

ENHANCING EFL LEARNERS' CRITICAL THINKING THROUGH HUMAN COMMUNICATION AND HUMAN DISCUSSION ACTIVITIES IN THE ERA OF AI

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Abstract: This study investigates the role of human communication and discussion activities in fostering critical thinking among EFL learners, particularly in an era increasingly influenced by artificial intelligence (AI). While AI-powered tools offer language learners unprecedented access to information and automated feedback, they often lack the humanistic and interactive dimensions essential for developing higher-order thinking skills. This research examines how face-to-face discussions and communicative activities can complement AI-based learning by enhancing students' ability to analyze, evaluate, and articulate ideas critically. The study was conducted with a sample of 100 undergraduate EFL students and 6 instructors at Djillali Liabes University, Algeria. A mixed-method approach was employed, using questionnaires, interviews, and classroom observations to explore students' engagement in discussion-based learning. Findings reveal that while AI tools support certain aspects of language acquisition, students struggle with expressing ideas critically, engaging in debates, and developing autonomous reasoning. Teachers also highlighted the importance of balancing AI-driven instruction with interactive human communication to cultivate critical thinking skills effectively. This research underscores the necessity of integrating discussion-based activities alongside AI-assisted learning to foster both linguistic proficiency and cognitive development in EFL students.

Keywords: Critical Thinking ,human Communication, AI-Assisted Learning, discussion-Based Activities , EFL Learners

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1.Introduction

The demands of globalization have prompted university EFL practitioners to explore strategies that foster students' autonomy in thinking. The traditional perception of learners as passive recipients is no longer considered effective. However, in EFL classroom practices, students continue to rely heavily on the teacher, with teacher talk remaining the dominant mode of instruction. Learners tend to listen rather than actively engage in speaking, questioning, and interaction.

In recent years, the integration of critical thinking into EFL education has garnered considerable attention, driven by the growing need for autonomous and reflective learners in an increasingly globalized world. Research has consistently highlighted the significance of critical thinking in language learning, emphasizing its role in problem-solving, argumentation, and effective communication (Facione, 2011; Cottrell, 2017; Paul & Elder, 2019).

Despite the remarkable recognition of critical thinking as an important skill in EFL education, its enhancement through communication-based activities remains underexplored. Much of the existing literature has focused on critical thinking as an individual cognitive activity (Facione, 2011; Cottrell, 2017) rather than a personal, social constructed skill developed through dialogue, debate, and interactive discussions. Additionally, the EFL learning context has the propensity to advocate linguistic accuracy more than critical engagement, leading to teacher-centered instruction where students remain passive recipients rather than active thinkers (McCarthy & O’Keeffe, 2004). Besides, the rise of AI-driven learning tools has further shifted attention toward automated feedback and individualized learning, neglecting the role of peer interaction and argumentation in shaping critical reasoning. This study addresses this gap by investigating how structured communication activities can foster critical thinking in EFL learners.

Drawing on the researchers' experience in teaching EFL at the university level, it has been observed that EFL learners face challenges in applying critical thinking skills. Communication, as an essential skill, remains a significant hurdle, often due to learners' limited linguistic competence, lack of confidence, and apprehension, particularly in public speaking contexts. While AI-powered tools provide learners with unprecedented access to information and automated feedback, they often lack the interactive and humanistic dimensions necessary for developing higher-order thinking skills. This study aims to address these issues by examining the role of structured discussion activities in fostering critical thinking among EFL learners in the era of AI. Additionally, it seeks to investigate teachers' perspectives on discussion-based learning and the challenges they encounter in implementing it effectively. By addressing these concerns, this research contributes to the ongoing discourse on pedagogical strategies that integrate both communicative and cognitive skill development in EFL education. Therefore, the study addresses the following questions:

1.To what extent is communication effective in shaping EFL students’ critical minds? 2.How can teachers reconstruct lessons based on communication, discussion activities, and AI integration?

Further, the following hypothesis are suggested:

H1: Structured communication and discussion activities significantly enhance the development of critical thinking skills among EFL students. H2: Integrating AI tools alongside human discussion-based strategies leads to improved critical thinking abilities and more effective communication practices in EFL classrooms.

To address these research questions, the study is conducted in the Department of English at Djillali Liabes University of Sidi Bel Abbès. A questionnaire is administered to

undergraduate EFL students to examine their perceptions and practices related to communication skills and critical thinking. Additionally, interviews are conducted with instructors to assess their awareness of the role of communication in fostering critical thinking. To further enrich the data, classroom observations are carried out to gain deeper insights into the practical implementation of discussion-based activities. By providing empirical evidence, this study aims to encourage both EFL teachers and learners to critically reflect on their pedagogical and learning practices, ultimately promoting a more critical-thinking-oriented approach.

2.Literature Review

2.1. An Overview about Critical Thinking

Critical thinking is a cognitive ability enabling individuals to transfer messages, engage in dialogues, and analyze information (Brady, 2008; McCarthy, 2004). Sternberg (1986) emphasized the role of motivation in developing critical behavior. Bloom's Taxonomy illustrates critical thinking stages, progressing from knowledge acquisition to evaluation.

