as the research framework. The researchers took field notes during virtual classroom observation to identify tasks and activities pertinent to the research. The virtual reading classes were recorded to make it easier for the researchers to reexamine the learning processes. In addition, the researchers analyzed the interview data to gain insight into pre-service EFL teachers' views on integrating critical thinking. The researchers went through data condensation, display, conclusion drawing, and verification to analyze the data (Miles et al., 2014).

First, the researchers listened to the recorded interview data several times while coding the data informally. Second, the researchers transcribed the interview data

verbatim to achieve high accuracy. Then the researchers immersed themselves in the data during the condensation phase by reading and rereading the transcripts. The researchers marked participants' opinions using highlighters regarding integrating critical thinking into online reading classes. After all the data were coded and compiled, the researchers refocused the study on themes, rather than codes, by sorting the codes into probable themes and combining all the relevant coded data extracts inside the discovered themes. The classifications were then amended if errors were discovered. Then, the researchers compared across sections of all categories.

RESULTS & DISCUSSION

This section examines how pre-service EFL teachers integrated critical thinking into online reading classes. It also includes information regarding pre-service teachers' challenges in the classrooms. For each point, the most representative data are presented as evidence.

Critical Thinking Integration into Reading Lesson Plans

The analysis found that pre-service EFL teachers have attempted to include critical thinking into reading lesson plans, making students the focus of the learning process. As one of the essential skills in language learning, teaching reading skills requires teachers to devise innovative and effective learning activities including tasks, questions, and activities to promote students' critical thinking skills. The lesson plans analysis was based on Bloom's revised taxonomy by Anderson et al. (2001). The participants used six cognitive processes in their lesson plans, ranging from the simplest, remembering, to the most difficult, creating. Pre-service EFL teachers used different tasks and activities based on their objectives.

Remembering

Remembering is essential for meaningful learning and problem solving, given that the knowledge gained in 'remembering' is subsequently utilized in more complex tasks (Anderson et al., 2001). Thus, remembering plays a crucial role in language learning. In the reading classes, teachers can incorporate 'remembering' into introductory activities such as brainstorming. The lesson plan data revealed that pre-service EFL teachers integrated 'remembering' activities into online reading classes. Some lesson plans involved 'remembering' activities with the teacher as the central actor in the learning procedures, for example:

Teacher asks students about the topic covered at the prior meeting. (PST 2/LP/IL)

Teacher instructs students to create questions based on the topic. (PST 5/LP/IL)

By asking students to clarify previously covered material and generate questions based on the topic, pre-service EFL teachers assisted students in recalling previously acquired information.

In addition, the data indicated that pre-service EFL teachers attempted to design lesson plans with students as the central focus of learning. Some 'remembering' activities such as:

Students identify the structure of formal and informal invitation letter. (PST 4/LP/IL)

Students match the word with the correct illustration. (PST 3/LP/IL)

The learning activities above enabled students to recall prior knowledge and identify specific information. Students must use their minds to complete the above assignments. Remembering as a cognitive process involving the use of the mind is consistent with Cottrel's (2005) notion that critical thinking is a cognitive process involving the mind and focusing on arguments.

Understanding

By 'understanding,' students can interpret the issue and construct the meaning of instructional messages, which may be spoken, written, or graphic. The 'understanding' process categories involve interpreting, illustrating, classifying, summarizing, deducing, comparing, and explaining (Anderson et al., 2001). The investigation found that pre-service EFL teachers employed 'understanding' activities in their lesson plans to deliver learning materials. PST 4 wrote:

Students comprehend the teachers' explanation about tourist destinations. (PST 4/LP/DT)

Activities that test students' comprehension are the first step toward more challenging work. Additionally, PST 7 devised an assignment involving tasks such as comparing and contrasting two topics to test student's comprehension of the materials. Students' ability to discern between two issues demonstrates their comprehension of the material.

'Understanding' has become a required stage in teaching reading since students must comprehend a reading passage and frequently answer the questions following

it. Students' ability to participate in subsequent cognitive processes depends on their understanding level—the ability to understand and to think critically, consistent with Facione (1990).

Applying

Applying is carrying out a technique in a particular context (Anderson et al., 2001). Two cognitive processes comprise the apply category: executing and implementing. The task of 'executing' is familiar and can be handled, whereas the process of 'implementing' is new (Anderson et al., 2001). The applying process can be observed in the effort to apply knowledge to problem-solving since students are frequently confronted with various issues during the lessons. Students usually use the previous information in a task that instructs them to modify, construct, or solve a problem in the applying process.

