Critical Literacy and Pedagogical Transformation among Prospective Indonesian Language Teachers

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Article Info	ABSTRACT
	The critical reading ability of prospective teacher students remains a serious issue in higher education, particularly in regions with low literacy levels such as Probolinggo Regency, which has the lowest Community Literacy Development Index (IPLM) in East Java, thus demanding transformative pedagogical strategies to foster students' reflective reasoning and discourse awareness. This study aims to examine the effectiveness of a critical literacy approach in improving the critical reading ability of students in the Indonesian Language Education Study Program at Zainul Hasan Genggong University (UNZAH) through strengthening six dimensions of critical thinking according to Facione's model, namely interpretation, analysis, inference, evaluation, explanation, and self-regulation. This study employs a quasi-experimental design with a non-equivalent control group, involving 50 students divided into experimental and control classes, and analyzes data through ANCOVA testing to determine the effect of treatment after controlling for initial scores (pretest). The results show a significant improvement in the experimental group ($p < 0.001$), particularly in the interpretation and inference dimensions, and confirm that the critical literacy approach is the main factor in improving students' posttest scores. Thus, the critical literacy approach proves effective as a pedagogical strategy in Islamic higher education to develop teachers who are not only capable of reading texts but also of reading the world critically, reflectively, and with intellectual responsibility.

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1. INTRODUCTION

Amidst the Industrial Revolution 4.0 era that blurs the boundaries between the physical and digital worlds and Society 5.0 that places humans and technology in an information symbiosis, critical thinking skills have become a primary prerequisite for prospective educators to be able to read and respond to the complexity of multidimensional discourse—whether social, cultural, political, or technological (Greiff et al., 2014; Hasanah & Ridho, 2020; Singh, 2024). In this maelstrom of change, the

need for in-depth literacy extends beyond the technical skills of reading and writing but also encompasses the ability to filter, interpret, and evaluate information contextually and reflectively. Unfortunately, literacy challenges in Indonesia remain a serious challenge, particularly at the local level, which is often overlooked in national discourse. Based on a study by Shoimah (2023), the Community Literacy Development Index (IPLM) for Probolinggo Regency was recorded at only 10.67—a figure that places it at the lowest position among 38 regencies/cities in East Java and far behind the provincial average (13.44) and the national average (12.99).

This low IPLM reflects a weak reading culture, limited access to literacy facilities, and minimal community participation in public literacy activities. In the context of Islamic higher education, especially institutions under the auspices of Islamic boarding schools or Islamic scholarly traditions, the role of teachers is not merely as a conveyor of knowledge but as a guardian of the intellectual conscience that shapes the character, ethical reasoning, and social awareness of students (Munawarsyah, 2023; Zamzami, 2023). Therefore, the urgency of strengthening critical thinking and reflective reading skills for prospective teachers is no longer optional but rather a necessity in welcoming educational transformation rooted in the values and relevance of the times.

Despite the continued urgency of strengthening critical reading skills, various studies show that Indonesian students, including those pursuing teacher training, still perform poorly in this area (Karadag, 2017; Setiawan et al., 2023). Many are unable to clearly distinguish between fact and opinion and struggle to identify hidden arguments or ideological biases implicitly embedded in academic and popular texts (Musdalifah, 2022). Yet, critical reading, as a form of higher-order thinking, demands not only literal comprehension but also active engagement in interpreting contextual meaning, evaluating logical reasoning, and constructing balanced and reflective argumentative responses (Paul & Elder, 2014; Brookfield, 2020).

The critical literacy approach, rooted in the thinking of Paulo Freire, does not position reading as a neutral or passive activity but rather as a conscious practice that embodies social bias—a process of "reading the world through texts" that always contains power structures, dominant discourses, and ideological narratives (Célèste Kee & Carr-Chellman, 2019; Shor, 2019). In this context, critical literacy becomes an emancipatory and epistemological tool for readers who want to be subjects, not objects, of learning. However, much previous research has focused solely on students' general critical reading skills and has not examined how a critical literacy approach can be applied in contexts appropriate for prospective teachers, particularly in Islamic higher education institutions (Li & Wan, 2022; Sultan et al., 2017). This lack of empirical evidence indicates that more empirical evidence is needed to identify the most effective teaching methods to address critical reading deficiencies in these environments.