Different studies focus in analyzing critical thinking as an important skill in the EFL learning process (McCarthy, 2004). Considering the analysis of critical thinking, critical thinking implies a cognitive ability that paves the way to transfer messages and disperse ideas and engaging people in meaningful conversations and dialogues (Brady, 2008).

The translation of cognitive skills into behavior constitutes the development of critical thinking (Sternberg, 1986). In order to enhance this behavior, motivation is a key element to lead the learner to question things, seek to find answers and compare ideas. This can refer to why some EFL learners despite their competences, fail to expose this kind of behavior (Facione, 2011). Additionally, Cottrell (2017) adds that critical thinking is a process which implies the acquisition of one's cognitive sub skills. These skills can be developed through giving attention to details, mapping the information by identifying its aspects, repetition through the extensive revision of the input and studying objectively this input from different perspectives.

From the analysis of the above aspects, it is important to state Bloom's Taxonomy as it embodies the main elements that constitute critical thinking as a skill. Bloom's taxonomy accentuates knowledge and memory as the primary components then pushes learners to explore this knowledge by asking questions and conceptualize notions that bring out the behavior. According to Bloom's taxonomy, the thinker must use all of the following steps to realize critical thinking:

- **Knowledge:** it requires generating information heard, read and explored.
- **Comprehension:** it refers to learners' ability to understand, explain and reflect on facts.
- **Application:** at this process, learners are required to interpret the facts and use them in a different context.
- **Analysis:** this level requires learners to use their metacognitive abilities to go beyond the information so that to be able to solve problems and find answers to their questions.
- **Synthesis:** the information is used to come to deductions and synthesize theories.
- **Evaluation:** it constitutes the final outcome where learners can assess the acquired input and arrive to a conclusion like the value.

Therefore, critical thinking implies the higher order skills of analyzing realized by our cognitive capacities and enhanced by a motivational aspect that determines the problem solving situation.

To what concerns the importance of critical thinking, it develops language proficiency, and motivates learners for public speaking activities. The systematic thinking affects the way

the learner expresses his ideas and develop their confidence to debate and exchange ideas. Moreover, critical thinking generally helps learners to analyse the logical outlay of texts and understand them properly. (Rayhanul, 2015).

2.2. Communication Skills in EFL Context

Communication has played a vital role in human life. The word "communication" comes from the Latin word "communis," which means "common." communication is a complicated process that involves sharing meaning by sending and receiving messages with the intention of conveying information. Narayanrao (2012) adds that the ultimate goal of communication is to transfer our beliefs, thoughts, and ideas to achieve mutual understanding. As a result, language learning involves communication, as teachers and learners can exchange explanations and ideas through real group interactions using these skills.

As far as communication is concerned, there are two main types of communication namely verbal and written communication. To begin with the verbal communication, it refers to the exchange through words and acoustic images and graphic symbols "writing". Barker (1984) defines communication as symbols that share universal meanings and these symbols constitute language.

2.3. Relating Critical Thinking Skills to Communicative Skills

Critical thinking and communicative skills are interrelated, both of them require the processing and exchange of information. According to Paul and Elder (2019), critical thinking refers to a "self-directed, self-disciplined, self-monitored, and self-corrective way of thinking that seeks to improve the quality of reasoning." Whereas Effective communication seeks the ability to convey information clearly, listen actively, and respond interactively to others (Guffey and Loewy, 2015). Critical thinking and communication are interdependent. Paul and Elder (2019) describe critical thinking as self-disciplined reasoning, while Guffey and Loewy (2015) emphasize clarity and interactive responsiveness. Ennis (2016) asserts that critical thinkers analyze information for biases and logical fallacies, reinforcing communication effectiveness (Garrison & Anderson, 2003).

For an effective communication, one should be able to think critically about the information they are receiving or transferring. This includes analyzing information for bias or inaccuracies, evaluating the credibility of sources, and recognizing logical fallacies in arguments (Ennis, 2016). Likewise, critical thinking and effective communication are complementary because as they enable individuals to articulate their ideas clearly and logically, and to understand and respond to the perspectives of others (Garrison and Anderson, 2003).

Despite the clear interconnection between critical thinking and communicative skills, much of the existing research has treated them as separate entities rather than exploring their integration in educational practice. While studies have extensively examined how critical thinking enhances individual reasoning and problem-solving (Paul & Elder, 2019), and communicative skills have been studied for their role in effective information exchange (Guffey & Loewy, 2015), there is a noticeable gap in research investigating how these skills can be developed simultaneously to reinforce one another. Few studies delve into the practical strategies that educators can employ to foster both critical thinking and communication in tandem, particularly in diverse learning environments. This research seeks to address this gap by exploring methodologies and pedagogical approaches that support the concurrent development of these skills, thereby enhancing overall learner competence and engagement.

Thus, critical thinking and communicative skills are closely connected and mutually complementary. Developing these skills together can lead to more effective learning process and a deeper understanding of the world around us.