From the analysis, the researchers found only a few 'applying' activities, and PST 8's lesson plan contains one of the examples. PST 8 designed various classroom activities, including student group discussions and presentations. In the discussion, students apply their knowledge to offer and accept one of the other's viewpoints, whereas when presenting their work, they attempt to provide a solution for a problem. Discussion and presentation are two activities that might assist students in developing their critical thinking abilities since students select and use pertinent information when participating. It is consistent with Lin's (2018) argument that learning critical thinking helps students select and apply relevant and essential information to determine the most effective ways to achieve their goals.

Analyzing

Analyzing is figuring out how various components are connected (Anderson et al., 2001). Differentiating, organizing, and attributing are three cognitive processes in analyzing activities (Anderson et al., 2001). This process begins with examining concepts, followed by identifying and analyzing arguments. Pre-service EFL teachers employed some 'analyzing' activities in their lesson plans, for instance:

Students analyze the invitation cards to determine the structure and content
(PST 7/LP/IL)

Students need to recognize the connections between several components to analyze the structure of a text successfully. They are required to investigate the concept first and then locate each specific item of information before arriving at an analysis.

Critical thinking, defined as having the ability to analyze is comparable to Facione's (1990) notion.

Evaluating

Evaluating is the process of judging based on categories or criteria, which include checking and criticizing procedures (Anderson et al., 2001). Pre-service EFL teachers had the evaluation process in their lesson plans, as demonstrated below:

Students evaluate their work through collaborative corrections. (PST 8/LP/DT)

The activity above instructed students to complete evaluation activities as part of a collaborative learning environment. This task encouraged students to learn from each other's mistakes and improve their work through collective corrections.

In addition, PST 1's lesson plan included an activity that involved summarizing. PST 1 asked students to summarize the previously learned content. Students must ensure that all significant features of the topic are included in their summary. This section contained evaluation-related content. This idea is similar to Yang and Gamble's (2013) arguments, which claimed that EFL teachers perceive critical thinking as the ability to evaluate, summarize, discover norms and patterns, solve problems, negotiate solutions with peers, and construct evidence-based arguments.

Creating

Creating is regarded as the most advanced cognitive sub-skill. Pre-service EFL teachers used 'creating' tasks as the most complex activities in their learning design. 'Creating' indicates whether students comprehend the lesson and can apply it to the creative activities. Three cognitive processes are involved in the creative process: generating, planning, and producing (Anderson et al., 2001). 'Generating' entails expressing the problem and arriving at alternatives or hypotheses that match specific criteria. Planning entails constructing a solution approach that fulfills the requirements of an issue, i.e., developing a plan for fixing the problem. Producing entails a procedure for selecting a specific problem that fits specified criteria (Anderson et al., 2001). The activity of 'creating' is presented below:

Students compose descriptive texts using themes such as historical locations, tourism attractions, animals, objects, and people. (PST 3/LP/DT)

PST 3 asked students to produce descriptive writings on the specified topics. To engage in a creative process, students must draw on their knowledge and experience

to generate, plan, and produce a new form of meaning. 'Creating' comprises assembling knowledge from several sources into new patterns and offering solutions to solve problems (Anderson et al., 2001). Students can use the three strategies of generating, planning, and finally producing to complete a descriptive task as instructed by their teachers. The notion of critical thinking as a creative process is consistent with Elder and Paul's (2006) definition, which states that critical thinking is a mode of thinking about any subject, substance, or issue in which the thinker methodically analyzes, evaluates, and reconstructs the thinking to improve its quality.

Critical Thinking Integration into Online Reading Classroom

In this study, participants exercised their teaching skills through team teaching. Each team teaching consisted of two to three pre-service EFL teachers, who worked together in the classroom to present the lesson and accomplish the learning objectives. In their practices, they divided the responsibilities and taught in rotation. Pre-service EFL teachers employed several strategies to include critical thinking in online reading classes. The reading classes were conducted virtually via Google Meet. The researchers participated as observers and documented the learning process. Documentation was prepared to allow the researchers to conduct quality assurance checks on the data and to ensure that the data gathered were accurate. During the participation in the teaching and learning activities, the researchers also kept a field note to capture genuine emotions and experiences. The recorded virtual teaching and learning process revealed that pre-service EFL teachers used brainstorming, questioning, and various learning tools in online reading classes. All strategies addressed reading activities before, during, and after the lesson.

