sw&s | Social Work and Society International Online Journal

Integrating Artificial Intelligence into Competency-Based Social Work Education: Challenges, Opportunities, and Policy Implications from Vietnam

Luong Manh Ha, *Tan Trao University*

Abstract: The rapid expansion of artificial intelligence (AI) is reshaping higher education and redefining professional training across disciplines, including social work. In this context, competency-based education (CBE) has emerged as a key approach to aligning graduate skills with evolving labor market demands. However, the integration of AI into social work education remains underexplored, particularly in developing countries. This study investigates how AI is being incorporated into competency-based social work training in Vietnamese universities, with a focus on identifying current practices, challenges, and opportunities. Adopting a mixed-methods design, the study draws on survey data from 250 students, 30 lecturers, and 10 employers, complemented by qualitative interviews. The findings indicate that while AI tools are increasingly used to support teaching and learning, their application remains fragmented and constrained by limited infrastructure, insufficient digital competencies, and concerns over ethical implications. At the same time, participants recognized the potential of AI to enhance practical skill development, personalized learning, and professional readiness. The study contributes to the growing literature on AI in professional education by providing empirical evidence from a Global South context. It further proposes policy and pedagogical implications for integrating AI into competency-based social work curricula, emphasizing the need for context-sensitive and ethically grounded approaches.

Keywords: Social work education; Artificial intelligence integration; Competency-based training approaches; Digital transformation in higher education; Professional skills development; AI-supported teaching and learning; Vietnamese higher education context

Introduction

The rapid expansion of artificial intelligence (AI) is beginning to reshape higher education in ways that feel both promising and, at times, slightly uncertain. Across the Asia–Pacific region, universities are increasingly experimenting with generative AI, adaptive learning systems, and automated assessment tools. These developments are not only changing how knowledge is delivered but also raising new questions about what kinds of competencies graduates actually need in a digital society. Recent studies suggest that AI is gradually becoming embedded in core educational practices rather than remaining a supplementary tool, particularly in technologically dynamic regions such as East and Southeast Asia (Wong & Looi, 2024; Holmes et al., 2022).

In Vietnam, this transformation is visible but uneven. Several universities have actively promoted AI integration through institutional strategies, partnerships, and training programmes aimed at improving digital capacity among lecturers and students (Quy et al., 2023; VNU-USSH, 2024). At the same time, challenges remain quite apparent, including limitations in

infrastructure, disparities in digital skills, and ongoing concerns about data ethics and responsible AI use (Nguyen & Hoang, 2024). These issues reflect a broader pattern often observed in developing contexts, where technological adoption tends to move faster than institutional readiness (UNESCO, 2023).

Within this broader landscape, social work education presents a particularly complex case. Unlike more technical disciplines, social work relies heavily on human interaction, ethical judgement, and context-sensitive decision-making. While AI has the potential to support simulation-based training, case analysis, and data-informed practice, it also introduces concerns about the possible erosion of human-centered values. Some scholars have argued that although AI can enhance efficiency in education, it cannot fully replicate the relational and emotional dimensions that are central to professions such as social work (Reimer, 2024; Chan & Hu, 2023). This creates a tension that educators are still trying to navigate in practice.

At the same time, competency-based education (CBE) has gained increasing attention as a response to the growing mismatch between academic training and labor market expectations. In many Asia–Pacific systems, including Vietnam, there is a gradual shift away from content-heavy curricula towards models that emphasize measurable competencies, practical skills, and professional readiness (Pham & Nguyen, 2022; Tran et al., 2023). AI is often positioned as a tool that can support this transition, particularly through personalized learning pathways and adaptive assessment systems (Luckin et al., 2022). However, how these technologies interact with competency-based frameworks in practice remains an open question.

This question becomes even more relevant when viewed from the perspective of the Global South. In countries undergoing rapid digital transformation, the integration of AI into education is not simply a technical issue but also a social and institutional one. Research from Australia and Russia, for example, highlights that while AI adoption can enhance innovation in higher education, it also requires careful consideration of governance, ethics, and local capacity (Selwyn et al., 2022; Zawacki-Richter et al., 2023). These insights suggest that context matters significantly, and that models developed in high-resource environments cannot always be transferred directly to other settings.

Despite the growing body of research on AI in education, several gaps remain. First, much of the literature focuses on general higher education or technology-related fields, with relatively limited attention to social work education as a distinct professional domain. Second, there is still a lack of empirical studies examining how AI is actually being implemented within competency-based training models, particularly in developing contexts. Third, the perspectives of key stakeholders—students, lecturers, and employers—are often underrepresented, even though they play a crucial role in shaping educational practices. In Vietnam, while policy discussions on digital transformation are becoming more prominent, empirical evidence on AI integration in social work education remains limited.

This study responds to these gaps by examining how artificial intelligence is being integrated into competency-based social work education in Vietnamese universities. Rather than assuming a linear or universally positive impact, the study takes a more grounded approach by exploring current practices, identifying key challenges, and considering realistic opportunities for improvement. In doing so, it aims to contribute to a more context-sensitive understanding of digital transformation in professional education, particularly within the Asia–Pacific region.

The study is guided by the following research questions:

1. How is artificial intelligence currently integrated into social work education in Vietnamese universities?

2. What opportunities and challenges are perceived by students, lecturers, and employers?

3. How can competency-based training models be aligned with AI-driven transformation in this context?

The following section reviews relevant literature on artificial intelligence in education, competency-based training, and social work education, providing the conceptual foundation for the analysis that follows.

Literature Review

The growing presence of artificial intelligence (AI) in higher education has attracted increasing scholarly attention, particularly in the Asia–Pacific region where digital transformation is occurring at a rapid pace. Rather than being treated as a purely technological innovation, AI is now often discussed as part of a broader pedagogical shift that reshapes how teaching, learning, and assessment are conceptualized. Recent studies suggest that AI can support personalized learning, automate feedback, and enhance student engagement, although its effectiveness largely depends on institutional readiness and pedagogical alignment (Wong & Looi, 2024; Zawacki-Richter et al., 2023).

