



CRITICAL THINKING DEVELOPMENT THROUGH ENGLISH READING ACTIVITIES IN HIGHER EDUCATION

Lim Seong Pek^{1*} and Ahmad Tauchid²

¹INTI International University, Malaysia

²Duta Bangsa University, Indonesia

*Corresponding Author: seongpek.lim@newinti.edu.my

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Abstract

Critical thinking has become a central goal in higher education, particularly in English language learning where reading is expected to move beyond basic comprehension toward analysis, evaluation, and interpretation. Recent studies have increasingly emphasized the integration of higher-order thinking strategies, such as guided questioning and collaborative discussion, to promote deeper engagement with texts; however, much of the existing research focuses on instructional strategies or outcomes without clearly explaining how students' thinking develops over time, leaving the connection between learning processes and measurable outcomes less fully explored. This study therefore aims to examine how English reading activities support the development of critical thinking among higher education students and to explore how students respond to the integration of critical thinking-oriented tasks. Using a mixed-method design, the study involved 23 undergraduate students in an English education program at a public university in Indonesia, with data collected through pre- and post-tests, reflective journals, classroom observations, and semi-structured interviews. Quantitative data were analyzed using paired samples t-tests, while qualitative data were examined through thematic analysis to identify patterns of engagement and cognitive development. The findings reveal consistent and balanced improvement in students' abilities to analyze, evaluate, and interpret texts over time, with interpretation showing slightly stronger development, alongside a clear positive relationship between engagement and critical thinking performance. Students also demonstrated positive cognitive, affective, and behavioral responses, including high engagement, strong motivation, increased confidence, and a strong perception of the relevance and value of the tasks. These results imply that structured reading activities not only enhance critical thinking skills but also foster meaningful and engaging learning experiences, highlighting the importance of integrating cognitive, behavioral, and affective dimensions in instructional design to effectively support critical thinking development in higher education contexts.

Keywords: Critical thinking, English language teaching, reading comprehension

INTRODUCTION

Critical thinking has become an essential element in higher education, especially in English language learning where students are expected to engage with texts in more meaningful ways. Reading in higher education is increasingly viewed as more than understanding vocabulary or identifying main ideas, but as an active process of questioning, interpreting, and evaluating information. When students read academic texts, they are often required to consider different perspectives and form their own judgments. This shifts reading from a passive activity into a more reflective and intellectually engaging process. In English classrooms, reading activities naturally provide space for this kind of engagement. Students are invited to interact with ideas, not just words, which gradually shapes how they think. In this sense, reading becomes closely connected to the development of critical thinking in higher education.

The importance of critical thinking extends far beyond the classroom, as students are constantly exposed to complex information in both academic and everyday contexts. In reading activities, students who think critically are better able



to interpret arguments, identify bias, and evaluate the credibility of sources. Without these skills, reading may remain limited to surface-level understanding, where students simply accept information without reflection. This can affect their ability to participate in discussions or express their ideas clearly. In higher education, where independent thinking is highly valued, this becomes a serious concern. Integrating critical thinking into reading instruction helps students become more active learners who can engage with texts more confidently. It also supports their ability to connect ideas across different contexts. As a result, reading activities play an important role in shaping how students process and respond to information.

Recent studies have shown increasing interest in integrating critical thinking into English reading instruction. Researchers have explored various strategies, such as using higher-order questions, reflective tasks, and collaborative discussions to encourage deeper engagement with texts (Liu & Puteh, 2025; Yang et al., 2025). Other studies highlight the role of guided questioning in helping students move beyond literal comprehension toward analysis and evaluation (Akbar et al., 2025; Wang, 2025). In addition, group-based reading activities have been found to create opportunities for students to exchange ideas and consider multiple perspectives (Allehyani, 2025; Rivard & Gueye, 2026). These approaches show that reading instruction has gradually shifted toward more thinking-oriented practices. However, the outcomes are not always consistent across different contexts. While many studies report positive results, questions remain about how these activities actually shape students' thinking over time.

Even with these developments, there is still limited understanding of how critical thinking grows through reading activities in a clear and observable way. Many studies describe teaching strategies, but fewer explain how students' thinking changes as they engage with texts. In some cases, the focus remains on comprehension scores rather than on how students analyze or evaluate ideas. This makes it difficult to see whether students are truly developing critical thinking skills. Differences in teaching methods and assessment tools also make comparisons across studies challenging. As a result, the connection between reading activities and the development of critical thinking is not always fully explained. A closer look at both the learning process and the outcomes is needed to better understand this relationship. This kind of perspective allows us to see not just what students learn, but how they think.