Recent studies indicate that a critical literacy approach has proven effective in fostering discourse awareness, reflective argumentative skills, and students' sensitivity to ideologies embedded in various types of texts (Karadag, 2017; Greiff et al., 2014; Aminah et al., 2023; Musdalifah, 2022). Critical literacy not only improves reading skills but also influences cognitive frameworks and individual perspectives regarding

social realities conveyed through written and spoken discourse. However, the application of this approach in the context of Islamic higher education, particularly in Indonesian Language Education programs within modern Islamic boarding schools (pesantren), has yet to receive adequate attention from academic studies (Hasanah & Ridho, 2020). The lack of attention indicates a discrepancy between the concept and actual data, compared to previous studies that focused more on general educational institutions or non-religious study programs. Consequently, the effectiveness of critical literacy in developing students' critical reading skills in Islamic boarding schools remains minimal in terms of testing. In other words, there is insufficient evidence to show how the characteristics of Islamic boarding school (pesantren) academic culture influence the application of critical literacy. This limited exploration creates a significant gap in the existing literature that this research aims to address. Therefore, the main objective of this study is to test the effectiveness of a critical literacy approach in improving the critical reading skills of prospective teacher students at Zainul Hasan Genggong University (UNZAH) Probolinggo, a representative of Islamic higher education based on Islamic boarding schools. Therefore, this study aims to connect the gap between theory and application, as well as between general knowledge of critical literacy and the specific demands in Islamic teacher education.

This research is based on the theoretical and pedagogical assumption that critical literacy-based learning has significant beneficial effects by developing six dimensions of students' critical thinking, as formulated by Facione: interpretation, analysis, inference, evaluation, explanation, and self-regulation (Facione, 2015; Jaelani et al., 2023; Rauscher & Badenhorst, 2021). Each of these dimensions is not merely a cognitive aspect but also represents the process of forming reflective awareness and intellectual responsibility that are the core of critical literacy. In the context of teacher education, this approach requires students not only to understand the surface structure of the text but also to explore the context, evaluate the author's perspective, and construct meaning independently based on their values, experiences, and social positions. Consequently, prospective educators trained in a critical literacy framework are anticipated to possess the capacity to interpret texts reflectively, assess them ethically, and deliberately situate themselves within both dominant and alternative discourses in the public sphere (Ha & Huertas-Abril, 2024; Marschall & Davis, 2012). Thus, critical literacy is not only a teaching method but also a strategy for cognitive and moral liberation that equips prospective educators to become transformative, critically empowered, and meaningful learning facilitators.

Critical Literacy Theory

Paulo Freire, a radical Brazilian pedagogue, founded critical literacy theory on the idea that literacy is the ability to read the world as well as words (Nery et al., 2022; Shor, 2019). Literacy is seen as a liberating activity that helps people see oppressive social structures and take deliberate action to improve them. Critical literacy views texts as ideological arenas where meaning is contested; therefore, readers must dismantle language's power systems (Gammelgaard et al., 2024; Luke, 2018). This method teaches

that reading is a political act that requires awareness and alignment with justice and humanity. Thus, a critical literacy approach to education demands readers to critically assess language, detect structural and narrative biases, and acknowledge that all texts are ideological (Alford et al., 2019; Papola-Ellis, 2020). This paradigm has influenced reflective, contextual, and socially conscious language learning methods (Brookfield, 2020).

In critical pedagogy, critical literacy is both a theory and an educational technique that makes students active, conscious, and reflective meaning-makers in texts and social realities (Kharisma & Jannah, 2025; Mínguez López & Kalogirou, 2024). A dialogic model that empowers students to evaluate the world replaces the previous educational paradigm that views students as passive recipients of knowledge. Critical literacy is important in teacher education because teachers must teach information, discourse awareness, and social sensitivity (Hasanah & Ridho, 2020; Dewi & Samudra, 2021). This method improves students' analytical, moral, and logical reasoning skills, according to several research studies (Karadag, 2017; Musdalifah, 2022). Critical literacy is still underutilized in Islamic educational institutions, especially in Indonesian language education programs. Thus, contextual investigation is critically needed to address local demands and global value-based education difficulties.

