"ARE YOU ON BOARD?": UNIVERSITY EFL INSTRUCTORS' READINESS FOR INTEGRATING AI-POWERED TOOLS IN TEACHING

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Abstract: Artificial Intelligence (AI) has been hailed as revolutionizing education, particularly in English Language Teaching and Learning. As teachers stand at the forefront of adopting AI in their teaching, understanding their readiness to harness this technology warrants further examination. While studies on teacher AI readiness exist, most have adopted a quantitative research approach. Employing a mixed-method approach, this study aimed to explore the level of EFL teachers' readiness to incorporate AI-based tools in teaching, their experience and their intention of using AI in their teaching. The framework developed by Li and Liang (2025), which operationalizes teacher AI readiness through personal assets, value-cost beliefs, and contextual resource evaluations, served as the primary theoretical underpinning. Data were collected from thirteen EFL instructors working in a higher education institution in Hanoi, Vietnam, using a questionnaire comprised of both closed-ended and open-ended questions. The results revealed that teachers are ready to integrate AI-based tools, as evidenced by their knowledge and technological innovativeness. Although the institution has provided AI training and peer support, teachers still aspire to have greater access to AI tools, clearer guidelines, and more specific institutional policies. Despite the study's small scale, its insights into EFL teachers' readiness for integrating AI-powered tools aim to enrich the literature.

Keywords: university EFL instructors, Artificial Intelligence (AI), teacher AI readiness, AI-Powered tools

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"BẠN ĐÃ SẴN SÀNG CHƯA?": MỨC ĐỘ SẴN SÀNG CỦA GIẢNG VIÊN TIẾNG ANH BẬC ĐẠI HỌC ĐỂ TÍCH HỢP CÁC CÔNG CỤ ỨNG DỤNG TRÍ TUỆ NHÂN TẠO TRONG GIẢNG DẠY

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Tóm tắt: Nghiên cứu này áp dụng phương pháp kết hợp định tính và định lượng nhằm khám phá mức độ sẵn sàng của giảng viên tiếng Anh trong việc tích hợp các công cụ ứng dụng AI vào giảng dạy. Nghiên cứu này dựa trên khung lý thuyết do Li và Liang (2025) phát triển, trong đó định nghĩa mức độ sẵn sàng của giáo viên đối với AI dựa trên ba yếu tố: năng lực cá nhân, niềm tin về giá trị và thách thức của các công cụ AI, và đánh giá về nguồn lực. Dữ liệu được thu thập thông qua bảng câu hỏi gồm cả câu hỏi đóng và câu hỏi mở trên mười ba giảng viên tiếng Anh tại một cơ sở giáo dục đại học ở Hà Nội, Việt Nam. Kết quả nghiên cứu cho thấy bản thân các giảng viên sẵn sàng tích hợp các công cụ AI vào giảng dạy, thể hiện qua kiến thức, kinh nghiệm, khả năng đổi mới và thái độ tích cực với AI của họ. Mặc dù nhà trường đã tổ chức các khóa đào tạo về AI và có sự hỗ trợ từ đồng nghiệp, giảng viên vẫn mong muốn được tiếp cận các công cụ AI, có nhiều chính sách hỗ trợ và hướng dẫn cụ thể hơn từ nhà trường.

Từ khóa: giảng viên tiếng Anh bậc đại học, trí tuệ nhân tạo, mức độ sẵn sàng của giáo viên trong việc ứng dụng AI, công cụ AI

1. Introduction

The integration of Artificial Intelligence (AI) in education has gained significant attention for its potential to enhance teaching and learning processes. In higher education, particularly in English as a Foreign Language (EFL) instruction, AI-powered tools are well-documented to offer opportunities to enhance learning achievement, L2 motivation and self-regulated strategies (e.g. Ebadi & Amini, 2022; El Shazly, 2021; Kim et al., 2019; Xu et al., 2022; Wei, 2023). However, the successful adoption of these tools largely depends on instructors' readiness to integrate them into their teaching practices (Li & Liang, 2025; Luckin et al., 2022; Wang, 2023). Despite growing interest, there is limited understanding of university instructors' preparedness to embrace AI in their classrooms as the primary focus has been much placed on teachers at secondary school (Cheah et al., 2025; Wang, 2023). Moreover, understanding university instructors' readiness is crucial for designing effective professional development programs, shaping institutional policies, and ensuring meaningful integration of AI tools into teaching practices. Therefore, this study seeks to explore university EFL instructors' readiness to integrate AI-powered tools, their experience and intention of using AI technologies in higher education contexts.