This study introduces an approach that brings reading activities and critical thinking development into a more connected framework. It combines structured reading tasks with guided reflection and discussion, allowing students to engage with texts in a deeper way. Students are encouraged to question ideas, interpret meanings, and express their reasoning as part of the learning process. In addition, the study looks at both students' performance and their experiences during the learning process. This makes it possible to capture a more complete picture of how critical thinking develops. By focusing on how students interact with texts, the study provides insight into their thinking patterns. The objective of this study is to examine how English reading activities support the development of critical thinking in higher education and to explore how students respond to these learning experiences.

When students engage in reading activities that challenge their thinking, the classroom atmosphere begins to change. Discussions become more meaningful, as

students feel encouraged to share their ideas and question what they read. Lecturers can guide this process by designing tasks that invite interpretation and reflection, rather than simply checking comprehension. Over time, students become more comfortable expressing their thoughts and considering different viewpoints. This not only affects their performance in reading tasks but also influences how they approach learning in general. Reading becomes a space where ideas are explored rather than memorized. Such experiences help students build confidence in their ability to think independently. They also shape how students engage with information in academic and real-life contexts.

This study presents a closer look at how reading activities can support the development of critical thinking in higher education. It provides a detailed exploration of how students engage with texts and how their thinking evolves through structured learning experiences. The findings offer insights into how specific types of reading tasks encourage deeper analysis and reflection. They also illustrate how students respond when they are given opportunities to think more actively during reading. By connecting instructional practices with students' thinking processes, the study helps clarify how reading can move beyond comprehension. It also offers a practical perspective for designing classroom activities that encourage meaningful engagement with texts.

Research Questions:

1. How do English reading activities support the development of critical thinking among higher education students?
2. How do students respond to the integration of critical thinking-oriented tasks in English reading activities?

LITERATURE REVIEW

Critical Thinking Development through Structured English Reading Practices

Critical thinking often appears as an abstract goal in higher education, yet its presence becomes very real when students engage with texts in meaningful ways. In many English classrooms, reading still revolves around finding correct answers, which can quietly limit students' curiosity. When students begin to treat texts as something to question rather than simply accept, their role as readers starts to shift. They become more attentive to how ideas are presented and why certain arguments are made. Scholars have pointed out that critical thinking grows when learners actively interact with texts instead of passively receiving information (Khasawneh & Belton, 2025; Rusieshvili et al., 2025; Zhai et al., 2024). Other studies suggest that analytical reading tasks can help students uncover assumptions and evaluate arguments more carefully (Archila et al., 2024; Hakemulder & Mangen, 2024; Phimpimon et al., 2024). These insights gently remind us that reading is not just about understanding words. It becomes a space where thinking is practiced and refined. It shows that when reading is approached thoughtfully, it can shape how students make sense of the world. It also suggests that structured reading activities can guide students toward more reflective habits of thinking.

Looking more closely at how reading connects with thinking, it becomes clear that the process is deeply cognitive. Reading invites learners to bring their own experiences into the text, creating a dialogue between what they know and what they encounter. This interaction often leads to moments where students

question, agree, or even disagree with what they read. Research grounded in cognitive theory highlights that such processes are essential for developing higher-order thinking (Hasanzade, 2025; Wang, 2025; Yan, 2025). In addition, schema theory explains how readers actively construct meaning by linking new information with prior knowledge. Studies also show that exposure to challenging texts can push learners to rethink their assumptions (Aco & Suwandi, 2025; Allehyani, 2025). These ideas help us see reading as more than a technical skill. It becomes an evolving process where understanding grows through interaction. It also shows that thinking develops when learners are invited to engage more deeply with what they read.

In recent years, classroom practices have started to reflect this understanding more clearly. Teachers are experimenting with reading activities that invite students to think, question, and respond rather than simply recall information. Task-based approaches, for example, encourage learners to explore texts through problem-solving and analysis (Fatwassani et al., 2025; Ismail et al., 2023). Guided questioning has also become a common strategy to help students look beyond surface meanings. At the same time, group discussions allow students to hear different interpretations and reconsider their own ideas. Digital platforms have added another layer, offering spaces where students can annotate and share thoughts in real time (Velásquez, 2025). These developments make reading feel less isolated and more interactive. They show that learning can become richer when students are actively involved. They also suggest that the way reading is designed has a strong influence on how students think.

Even so, many studies still leave us wondering what actually happens inside students' minds during these activities. It is common to see results presented in the form of scores or general observations, but these do not always capture how thinking unfolds. Some research touches on students' perceptions, yet it rarely shows how their reasoning develops step by step (Subramaniam et al., 2024). Differences in teaching styles and classroom environments add another layer of complexity. This makes it difficult to identify which elements truly support critical thinking. What seems to be missing is a closer look at the learning process itself. Understanding how students interpret, question, and respond to texts can offer deeper insights. It shows that learning is not only about outcomes but also about the journey. It also reminds us that observing thinking in action can reveal what numbers alone cannot.