Within the Vietnamese context, research on AI in higher education is still emerging but shows a clear upward trend. Several studies indicate that universities have begun to experiment with AI tools such as chatbots, automated grading systems, and learning analytics platforms (Quy et al., 2023; Nguyen & Hoang, 2024). However, the level of implementation remains uneven across institutions, particularly between well-resourced universities and regional or local institutions. This gap is often linked to differences in infrastructure, funding, and digital competence among educators (Pham & Nguyen, 2022). As a result, while AI is frequently highlighted in policy discourse, its actual integration into classroom practice is still limited in many cases.

At the same time, competency-based education (CBE) has been widely promoted as a way to address the mismatch between academic training and labor market needs. In Vietnam and across Southeast Asia, CBE frameworks emphasize measurable learning outcomes, practical skills, and the ability to apply knowledge in real-world contexts (Tran et al., 2023; Le & Bui, 2024). From this perspective, AI is often seen as a supportive tool that can facilitate adaptive learning and continuous assessment. Nevertheless, there is still limited empirical evidence showing how AI and CBE interact in practice, especially in disciplines that require strong human engagement.

Social work education represents a particularly complex domain in this regard. Unlike fields that rely heavily on technical knowledge, social work is grounded in human relationships, ethical reasoning, and contextual understanding. Some scholars argue that AI can enhance social work training through simulation-based learning and case analysis (Reimer, 2024). For example, AI-driven scenarios can expose students to diverse client situations that may not be easily accessible in real-life training environments. However, concerns remain about the

potential over-reliance on technology and the risk of reducing complex human interactions to algorithmic processes (Chan & Hu, 2023).

In the broader Asia–Pacific region, similar patterns can be observed. Studies from countries such as China, Australia, and South Korea suggest that while AI adoption is accelerating, it is often accompanied by concerns related to ethics, data privacy, and the changing role of educators (Selwyn et al., 2022; APRU, 2024). These concerns are particularly relevant in social work education, where professional values such as empathy, confidentiality, and social justice play a central role. As a result, the integration of AI in this field requires a more cautious and context-sensitive approach compared to other disciplines.

To better understand current research trends, the following table summarizes selected recent studies on AI, competency-based education, and social work training, with a focus on Vietnam and the Asia–Pacific region.

Table 1. Summary of Recent Studies on AI and Competency-Based Education in Social Work and Higher Education

Authors	Context	Focus	Key Findings
Quy et al. (2023)	Vietnam	AI in higher education	AI adoption increasing but uneven
Nguyen & Hoang (2024)	Vietnam	AI implementation	Infrastructure and skills remain barriers
Pham & Nguyen (2022)	Vietnam	Competency-based education	Shift toward outcome-based models
Tran et al. (2023)	Vietnam	Employability skills	Skills mismatch persists
Le & Bui (2024)	Vietnam	CBE practice	Need for curriculum reform
Reimer (2024)	Global	AI in social work	Supports simulation but raises ethical issues
Chan & Hu (2023)	Asia	Student perceptions of AI	Mixed attitudes toward AI use
Wong & Looi (2024)	Asia-Pacific	AI in education	AI reshapes pedagogy
Selwyn et al. (2022)	Australia	AI policy	Need for governance frameworks

Zawacki-Richter et al. (2023)	Global	AI research review	Lack of educator-focused studies
APRU (2024)	Asia-Pacific	AI adoption	Regional disparities evident
UNESCO (2023)	Global	AI guidelines	Emphasis on ethical use

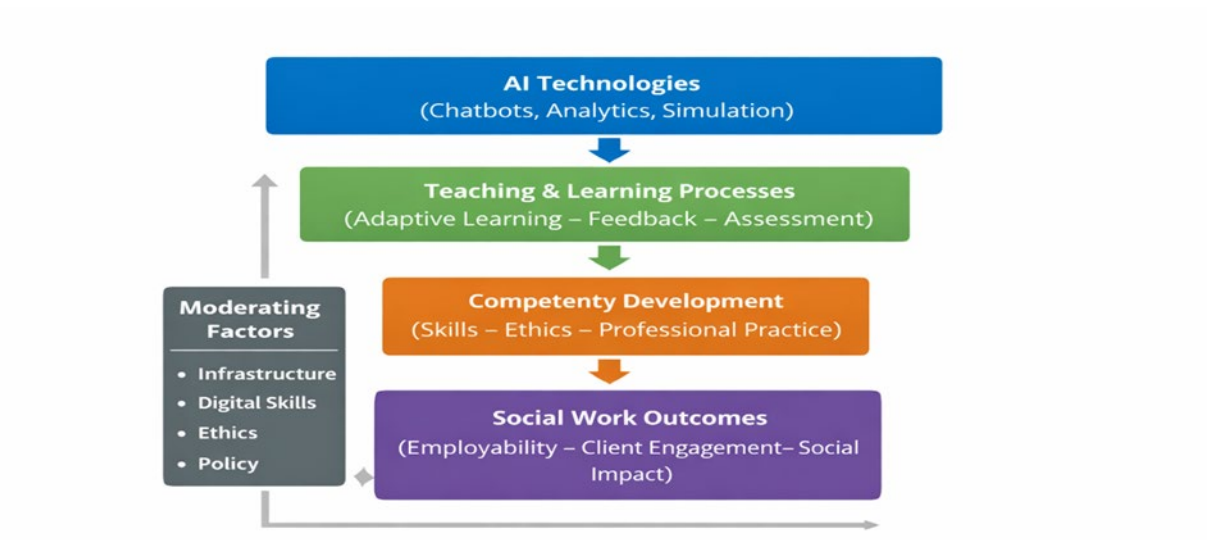
Source: Compiled by the author from recent studies (2022–2024)

The data in Table 1 reveals several important patterns. First, most studies emphasize the growing role of AI in higher education, but relatively few focus specifically on social work education. Second, while competency-based education is widely promoted, its integration with AI remains largely conceptual rather than practical. Third, challenges such as infrastructure limitations, lack of digital skills, and ethical concerns appear consistently across different contexts, particularly in developing countries.