The Technological Pedagogical Content Knowledge (TPACK) framework (Mishra & Koehler, 2006) has been commonly employed to evaluate the readiness of teachers (e.g. Chan & Tang, 2025; Ning et al., 2024; Sun et al., 2023). The framework, which was adapted from Shuman's (1986) work, focuses on the knowledge areas that teachers need to equip themselves

with in order to fully harness the technology. This includes technical knowledge (TK), technological pedagogical knowledge (TPK), technological content knowledge (TCK) and technological pedagogical content knowledge (TPACK). Also, to measure these knowledge items, research has primarily adopted a quantitative research approach. However, there has been a shift in the research focus, from measurable objective indices to subjective reflections in specific contexts in light of the postmodernist worldview. Therefore, the readiness construct in this paper is comprised of both the subjective and contextual elements. Besides teachers' knowledge to utilize AI technologies, their technological innovativeness, beliefs of the values and costs of AI educational use, and the facilitating conditions were under scrutiny based on the comprehensive framework developed by Li and Liang (2025).

2. Literature Review

2.1. Artificial Intelligence

There are numerous definitions of AI and none that is unanimously accepted within the AI research community (Luckin et al., 2022). In their paper, Luckin et al. (2022), based on the Oxford English Dictionary, defined AI simply as "The capacity of computers or other machines to exhibit or simulate intelligent behaviour; the field of study concerned with this" (p.2). As defined by Lu (2019), AI is the capability of machines, particularly computers, 'to analyze, simulate, exploit, and explore human thinking process and behavior' (p. 2). In other words, AI examines human activities, then constructs a certain intelligent system allowing machines to perform tasks used to be merely done by humans. Likewise, Mccarthy and Wright (2004) simply put AI as "the science and engineering of making intelligent machines" (p.2). It is apparent that Lu's (2019) and Luckin et al.'s (2022) definitions shared many common points which demonstrate what AI is capable of doing, like "exhibiting" and "simulating" human behavior and thinking. This paper considers AI as a computerized machine which has those cutting-edge features in simulating human thinking and behavior.

2.2. Artificial Intelligence in Education

AI in Education (AIED) has a rich history (Luckin, 2022). On reviewing this prolonged development, Lu (2019) claimed that AI and education were deeply integrated, and the form of education has undergone 'tremendous changes: from AI education to educational AI' (p.17). The research objects of educational AI include educational activities and rules for machines and people. Educational AI, therefore, is conceptualized as moving beyond mere technical functionality to focus on the core purposes of education. Rooted in the principle of synergy, it aims to leverage AI to investigate how learning takes place and how it is shaped by external influences, thereby creating optimal learning environments (Lin et al., 2018; Luo & Xie, 2018; McArthur et al., 2005). This fusion of AI and education has led to the emergence of innovations such as intelligent robots, adaptive teaching platforms, and automated assessment systems, all of which alleviate the burden of repetitive tasks for educators and promote collaboration between humans and machines. Ultimately, educational AI plans to develop a smart learning ecosystem- a connected network supported by governments, schools, training centers, and industries - to enhance instructional quality and nurture learners' cognitive, communicative, and creative abilities. This integration transforms teaching into a more intelligent process, enables personalized learning experiences, and ensures that educational content is increasingly flexible and accessible (Luo, 2018; Spiro et al., 2017).

AI also has had substantial impacts on English as a Foreign Language teaching and learning. A recurring finding in studies across contexts is that AI can foster a supportive and engaging learning environment for English language acquisition (Alshumaimeri & Alshememry, 2023; Choudhury et al., 2024; Ghafar et al., 2023). More specifically, to accommodate learners' individual differences such as current level of English, career needs, or hobbies, it has much potential to create a customized environment where students can simultaneously use their senses to learn English. AI is also known to boost productive skills like writing and offer an authentic simulation dialogue platform like spoken English. By accessing a wide variety of applications that are built on AI technology such as Google Translate, Text to Speech (TTS), Elsa, Chat GPT platforms, students are able to practice their language skills to enhance English linguistic competence. Additionally, a comprehensive review by Crompton et al. (2023) affirms that AI offers significant affordances for English language teaching, particularly in developing speaking, writing, and reading skills, as well as supporting pedagogy and learner self-regulation. Nevertheless, besides the potentials, this study has pointed out the challenges when deploying AI in EFL teaching and learning that include standardized tests, technology breakdowns, limited knowledge and fear among both teachers and learners. Another study by Chaka (2023) claimed that Chatbots like ChatGPT, Youchat and Chatsonic mechanically and superficially generated phrases and ideas in their responses and the knowledge they communicate tend to be highly generic without much meaning. Thus, there has been an emphasis on cultivating a strong sense of ethics when utilizing AI-powered tools in EFL classes (Abisheva et al., 2024).