Brainstorming

Pre-service EFL teachers employed brainstorming by posing questions related to previous knowledge at the beginning of the lesson. Prior knowledge questions were considered lower-cognitive since they required students to recollect specified knowledge immediately. Brainstorming is commonly linked to problem-solving. In reading comprehension, brainstorming allows readers to generate and share past knowledge to solve problems and achieve the objective (Tran, 2017). Pre-service EFL teachers believed brainstorming helps investigate the students' understanding of specific topics. Instead of enforcing the opinions presented in the text, brainstorming facilitates activating students' prior knowledge or schema (Ghabanchi & Behrooznia,

2014). Virtual classroom observation data revealed that pre-service teachers allowed students to state their understanding of the issues before proceeding to the main activities. Participants in this study were scheduled to teach descriptive texts and invitation letters at Senior High Schools.

Pre-service EFL teachers initiated the reading session with a brainstorming activity by posing questions to the student. Teaching in the same team, PST 3 and PST 6, used descriptive text entitled 'Historical Building' to be discussed in the classrooms. PST 3 started the lesson by inquiring about students' knowledge of historic buildings. This question aimed to explore students' initial understanding of historical buildings. PST 3 also utilized this approach to introduce descriptive texts. PST 3 continued the lesson by allowing students to discuss a descriptive text, while PST 6 assisted students in responding to text-based questions. Brainstorming is a component of remembering activities because, in this activity, students compile a list of pertinent facts about the topic under discussion. Brainstorming techniques positively and significantly affect the participants' critical thinking and reading comprehension skills (Ghabanchi & Behrooznia, 2014).

Questioning

Teachers can effectively integrate critical thinking into their teaching by focusing on the quality and types of questions posed in classes. Questioning is an effective method of encouraging students to think critically. Higher-level inquiries and probing techniques encourage students to reason, evaluate, research, expand their views, and enhance critical thinking (Zhao et al., 2016). Questions that encourage critical thinking should guarantee that students are not merely repeating data but are making judgments or evaluating various alternatives (Case, 2005). Virtual classroom observation data showed that pre-service EFL teachers posed specific questions in the reading classrooms, such as questions about factual or particular information in the text and evaluation or analysis questions.

Questions referring to factual or particular information in the text are questions that concern explicitly stated facts in the text and do not require students to think critically. Pre-service EFL teachers posed the following questions:

What evidence can you find in the text about the characteristics of Purna Bhakti Pertiwi Museum? (PST 1/CO/DT)

Where is the National Monument Located? (PST 2 & PST 3/CO/DT)

These questions indicated that pre-service EFL teachers tend to emphasize subject matter expertise over developing critical thinking skills. On the other hand, pre-service EFL teachers might also utilize lower order thinking questions to stimulate class involvement and minimize anxiety among students with limited English competence.

In addition, questions related to evaluating or analyzing appeared in the reading classroom, such as:

From the text, we can infer that? (PST 3 & PST 6/CO/IL)

Which statement is true based on the text? (PST 3 & PST 6/CO/IL)

These questions required students to analyze the detailed information presented in the text to draw a conclusion and determine the correct information. In addition, pre-service EFL teachers also used questioning to assess students' comprehension of the presented material. In their teaching practice, PST 3 and PST 6 asked students about their knowledge of the provided materials and allowed them to ask questions on sections they did not fully comprehend. Pre-service EFL teachers developed students' ability to think critically, assessed their learning, and asked follow-up questions by allowing them to raise questions. Questioning allows students to negotiate meaning through engaging, thought-provoking discussions and activities (Seker & Kömür, 2008).

Using Various Learning Materials

To foster the development of critical thinking in reading lessons, pre-service EFL teachers employed a variety of media, including reading passages, visuals, games, music, and YouTube videos. Pre-service EFL teachers utilized illustrated or image-filled texts for teaching descriptive text. They provided students with a descriptive text for discussion and exercises. In addition, pre-service EFL teachers used a greater variety of text in the session on formal and informal invitation letters to teach students to distinguish between formal and informal invitation letters. The strategies adopted by pre-service EFL teachers are consistent with the assertion that the learning material should be chosen with care regarding topic familiarity and language complexity to enhance students' engagement in critical thinking (Setyaningsih, 2019). Student participation in their studies is increased when learning materials are engaging and varied.