2.3. Critical Thinking and the Era of AI

With the rapid progress of artificial intelligence, it is important to critically examine its impact on students' critical thinking abilities and overall productivity, including creative writing and literary expression. Scholars have raised interest about AI's potential influence on higher-order thinking skills, arguing that while AI tools can enhance efficiency and provide instant access to information, they may also reduce learners' cognitive engagement and critical reflection (Carr, 2008; Paul & Elder, 2019). The remarkable use of AI in educational and creative contexts necessitates a balanced perspective that considers both its benefits and limitations. While AI-powered tools can help in generating content and refining linguistic accuracy, they lack the depth of human cognition, creativity, and emotional intelligence (Boden, 2018). Engaging in critical thinking activities with intellectual rigor and integrity remains imperative, as the human mind possesses enduring reasoning capabilities that AI cannot replicate. Unlike human thought processes, which are deeply influenced by experience, emotion, and cultural context, artificial systems are transient and devoid of the humanistic qualities fundamental to creative and intellectual endeavors (Dreyfus, 2007). AI tools enhance efficiency but risk reducing cognitive engagement (Carr, 2008; Paul & Elder, 2019). AI lacks human creativity, emotional intelligence, and reflective reasoning (Boden, 2018; Dreyfus, 2007). Thus, integrating AI with human discussion activities remains vital.

Thus, it is essential to couple this use with the learning process thoughtfully, ensuring that it complements rather than replaces the essential cognitive and critical thinking skills that reflect human intelligence.

3. Methodology

Initially, it would be interesting to restate the research aim so that the main objectives could be reconsidered. This would give the reader adequate insights as to why the current papers design have been chosen over another. This research is based on both qualitative and quantitative methods to collect data. Through the descriptive method, the study seeks to examine the relevance of critical thinking skills in EFL university context, as well as how to foster discussion and communication skills of our students. Therefore, this study is an attempt to explore current methods for enhancing critical skills among EFL students, and strategies to overcome communication barriers.

To conduct this investigation, a triangulated data collection approach was employed, integrating fieldwork observations with first-year students, questionnaires administered to undergraduate EFL students, and interviews conducted with EFL instructors. This methodological framework was selected to align with the study's objectives, which include examining the role of communicative and discussion-based skills in English language teaching, refining existing pedagogical strategies, and fostering students' critical thinking abilities.

The study was conducted with a purposive sample of 100 undergraduate EFL students and six instructors from the English Department at Djillali Liabes University, Algeria. The purposive sampling technique ensured the inclusion of students from various proficiency levels and academic years, thereby capturing a diverse range of perspectives on critical thinking and communication skills in EFL learning. The questionnaire was administered to undergraduate EFL students to explore their perceptions and experiences with discussion-based learning and its impact on critical thinking development, while interviews with

instructors provided further insights into their perspectives on integrating communicative approaches in the classroom. Classroom observations complemented these data sources by offering a deeper understanding of students' engagement in discussion activities and their application of critical thinking skills in real-time learning contexts.

The study employed a self-designed questionnaire, developed based on existing literature on critical thinking, communicative competence, and student engagement (Paul & Elder, 2019; Guffey & Loewy, 2015). The questionnaire included a combination of closed-ended and Likert-scale items designed to assess students' perceptions of their participation in discussion activities, their confidence levels, and the challenges they face in developing critical thinking skills. To ensure content validity, the instrument was reviewed by three EFL experts, who provided feedback on item clarity and relevance.

In addition to the questionnaire, semi-structured interviews were conducted with six instructors, selected based on their teaching experience and familiarity with communicative teaching methods, to gain deeper insights into their perspectives on discussion-based learning and its role in fostering critical thinking. Furthermore, classroom observations were carried out with a sample group of 30 to 35 students to examine their interaction patterns, engagement levels, and responsiveness to discussion-based activities in real-time learning contexts.

4. Data Analysis

4.1. Questionnaire Findings

This section presents the findings derived from a comprehensive analysis of the questionnaire data. The responses gathered from students have provided valuable insights into the research topic, highlighting key trends and perspectives.

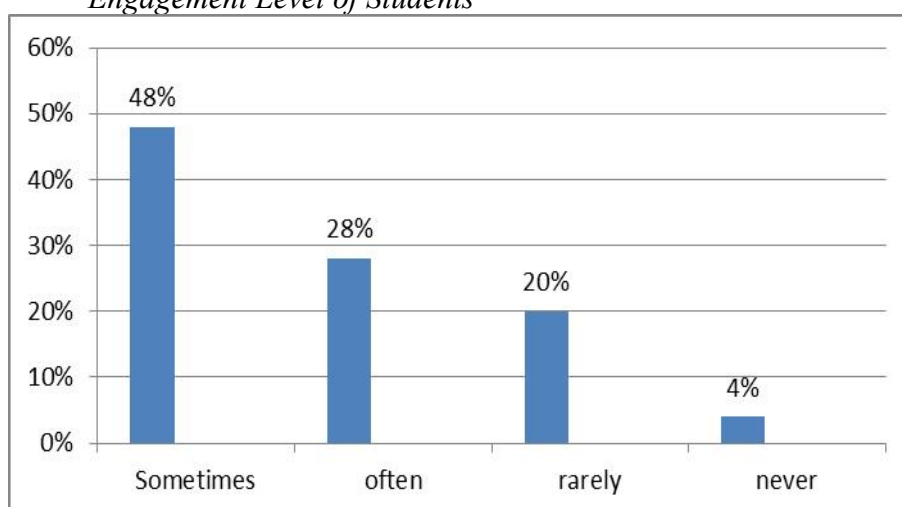
To begin, participants were asked to provide demographic information. The sample primarily consisted of undergraduate EFL learners aged between 19 and 25, with a relatively balanced gender distribution, comprising 58 female and 42 male respondents. This demographic overview establishes the context for interpreting the subsequent findings related to students' engagement in discussion-based activities and their perceptions of critical thinking development.