Teacher guidance plays a quiet but powerful role in shaping how students engage with reading. A simple question from a lecturer can open up new ways of thinking or encourage students to reconsider their assumptions. Research shows that scaffolding helps learners move gradually from basic comprehension to deeper analysis (Mason & Warmington, 2024; Ruíz et al., 2023). Feedback also plays an important role in helping students refine their ideas (Chen, 2026). Without this support, students may remain at the surface level of understanding. This highlights how teaching is not just about delivering content but about guiding thinking. It shows that meaningful interaction between teacher and student can shape the learning experience. It also suggests that critical thinking grows in environments where students feel supported to explore ideas.

At the same time, students themselves bring important elements into the learning process. Their interest, curiosity, and willingness to engage can influence

how deeply they interact with texts. Research suggests that motivated learners are more likely to question and reflect on what they read (Yang et al., 2026). Activities such as debates or open discussions can encourage students to express their thoughts more freely (Gebremariam & Weldeyohannes, 2025). When reading materials feel relevant to their lives, students tend to connect more easily with the content. These experiences make learning feel more personal and meaningful. They show that engagement is not something that happens automatically. It grows when students feel connected to what they are learning. It also highlights the importance of designing activities that invite participation rather than passive observation.

In higher education, these ideas become even more relevant as students are expected to think independently and engage with complex issues. Reading activities offer a practical way to develop these abilities within language classrooms. Studies have shown that students who engage in critical reading demonstrate stronger analytical skills (Ratnasari et al., 2025; Rusieshvili et al., 2025). Yet, challenges remain in making these practices consistent across different contexts. This reminds us that developing critical thinking is not a one-step process. It requires continuous reflection and adaptation. It shows that reading can play a central role in shaping how students think. It also reinforces the need to align classroom practices with broader educational expectations.

Reflecting on these discussions, reading emerges as more than a language activity. It becomes a space where ideas are explored, challenged, and reshaped. While existing research provides valuable insights, it also leaves room for deeper exploration of how thinking develops in real classroom settings. Paying attention to both processes and outcomes can offer a more complete understanding of learning. This perspective encourages a more thoughtful approach to designing reading activities. It also highlights the importance of creating learning environments that invite students to think, question, and grow.

Exploring Critical Engagement in English Reading for Higher Education Learners

For many students, reading in English begins as a task that focuses on understanding words and sentences. Over time, however, it can become something much richer when learners start to engage with ideas behind the text. Critical engagement means that students do not simply accept what they read, but begin to question, interpret, and respond to it. This shift is not always easy, especially for learners who are used to looking for single correct answers. Scholars have described critical thinking as the ability to analyze arguments and evaluate evidence thoughtfully (Alshaye, 2021; Maab et al., 2024). In reading contexts, this ability grows when learners actively interact with texts. These perspectives help us see reading as more than a technical skill. It becomes a way of engaging with ideas. It also suggests that learning happens when students are encouraged to think beyond the surface.

Understanding how critical thinking develops requires looking at its theoretical foundations. Bloom's taxonomy, for instance, highlights the importance of higher-order thinking such as analysis and evaluation (Yulianti & Herpratiwi, 2024). These skills are closely connected to how students process texts during reading. Constructivist theories further explain that learners build meaning through interaction and experience (Melati & Rasyid, 2023; Tauchid et al., 2025). This

means that understanding does not come from the text alone but from how learners interpret it. Research on metacognition also shows that reflecting on one's own thinking can deepen comprehension. These ideas provide a strong foundation for connecting reading with critical thinking. They show that learning is an active and reflective process. They also highlight the importance of encouraging students to think about how they think.

In classroom practice, different strategies have been used to support this kind of engagement. Simple techniques such as annotation can encourage students to interact more actively with texts (Zarobe & Gutiérrez, 2024). Questioning strategies also help students move beyond basic understanding (Wang, 2025). Collaborative activities allow learners to share perspectives and reconsider their ideas (Yasmin et al., 2026). Digital tools have added new possibilities, enabling students to engage with texts in more interactive ways (Brevik, 2019). These approaches show that reading can be shaped into a more engaging experience. They suggest that learning becomes deeper when students are involved. They also highlight that the way activities are designed matters greatly.

Even with these efforts, understanding how critical engagement develops remains a challenge. Many studies focus on outcomes without fully exploring the learning process. Some rely on test scores that may not reflect the complexity of students' thinking (Tukurah, 2021). Others describe strategies without examining how students experience them in practice. This creates a gap between what is taught and what is actually learned. Differences in learners' backgrounds also influence how they engage with texts. These factors make it difficult to draw clear conclusions. It shows that learning is more complex than it may appear. It also emphasizes the need to look more closely at students' experiences during reading activities.