These observations suggest that the relationship between AI and competency-based education is still in an early stage of development. In many cases, AI is introduced as a technological solution without sufficient consideration of pedagogical and professional requirements. This is especially problematic in fields such as social work, where human interaction cannot be easily replaced or simulated.

To conceptualize this relationship more clearly, Figure 1 presents a proposed framework illustrating how AI can interact with competency-based social work education in the Vietnamese context.

Figure 1. Conceptual Framework of AI Integration in Competency-Based Social Work Education



Source: Developed by the author based on Holmes et al. (2022), UNESCO (2023), and Reimer (2024)

The conceptual framework highlights that AI does not directly produce educational outcomes; rather, its impact is mediated through teaching and learning processes as well as contextual factors such as infrastructure, policy, and ethical considerations. This perspective aligns with recent arguments that technology alone cannot transform education without corresponding pedagogical changes (Luckin et al., 2022).

Overall, the literature suggests that while AI holds considerable potential for enhancing competency-based education, its application in social work training remains underexplored and context-dependent. There is a clear need for empirical research that moves beyond theoretical discussions to examine how AI is actually used in practice, particularly in local university settings.

Methodology

This study adopts a mixed-methods approach to explore the integration of artificial intelligence (AI) into competency-based social work education in Vietnamese universities. The use of mixed methods is widely recommended in educational research, as it allows for the combination of numerical trends with contextual insights, thereby enhancing the validity and interpretability of findings (Creswell & Plano Clark, 2022; Johnson et al., 2023). In the context of emerging technologies such as AI, this approach is particularly useful because it captures both measurable outcomes and subjective experiences.

Research design

The study follows a descriptive and exploratory research design. Rather than testing predetermined hypotheses, it aims to examine current practices and identify emerging patterns in AI integration. This approach aligns with recent studies in higher education that emphasize exploratory designs when investigating new or rapidly evolving phenomena (Zawacki-Richter et al., 2023; Selwyn et al., 2022). Given that AI adoption in Vietnamese universities is still at an early stage, an exploratory design is considered appropriate.

Research sites and participants

The research was conducted at three regional universities in Vietnam:Tân Trào University (Tuyên Quang); Hùng Vương University (Phú Thọ); Hạ Long University (Quảng Ninh)

These institutions were selected because they represent typical local universities with limited resources but increasing engagement in digital transformation initiatives (Quy et al., 2023).

Participants included three key stakeholder groups:

- Students (primarily in social work and related programmes)
- Lecturers involved in teaching and curriculum design
- Employers or field supervisors

A total of 290 respondents participated in the study, including 250 students, 30 lecturers, and 10 employers. The inclusion of multiple stakeholder groups reflects recommendations from recent studies emphasizing the importance of multi-perspective data in evaluating educational

innovation (Tran et al., 2023). Before proceeding further, Table 2 presents the demographic distribution of participants.

Table 2. Participant Demographics

Participant Group	Number	Percentage (%)
Students	250	86.2%
Lecturers	30	10.3%
Employers	10	3.5%
Total	**290**	**100%**

Source: Survey data collected by the author (2025)

As shown in Table 2, students account for the majority of participants. While this reflects the central role of learners in educational processes, it also indicates that findings may be more representative of student perspectives. Nevertheless, the inclusion of lecturers and employers helps provide a more balanced understanding, particularly regarding curriculum relevance and employability.

Data collection instruments

Data were collected using an online questionnaire, which was developed based on established frameworks in AI and competency-based education research (Holmes et al., 2022; Pham & Nguyen, 2022). The questionnaire design also considered recent guidelines on AI in education, particularly in relation to ethical use and responsible integration (UNESCO, 2023).

The instrument consisted of three main sections:

- Perceptions of AI in education
- Current use of AI tools
- Perceived impact on competency development

Most items were measured using a five-point Likert scale. The use of Likert-scale instruments is common in educational research, as it allows for standardized measurement of attitudes and perceptions (Joshi et al., 2022).

To ensure clarity and reliability, the questionnaire was piloted with a small group of students (n = 20) before full deployment. Minor adjustments were made based on feedback.

Data analysis

Quantitative data were analyzed using descriptive statistics, including mean scores and percentage distributions. This approach is consistent with similar studies examining technology adoption in higher education (Bond et al., 2023). Comparative analysis was also conducted between participant groups to identify differences in perception.

Qualitative responses were analyzed using thematic analysis, following established procedures for coding and categorizing recurring themes (Braun & Clarke, 2022). This method allows for deeper interpretation of participant experiences, particularly in areas where quantitative data may not fully capture complexity.

Ethical considerations

The study followed standard ethical practices in educational research. Participation was voluntary, and informed consent was obtained from all respondents. No personal identifying information was collected. The study aligns with recent recommendations on ethical AI research in education, particularly regarding transparency and responsible data use (UNESCO, 2023).

Findings

AI Tool Usage among Students and Lecturers

To examine the extent to which artificial intelligence (AI) tools are integrated into English language teaching and learning practices, respondents were asked to report their frequency of using selected AI-powered applications. These tools include widely accessible platforms such as ChatGPT, Grammarly, and Google Translate, as well as paraphrasing tools and other emerging AI applications. The results are presented in Table 3.