How often do you participate in the class?

The responses to the question regarding participation frequency in their classes provide interesting insights about their engagement level. The majority of learners indicated a moderate level of engagement, with approximately 48% selecting "sometimes", signifying that they integrate within communicative and discussion tasks periodically but not consistently. 28% of the respondents indicated that they often participate in discussions whereas 20% of them revealed that they are rarely integrated in these activities. Only 4% of the respondents stated that they never participate in these activities. The findings are presented in the graph below:

Graph1.

Engagement Level of Students

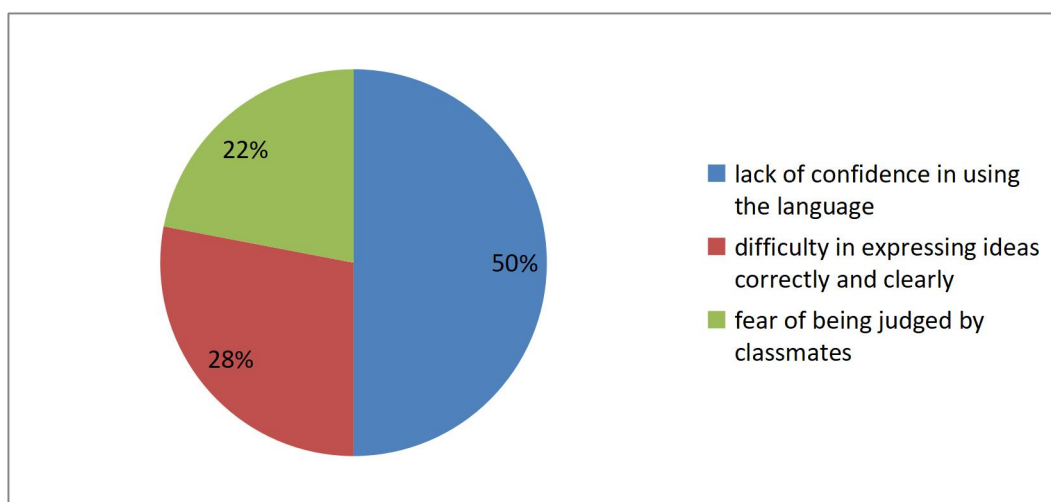


What challenges do you encounter when engaging in discussion activities?

Students were asked about the challenges they have faced when participating in discussion activities. This question offers some information about the obstacles students encounter while actively engaging with course material. A notable number of the participants around 50 % reported difficulties referring to “lack of confidence in using the language”. This suggests that learners may struggle to perform their ideas in real time discussion. Additionally, approximately 28 % highlighted “difficulty in expressing ideas correctly and clearly”, reveals the need for effective communicative skills to boost their critical thinking. Around 22% of participants reported “fear of being judged by classmates”, which indicated that the social and psychological factors can be a handicap to their willingness to participate.

Graph2.