Teachers play an important role in shaping how students approach reading. Their guidance can encourage students to think more deeply and explore different perspectives. Research shows that effective feedback can help learners refine their thinking (Devi & Suroto, 2024). Scaffolding techniques also support students as they move toward higher-level thinking (Chen, 2026; Yolanda et al., 2025). Without this support, students may remain at a basic level of understanding. This highlights the importance of teacher involvement in the learning process. It shows that critical thinking does not develop automatically. It also reinforces that guidance is essential in helping students engage more deeply with texts.

Learners themselves also influence how critical engagement develops. Their motivation, interest, and prior knowledge shape how they interact with reading materials. Studies suggest that motivated students are more likely to engage deeply with texts (Gonzalez-Torres & Vargas-Saritama, 2025; Huang et al., 2025). When learners can relate to the content, they tend to reflect more on what they read. This makes reading feel more meaningful and less like a task. These factors remind us that learning is not only about instruction. It is also about how students experience the process. It shows that engagement grows when students feel connected to the material. It also highlights the importance of considering learners' perspectives.

In higher education, the demand for critical thinking continues to grow. Students are expected to analyze information, evaluate arguments, and form their own opinions. Reading activities offer a practical way to develop these skills.

Research shows that students who engage in critical reading demonstrate stronger analytical abilities (Hardianti, 2024; Zuluaga et al., 2020). However, implementing effective practices remains a challenge in many classrooms. This suggests that more attention is needed in designing meaningful reading activities. It shows that reading can support intellectual development in powerful ways. It also emphasizes the importance of aligning teaching practices with educational expectations.

Reflecting on these ideas, critical engagement in reading appears as a complex but meaningful process. It involves interaction between students, texts, and instructional practices. While research provides useful insights, it also highlights the need for deeper exploration. Understanding how students experience reading can offer valuable perspectives on learning. This approach encourages a more thoughtful design of reading activities. It also highlights the importance of creating spaces where students feel comfortable questioning and exploring ideas.

METHOD

Research Design

This study employed a mixed-method design to examine the development of critical thinking through English reading activities in higher education. This design was selected because it allows the integration of quantitative data, which captures measurable changes in students' performance, and qualitative data, which provides deeper insight into students' learning experiences. The study followed a pre- and post-intervention structure to observe changes in students' critical thinking over time. At the same time, qualitative exploration was embedded within the instructional process to understand how students engaged with and responded to the reading activities. This combination enabled the study to move beyond numerical results and explore how critical thinking develops in actual classroom contexts. The design was particularly appropriate because critical thinking involves both observable outcomes and internal cognitive processes. By combining these approaches, the study was able to present a more comprehensive understanding of how reading activities shape students' thinking.

Participants

The participants consisted of 23 undergraduate students enrolled in an English education program at a public university in Indonesia. Purposive sampling was employed to ensure that participants shared relatively similar academic and English proficiency backgrounds relevant to the objectives of the study. The students were in their second year of study and ranged in age from 18 to 22 years old. In terms of gender distribution, 14 participants were female and 9 were male. The participants came from diverse backgrounds, including both urban and rural areas, which influenced their exposure to English and reading practices. Most students had experience with academic reading tasks but had limited experience with activities explicitly designed to develop critical thinking. All 23 participants were actively involved throughout the study, ensuring consistency and completeness in the data collection process.

Instruments

Several instruments were used to capture both the development of critical thinking and students' responses to the reading activities. A critical reading test was developed to measure students' ability to analyze, evaluate, and interpret texts. The test included open-ended questions, argument analysis tasks, and short written responses, allowing students to demonstrate their reasoning processes. To complement this, reflective journals were used to capture students' personal experiences and responses during the learning process. Students were asked to write brief reflections after each session, focusing on how they engaged with the reading tasks. In addition, a semi-structured interview guide was prepared to explore students' perceptions in greater depth. Classroom observation was also conducted using a structured checklist to document students' participation and interaction during reading activities. The use of these multiple instruments allowed for data triangulation, enhancing the credibility of the findings.

Data Collection

Data collection was conducted over a period of five weeks, allowing sufficient time for students to engage with a sequence of critical thinking-oriented reading activities. At the beginning of the study, all 23 participants completed a pre-test to assess their initial level of critical thinking in reading. Following this, students participated in structured reading sessions that included tasks such as guided questioning, text analysis, and group discussion. During each session, classroom observations were carried out to record students' engagement and interaction. Students also completed reflective journals after each session, providing insight into their learning experiences. At the end of the intervention, a post-test was administered to measure changes in critical thinking performance. In addition, several participants were selected for semi-structured interviews to gain deeper understanding of their responses to the activities. This systematic procedure ensured that both learning outcomes and learning processes were captured consistently.