Facione's Critical Thinking Model

Peter A. Facione's critical thinking model is frequently used in higher education to measure higher-order thinking skills (Hart et al., 2021; Mastuti et al., 2022). Interpretation, analysis, inference, evaluation, explanation, and self-regulation are six critical thinking dimensions that help understand, process, and reflect on textual and discursive information and arguments (Facione et al., 2017). These six dimensions form an interrelated and mutually reinforcing cognitive matrix that helps learners read and infer meaning and assess the author's intentions, the argument's logic, and the narrative's social effects. This approach also incorporates metacognition through self-regulation, the ability to monitor, analyze, and alter thinking techniques while processing conversation. The Facione approach allows educators and researchers to use validated and reliable tools to measure students' depth of thought across educational contexts (Basri et al., 2024). This model's accessibility and standardization make it a top choice for quantitative critical thinking skills assessment tools in higher education.

The Facione paradigm is important in teacher education because teaching requires introspective, argumentative, and evaluative thinking. This paradigm allows systematic critical thinking training with unambiguous cognitive markers. Karadag (2017) and Aminah et al. (2023) found that this strategy improves students' ability to recognize concealed premises, discern fact from opinion, and develop logical arguments with valid evidence. In this research, Facione's model was employed for final evaluation, pretest and posttest instruments, and critical literacy learning interventions. The model is fundamental to the methodological design, influencing both the design process and the interpretation of results. Thus, Facione's critical thinking model is both an academic

measurement tool and a conceptual framework for producing teachers who think clearly, have broad understanding, and are conscious of their discourse position.

Critical Literacy in the Digital and Multiliteracy Era

Multiliteracies and digital literacy have become new education paradigms as digital technology has rapidly changed the global communications landscape (Brookfield, 2020; Sumarni & Nuryanti, 2021). Multiliteracies stress the capacity to read and understand verbal, visual, audiovisual, and multimodal texts, which are now part of digital literacy. Critical literacy now encompasses navigating, analyzing, and critiquing the complex, quick, and frequently biased or manipulative flow of information as well as understanding printed texts. As digital citizens, students must learn to examine online content reflectively, identify fake news, and understand the objectives and ideologies disguised in social media and other digital discourse (Otrel-Cass & Fasching, 2021). Critical literacy in the digital age is both a pedagogical tool and an intellectual defense, allowing people to thrive logically, ethically, and reflectively in the online public sphere's flow of information and polarization of opinion (Aguilera & Pandya, 2021).

A recent study suggests that critical literacy in digital environments might improve students' discourse awareness, social empathy, and awareness of digital text narratives (Rahmawati & Noor, 2021; Karadag, 2017). Prospective instructors must have this competence to help pupils grasp academic and non-academic materials in various formats and media. Teachers help students develop character and reasoning in a digital world vulnerable to disinformation and discourse radicalization by teaching multiliteracies-based critical literacy. This method emphasizes reading ethics, social responsibility, and intellectual spirituality on an Islamic campus like UNZAH (Zamzami, 2023). Thus, multiliteracies, rooted in critical literacy, provide technical skills and provide a more contextual, inclusive, and transformative Indonesian language learning paradigm to meet 21st-century concerns (Huot et al., 2025; Ratna, 2024).

2. METHOD

This study employed a quasi-experimental design with a pretest-posttest control group approach, which is methodologically designed to test the effectiveness of a learning intervention under conditions that do not permit complete randomization of subjects. This design was chosen because it aligns with the real-world context of higher education, where student allocation to specific classes is often predetermined by the academic system. In this model, two groups are compared: an experimental group receiving a critical literacy approach and a control group receiving conventional learning without any specific intervention. Before and after the treatment, both groups were given the same test to measure critical reading skills. The purpose of this design was to determine whether there were significant differences between the pretest and posttest results of the two groups and to what extent the intervention contributed to this improvement. By using this design, researchers were able to isolate the treatment variable in a more measurable manner, thereby obtaining empirical evidence regarding

the effect of the critical literacy approach on the critical thinking dimensions of prospective teacher students.
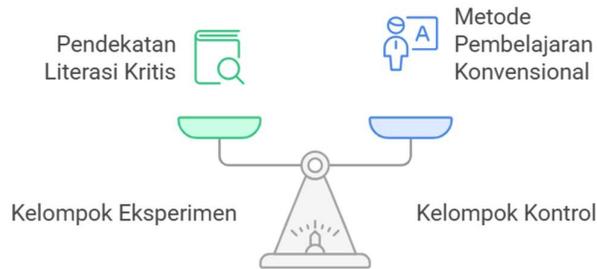