Challenges of Students in Discussion Activities

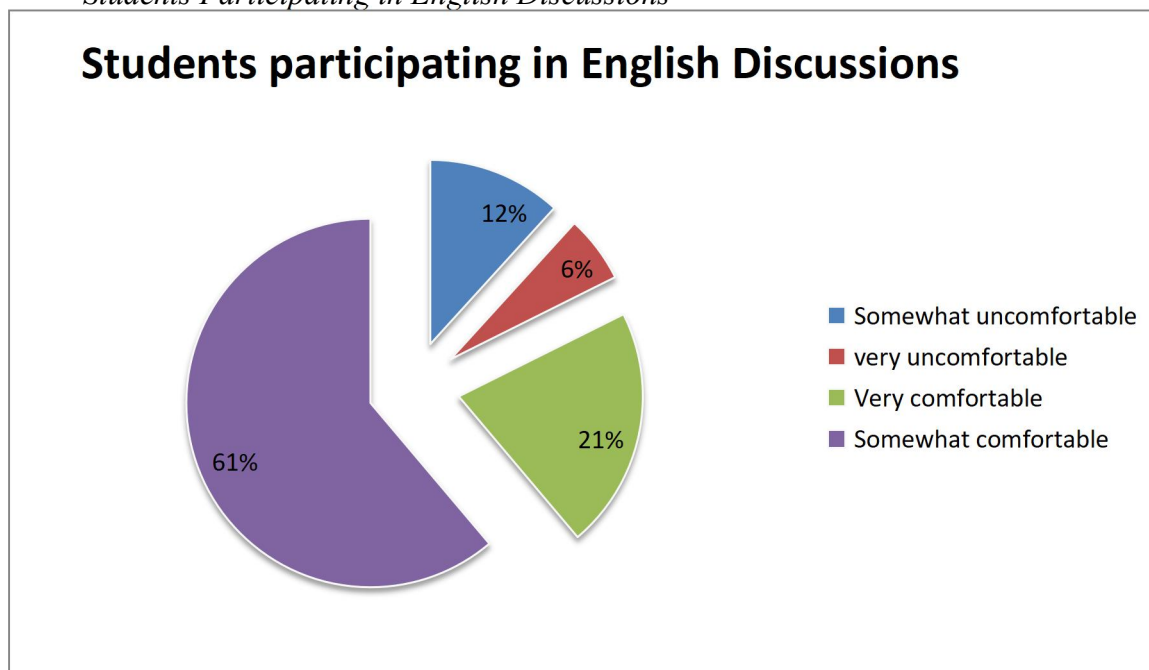


How comfortable are you participating in discussions in English?

Further, students were asked about their comfort when they are integrated in English discussions. 52 % of respondents rated their comfort level in participating in English discussions as "Somewhat comfortable" indicating a generally neutral attitude towards engaging in conversations in English. This suggests a moderate degree of proficiency and confidence in practicing communication skills.

Graph 3.

Students Participating in English Discussions



**Which critical thinking skills do you consider most important for language learning?
(Select all that apply)**

Table 1.

Critical Thinking Results

Skill	Percentage (%)	Mean Score	Standard Deviation	Participants
Analyzing and evaluating arguments	58	2.32	0.78	100
Problem-solving and decision-making	58	2.32	0.78	100
Logical reasoning and deduction	42	1.68	0.74	100
Interpreting and synthesizing information	42	1.68	0.74	100

Interestingly, a significant number of informants reported having received tasks to boost their critical thinking skills, indicating an awareness of the importance of such skills in their learning process. When asked about the critical thinking skills, 58 % of them state are crucial for language learning, "Analyzing and evaluating arguments" and "Logical reasoning and deduction" emerged as the most chosen answers. This signals the importance of assessing

and understanding different perspectives and applying logical reasoning in language learning contexts. Overall, these answers suggest recognition among informants of the significance of effective communication skills in both language acquisition and critical thinking.

Do your teachers encourage critical thinking in classes ?

Students were asked whether their teachers actively encourage critical thinking during class discussions. 58% of respondents affirmed that their teachers frequently incorporate critical thinking activities, such as questioning techniques, debates, and problem-solving tasks. This suggests that many instructors make conscious efforts to integrate higher-order thinking skills into their teaching methods, fostering an interactive learning environment that supports cognitive development.

However, 26% of students reported that their teachers sometimes encourage critical thinking, indicating inconsistencies in classroom practices. Some students mentioned that while certain instructors promote analytical discussions, others rely heavily on teacher-centered methods, limiting opportunities for critical engagement.

Additionally, 16% of students stated that their teachers rarely or never encourage critical thinking, highlighting a significant gap in pedagogical approaches. These students expressed frustration with rote learning, excessive focus on textbook materials, and limited opportunities for classroom discussions. Some also noted that instructors tend to dominate discussions, leaving little room for student-led critical inquiry.

Table2.

The Use of Critical Thinking in Class

Description	Percentage (%)	Mean Score	Standard Deviation	Participants
Teachers frequently incorporate critical thinking activities	58	2.32	0.78	100
Teachers sometimes encourage critical thinking	26	1.04	0.65	100
Teachers rarely or never encourage critical thinking	16	0.64	0.58	100

Do what extent do you agree with the following statement?

"Engaging in human discussions and debates in the classroom is more effective than using AI tools for improving my critical thinking skills."

Table 3.

Attitudes Regarding H/human Discussions

Attitude	Percentage (%)	Participants	Mean Score	Standard Deviation
Strongly Agree	47	100	2.35	0.83
Agree	29	100	1.45	0.72
Neutral	15	100	0.75	0.58
Disagree	6	100	0.3	0.48
Strongly Disagree	3	100	0.15	0.37

When asked about the effectiveness of human discussions and debates compared to AI tools in improving critical thinking skills, most students favored interactive classroom discussions. A majority (47%) selected "Strongly Agree", emphasizing that face-to-face debates, peer interactions, and real-time argumentation provide deeper engagement and encourage spontaneous reasoning, problem-solving, and analytical thinking. Additionally, 29% of students chose "Agree", recognizing that while AI offers structured responses, it lacks the dynamism and critical questioning that human interactions foster. Meanwhile, 15% remained "Neutral", indicating that they find both AI and discussions equally beneficial or depend on personal learning preferences. A small percentage (6%) selected "Disagree", believing that AI tools can be as effective as discussions in enhancing critical thinking, especially for self-paced learners who benefit from AI-driven explanations. Finally, only 3% of students "Strongly Disagreed", suggesting that some learners rely more on AI for structured feedback and do not see debates as essential to their cognitive development. These findings confirm that while AI can support analytical skills, human discussions remain the primary method for fostering deeper critical engagement and reasoning in EFL learning.