Data Analysis

The data analysis involved both quantitative and qualitative procedures to address the research questions comprehensively. Quantitative data from the pre-test and post-test were analyzed using paired samples t-tests to determine whether there were significant improvements in students' critical thinking. This analysis provided statistical evidence of the effectiveness of the reading activities. Qualitative data from reflective journals, interviews, and classroom observations were analyzed using thematic analysis. The data were coded, categorized, and interpreted to identify patterns related to students' engagement, responses, and thinking processes. Through this process, key themes emerged that illustrated how students experienced and developed critical thinking during the activities. The integration of these analytical approaches allowed the findings to reflect both measurable changes and lived experiences. This provided a more complete understanding of how English reading activities support critical thinking development in higher education.

FINDINGS

Figure 1 illustrates the progression of three key components of critical thinking—analysis, evaluation, and interpretation—across five instructional sessions. The chart presents how each component develops over time as students engage in structured English reading activities. All three lines show a steady upward trend, indicating continuous improvement in students' performance. The visual comparison allows for an easy observation of how each skill evolves in relation to the others. The figure also highlights slight variations in growth rates among the components, reflecting differences in how students process and internalize each aspect of critical thinking. This representation provides a dynamic view of learning rather than a static outcome. It captures the gradual nature of cognitive development within classroom practice.

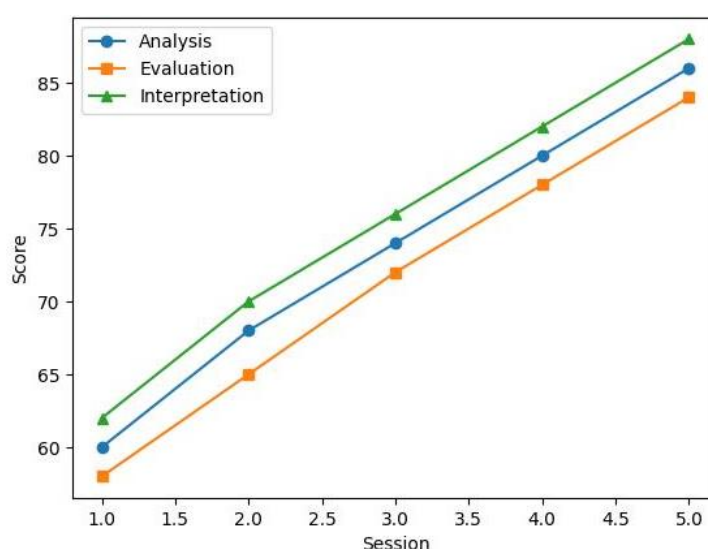


Figure 1. Development of critical thinking components

The data indicate that all three components of critical thinking improved consistently from the first to the fifth session. Analysis scores increased from 60 to 86, evaluation from 58 to 84, and interpretation from 62 to 88. Among these, interpretation showed the highest final score, suggesting that students became increasingly capable of constructing meaning from texts. Evaluation, although slightly lower, still demonstrated strong growth, reflecting improved ability to judge and critique information. The steady upward trend across all components suggests that repeated exposure to reading tasks played a significant role in strengthening students' thinking skills.

These patterns suggest that English reading activities support critical thinking not only by improving outcomes but also by sustaining gradual development over time. The parallel growth of all three components indicates that the instructional design addressed multiple dimensions of thinking rather than focusing on a single skill. The slightly higher gains in interpretation may indicate that students found meaning-making tasks more accessible compared to evaluative judgment. At the same time, the consistent increase in evaluation scores shows that students were gradually becoming more confident in expressing critical judgments.

This progression highlights how structured reading activities can nurture different aspects of thinking in a balanced way.

Figure 2 presents a grouped bar chart comparing students' performance in three critical thinking skills—analysis, evaluation, and interpretation—before and after the implementation of reading activities. Each skill is represented by two bars, allowing for direct comparison between pre-test and post-test results. The chart clearly shows that all post-test scores are higher than their corresponding pre-test scores. This visual format makes it easy to identify the extent of improvement across different skills. It also highlights how the intervention influenced each component of critical thinking. By presenting the data side by side, the figure offers a straightforward view of learning gains. It emphasizes the contrast between initial and final performance.