Figure 1. Research Design

The following visualization illustrates the process flow of this research, starting from initial planning to final data analysis, providing a more systematic overview and facilitate understanding of the stages involved.
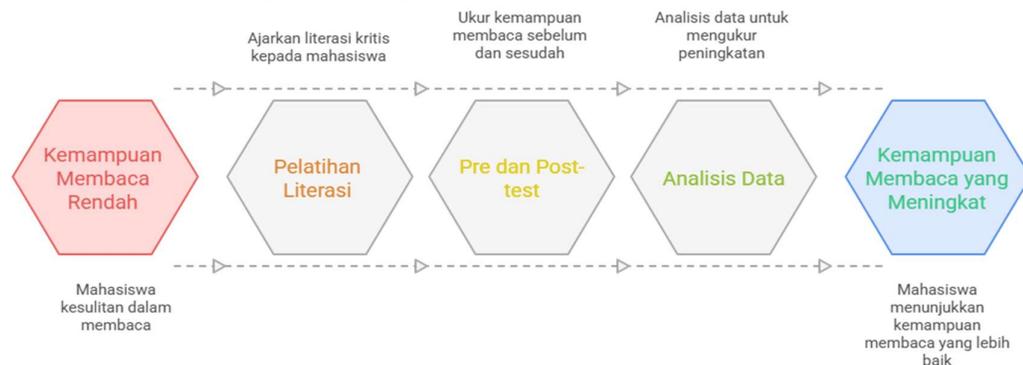

Figure 2. Quasi-Experimental Research Flow

This study involved 50 fifth-semester students from the Indonesian Language Education Study Program at Zainul Hasan Genggong University (UNZAH), Probolinggo, as the unit of analysis and the primary participants in testing the effectiveness of the critical literacy approach. The selection of fifth-semester students assumed that at this stage they have acquired the basics of literacy and pedagogy, but not all of them have developed in-depth critical reading skills. The study subjects were divided into two treatment groups using a randomized controlled trial: an experimental group and a control group, each consisting of 25 students. The randomization process was carried out after an initial screening based on strict inclusion criteria, namely: (1) having taken basic literacy and language courses as a prerequisite for mastering the initial concepts of literacy; (2) stating in writing their willingness to participate in all treatment sessions within a predetermined timeframe; and (3) not currently participating in any other literacy training or learning program outside the curriculum in order to maintain the internal validity of the intervention. This selection aimed to ensure that each participant had homogeneous academic and cognitive characteristics so that the effects of the treatment could be analyzed more objectively.

The data source for this study was obtained through direct measurement of students' critical reading skills using a test instrument developed based on Facione's (1990) six-dimensional model of thinking. This instrument includes six main indicators: interpretation, analysis, inference, evaluation, explanation, and self-regulation—dimensions designed to capture students' cognitive and reflective processes in understanding and critiquing texts. Each dimension is represented by questions that assess students' critical responses to a variety of texts, including descriptive narratives, expository texts, and argumentative texts with both implicit and explicit arguments. There were 24 questions in all, and they were a mix of short essays and reasoned multiple-choice questions. This format was chosen to accommodate two important aspects: objectivity of measurement and depth of argumentation. Reasoned multiple-choice questions allow for standardized quantitative data filtering, while short essays provide space for students' cognitive expression in reasoning, evaluating, and positioning themselves argumentatively. The entire instrument was designed to capture critical reading skills comprehensively, while maintaining alignment between the theory used and the context of Indonesian language teachers' education.