2.3. Teacher Readiness for AI

The omnipresence of AI in education has entailed the requirement to get teachers ready for its use. Kaur, Singh and Chan (2014) contended that teacher readiness included the knowledge level, attitude towards the use of ICT in teaching-learning and obstacles faced. More specifically, according to Park and Son (2020), readiness can be defined as the state of being prepared for something or willing to do something as they adopted from Merriam-Webster Dictionary. It is also clarified in their paper that teachers' readiness encompasses not only technological knowledge and skills but also knowledge of technology from the perspective of target content and corresponding pedagogy - TPACK (Mishra & Koehler, 2006) and attitudes towards technology.

Knowledge indeed plays a pivotal role in teachers' initiative in integrating AI in their teaching. The role of technological and pedagogical knowledge is vital in the successful education integration of any technology (Mishra & Koehler, 2006). The body of research literature has pinpointed that teachers with good knowledge of AI can foster learner motivation, creating an engaging environment where personal learning is concerned and prioritized (Popenici & Kerr, 2017; Wang et al., 2021). They can make well-informed decision about the appropriate AI-based tools in lesson planning and implementation (Celik et al., 2022; Zawacki-Ritcher et al., 2019); in formative and summative assessments (Chen et al., 2021), and in in-class activities (Edwards et al., 2018). Pointing out the gap in the literature that none of the previous studies have explored teacher knowledge for instructional AI use pedagogically and ethically, Celik (2023) and Bautista et al. (2024) expanded the TPACK framework by embedding ethical considerations. Sharing the same ideology as Celik (2023), Wang et al. (2023) conceptualized AI readiness for educational use from four components, namely, cognition, ability, vision, and ethics.

2.4. Prior Studies on Teacher Readiness for AI-Powered Integration in Teaching

There have been a considerable number of papers emphasizing the importance of AI readiness for individual and organizational use (e.g., Holmstrom, 2022; Luckin et al., 2022). This part is going to review some significant empirical studies on teacher AI readiness across contexts.

Cheah, Lu and Kim (2025) conducted a mixed-method study on K-12 teachers' integration of generative AI (GenAI) into daily teaching practices in the American context. The results indicated that teachers were generally underprepared for integrating GenAI, with fewer than half incorporating it into their educational practices, and merely for out-of-classroom duties (i.e., lesson preparation, assessment, and administrative tasks) rather than for real-time teaching and learning.

Moorhouse (2024) reported that first-year teachers in Hong Kong, China were generally ready for the use of GAI tools and could recognize its potential to support their professional work largely due to their experiences using ChatGPT. However, beginning teachers were not ready to use GAI tools in their professional work and had little knowledge about them. Yue et al. (2024) surveyed K-12 teachers' technological pedagogical content knowledge readiness and attitudes toward artificial intelligence education in Mainland China. The quantitative data analysis indicated that the teachers exhibited relatively low perceived Content Knowledge and Technical Knowledge related to AI. Moreover, high confidence in Pedagogical Knowledge related to general teaching did not lead to high confidence or interest in teaching AI. Demographic analysis suggested that more teaching experience did not guarantee a better understanding and implementation of AI education. In the same context, Wang et al. (2023) conducted a massive scale quantitative study on 3164 primary school teachers, which yielded similar results. The study found that cognition, ability, and vision in the educational use of AI were positively associated with ethical considerations. The four components of AI readiness all positively predicted AI-enhanced innovation, whereas perceived threats from AI negatively. AI-enhanced innovation, in turn, positively predicted teachers' job satisfaction. Additionally, teachers from different socio-economic regions and of different genders showed no significant differences regarding AI readiness and its impact on their jobs.

In the context of Nigeria, Eke's (2024) findings showed a high level of readiness and positive attitudes among the Nigerian teacher educators towards the adoption of AI-powered educational tools. The results highlighted the teacher educators' recognition of the potential benefits of AI in addressing educational challenges, as well as their confidence in integrating AI-driven automated grading systems into their teaching practices. However, the study also identified perceived barriers, including inadequate infrastructure, insufficient training, and ethical concerns, which need to be addressed to ensure successful AI integration. Similarly, another study by Reuben and Kabilan (2024) on 100 university lecturers from North-East Nigeria revealed a moderate level of AI readiness among lecturers. The article concluded with recommendations for universities to bridge proficiency gaps, address ethical concerns, and foster a supportive environment for AI adoption.