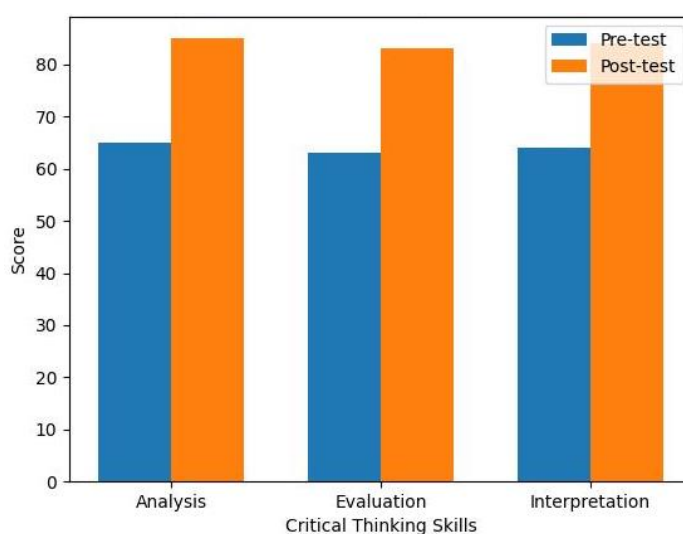


Figure 2. Pre vs post comparison by skill

The results show a clear improvement in all three skills after the reading intervention. Analysis increased from 65 to 85, evaluation from 63 to 83, and interpretation from 64 to 84. These increases indicate that students experienced substantial gains in their ability to process and engage with texts critically. The relatively similar post-test scores across all skills suggest balanced development. This implies that the reading activities were effective in addressing multiple dimensions of critical thinking simultaneously. The consistent improvement across all categories strengthens the evidence that the instructional approach had a meaningful impact.

The findings suggest that English reading activities can significantly enhance students' critical thinking abilities when designed with intentional focus on higher-order skills. The noticeable increase in scores reflects not only improved comprehension but also deeper engagement with textual content. The balanced improvement across analysis, evaluation, and interpretation indicates that students were not limited to one aspect of thinking. Instead, they developed a more integrated approach to understanding and responding to texts. This pattern highlights the effectiveness of combining different types of reading tasks within

instruction. It also shows that meaningful improvement can occur within a relatively short period when activities are structured carefully.

Figure 3 displays a scatter plot illustrating the relationship between students' engagement levels and their critical thinking scores, accompanied by a regression line. Each point represents an individual data pair, showing how engagement corresponds to critical thinking performance. The upward trend of the regression line indicates a positive relationship between the two variables. The distribution of points suggests a consistent pattern rather than random variation. This visual representation helps identify how changes in engagement are associated with changes in thinking performance. It also provides a clearer understanding of how active participation influences learning outcomes. The figure emphasizes the connection between behavioral involvement and cognitive development.

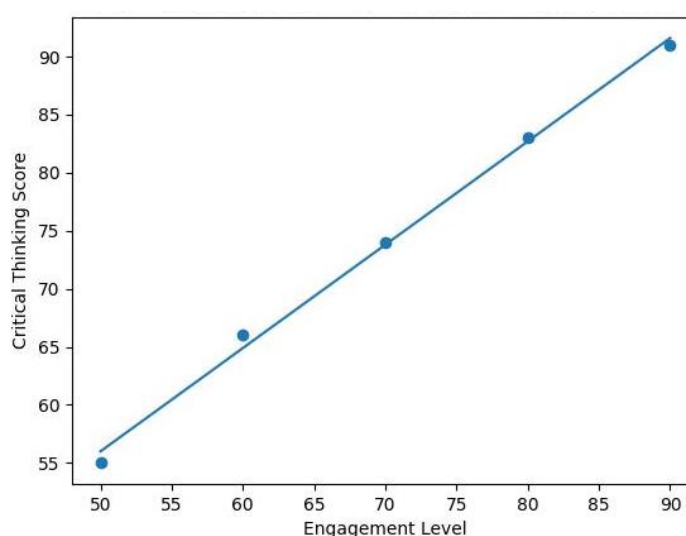


Figure 3. Engagement vs critical thinking

The results show a strong positive relationship between engagement and critical thinking scores. As engagement levels increased from 50 to 90, critical thinking scores also rose from 55 to 91. The alignment of data points along the upward trend line suggests that students who were more actively involved in reading activities tended to achieve higher levels of critical thinking. This pattern indicates that engagement is not merely a supporting factor but plays a central role in learning. The strength of this relationship highlights the importance of encouraging active participation in classroom activities.

These findings suggest that English reading activities support the development of critical thinking among higher education students by providing structured opportunities for continuous cognitive engagement. The steady improvement across critical thinking components, the clear differences between pre- and post-performance, and the strong relationship between engagement and thinking ability all point to the same direction. When students actively interact with texts through guided tasks, discussions, and reflective practices, they gradually develop the ability to analyze, evaluate, and interpret information more effectively. The learning process becomes more meaningful as students are encouraged to question ideas and construct their own understanding. In this way, reading activities

do not simply enhance comprehension but also shape how students think. This indicates that well-designed reading instruction can serve as a practical and effective pathway for fostering critical thinking in higher education contexts.