Do you think AI tools (e.g., ChatGPT, Grammarly, AI-based translators) help develop your critical thinking skills in English?

Table 3.

Learners' Attitudes toward the Use of AI

Attitude	Percentage (%)	Participants	Mean Score	Standard Deviation
Strongly Agree	47	100	2.35	0.83
Agree	29	100	1.45	0.72
Neutral	15	100	0.75	0.58
Disagree	6	100	0.3	0.48
Strongly Disagree	3	100	0.15	0.37

When asked whether AI tools (e.g., ChatGPT, Grammarly, AI-based translators) help develop their critical thinking skills in English, students provided diverse responses. A majority (35%) stated that AI primarily helps with language accuracy but does not significantly enhance reasoning skills, highlighting its role in correcting grammar and structuring responses rather than fostering deep analytical thinking. Additionally, 28% of

students believed that AI provides quick answers without encouraging independent thinking, reinforcing concerns that over-reliance on AI might lead to passive learning rather than active engagement in discussions. These findings align with previous results, where many students reported difficulties in expressing their ideas critically due to confidence issues and a lack of linguistic competence, suggesting that AI may not be sufficient in bridging these gaps.

On the other hand, 22% of students perceived AI as an effective tool for analyzing and evaluating information critically, as it provides instant feedback, structured explanations, and exposure to diverse perspectives. However, they acknowledged that AI alone is not enough and that human discussions remain essential for developing argumentation, debate, and real-time critical engagement. Interestingly, 15% of students reported never using AI tools for language learning, indicating that traditional methods still hold relevance. Overall, while AI supports linguistic proficiency and structured learning, the results confirm that it cannot replace interactive classroom discussions, which play a crucial role in enhancing reasoning, problem-solving, and independent thought.

In your opinion, how does AI compare to human discussion activities in helping you develop critical thinking?

Table 4 .

AI vs. Human Debates

Attitude	Percentage (%)	Participants	Mean Score	Standard Deviation
AI is more helpful because it provides instant feedback	42	100	1.68	0.74
Human discussions are more effective	30	100	1.2	0.66
A combination of both AI and human discussions is the best approach	20	100	0.8	0.57
Neither significantly impact my critical thinking	8	100	0.32	0.47

When asked to compare AI with human discussion activities in developing critical thinking, students provided varied responses. The majority (42%) believed that a combination of both AI and human discussions is the most effective approach, as AI provides instant feedback and structured responses, while peer discussions foster debate, reasoning, and interactive engagement. Additionally, 30% of students favored human discussions alone, emphasizing that face-to-face debates and collaborative exchanges are essential for developing argumentation and problem-solving skills a finding consistent with previous results highlighting students' preference for interactive learning. Meanwhile, 20% of students found AI more helpful than discussions, particularly for self-paced learning and analytical exercises, though they acknowledged that it lacks the spontaneity and critical questioning of human interaction. A small percentage (8%) felt that neither AI nor human discussions significantly impacted their critical thinking, suggesting that additional instructional strategies may be needed to engage these learners in higher-order thinking tasks. These findings reinforce the idea that while AI supports cognitive development, it cannot fully replace human-led discussions, which remain fundamental for active reasoning, debate, and independent thought.

4.2. The Interview Results

Thematic analysis yielded three themes: Role of Discussion: Teachers emphasized that structured debates foster deeper reasoning (Teacher 1, Teacher 5). Limitations of AI: Teachers noted AI provides structured input but lacks critical stimulation (Teacher 3, Teacher 6). Student Engagement Strategies: Teachers suggested debates, real-world scenarios, and AI comparison tasks (Teacher 2, Teacher 4).

To analyze the qualitative data, a thematic analysis approach was employed. First, the recorded interviews were transcribed verbatim** to ensure accuracy. The transcripts were then carefully reviewed, and initial coding was performed to identify recurring ideas related to critical thinking and discussion-based activities. These codes were grouped into broader themes, including (1) the role of discussion in critical thinking development, (2) the limitations of AI tools, and (3) student engagement in interactive learning. This systematic approach allowed for a structured interpretation of teachers' perspectives on the integration of discussion-based activities in EFL classrooms.

During the teacher interviews, valuable insights were gathered regarding their teaching methodologies and perceptions of critical thinking and communication skills in the EFL classroom. Teachers were asked several key questions, including:

- How do you prepare students for class discussions in English?
- What challenges do you face when integrating critical thinking into discussions?
- What strategies do you use to foster critical thinking through communication?
- In your experience, do students rely too much on AI tools for generating ideas, or do they use them as a support for critical thinking?
- How do you integrate AI tools into your teaching to enhance students' critical thinking and communication skills?
- Do you think AI-generated responses encourage independent reasoning, or do they hinder students from thinking critically?