Also related to university instructors, Kohnke (2023) did a qualitative interpretive study to identify the digital competencies and pedagogical knowledge required to implement generative AI in education and provide guidance for the design of professional development programmes that address the challenges and concerns associated with adopting AI. Drawing on semi-structured interviews with twelve instructors at a higher education institution in Hong Kong, the findings reveal the significance of familiarity and confidence with using AI-driven teaching tools, the challenges and concerns language instructors face and the need for tailored

support and professional development.

In short, prior studies have generally agreed on the importance of AI readiness for individual and organizational use of AI. There exist a number of research gaps in the field. Felix (2020) spotted the limited attention to teachers who normally oversee the design and implementation of AI-enhanced education. Chan and Tang (2025) have also posited that although the integration of AI into language teaching shows potential benefits, there remains a dearth of comprehensive research on English teachers' perceptions, readiness, and professional development requirements in relation to AI. To address these gaps, there have been attempts across contexts adopting quantitative, qualitative or mixed-method approaches. Nevertheless, each of these studies has covered one single aspect of the notion of AI readiness. Cheah, Lu and Kim (2025), Eke (2024), Kohnke (2023), Moorhouse (2024), and Reuben and Kabilan (2024) examined teachers' attitudes, perceptions, and intentions to integrate AI-based tools in their teaching. Meanwhile, Yue et al. (2024) focused on teacher knowledge. The study conducted by Wang et al. (2023) on 3164 primary school teachers seemed to provide the most comprehensive illustration of teacher AI readiness as AI readiness for educational use was defined to encompass four components, namely, cognition, ability, vision, and ethics. However, in the post-modernist era when subjective reflections matter more than measurable outcomes, the quantitative approach in Wang et al.'s (2023) study necessitates a more holistic view of teacher AI readiness. In this study, in order to address that gap, a mixed-method approach has been adopted to examine teacher AI readiness based on the innovative framework by Li and Liang (2025).

2.5. Theoretical Framework

Most recently, Li and Liang (2025) have developed and validated a conceptual framework for AI readiness from the teachers' perspective and provide valuable insights into the integration of AI in Chinese as a Foreign Language education. The results indicated that Chinese as a Foreign Language (CFL) teachers' AI readiness can be conceptualized from three factors, namely, personal assets (AI-TPACK and technological innovativeness), value-cost beliefs (perceived value and perceived cost), and contextual resource evaluations (institutional support and facilitating condition).

The framework developed from a mixed-method study inherited the TPACK framework (Mishra & Koehler, 2006) and the AI-TPACK (Celik, 2023). Besides, it has embedded teachers' perceptions of their technological innovativeness which aligns with Diffusion of Innovation Theory (Rogers, 1995). Both AI-TPACK and technological innovativeness are deemed critical indicators of teachers' AI readiness in this study, highlighting the importance of understanding teachers' *personal assets* for AI readiness. Another domain of the Teacher AI readiness framework is *value-cost beliefs*, comprising perceived virtues and barriers by teachers in AI adoption. The value-cost perspective can be traced back to the Expectancy-Value Theory (Eccles et al., 1983), which provides a comprehensive conceptual framework for understanding individuals' motivation and decision-making processes related to their choices, performance, and persistence. However, little research has focused on the role of these two components in AI usage from the teacher's perspective. Last but not least, Li and Liang (2025) claim *that contextual resource evaluations*, which include institutional support and facilitating conditions, capture all the perceived socio-psychological, organizational, professional, and infrastructure supports that teachers receive from external contexts. These resources play a crucial role in enabling effective AI-assisted teaching practices. This aligns with Vygotsky's (1978) social constructivist theory, which emphasizes the role of social interaction and environmental mediation in shaping individuals' cognitive development. In this view, the contextual factors,

including institutional, interpersonal support and infrastructural availability, play a crucial role in teachers' professional learning and growth.