The virtual classroom observation data also revealed that learning tools such as graphics, games, music, and YouTube videos were predominantly used for ice breaking and brainstorming. Few of these were used for more critical learning tasks, such as analysis, evaluation, and creativity. Pre-service EFL teachers did not utilize the learning media optimally. For instance, at PST 8's second meeting, games were used to assess students' comprehension of the previous content, but they were not integrated into the main learning activities. PST 8 began the session by reviewing prior content with Quizizz. She asked questions to assess how well students remembered and understood the previous materials. Games and other technological applications can increase student engagement in classroom activities. Therefore, pre-service EFL teachers should utilize these specialized tools extensively because technological media encourages students to be more active in their learning (Jodoi et al., 2021).

The virtual classroom observation data demonstrated that pre-service EFL teachers did not execute all the activities from their lesson plans due to teaching obstacles. Pre-service EFL teachers faced several barriers, including students, teachers, time constraints, and technical issues. The activities that were not covered in the class were, for instance, students' production of descriptive texts depending on the theme selected by the teacher, which were included in PST 3's lesson plan. Still, this activity was not executed in classroom instruction due to time constraints.

The challenges of Integrating Critical Thinking into Reading Classrooms

The interview data showed that critical thinking integration into online reading classes presented several challenges for the participants. Pre-service EFL teachers cited four challenges of incorporating critical thinking into online reading classes. Factors include students' lack of motivation, lack of understanding, lack of self-confidence, teacher's limited knowledge, time constraint, and technical issues are all identified as obstacles.

Students

Pre-service EFL teachers identified that students' lack of motivation, lack of understanding, and lack of self-confidence are all the issues students must encounter. PST 1 and PST 2 believed that students' lack of motivation to share their opinions is one of the obstacles that must be faced:

It is not easy to get students to think critically since they tend to be walled off.
(PST 1/Interview/LoM 1)

Students are not accustomed to expressing their opinions. (PST
2/Interview/LoM 2)

In most cases, students were constrained and hesitant to engage in critical thinking. They are not accustomed to it; therefore, they prefer silence. The connection between motivation and critical thinking development was explained by Turner (1995) stated that when students are given opportunities for problem-solving, critical thinking, and individual methods, regardless of standard instructional patterns, their motivation increases and they become more strategic and effortful.

The second student's factor is lack of understanding. PST 3 argued that students did not engage in essential activities of thinking due to students' competence to understand information.

Usually, some students did not understand the questions due to a lack of knowledge of the material. (PST 3/Interview/LoU 1)

Several aspects must be considered at this point; the ability to comprehend and communicate something is closely tied to language competency but is not immediately related to a person's critical thinking skills. Critical thinking is not rooted in language proficiency (Wallace, 2003). A comprehension threshold must be surpassed to engage in critical thinking. Setyaningsih (2019) discovered that learners demonstrate a hint of critical thinking skills but are off-goal for various reasons. These include unfamiliarity with the covered issue, unaccustomed to critical thinking, misinterpretation of the problem, and inability to express ideas due to language barriers; for these reasons, material selection is essential for incorporating CT or CL into EFL classrooms (Setyaningsih, 2019).

The third student factor is a lack of self-confidence. PST 8 considered lack of confidence as a possible factor impeding students' critical thinking abilities.

Some students were still hesitant to answer questions and lacked the confidence to do so. (PST 8/Interview/LoSC 1)

The type of self-confidence mentioned by the participant is confidence in answering questions and expressing their critical opinions despite the possibility of unpleasant feedback. This type of confidence is pertinent to the idea of "confidence in reason" (Paul & Elder, 2013). However, Manalo and Sheppard (2016) claimed that students'

critical thinking engagement might be hindered by their L2 proficiency, which can contribute as a potential factor to their unwillingness to address questions.

Teacher

Inadequate technical knowledge for integrating critical thinking abilities creates obstacles that impede the integration of critical thinking skills. Due to the fact that teachers regularly face multiple challenges in the classroom, they must possess the ability to deal with them. The following excerpt supports this point:

During the learning process, when students did not respond to what I explained, I felt confused, and I tried several methods without success. I had no idea what else to do. (PST 6/Interview/IK)

The statement above indicated that PST 6 was not well-versed in the best methods that should be implemented in the classroom in order to encourage students' critical thinking skills. As learning facilitators, teachers must possess sufficient knowledge to facilitate successful learning and increase student participation in classroom activities. The fact that teachers play a significant role in critical thinking integration is similar to Gustine's (2018) statement that the incapacity of teachers to comprehend critical literacy has also become one of the impediments to critical thinking integration. Regarding teachers' function as transformative intellectuals (Johnson, 2006) whose learning emerges from and is supported by classroom and school experience, teachers' knowledge plays a significant role in integrating critical thinking into EFL classrooms.