In response, teachers described various preparatory strategies, such as reviewing relevant materials, encouraging students to research discussion topics, and implementing speaking practice activities to enhance confidence. However, they highlighted several challenges, including students' language proficiency limitations, difficulty in expressing complex ideas, and cultural barriers that sometimes hinder open debate.

When asked about effective strategies for fostering critical thinking through communication, teachers emphasized the importance of creating a classroom environment that encourages debate and active learning. Many noted that allowing students to express disagreement in a structured and respectful manner helps develop their analytical reasoning. Additionally, they stressed the value of using real-world examples, case studies, and scenario-based discussions to provide students with practical applications of critical thinking skills.

Teacher 1 stated:

"AI tools are useful for information retrieval, but they do not challenge students to think critically as interactive discussions do."

Teacher 5: *"Students develop stronger arguments when engaged in peer discussions compared to AI-assisted exercises."*

Findings align with Paul and Elder (2019) and Guffey and Loewy (2015) on the critical link between communication and critical thinking. However, unlike McCarthy and O'Keeffe (2004), students in this study faced significant participation barriers, confirming Rayhanul's (2015) need for structured support. While AI aids linguistic development, it cannot replace interactive discussions necessary for higher-order thinking. Students who engaged in debates demonstrated greater cognitive abilities compared to AI-reliant learners.

Teacher 3 explained:

"Through structured debates, students learn to defend their viewpoints and evaluate opposing perspectives." Teacher 5 highlighted that "students develop stronger arguments when engaged in peer discussions compared to AI-assisted exercises."

Teacher 6 added:

"AI platforms provide quick answers, but they lack the ability to provoke deep, reflective thought in students."

One particularly insightful response came from an instructor who articulated the broader role of critical thinking in EFL instruction:

Teacher 1 ".....As a teacher, I believe critical thinking in EFL instruction involves not only the mastery of language skills but also the ability to analyze, evaluate, and synthesize information effectively. It's about encouraging students to think critically about language use, cultural perspectives, and real-world situations. Critical thinking is essential in EFL instruction as it empowers students to become independent learners, effective communicators, and active participants in intercultural dialogue...."

Additionally, teachers were also asked about the impact of AI tools on students' critical thinking and communication skills. Responses varied, with some instructors expressing concern that students rely too heavily on AI for idea generation, often accepting AI-generated responses without deeper analysis. One teacher noted that while AI provides instant access to information, it does not necessarily push students to evaluate, question, or synthesize knowledge critically. However, others saw AI as a valuable support tool when used appropriately. They emphasized that AI should be integrated as a means of scaffolding learning rather than replacing human reasoning.

One teacher highlighted the importance of guiding students to think beyond AI-generated content, stating:

Teacher 7 "AI can provide structured responses, but it is our role as teachers to teach students how to think critically, adjust these ideas rather than passively accept them. If used with human intelligence, AI can be a great tool to enhance reasoning, but it can never replace human communication and debate."

Further, some teachers mentioned strategies to integrate AI into their teaching without compromising students' critical engagement. This included assigning tasks where students must compare AI-generated arguments with their own reasoning, identify biases or limitations in AI responses, and participate in peer discussions to challenge AI-generated ideas. Overall, teachers agreed that AI can either support or hinder critical thinking, depending on how students are taught to engage with it.

5. Discussion

The findings of this study align with existing literature on the interconnection between critical thinking and communication skills in EFL learning. As highlighted by Paul and Elder (2019), critical thinking is a self-directed, self-disciplined process that requires learners to actively engage in questioning, reasoning, and evaluating information. Similarly, Guffey and Loewy (2015) argue that effective communication fosters analytical skills, enabling students to articulate their ideas logically. This study confirms these perspectives, demonstrating that students who frequently engage in discussion activities exhibit higher levels of analytical

reasoning and problem-solving abilities. However, this study also highlights several challenges that contradict some previous research findings. While McCarthy and O’Keeffe (2004) suggest that communicative EFL classrooms naturally promote critical thinking, our results indicate that many students struggle with confidence, fear of judgment, and linguistic limitations, which hinder their participation in discussions.

Most of students in our study reported difficulties in expressing ideas due to language barriers, a finding that aligns with Rayhanul (2015), who emphasizes the need for structured support in developing both language proficiency and critical engagement. Furthermore, our findings suggest that despite teachers’ efforts to integrate discussion-based learning, only 58% of students perceive their instructors as actively encouraging critical thinking. This aligns with previous research by Ennis (2018), who highlights the gap between pedagogical intentions and students’ perceived engagement in critical thinking activities.

Additionally, in the context of AI in EFL learning, our study raises concerns similar to those of Brady (2008), who argues that AI lacks the human interaction necessary for deep critical engagement. While AI tools provide instant feedback, they do not foster the debate, argumentation, and reflective questioning that are essential for critical thinking. The research findings support this view, as students who relied more on peer discussions and instructor-debates demonstrated stronger analytical skills compared to those who primarily engaged with AI-based learning tools.