Table 1. Dimensions and Indicators of Critical Reading Ability

Dimensions	Indicators
Interpretation	Identifying literal and implicit meanings
Analysis	Determining the main argument in a text
Inference	Drawing conclusions based on textual evidence
Evaluation	Evaluating the quality of arguments and the validity of sources
Explanation	Restate the meaning of a text with reasoning
Self-Regulation	Reflecting on understanding and evaluating the reader's position

Figure 3. Dimensions and Indicators of Critical Reading Ability

To ensure the validity and reliability of the research instrument, a series of evaluation procedures were conducted in accordance with standards for developing measurement tools in quantitative research. Content validity was achieved through an expert judgment process involving three expert lecturers in the field of literacy and educational evaluation. These experts assessed the suitability of the test items to Facione's critical thinking dimensions, as well as checking wording clarity, indicator representativeness, and contextual alignment with the characteristics of student teachers. Revisions were

made based on their feedback before the instrument was used for data collection. To test the instrument's reliability, Cronbach's alpha coefficient analysis was used using SPSS version 25. The reliability test results showed that the instrument had an excellent level of internal consistency with a coefficient of 0.87. This indicates that the test instrument has sufficient stability and accuracy to be used to quantitatively and systematically measure students' critical reading skills.

The data analysis technique used in this study was Analysis of Covariance (ANCOVA), which functions to test the effect of treatment on posttest scores by controlling for pretest scores as a covariate variable. This approach was chosen because it can isolate the effect of the intervention (critical literacy) more accurately by controlling for initial differences between subjects. Before conducting the main test, the data were first analyzed through prerequisite tests, including a normality test (to ensure data distribution is close to normal) and a homogeneity test (to ensure equality of variance between groups), in accordance with the provisions of parametric tests. Next, an ANCOVA test was conducted to determine the significance of the treatment effect, followed by calculation of the effect size using the Eta Squared (η^2) formula to assess the strength of the resulting effect. All analysis processes were carried out using SPSS version 25 statistical software, with a significance level set at $\alpha = 0.05$. With this procedure, the analysis of the results can be carried out objectively and in-depth and supports the validity of the resulting empirical findings.

3. RESULTS AND DISCUSSION

Results

This study tested whether the critical literacy strategy improved the critical reading skills of prospective Indonesian language teacher students in Zainul Hasan Genggong University's Islamic Education (Tadris) study program. The research focused on three complementary findings for a complete understanding. First, pretest and posttest scores were compared between the experimental group receiving critical literacy intervention and the control group getting conventional teaching to quantify critical reading ability changes. Second, an ANCOVA analysis was performed to evaluate if the treatment caused the posttest score increase and not other factors, such as pretest scores. Third, Facione's six critical thinking dimensions—interpretation, analysis, inference, evaluation, explanation, and self-regulation—were used to analyze the test results to determine which dimension improved most. These three focuses help explain how well the critical literacy method develops students' reflective and analytical thinking skills. The following data show that the program works and that students increase their competencies consistently.

Pretest and Posttest Results

Initial analysis was conducted by measuring pretest and posttest scores administered to both groups of participants before and after the treatment. The pretest results indicated that both the experimental and control groups had relatively equivalent levels of critical

reading ability. The experimental group recorded an average pretest score of 58.4 (SD = 6.3), while the control group achieved an average of 57.9 (SD = 5.9). This similarity reflects the general homogeneity of the initial conditions of both groups, which is an important requirement for the internal validity of a quasi-experimental study. This similarity indicates that the differences in scores that emerged in the posttest stage were most likely caused by the treatment, rather than differences in initial ability. The findings obtained at this initial stage provide a strong foundation for valid analysis of the treatment's impact.

Table 2. Pretest and Posttest Scores for Critical Reading Ability

Group	Pretest (M ± SD)	Posttest (M ± SD)
Experiment	58.4 ± 6.3	78.6 ± 5.7
Control	57.9 ± 5.9	68.1 ± 6.1

After intervention and learning, a post-test measured critical reading skills. The experimental group increased significantly to 78.6 (SD = 5.7), while the control group improved somewhat to 68.1 (SD = 6.1). The experimental group's results increased by over 10 points, indicating that the critical literacy method improved students' critical thinking. The score growth graph demonstrates a constant trend throughout treatment, showing the intervention's systematic impact on learning outcomes. The fact that the control group did not improve supports the claim that the difference is due to the learning strategy rather than curricular adaptation or motivation. Thus, these quantitative data show that critical literacy abilities promote text comprehension better than standard learning approaches.

These preliminary data suggest that the critical literacy approach is effective in Islamic higher education, particularly in Islamic boarding schools. The experimental group improves critical reading abilities quantitatively and analytically, leading to a deeper, more reflective knowledge of texts. The difference in pretest and posttest scores in this study provides initial empirical evidence of critical literacy's transformational impact on Indonesian language learning for potential teachers. This demonstrates that critical literacy abilities help professional teacher candidates improve critical thinking skills.