Time constraints

Pre-service EFL teachers stated that time constraints are a barrier in their reading classes. Due to online learning, pre-service EFL teachers were assigned less time for teaching. The time allotted for each meeting is 40 minutes long. PST 8 claimed that it was insufficient to cover all the materials. She asserted that she had insufficient time to teach. In line with PST 8, PST 5 stated that the obstacle he found was the limited teaching time. Time constraint as a barrier to critical thinking integration is in accordance with Li's (2016) concept that time is a significant challenge for establishing critical thinking activities. Thus, teachers must maximize time to meet learning objectives in an online reading lesson with limited time.

Technical Issues

The next issue highlighted by the participants was an unstable internet connection. Pre-service EFL teachers noted that unstable internet connection hindered their teaching activities and student responses. As PST 7 said below:

The student's response was not as expected because of the unstable internet connection. (PST 7/Interview/IC 1)

When presenting lessons, pre-service EFL teachers believed that students did not respond as expected because the message was frequently not transmitted owing to network issues or disconnections. This problem affected the teaching and learning process. Due to digital media used in learning activities, the consideration of acceptable learning media and the selection of digital media for learning must consider activities such as accessibility, affordability, technology, interactivity, organization, and innovation (Susanty et al., 2021). Therefore, teachers must prepare alternative solutions when technical issues arise in their teaching activities. Rahman (2020) advised teachers to adopt well-equipped language learning platforms and educational institutions to train teachers and students to run online teaching-learning programs efficiently.

CONCLUSION

This study revealed that pre-service EFL teachers incorporate only a few tasks that support the higher cognitive function, such as applying, analyzing, evaluating, and creating into their reading lesson plans. In addition, pre-service teachers employed a more significant portion on remembering and understanding. Consequently, the cognitive activities associated with 'applying' to 'creating' must be intensified. Pre-service EFL teachers need to add more activities and tasks to develop students' critical thinking in reading classrooms. Furthermore, pre-service EFL teachers identified challenges when integrating critical thinking into online reading classes, including students' lack of motivation, comprehension, self-confidence, insufficient teacher knowledge, time constraints, and technical issues.

The research findings led to various theoretical contributions for EFL teachers, pre-service EFL teachers, and teacher training institutions. The result of the study provides insight for EFL teachers and pre-service EFL teachers about the knowledge of critical thinking integration into lesson plans and reading classroom instructions. Identifying critical thinking integration barriers encourages teachers to anticipate

similar challenges in their instructional activities and devise solutions. Additionally, the findings imply that teacher training institutions should focus on strengthening the critical thinking skills of pre-service EFL teachers to integrate critical thinking skills into EFL classrooms successfully.

REFERENCES

- Abrami, P. C., Bernard, R. M., Borokhovski, E., Wade, A., Surkes, M. A., Tamim, R., & Zhang, D. (2008). Instructional interventions affecting critical thinking skills and dispositions: A stage 1 Meta-Analysis. *Review of Educational Research*, 78(4), 1102–1134. <https://doi.org/10.3102/0034654308326084>
- Agustina, N., Mayuni, I., Iskandar, I., & Ratmaningsih, N. M. (2022). Mobile learning application: Infusing critical thinking in the EFL classroom. *Studies in English Language and Education*, 9(2), 724–743. <https://doi.org/doi.org/10.24815/siele.v9i2.23476>
- Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Raths, J., & Wittrock, M. C. (2001). *A taxonomy for learning, teaching and assessing: a revision of Bloom's taxonomy of educational objectives*. Addison Wesley Longman, Inc.
- Bağ, H. K., & Gürsoy, E. (2021). The Effect of Critical Thinking Embedded English Course Design to The Improvement of Critical Thinking Skills of Secondary School Learners☆. *Thinking Skills and Creativity*, 41(April). <https://doi.org/10.1016/j.tsc.2021.100910>
- Case, R. (2005). Moving critical thinking to the main stage. *Education Canada*, 45(2), 45–49.
- Cottrel, S. (2005). *Critical thinking skills: Developing effective analysis and argument*. Palgrave Macmillan.
- El Soufi, N., & See, B. H. (2019). Does explicit teaching of critical thinking improve critical thinking skills of English language learners in higher education? A critical review of causal evidence. *Studies in Educational Evaluation*, 60(August 2018), 140–162. <https://doi.org/10.1016/j.stueduc.2018.12.006>