Discussion-based activities improve reasoning and problem-solving (Ennis, 2018). AI lacks the human interaction needed for deep critical thinking (Brady, 2008). Yet, it contradicts previous studies. Unlike McCarthy and O’Keeffe (2004), the findings suggest that students face significant participation barriers due to confidence issues and linguistic limitations. Previous research (Rayhanul, 2015) suggests that critical thinking emerges naturally in discussion-based learning, but the results reveal that structured support and teacher intervention are crucial to overcome participation barriers.

Therefore, These findings highlight the need for targeted instructional strategies that balance AI-enhanced learning with human communication. While AI can assist in language accuracy, it cannot replace the cognitive and interactive aspects of face-to-face discussion. Educators should therefore implement structured debate formats, critical thinking clubs, and real-world discussion scenarios to actively engage students and bridge the gap between language proficiency and analytical reasoning.

The findings of this study validate the hypotheses posed at the outset. Firstly, regarding the effectiveness of communication in shaping critical minds, the data revealed that students who engaged in discussion-based activities demonstrated higher levels of analytical reasoning and problem-solving skills. Statistical results confirmed that critical thinking skills such as analyzing arguments and solving problems had higher mean scores among students who frequently participated in discussions. Furthermore, qualitative findings from teacher interviews reinforced the idea that structured debates and classroom discussions cultivate deeper critical engagement compared to AI-reliant learning. These findings affirm that human interaction plays a crucial role in nurturing critical thinking among EFL learners. Secondly, the research hypotheses on reconstructing lessons around communication and discussion activities were also validated. Teachers emphasized the necessity of embedding structured discussions, real-world scenarios, and critical questioning into lesson plans to promote critical thinking. Classroom observations and interview analysis indicated that students engaged in discussions developed stronger independent reasoning and exhibited more active participation. The findings suggest that integrating interactive communication strategies into EFL classrooms, alongside controlled use of AI tools, significantly enhances students’ cognitive and communicative competence, thereby supporting the central aims of this research.

6. Suggested Strategies to Foster Critical Thinking

So far, the results of our study open the door to different horizons to be debated mainly how to overcome the current challenges that are faced by both the students and teachers. For this reason, the instructor should design tasks that highlight students' direct engagement within a full opportunity of debate and share of expressions and perceptions. In this study, the difficulties regarding critical thinking were accounted for by both teachers and learners. Hence, the teacher should take into consideration effective strategies to limit students' fears of any judgment in a relaxing class atmosphere. Moreover, communication is the art of self-reflection and share of emotions, minds and goals that overcomes the flow of critical thinking in a beneficial manner than other receptive skills. Throughout, effective debates become hugely contagious, competitive and interesting for any student to mirror his mind and for the teacher to redirect and shape self-confidence, production and enhancement of their learners. Based on our findings, several barriers are faced by students for critical thinking. For that, we recommend some strategies:

- Creating critical thinking clubs to encourage students' lifelong learning and autonomy. Engaging students in groups and rewarding challenges to rise their interest in thinking and debating.
- The teacher should choose too attractive and interesting topics for his learner based on actuality and their age.
- The teacher should design activities for evaluation like summarizing or written essay about what was debated to encourage individuality and develop students' philosophy.
- The teacher should give learners more chances to debate than himself.

Further, implications of the current study on the potential of communication in critical thinking development are multifaceted. First, practitioners should focus on fostering effective communication skills alongside critical thinking abilities to enrich students' overall cognitive competence. This implies integrating a variety of communication-based activities. Among the suggested activities the following:

Debating: this activity boosts learners' critical mind by dividing students into groups and assigning them topics to discuss. Encouraging them to research and present arguments, counterarguments, and evidence to support their positions.

Integrating learners in case studies: this activity exposes learners to a learning situation related to cultural differences, social barriers, or global issues by asking them to analyze the situations, identify challenges, and propose solutions.

Mind mapping: this activity seeks to explore students' conception by creating visual representations of concepts, themes, or relationships related to the course content and then discussing them in front of their classmates.

Up to date discussions: exploring articles, videos, or podcasts about current issues and events or global topics relevant to the students' interests or studies. The teacher can encourage learners to read, watch, or listen to the material critically, considering different perspectives and evaluating the credibility of sources.

7. Conclusion

This study highlights the crucial role of communication-based activities in fostering critical thinking among EFL learners while also examining the influence of AI tools on cognitive and communicative skill development. The findings confirm that interactive discussions, debates, and structured communication tasks significantly enhance students' ability to analyze, evaluate, and articulate ideas critically. However, challenges such as language proficiency limitations, fear of judgment, and teacher-dominated discussions continue to hinder students' full engagement in critical thinking practices.

Furthermore, the study reveals a growing reliance on AI tools, with mixed perspectives from both students and instructors. While AI provides structured responses, instant feedback, and language support, it does not inherently cultivate independent reasoning and analytical thinking. Teachers emphasized the need to balance AI-assisted learning with human interaction, ensuring that students learn to critically assess AI-generated information rather than passively accepting it. Effective pedagogical strategies, such as comparing AI-generated arguments with student reasoning, identifying biases, and integrating AI discussions into classroom debates, can help mitigate the risks of over-reliance on AI.

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