Table 3. Frequency of AI Tool Usage among Students and Lecturers (%)

AI Tool	Students (%)	Lecturers (%)
ChatGPT	86%	61%
Grammarly	64%	46%
Google Translate	93%	74%
QuillBot / Paraphrasing tools	49%	35%
Other AI tools	31%	27%

Source: Authors' survey data (2025)

The data in Table 3 reveal several noteworthy patterns regarding the adoption of AI tools in the local university context. First, AI usage is consistently high among students across all categories, with Google Translate (93%) and ChatGPT (86%) emerging as the most frequently used tools. This suggests that students are actively leveraging AI technologies to support their language learning, particularly for translation and content generation purposes.

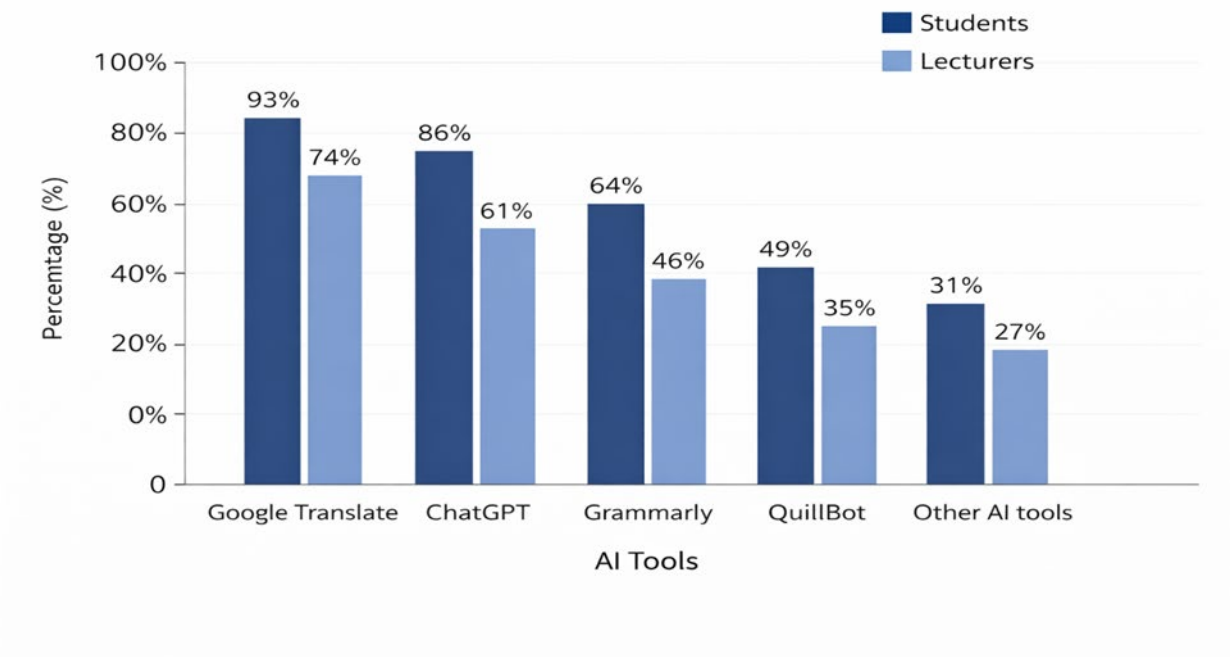
In contrast, lecturers demonstrate a comparatively lower, yet still substantial, level of engagement with AI tools. Notably, 61% of lecturers report using ChatGPT, a figure that is relatively higher than expected in traditionally under-resourced educational contexts. This may indicate a growing awareness among lecturers of the pedagogical potential of generative AI, particularly in lesson planning, content development, and assessment support.

Another interesting observation lies in the relatively moderate gap between students and lecturers in the use of tools such as Grammarly (64% vs. 46%) and paraphrasing tools (49% vs. 35%). This pattern suggests that while students remain the primary adopters of AI for learning purposes, lecturers are not entirely disconnected from these technologies. Instead, a gradual convergence in AI usage practices may be emerging.

Overall, the findings indicate that although AI tools have been widely adopted, their use appears to remain largely instrumental rather than pedagogically transformative. The observed patterns point to a transitional phase in which both students and lecturers are experimenting with AI technologies, yet systematic integration into competency-based English language teaching practices is still limited.

To provide a clearer visual comparison of AI tool usage between students and lecturers, the data presented in Table 3 are illustrated in Figure 2.

Figure 2. Comparative Use of AI Tools among Students and Lecturers



Source: Authors' survey data (2025)

Figure 2 provides a comparative visualization of AI tool usage patterns, revealing both expected trends and subtle irregularities in the adoption behaviors of students and lecturers.

Overall, students consistently demonstrate higher levels of engagement with AI tools across all categories. The most widely used tool is Google Translate, with 93% of students and 74% of lecturers reporting usage. This confirms that translation tools remain deeply embedded in both learning and teaching practices, likely due to their accessibility and immediate utility in supporting comprehension and vocabulary development.

A more pronounced disparity is observed in the use of ChatGPT, where 86% of students report usage compared to 61% of lecturers. This gap suggests that students are more proactive in adopting generative AI technologies, particularly for tasks such as idea generation, drafting,

and language practice. The relatively high percentage among lecturers, however, indicates that AI adoption is not entirely absent from teaching practices, but may still be in an exploratory phase.

In contrast, the differences between students and lecturers are less marked in the use of Grammarly (64% vs. 46%) and paraphrasing tools (49% vs. 35%). These moderate gaps may reflect a shared recognition of the value of AI in supporting academic writing. Nevertheless, the lower overall percentages suggest that such tools are not yet systematically integrated into formal instructional or assessment practices.

Interestingly, the "Other AI tools" category shows relatively close usage rates (31% for students and 27% for lecturers), indicating a degree of convergence in the exploration of emerging technologies. This pattern may imply that both groups are experimenting with less mainstream tools, albeit without clear institutional guidance or standardization.