Table 1. Students' responses to critical thinking-oriented tasks in English reading activities

Component	Indicator	N	Mean	SD	Interpretation
Engagement	Active participation in discussions	23	4.32	0.58	High
	Willingness to express opinions	23	4.18	0.62	High
	Interaction with peers	23	4.26	0.55	High
Cognitive Response	Ability to analyze texts	23	4.35	0.60	High
	Ability to evaluate arguments	23	4.21	0.64	High
	Ability to interpret meaning	23	4.39	0.57	Very High
Affective Response	Interest in reading activities	23	4.28	0.61	High
	Confidence in expressing ideas	23	4.17	0.66	High
	Motivation to participate	23	4.33	0.59	High
Perceived Learning Value	Helpfulness of tasks	23	4.41	0.56	Very High
	Relevance to academic needs	23	4.29	0.60	High
	Improvement of thinking skills	23	4.38	0.58	Very High

Table 1 paints a clear picture of how students experience the integration of critical thinking-oriented tasks in English reading activities. It brings together different aspects of their responses, ranging from how actively they participate to how they think, feel, and evaluate the usefulness of the tasks. Rather than focusing on a single dimension, the data shows a more complete view of students as learners who engage both cognitively and emotionally. It reflects what happens in the classroom when reading is no longer just about understanding a text, but also about exploring ideas. Through this structure, it becomes easier to see how students navigate the learning process. It also shows how their responses are shaped by both the design of the tasks and their own involvement. In many ways, the table captures the classroom atmosphere as one that encourages thinking and interaction.

Looking more closely at engagement and cognitive response, students appear to be genuinely involved in the activities. Their active participation in discussions ($M = 4.32$, $SD = 0.58$) and willingness to express opinions ($M = 4.18$, $SD = 0.62$) suggest that they feel comfortable sharing their thoughts. Interaction with peers ($M = 4.26$, $SD = 0.55$) also shows that learning is not happening in isolation, but through exchange of ideas. On the cognitive side, students demonstrate strong abilities in analyzing texts ($M = 4.35$, $SD = 0.60$), evaluating arguments ($M = 4.21$, $SD = 0.64$), and especially interpreting meaning ($M = 4.39$,

SD = 0.57). This pattern suggests that students are not just reading for answers, but are actually thinking through what they read. The slightly higher score in interpretation hints that students may feel more confident making sense of texts than judging them critically at first. Still, the overall pattern shows that the tasks successfully invite students to think more deeply.

At the same time, students' feelings and perceptions toward the activities also reveal something important. Their interest in reading ($M = 4.28$, $SD = 0.61$) and motivation to participate ($M = 4.33$, $SD = 0.59$) suggest that the activities feel engaging rather than forced. Confidence in expressing ideas ($M = 4.17$, $SD = 0.66$) indicates that students are gradually finding their voice in the classroom. What stands out even more is how they perceive the value of these tasks. The high score for helpfulness ($M = 4.41$, $SD = 0.56$) and improvement of thinking skills ($M = 4.38$, $SD = 0.58$) shows that students are aware of the benefits they are gaining. They also see the relevance of these activities to their academic needs ($M = 4.29$, $SD = 0.60$). This suggests that the learning experience is not only enjoyable but also meaningful for them. It reflects a classroom environment where students feel both supported and challenged.

In the end, students' responses show that critical thinking-oriented reading activities are received in a very positive and encouraging way. They do not simply participate because they have to, but because the activities invite them to think, speak, and reflect. Students become more engaged, more confident, and more aware of how they are learning. The tasks seem to create a space where ideas can be explored rather than just answered. This kind of response suggests that reading activities, when designed with a focus on thinking, can transform the classroom experience. It shows that students are not only learning the language but also learning how to think through it.

DISCUSSION

The observed pattern of steady growth across analysis, evaluation, and interpretation indicates that students' critical thinking developed progressively through their sustained engagement with structured reading activities. This progression can be understood as a result of continuous interaction with texts, which aligns with constructivist perspectives that position learning as an active process of meaning construction rather than passive reception. In line with Khasawneh and Belton (2025) and Zhai et al. (2024), critical thinking emerges when learners engage dialogically with texts, and the present study extends this by showing how such development unfolds gradually across multiple instructional sessions. Schema theory further explains this process, as repeated exposure allows learners to refine and reorganize prior knowledge, leading to increasingly sophisticated thinking (Hasanzade, 2025; Yan, 2025). The consistent progression observed suggests that learning is not immediate but accumulative. It reflects how repeated practice shapes deeper cognitive development over time.