ANCOVA Test Results

To ensure the validity of the results, further analysis was conducted using Analysis of Covariance (ANCOVA), a statistical technique that allows researchers to isolate the effect of treatment on posttest scores by controlling covariate variables, in this case, pretest scores. This technique was chosen because of its advantage in accommodating quasi-experimental designs where full randomization of subjects is not possible. In the context of this study, ANCOVA serves to test whether the increase in critical reading scores in the experimental group is solely the result of the critical literacy treatment approach, or whether it is possibly influenced by differences in initial abilities between subjects. The use of this test is important because it ensures that the treatment effect is

not confusing with the baseline variable. Therefore, ANCOVA plays a crucial role in ensuring that the progress that occurs truly reflects the effects of intervention.

Table 3. Average Improvement in Each Dimension of Critical Thinking

Source of Variation	JK	DK	RJK	F	Sig.
Pretest	208.2	1	208.2	4.81	0.032*
Group	892.7	1	892.7	20.61	0.000**
Error	1984	47	42.21		
Total		49			

The ANCOVA results, shown in the analysis of variance table, reveal two important findings. First, pretest scores did have a significant effect on posttest scores (F = 4.81; p = 0.032), indicating that students' initial abilities contributed to their final achievement. However, a more crucial finding was the influence of the group variable—between experimental and control—which had a highly significant effect on posttest scores (F = 20.61; p = 0.000). A significant value below 0.01 indicates that the critical literacy intervention had a strong and statistically convincing impact on student learning outcomes. In other words, although there was a contribution from the pretest, the significant changes in the posttest were primarily driven by the treatment.

These findings confirm the effectiveness of the critical literacy approach as a pedagogical strategy with a real impact, not simply a variation of traditional teaching. The improvement in students' scores was not merely numerical but also demonstrated that this approach facilitated the achievement of higher order thinking skills, which, in the context of Facione's model, include the ability to interpret, evaluate, and metacognitively regulate understanding. Therefore, the ANCOVA results not only reinforce previous quantitative findings but also strengthen the theoretical argument that critical literacy is not only feasible, but also urgently needed to be integrated into prospective teacher education in Islamic higher education settings.

Dimensional Analysis of Critical Reading Skills

Further analysis in this study focused on the distribution of score increases in the six dimensions of critical thinking according to Facione's model: interpretation, analysis, inference, evaluation, explanation, and self-regulation. This approach not only measures the overall aggregate score but also examines in more depth which cognitive aspects experienced the most significant development. The data processing results showed that the experimental group experienced improvements in all dimensions, with higher scores than the control group. The dimensions with the highest scores in the experimental group were interpretation (82.4) and inference (79.8), while self-regulation—despite having the lowest score among the six dimensions (72.3)—still showed a significant difference compared to the control group (61.6). This improvement was consistent, indicating a stable and comprehensive effect of the intervention on the students' thinking spectrum. The results of this study show balanced development across all aspects, indicating that critical literacy skills influence how students digest, evaluate, and consider information across multiple dimensions.

Table 4. Statistical Test Results

Dimensions	Average Experiment Score	Average Control Score	Difference
Interpretation	82.4	70.2	+12.2
Analysis	76.5	66.3	+10.2
Inference	79.8	67.1	+12.7
Evaluation	75.2	64.7	+10.5
Explanation	77.9	65.8	+12.1
Self-Regulation	72.3	61.6	+10.7

The highest increases in the interpretation and inference dimensions indicate that students who followed the critical literacy approach were better able to interpret the implied meaning of texts and draw evidence-based conclusions. Meanwhile, improvements in the evaluation and explanation dimensions demonstrate that students are not only reading texts but also evaluating the quality of arguments and rationally articulating their positions. This indicates that learning does not stop at literal comprehension but moves toward forming opinions based on critical reasoning. Furthermore, although the increase in self-regulation was not as high as in the other dimensions, this score still indicates that students are beginning to demonstrate metacognitive awareness of how they understand and evaluate texts. Therefore, all this information suggests that critical reading skills not only improve basic cognitive elements but also enhance the capacity for reflection, evaluation, and metacognition, which are essential for teaching.