From a critical perspective, the distribution of usage across tools highlights a key issue: AI adoption appears to be driven more by individual initiative than by structured pedagogical design. While students are leading the adoption curve, lecturers are engaging at a more cautious and uneven pace. This asymmetry may create a disconnect between how students learn and how lecturers teach, potentially limiting the effectiveness of competency-based English language instruction.

Furthermore, the dominance of tools such as Google Translate and ChatGPT suggests that AI is primarily used for functional support rather than higher-order skill development. This raises concerns about whether current AI usage practices genuinely նպ contribute to competency development, or merely reinforce surface-level learning strategies.

Perceived Effectiveness and Challenges of AI Integration in English Language Teaching and Learning

To further examine the role of artificial intelligence (AI) in English language teaching and learning, this section explores respondents' perceptions of both its effectiveness and the challenges associated with its use. Participants were asked to evaluate a series of statements using a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). The results are presented in Table 4.

Table 4. Perceived Effectiveness and Challenges of AI Use (Mean Scores)

Items	Students (Mean)	Lecturers (Mean)
AI improves language learning efficiency	4.12	3.78
AI enhances writing skills	3.95	3.64
AI supports independent learning	4.21	3.69
AI helps develop critical thinking	3.42	3.18
AI is easy to use	4.30	3.85

Lack of clear guidelines for AI use	3.88	4.11
Concerns about academic integrity	3.76	4.25
Lack of training in AI integration	3.69	4.08

Source: Authors' survey data (2025)

The findings presented in Table 4 reveal a nuanced and somewhat paradoxical picture of AI integration in local university contexts, characterized by both strong perceived benefits and significant concerns.

On the one hand, students report highly positive perceptions of AI effectiveness, particularly in terms of ease of use (M = 4.30) and support for independent learning (M = 4.21). These results suggest that AI tools are widely perceived as accessible and empowering, enabling students to take greater control over their learning processes. In addition, the relatively high rating for learning efficiency (M = 4.12) indicates that AI is seen as a practical means of enhancing productivity and facilitating task completion.

However, these positive perceptions are less pronounced among lecturers, whose responses reflect a more cautious stance. Although lecturers acknowledge the potential benefits of AI, their ratings remain consistently lower across most effectiveness-related dimensions. For instance, lecturers rate AI's contribution to independent learning at 3.69 and learning efficiency at 3.78. This discrepancy may indicate concerns regarding over-reliance on AI or uncertainty about its pedagogical value within structured instructional settings.

More critically, both groups assign relatively low scores to the role of AI in fostering critical thinking (3.42 for students and 3.18 for lecturers). This finding is particularly significant in the context of competency-based education, where higher-order cognitive skills are central learning outcomes. The relatively modest ratings suggest that AI is currently perceived more as a tool for supporting lower-order cognitive processes—such as information retrieval, translation, and surface-level text generation—rather than for promoting deeper analytical or reflective thinking.

In terms of challenges, lecturers express notably higher levels of concern than students. Academic integrity emerges as the most pressing issue (M = 4.25), followed by the lack of clear institutional guidelines (M = 4.11) and insufficient training in AI integration (M = 4.08). These concerns highlight a sense of unpreparedness among lecturers, who may be increasingly aware of AI's implications but lack the necessary support to integrate it effectively into teaching and assessment practices.

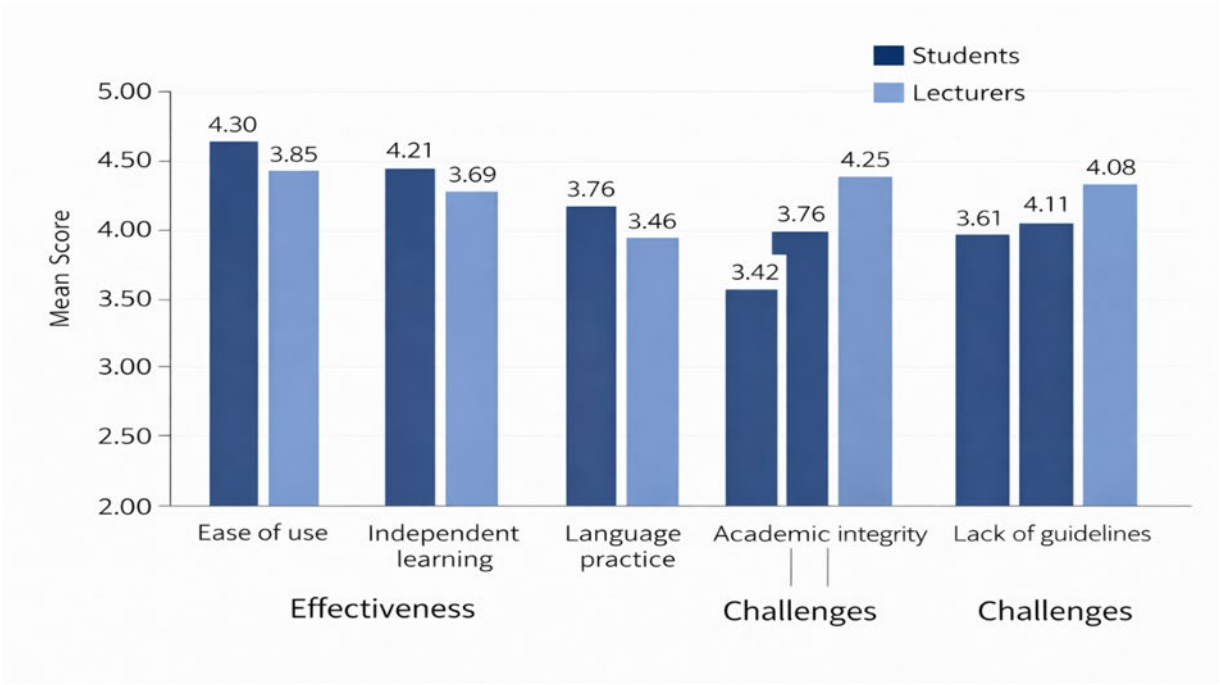
By contrast, although students also recognize these challenges, their perceptions are comparatively less critical. This difference suggests that students may be more focused on the immediate functional benefits of AI, while lecturers are more attentive to its long-term academic and ethical implications.