The relatively stronger development in interpretation compared to analysis and evaluation may be explained by the cognitive accessibility of meaning-making processes. Learners often find it easier to construct meaning from texts before engaging in more demanding evaluative judgments, as suggested by Aco and Suwandi (2025). While some studies report uneven development of higher-order skills (Subramaniam et al., 2024), the balanced growth across components in this

study indicates that the instructional design effectively addressed multiple levels of thinking. This supports Yulianti and Herpratiwi's (2024) argument that higher-order skills develop more effectively when tasks are systematically structured across cognitive domains. The findings highlight that different thinking skills do not develop in isolation. Instead, they evolve together through carefully designed learning experiences.

The positive relationship between engagement and critical thinking performance can be interpreted through both cognitive and motivational frameworks, where active involvement enhances deeper processing and reflection. This finding is consistent with Yang et al. (2026) and Gonzalez-Torres and Vargas-Saritama (2025), who argue that motivated learners are more likely to question and analyze information. However, the present study strengthens this claim by demonstrating that engagement functions not merely as a supporting factor but as a central mechanism in shaping thinking performance. From a metacognitive perspective, active participation may have encouraged students to monitor and regulate their thinking processes. This shows that engagement is not just about participation. It directly influences how deeply students think.

In contrast to studies highlighting passive learning environments as barriers to critical thinking (Tukurah, 2021), the high level of interaction in this study suggests that collaborative and discussion-based activities created conditions conducive to deeper cognitive engagement. This aligns with Gebremariam and Weldeyohannes (2025), who emphasize the role of dialogic interaction in promoting reflective thinking. The current findings extend this perspective by demonstrating a clear alignment between behavioral engagement and cognitive development. The classroom environment appears to play a crucial role in shaping learning outcomes. When interaction is encouraged, thinking becomes more active and meaningful.

Students' positive cognitive and affective responses further reveal the contextual conditions that support critical engagement. The strong levels of interest, motivation, and confidence can be explained through affective learning theories, which suggest that emotional engagement facilitates deeper cognitive processing. This aligns with Huang et al. (2025), who highlight the role of motivation in sustaining engagement, while the present findings show how affective and cognitive dimensions operate together. The perceived relevance and usefulness of the tasks also reflect principles of meaningful learning (Ratnasari et al., 2025). These responses indicate that students are not only involved cognitively but also emotionally. Such conditions create a more supportive and engaging learning experience.

Compared to earlier studies that report low engagement due to traditional, answer-focused reading practices (Hakemulder & Mangen, 2024), the positive responses observed here suggest that critical thinking-oriented tasks transform reading into a more interactive and meaningful experience. This transformation can be further explained by task-based and guided questioning approaches (Fatwassani et al., 2025; Wang, 2025), which provide scaffolding for deeper thinking. These strategies help students move beyond surface-level comprehension and engage more actively with texts. The shift in instructional approach appears to redefine how students experience reading. It becomes a space for exploration rather than simple comprehension.

Finally, the alignment between cognitive development, engagement, and positive perceptions highlights the importance of instructional design and teacher support in shaping learning outcomes. The findings support Mason and Warmington (2024) and Ruíz et al. (2023), who emphasize the role of scaffolding, as well as Chen (2026), who highlights the importance of feedback in refining thinking. However, this study extends existing literature by showing how these elements operate collectively within a classroom environment. The results suggest that learning is influenced by multiple interconnected factors. It shows that effective instruction requires both structure and meaningful interaction.

CONCLUSION

English reading activities support the development of critical thinking among higher education students by promoting continuous and balanced growth in their abilities to analyze, evaluate, and interpret texts through structured and repeated engagement, while also fostering active participation that is closely associated with higher levels of thinking performance. At the same time, students respond positively to the integration of critical thinking-oriented tasks, as reflected in their strong engagement, active involvement in discussions, and willingness to express ideas, alongside notable cognitive development, particularly in interpreting meaning. Their responses further reveal positive affective dimensions, including heightened interest, motivation, and increasing confidence, as well as a strong perception of the tasks as meaningful and relevant to their learning. These findings imply that well-designed reading activities not only enhance cognitive skills but also create a supportive learning environment that encourages active involvement and deeper engagement with texts, suggesting that critical thinking development is most effective when instructional practices integrate cognitive, behavioral, and affective elements in a cohesive manner.

Despite these contributions, the study has several limitations that should be considered. The relatively small sample size and the use of purposive sampling within a single university context limit the generalizability of the findings to broader populations. In addition, the short duration of the intervention may not fully capture the long-term development of critical thinking skills, which typically requires sustained practice over extended periods. Although the mixed-method design provides a comprehensive perspective, the reliance on self-reported data from reflective journals and interviews may introduce subjectivity and potential bias. Future research could address these limitations by involving larger and more diverse samples across multiple institutions, extending the duration of the intervention to observe long-term effects, and incorporating additional objective measures such as longitudinal tracking or experimental designs with control groups to strengthen the robustness of the findings.

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