Overall, this data reinforces the claim that the critical literacy approach is not a one-size-fits-all strategy, but rather a learning method that addresses the full spectrum of critical thinking. Overall improvements across the six dimensions demonstrate that this approach successfully instills systematic, reflective thinking mechanisms in students. In the context of teacher education, these findings are crucial because prospective educators are expected to possess strong metacognitive abilities to critically assess texts, learning situations, and even themselves. Thus, critical literacy has been shown to impact not only test scores but also the formation of a deeper and more sustainable intellectual foundation.

Discussion

This study proves that the critical literacy strategy significantly improves prospective Indonesian language teacher students' critical reading skills. Test and posttest analysis indicated that the experimental group improved more than the control group in all critical thinking areas, especially interpretation and inference, which are essential to understanding implicit meaning and building evidence-based reasoning. The ANCOVA test demonstrated that the intervention had a highly significant impact even after controlling for starting ability characteristics, bolstering its efficacy. Thus, the critical literacy-based intervention improved students' thinking by making them more contemplative, analytical, and sensitive to ideological systems in texts. This study shows a correlation between student growth and critical literacy theory, supporting its validity.

This suggests that the critical literacy method might be integrated into higher education courses, particularly in teacher training programs that promote critical thinking and social awareness.

At an Islamic institution like Zainul Hasan Genggong University (UNZAH), where scientific, ethical, and spiritual values underpin education, the critical literacy method is even more transformative. Critical literacy instruction improves students' cognitive abilities and attitudinal changes that represent a paradigm shift in how they interpret texts and knowledge. Passive students became active, critical readers, questioning authors' claims, identifying biases, and interpreting discourse content in social and ideological contexts. In fieldwork, experimental students criticized news narratives, literary texts, and discourse-based learning resources more actively. Test scores and student attitudes toward texts changed as they became more introspective, ethical, and aware of their role as readers. This condition also shows that the study results support critical literacy and ideological awareness ideas but strengthen them. This conclusion suggests that critical literacy can develop cognitively and morally whole readers.

This study supports Paulo Freire's idea of education as an emancipatory process (Nugraha et al., 2024; Shih, 2018). Freire regards reading as a conscious effort that allows people to critically evaluate the world, not just decode language symbols. Critical literacy liberates from language-based discourse and power structures (Morales, 2018). Students in the experimental group improved in interpretation and inference, supporting Freire's claim that conscious readers are active, introspective, and socially involved (Misiaszek, 2021). Students' success in the six dimensions of Facione's critical thinking model, especially evaluation and explanation, demonstrates that a critical literacy approach cultivates metacognitive abilities essential for reflective educators and democratic learning facilitators. Thus, the discussion of this study directly addresses critical literacy and critical thinking, demonstrating that the results not only reinforce the theory but also provide empirical evidence that strengthens its importance in Islamic higher education. Critical literacy enhances students' cognitive abilities, awareness, ethical standards, and preparedness to champion social change within their educational environments.

This study confirms Karadag (2017), who found that critical literacy improves readers' awareness of texts' ideological structure and encourages contextual meaning interpretation. Both found that critical literacy acquisition improved assessment and inference skills in students, supporting this study. An Islamic university study by Dewi and Samudra (2021) likewise found consistent increases in explanation and self-regulation after a critical literacy-based intervention. A significant degree of concordance with previous studies suggests that critical literacy strategies have consistent and repeatable favorable impacts across educational settings. Using the literal-conventional strategy, Hasanah and Ridho (2020) found little progress in evaluation and explanation ratings, which even stagnated. This proves that non-critical thinking education develops readers who ingest material without analyzing meaning or bias. Thus, the critical literacy strategy develops critical literacy awareness better than

the traditional way. This comparison demonstrates that this study's results match earlier research, broadening and reinforcing critical literacy's general trend.