- Elder, L., & Paul, R. W. (2006). *Critical thinking: Learn the tools the best thinkers use. Concise edition*. Prentice Hall.
- Ennis, R. H. (1996). Critical Thinking Dispositions: Their Nature and Assessability. *Informal Logic*, 18(2), 165–182. <https://doi.org/10.22329/il.v18i2.2378>
- Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction. Research findings and recommendations*. American Philosophical Association.
- Floyd, C. B. (2011). Critical thinking in a second language. *Higher Education Research and Development*, 30(3), 289–302. <https://doi.org/10.1080/07294360.2010.501076>
- Ghabanchi, Z., & Behrooznia, S. (2014). The Impact of Brainstorming on Reading Comprehension and Critical Thinking Ability of EFL Learners. *Procedia - Social and Behavioral Sciences*, 98, 513–521. <https://doi.org/10.1016/j.sbspro.2014.03.447>
- Ghanizadeh, A., Al-Hoorie, A. H., & Jahedizadeh, S. (2020). Higher order thinking skills in the language classroom: A concise guide. In *Second Language Learning and Teaching*.
- Gustine, G. G. (2018). a Survey on Critical Literacy As a Pedagogical Approach. *Indonesian Journal of Applied Linguistics*, 7(3), 531–537.
- Haryati, S., & Hidayati, D. N. (2017). Hoax News: Promoting the Students' Critical Thinking in Critical Reading Class. *Register Journal*, 10(2), 122–139.
- Huang, C. T., & Yang, S. C. (2015). Effects of online reciprocal teaching on reading strategies, comprehension, self-efficacy, and motivation. *Journal of Educational Computing Research*, 52(3), 381–407. <https://doi.org/10.1177/0735633115571924>
- Jodoi, K., Takenaka, N., Uchida, S., Nakagawa, S., & Inoue, N. (2021). Developing an active-learning app to improve critical thinking: item selection and gamification effects. *Heliyon*, 7(11), e08256. <https://doi.org/10.1016/j.heliyon.2021.e08256>

- Johnson, R. B., & Christensen, L. (2017). *Educational research: Quantitative, qualitative, and mixed approaches — sixth edition*. In SAGE Publications, Inc.
- Johnson, K. E. (2006). The sociocultural turn and its challenges for second language teacher education. *TESOL Quarterly*, 40(1), 235–257.
- Koenig, J. A. (2011). *Assesing 21st Century Skills Summary of Workshop*. The National Academic Press.
- Lamb, M. (2004). “It depends on the students themselves”: Independent language learning at an Indonesian state school. *Language, Culture and Curriculum*, 17(3), 229–245. <https://doi.org/10.1080/07908310408666695>
- Li, L. (2016). Integrating thinking skills in foreign language learning: What can we learn from teachers’ perspectives? *Thinking Skills and Creativity*, 22, 273–288. <https://doi.org/10.1016/j.tsc.2016.09.008>
- Lin, Y. (2018). Infusing Critical Thinking into EFL Classes. In *Developing Critical Thinking in EFL Classes*. https://doi.org/10.1007/978-981-10-7784-5_10
- Loo, D. B. (2020). Integrating Critical Thinking in Online Language Tasks: Considerations for an Academic Writing Class. *International Journal of TESOL Studies*, 2, 52–61. <https://doi.org/10.46451/ijts.2020.09.05>
- Manalo, E., & Sheppard, C. (2016). How might language affect critical thinking performance? *Thinking Skills and Creativity*, 21, 41–49. <https://doi.org/10.1016/j.tsc.2016.05.005>
- Miles, M. B., Hubberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A method sourcebook* (3rd ed.). SAGE.
- Nesari, A. J., & Heidari, M. (2014). The Important Role of Lesson Plan on Educational Achievement of Iranian EFL Teachers’ Attitudes. *International Journal of Foreign Language Teaching & Research*, 2(5), 27–34. http://jfl.iaun.ac.ir/article_557178.html
- Nold, H. (2017). Using Critical Thinking Teaching Methods to Increase