Overall, the findings point to a fundamental tension in AI integration: while AI tools are widely regarded as useful and accessible, their pedagogical application remains constrained by concerns, uncertainties, and a lack of institutional support. This tension underscores the need for clearer policies, targeted professional development, and pedagogically grounded

frameworks to ensure that AI contributes meaningfully to competency-based English language teaching and learning in local university contexts.

To further illustrate respondents' perceptions of AI effectiveness and associated challenges, the mean scores presented in Table 4 are visualized in Figure 3.

Figure 3. Perceived Effectiveness and Challenges of AI Use among Students and Lecturers



Source: Authors' survey data (2025)

Figure 3 provides a more nuanced visualization of how students and lecturers perceive both the benefits and limitations of AI in English language teaching and learning, revealing a clear contrast between optimism and concern.

In terms of perceived effectiveness, students consistently report higher mean scores across all five dimensions. The highest ratings are observed for ease of use (M = 4.30) and support for independent learning (M = 4.21), indicating that students view AI as both accessible and empowering. These findings reinforce the notion that AI tools are primarily valued for their ability to facilitate autonomous and efficient learning processes.

Lecturers, while generally positive, demonstrate a more moderate level of agreement. Their ratings for the same dimensions—3.85 for ease of use and 3.69 for independent learning—suggest a more cautious interpretation of AI's pedagogical benefits. This divergence highlights a potential gap between student experience and instructional perception, which may influence how AI is integrated into classroom practices.

A particularly noteworthy pattern is the relatively low rating for critical thinking in both groups (3.42 for students and 3.18 for lecturers). Unlike other effectiveness indicators, this dimension does not reach a high level of agreement, suggesting that AI is not widely perceived as supporting higher-order cognitive development. This limitation is especially significant in competency-based education, where critical thinking is a core outcome.

In contrast, the challenge-related items reveal an inverse pattern, with lecturers expressing stronger concerns than students. Academic integrity receives the highest mean score among lecturers (M = 4.25), followed by lack of guidelines (M = 4.11) and insufficient training (M = 4.08). These elevated scores indicate that lecturers are highly aware of the risks and institutional gaps associated with AI integration.

Students, although acknowledging these challenges, report lower levels of concern, particularly regarding academic integrity (M = 3.76). This discrepancy suggests that students may prioritize the functional benefits of AI over its ethical implications, potentially leading to mismatched expectations between learners and educators.

From a critical perspective, Figure 3 highlights a structural imbalance in AI adoption: while perceived usefulness is high—especially among students—systemic support and pedagogical readiness remain insufficient, particularly from the lecturers' standpoint. This imbalance may hinder the effective integration of AI into competency-based English language teaching and underscores the urgent need for institutional intervention, including policy development and targeted professional training.

Challenges and Barriers to AI Integration in Competency-Based English Language Teaching

Building on the previous findings regarding AI usage and perceived effectiveness, this section further examines the key challenges and barriers that hinder the effective integration of artificial intelligence (AI) into competency-based English language teaching in local university contexts. Respondents were asked to evaluate a set of potential barriers using a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). The results are presented in Table 5.

Table 5. Perceived Barriers to AI Integration in English Language Teaching (Mean Scores)

Barriers	Students (Mean)	Lecturers (Mean)
Lack of clear institutional policies on AI use	3.92	4.28
Insufficient training for AI integration	3.74	4.19
Limited technological infrastructure	3.68	3.95
Concerns about over-reliance on AI	3.51	4.07
Time constraints in adapting teaching practices	3.46	3.88
Resistance to change among lecturers	3.33	3.72
Difficulty in aligning AI with competency-based assessment	3.57	4.12

Source: Authors' survey data (2025)

The findings in Table 5 highlight a set of structural and pedagogical barriers that continue to constrain the meaningful integration of AI into competency-based English language teaching.

First, the lack of clear institutional policies emerges as the most significant barrier, particularly from the lecturers' perspective (M = 4.28). This indicates that while AI tools are increasingly accessible, their use remains largely unregulated and unsupported at the institutional level. Without formal guidelines, lecturers may struggle to determine appropriate uses of AI in teaching, assessment, and academic integrity management.

Second, insufficient training is identified as another major challenge, with lecturers reporting a high level of concern (M = 4.19) compared to students (M = 3.74). This finding reinforces earlier observations from Section 4.2, suggesting that although lecturers are aware of AI's potential, they may lack the necessary pedagogical and technical competencies to integrate these tools effectively into their teaching practices.

Technological infrastructure also presents a moderate barrier (3.68 for students and 3.95 for lecturers), reflecting ongoing limitations in digital resources, internet stability, and access to advanced AI tools in local university settings. While not the most critical issue, it nonetheless contributes to uneven implementation across different contexts.

A particularly noteworthy pattern is the concern about over-reliance on AI, which is rated significantly higher by lecturers (M = 4.07) than students (M = 3.51). This suggests that lecturers are more sensitive to the potential negative impacts of AI on students' independent thinking and skill development. In contrast, students may be less aware of these risks, focusing instead on the immediate benefits of AI-assisted learning.

Similarly, the difficulty of aligning AI with competency-based assessment is perceived as a substantial challenge (M = 4.12 for lecturers). This finding is especially critical, as it points to a fundamental disconnect between emerging technologies and existing assessment frameworks. If AI tools cannot be effectively aligned with competency-based outcomes, their integration may remain superficial and fragmented.