This study's findings have crucial theoretical and practical implications for critical literacy in higher education, notably in Indonesian language education. The findings that students improved in interpretation, inference, evaluation, and explanation support Paulo Freire's view of education as liberation and Facione's theory of metacognitive thinking in critical thinking. This study shows that critical literacy is consistent with existing theories and broadens its application in Islamic higher education by emphasizing its role in building student awareness of ideology, ethics, and morals. This study opens new avenues for curriculum development and teaching methods, where critical literacy can be used to create reflective, analytical, and sensitive teachers who are sensitive to textual biases and power structures. Critical literacy can improve learning processes and outcomes, so higher education institutions must train lecturers, create dialogue-based modules, and foster a critical thinking environment. Critical literacy strengthens ethical, scientific, and spiritual values in an Islamic university like UNZAH, producing graduates who are not only academically competent but also ready to transform society.

Building upon the findings, this study recommends systemically integrating critical literacy into teacher education, particularly in Indonesian Language Education study programs at Islamic universities. Critical literacy improves students' critical reading skills quantitatively and promotes reflective awareness of meaning, ideology, and the reader's role in text comprehension. To assist this, higher education institutions should train lecturers in critical literacy-based modules and teaching material design through workshops, peer teaching, and action research. This method can help prospective teachers become discourse-aware, critical thinkers, and social justice and intellectual spirituality advocates. This approach could develop professors who are academically competent and capable of revolutionary change at an Islamic university like UNZAH. Critical literacy is an intellectual investment in Indonesian education's future, not just a learning approach.

Higher education institutions, particularly Indonesian Language Education study programs, need to consider integrating a critical literacy approach into their curriculum. This approach can be applied to courses such as reading strategies, literary appreciation, text teaching, and even discourse-based character education courses. Furthermore, lecturer training and the development of critical literacy-based teaching materials need to be part of policies for developing study programs.

More broadly, critical literacy can bridge the gap between the profound scholarly traditions of Islamic boarding schools (pesantren) and the demands of the times, which demand reasoning skills, the courage to think independently, and social responsibility. Therefore, through this approach, prospective teachers are prepared not only as instructors but also as agents of transformation capable of guiding a generation of learners towards intellectual and spiritual maturity. Critical literacy, in this case, is not just a teaching method but a path to educational liberation and enlightenment.

4. CONCLUSION

The critical literacy approach successfully strengthened the critical reading skills of prospective Indonesian language teacher students. The impact was evident in the significant increase in posttest scores, ANCOVA analysis results, and the development of Facione's six dimensions of critical thinking. In line with the research objectives, this intervention not only strengthened the interpretation and inference aspects, which are key indicators of successful critical reading, but also fostered reflective and analytical thinking patterns, which are essential for prospective professional educators. Additionally, the critical literacy approach has a significant influence on strengthening the critical reading skills of prospective Indonesian language teacher students. Critical literacy-based interventions not only resulted in significant increases in quantitative scores but also demonstrated a transformation in students' thinking patterns toward a more reflective, evaluative, and ideologically conscious perspective. The higher scores in all six areas of critical thinking in Facione's model support the idea that this method works to help teachers in the 21st century develop the higher-order cognitive skills they need. These findings enrich the discourse on critical literacy in the context of Islamic education and open up space for the integration of emancipatory pedagogical practices with Islamic values. Theoretically, this approach validates Freire and Facione's framework as a basis for developing teacher competencies based on critical awareness. Practically, this approach can be adapted as a learning model at various levels of education to develop learners who are not only competent in understanding texts but also courageous in questioning, interpreting, and taking positions on the social meanings contained in them.

Therefore, critical literacy should be recommended as a primary approach in teacher education curricula, particularly in courses that emphasize discourse comprehension and ideological awareness. Furthermore, higher education institutions are advised to provide ongoing training programs for lecturers in developing learning strategies that focus on dialogue and reflection, as well as developing materials that encourage students to develop metacognitive and ethical awareness when reading texts. Systematic implementation of this approach is expected to produce graduates who are not only academically competent but also possess critical thinking skills, social sensitivity, and the readiness to become agents of change in education and society. The subject coverage of this study, encompassing only one study program at a single Islamic educational institution, limits its scope. Furthermore, the instrument used was test-based, thus not fully capturing cognitive and affective processes in depth. Further research is recommended using a mixed-methods approach or qualitative studies that examine students' thinking processes in greater depth through classroom observations, portfolios, or reflective interviews. Furthermore, exploring the application of a critical literacy approach at the secondary level, in madrasas, or Islamic boarding schools (pesantren), is also an important avenue for broadening its impact.

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