- Student Success: An Action Research Project. *International Journal of Teaching and Learning in Higher Education*, 29(1), 17–32.
- Paul, R., & Elder, L. (2009). Critical thinking: Ethical reasoning and fair minded thinking, part I. *Journal of Developmental Education*, 33(1), 38–39.
- Paul, R., & Elder, L. (2013). The Standards for Thinking. In *Tools for Taking Charge of Your Professional and Personal Life*. <http://books.google.com/books?id=g5YX6jLnkcoC&pgis=1>
- Rahman, M. M. ur. (2020). Challenges and solutions of teaching english as a foreign language online during a global pandemic like covid-19: saudi efl teachers' perspectives. *Journal of Southwest Jiaotong University*, 55(6). <https://doi.org/10.35741/issn.0258-2724.55.6.10>
- Seker, H., & Kömür, Ş. (2008). The relationship between critical thinking skills and in-class questioning behaviours of English language teaching students. *European Journal of Teacher Education*, 31(4), 389–402. <https://doi.org/10.1080/02619760802420784>
- Setyaningsih, E. (2019). Bringing critical literacy into tertiary EFL reading class. *Indonesian Journal of Applied Linguistics*, 9(2), 297–307. <https://doi.org/10.17509/ijal.v9i2.20220>
- Solihati, N., & Hikmat, A. (2018). Critical Thinking Tasks Manifested in Indonesian Language Textbooks for Senior Secondary Students. *SAGE Open*, 8(3). <https://doi.org/10.1177/2158244018802164>
- Susanty, L., Hartati, Z., Sholihin, R., Syahid, A., & Liriwati, F. Y. (2021). Why English teaching truth on digital trends as an effort for effective learning and evaluation: opportunities and challenges: analysis of teaching English. *Linguistics and Culture Review*, 5(S1), 303–316. <https://doi.org/10.21744/lingcure.v5ns1.1401>
- Tathahira, T. (2020). Promoting students' critical thinking through online learning in higher education: Challenges and Strategies. *Englisia: Journal of Language, Education, and Humanities*, 8(1), 79. <https://doi.org/10.22373/ej.v8i1.6636>
- Tran, T. N. Y. (2017). The Effect of Brainstorming on EFL Reading

- Comprehension. *VNU Journal of Foreign Studies*, 33(6), 142–149.
- Turner, J. C. (1995). The influence of classroom contexts on young children's motivation for literacy. *Reading Research Quarterly*, 30(3), 410–441.
- Wallace, C. (2003). Critical reading in language education. In *Critical Reading in Language Education*. <https://doi.org/10.1057/9780230514447>
- Wilson, K. (2016). Critical reading, critical thinking: Delicate scaffolding in English for Academic Purposes (EAP). *Thinking Skills and Creativity*, 22, 256–265. <https://doi.org/10.1016/j.tsc.2016.10.002>
- Wineburg, S. (1998). Reading Abraham Lincoln: An expert/expert study in the interpretation of historical texts. *Cognitive Science*, 22(3), 319–346. https://doi.org/10.1207/s15516709cog2203_3
- Wu, W. C. V., Marek, M., & Chen, N. S. (2013). Assessing cultural awareness and linguistic competency of EFL learners in a CMC-based active learning context. *System*, 41(3), 515–528. <https://doi.org/10.1016/j.system.2013.05.004>
- Yang, Y. T. C., & Gamble, J. (2013). Effective and practical critical thinking-enhanced EFL instruction. *ELT Journal*, 67(4), 398–412. <https://doi.org/10.1093/elt/cct038>
- Yanning, D. (2017). Teaching and Assessing Critical Thinking in Second Language Writing: An Infusion Approach. *Chinese Journal of Applied Linguistics*, 40(4), 431–451. <https://doi.org/10.1515/cjal-2017-0025>
- Zhang, H., Yuan, R., & He, X. (2020). Investigating university efl teachers' perceptions of critical thinking and its teaching: voices from china. *Asia-Pacific Education Researcher*, 29(5), 483–493. <https://doi.org/10.1007/s40299-020-00500-6>
- Zhao, C., Pandian, A., & Mehar Singh, M. K. (2016). Instructional strategies for developing critical thinking in efl classrooms. *English Language Teaching*, 9(10), 14. <https://doi.org/10.5539/elt.v9n10p14>