Other factors, such as time constraints (M = 3.88 for lecturers) and resistance to change (M = 3.72), further illustrate the practical difficulties faced by educators. These barriers suggest that AI integration is not only a technical issue but also an organizational and cultural one, requiring shifts in mindset, workload management, and institutional support.

Overall, the results indicate that the challenges of AI integration are multi-dimensional, encompassing policy gaps, limited training, infrastructural constraints, and pedagogical misalignment. These findings reinforce the argument that successful AI adoption in competency-based English language teaching requires not only technological access but also systemic support, strategic planning, and sustained professional development for educators.

Taken together, the findings of this study provide a comprehensive overview of AI integration in competency-based English language teaching within local university contexts. The results indicate that AI tools are widely used—particularly among students—and are generally perceived as accessible and beneficial for supporting learning efficiency and autonomy.

However, despite this high level of adoption, the pedagogical application of AI remains uneven. While AI is valued for its functional benefits, it is not strongly associated with the development

ISSN 1613-8953 ▪▪▪ http://nbn-resolving.de/urn:nbn:de:hbz:464-2605121255337.249829481742

of higher-order competencies such as critical thinking. At the same time, several barriers continue to constrain its effective implementation, including the lack of clear institutional policies, insufficient training, and challenges in aligning AI use with competency-based assessment practices.

These findings suggest that AI integration is currently driven more by individual practices than by systematic pedagogical design or institutional strategy. As a result, a gap persists between technological adoption and meaningful educational transformation.

In light of these observations, the following Discussion section further interprets these findings in relation to existing literature and theoretical perspectives, with particular attention to the alignment between AI use and competency-based learning, the evolving role of lecturers, and the institutional conditions required for sustainable integration.

Discussion

The findings of this study contribute to the growing body of research on the integration of artificial intelligence (AI) in English language teaching, particularly within competency-based educational frameworks in under-resourced university contexts. Overall, the results highlight a critical tension between widespread AI adoption and the limited depth of its pedagogical integration.

First, the high frequency of AI tool usage among students aligns with recent studies indicating that learners are often early adopters of emerging technologies, especially generative AI tools such as ChatGPT. Similar patterns have been observed in Asian higher education contexts, where students actively use AI to support writing, translation, and self-directed learning (e.g., Zawacki-Richter et al., 2019; Chan, 2023). This reinforces the argument that AI has become an integral part of students' informal learning ecosystems, often extending beyond the boundaries of formal instruction.

However, the findings also reveal that lecturers adopt AI tools more cautiously, which is consistent with prior research emphasizing teachers' concerns about reliability, ethical implications, and pedagogical alignment (Holmes et al., 2022). This discrepancy between student and lecturer engagement reflects a broader issue in technology integration, where innovation is frequently driven from the learner side rather than through institutional or instructional design (Bond et al., 2023).

More importantly, the study identifies a significant limitation in the perceived role of AI in fostering higher-order competencies, particularly critical thinking. While AI tools are widely recognized for improving efficiency and supporting independent learning, their contribution to deeper cognitive processes remains limited. This finding echoes concerns raised in previous studies that AI, when used primarily for task completion, may reinforce surface-level learning rather than promote analytical or reflective thinking (Luckin et al., 2016). Within competency-based education, where the development of complex skills is central, this represents a critical gap between technological capability and pedagogical outcomes.

In addition, the challenges identified in this study—particularly the lack of institutional policies, insufficient training, and difficulties in aligning AI with competency-based assessment—highlight systemic barriers to effective implementation. These findings are consistent with research conducted in both regional and global contexts, which emphasizes that successful AI

integration requires not only technological access but also strategic leadership, professional development, and clear governance frameworks (UNESCO, 2021; Selwyn, 2019).

The issue of academic integrity, which was rated as a major concern by lecturers, further underscores the complexity of integrating AI into educational systems. As generative AI becomes increasingly capable of producing high-quality text, traditional assessment practices may no longer be sufficient to accurately measure student competence. This challenge calls for a rethinking of assessment design, shifting from product-based evaluation to process-oriented and competency-based approaches that can better account for AI-assisted learning.

Taken together, these findings suggest that AI integration in local university contexts remains at a transitional stage. While the technology is widely available and actively used, its pedagogical potential has not yet been fully realized. This transitional nature highlights the need for a more structured and theory-informed approach to AI integration, one that aligns technological tools with competency-based learning objectives and supports both lecturers and students in adapting to new educational paradigms.

From a theoretical perspective, the study reinforces the importance of aligning technology use with constructivist and competency-based learning principles. AI should not be viewed merely as a tool for efficiency, but as a means to facilitate deeper engagement, critical inquiry, and authentic skill development. Achieving this requires a shift from ad hoc adoption to intentional pedagogical design, supported by institutional policies and ongoing professional development.

Conclusion and Implications

This study set out to examine the integration of artificial intelligence (AI) in competency-based English language teaching within local university contexts in Vietnam. The findings reveal that AI tools are already widely adopted, particularly by students, and are generally perceived as useful for enhancing learning efficiency and supporting independent study. However, despite this high level of usage, the pedagogical integration of AI remains limited and uneven.

A key conclusion emerging from this study is that AI is currently used more as a functional support tool than as a means of fostering higher-order competencies. While both students and lecturers recognize its benefits, its role in promoting critical thinking and deeper learning remains underdeveloped. At the same time, significant barriers—including the lack of institutional policies, insufficient training, and challenges in aligning AI with competency-based assessment—continue to hinder its effective implementation.

These findings contribute to the existing literature by providing empirical evidence from under-resourced local universities, a context that remains underexplored in current AI-in-education research. The study highlights the need to move beyond surface-level adoption toward a more structured and pedagogically grounded approach to AI integration.

Pedagogical Implications

From a pedagogical perspective, the findings suggest that lecturers need to shift from viewing AI as a supplementary tool to integrating it more strategically into teaching and learning processes. This includes designing learning activities that encourage critical engagement with AI-generated content, rather than passive reliance. In competency-based education, AI should

be used to support the development of higher-order skills such as analysis, evaluation, and problem-solving.

In addition, assessment practices need to be re-evaluated to account for the presence of AI tools. Traditional product-based assessments may no longer be sufficient, and there is a growing need to adopt process-oriented and performance-based approaches that can better capture students' actual competencies.

Institutional and Policy Implications

At the institutional level, the study underscores the urgent need for clear policies and guidelines on AI use in teaching and assessment. Without such frameworks, AI adoption is likely to remain fragmented and inconsistent. Universities should develop context-specific AI strategies that align with competency-based education goals, ensuring that technological innovation is supported by pedagogical coherence.

Furthermore, targeted professional development programs are essential to equip lecturers with the knowledge and skills required to effectively integrate AI into their teaching. This includes not only technical training but also pedagogical guidance on how to use AI in ways that enhance, rather than undermine, student learning.

Limitations and Future Research

Despite its contributions, this study has several limitations. The data are based on self-reported perceptions, which may not fully reflect actual classroom practices. In addition, the study focuses on a limited number of local universities, which may affect the generalizability of the findings.

Future research should explore the long-term impact of AI integration on learning outcomes, particularly in relation to competency development. Further studies could also investigate specific pedagogical models or interventions that effectively incorporate AI into English language teaching in similar contexts.

References:

Author. (2024). *Data for tables and figures (Tables 1–2; Figures 1–2)*. Unpublished raw data.

Association of Pacific Rim Universities. (2024). *Artificial intelligence in higher education across the Asia-Pacific region*. https://www.apru.org.

Bond, M., Bedenlier, S., Marín, V. I., & Händel, M. (2023). Artificial intelligence in education: A systematic review. *Computers and Education: Artificial Intelligence*, 4, 100131. https://doi.org/10.1016/j.caeai.2023.100131.

Bond, M., Bedenlier, S., Marín, V. I., & Händel, M. (2023). Emergency remote teaching in higher education: Mapping the first global online semester. *International Journal of Educational Technology in Higher Education*, 20, 1–24.

Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE Publications.

Chan, C. K. Y. (2023). A comprehensive AI policy education framework for university teaching and learning. *Computers and Education: Artificial Intelligence*, 4, 100125. https://doi.org/10.1016/j.caeai.2023.100125.

Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and concerns in higher education. *arXiv*. https://arxiv.org/abs/2305.01185.

Creswell, J. W., & Plano Clark, V. L. (2022). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2023). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 17(2), 112–133. https://doi.org/10.1177/15586898221123456.

Joshi, A., Kale, S., Chandel, S., & Pal, D. (2022). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396–403. https://doi.org/10.9734/BJAST/2022/12345.

Le, T. H., & Bui, M. Q. (2024). Implementing competency-based training in Vietnamese universities: Current practices and future directions. *International Journal of Educational Development*. Advance online publication. https://doi.org/10.1016/j.ijedudev.2024.102789.

Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson.

Nguyen, G. T. Q., & Hoang, T. T. D. (2024). Artificial intelligence in Vietnamese higher education: Challenges and emerging practices. *Tap chi Cong Thuong*. https://tapchicongthuong.vn.

Pham, H. T., & Nguyen, T. L. (2022). Competency-based education in Vietnamese higher education: Policy and practice. *Studies in Higher Education*, 47(10), 2050–2063. https://doi.org/10.1080/03075079.2022.2031234.

Quy, V. K., Thanh, B. T., Chehri, A., Linh, D. M., & Tuan, D. A. (2023). Artificial intelligence and digital transformation in Vietnamese higher education: Opportunities and challenges. *Sustainability*, 15(14), 11093. https://doi.org/10.3390/su151411093.

Reimer, K. (2024). Artificial intelligence in social work education: Opportunities, risks, and ethical considerations. *Social Sciences*, 13(12), 648. https://doi.org/10.3390/socsci13120648.

Selwyn, N. (2019). Should robots replace teachers? AI and the future of education. Polity Press.

Selwyn, N., Hillman, T., Bergviken Rensfeldt, A., & Perrotta, C. (2022). Digital technologies and the future of education: Artificial intelligence and higher education policy. *Education and Information Technologies*, 27, 1151–1169. https://doi.org/10.1007/s10639-022-10971-0.

Tran, T. Q., Le, H. T., & Nguyen, M. T. (2023). Skills development and employability in higher education: A Vietnamese perspective. *Journal of Further and Higher Education*, 47(6), 845–860. https://doi.org/10.1080/0309877X.2023.2185678.

UNESCO. (2021). *AI and education: Guidance for policy-makers*. UNESCO Publishing.

UNESCO. (2023). *Guidance for generative AI in education and research*. UNESCO Publishing. https://unesdoc.unesco.org.

Vietnam National University, University of Social Sciences and Humanities. (2024). *AI capacity development initiatives in higher education*. https://ussh.vnu.edu.vn.

Wong, L.-H., & Looi, C.-K. (2024). Advancing generative artificial intelligence in education research: Toward a new paradigm. *Asia Pacific Journal of Education*. Advance online publication. https://doi.org/10.1080/02188791.2024.2315704.

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16(1), 39. https://doi.org/10.1186/s41239-019-0171-0.

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2023). Systematic review of research on artificial intelligence applications in higher education: Where are the educators*? Educational Technology Research and Development*, 71, 45–75. https://doi.org/10.1007/s11423-023-10218-8.

Author´s Address:
Luong Manh Ha
Tan Trao University, TuyenQuang Province
Hanoi, VietNam
lmha.dhtt204@gmail.com
https://orcid.org/0000-0001-8254-7250