Figure 1

Li and Liang's (2025) Teacher AI Readiness Framework
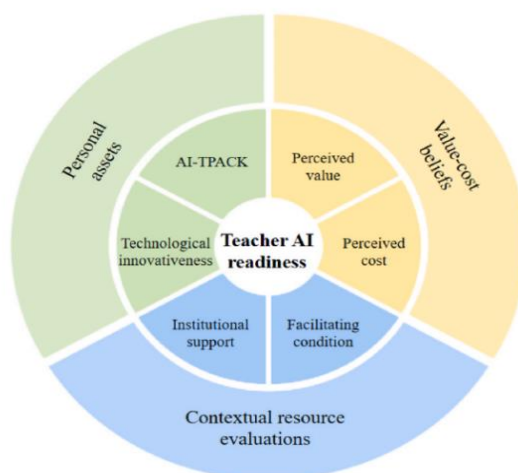
It is evident in the literature that the majority of research on teacher readiness has adopted quantitative approach on a large number of participants (Kurshumova, 2024; Wang et al., 2003; Yue et al., 2024). This contradicts Canagarajah's (2015) contention, which asserts that in light of post-modernism, teachers should be deemed holistic human beings with beliefs, identities and ideologies. More importantly, there has been a shift in research approach from objective to personal and reflexive methods. Therefore, teacher AI readiness for leveraging AI-based tools in their teaching should be examined from various angles, not solely their knowledge and understanding of AI. For the above reasons, the comprehensive framework by Li and Liang (2025), which not only focuses on teachers' knowledge but also underscores the significance of teacher beliefs and the contextual resources, has been adopted in this study to address the aforementioned gaps in the literature.

3. Methodology

3.1. Research Questions

This study is to explore the perceived AI readiness of EFL teachers at a Higher Education (HE) institution, their experiences with AI-powered tools in teaching, and their intentions to integrate AI into their teaching practices. Therefore, it is to seek the answers to the following research questions:

1. How ready are university EFL instructors to integrate AI-powered tools in their teaching?
2. What experiences do university EFL instructors have with using AI-powered tools in their teaching?
3. What are university EFL instructors' intentions when using AI-powered tools in their teaching?

3.2. Research Setting

The study was conducted at a HE institution in Hanoi, Vietnam. This institution has

been well-known for training highly qualified personnel specializing in foreign languages. The target sample of this study was a group of EFL teachers teaching bachelor students majoring in the English language and culture. As the students were admitted to the institution with high English proficiency, the four language skills were embedded in content-based subjects.

The HE institution has demonstrated supportive discourse in AI adoption. Recently, the teachers have been provided with multiple training sessions in educational technologies in general and utilizing AI-powered tools in language teaching in particular. With the endorsement of some organizations, it has invited scholars to train course coordinators and teachers to integrate AI tools in their teaching. With these affordances, a study to examine teachers' AI readiness in this particular context would partially reveal how effective the training and assistance are.

3.3. Research Approach and Design

This study adopted a mixed-method approach. According to Cohen et al. (2018), the mixed-method approach:

> *"enables a more comprehensive and complete understanding of phenomena to be obtained than single methods approaches and answers complex research questions more meaningfully, combining particularity with generality, 'patterned regularity' with 'contextual complexity', insider and outsider perspectives (emic and etic research), focusing on the whole and its constituent parts, and the causes of effects"* (p. 33).

This present study adopted the convergent mixed methods design, one of the three core designs of mixed-method approach (Creswell & Creswell, 2023). In this design, quantitative research method revealed the level of teacher AI readiness divided in three categories based on the Li and Liang's (2025) framework. Roughly at the same time, a qualitative method was conducted to gain teachers' insights into their past experience and intention of adopting AI in teaching. Data were analyzed separately, and then compared to see if the findings confirm or disconfirm each other in the integrative analysis.

3.4. Participants

Thirteen EFL teachers responded to the questionnaire which was initially sent to more than thirty EFL teachers specialized in the English linguistics and culture of the Higher Education institution. More than a third of them had between 10 and 15 years of teaching experience. An equal proportion could be seen for the teachers with 15-20 years and more than 20 years of teaching whereas 15% of the respondents have taught between 5 and 10 years. They were all teaching EFL courses to first-year students specializing in English Linguistics or English Teacher Education. They reported they have taught Social English, Academic English, Silk Road (the history of trade in Southeast Asia), Public Speaking, Language and Media, Critical Thinking, and College Writing. Some lectured on content subjects such as Intercultural Communication, Approaches to Curriculum design and materials development, and English for Science and Technology. All teachers are pseudonymized from T1 to T13.

3.5. Data Collection

A survey questionnaire encompassing 33 questions was designed to explore teachers' AI readiness. The first question was to know the years of teaching experience and the second asked about the courses the participants have taught. After these two demographic questions, questions from 1 to 29 which were all closed-ended with a 5 Likert scale (1 = completely disagree, 2 = disagree, 3 = I'm not sure, 4 = Agree, 5 = Completely Agree) were adopted from Li and Liang's (2025) paper. Questions 1-3 asked about teachers' technological innovativeness,

while the ones from 4 to 11 were to unearth their AI-TPACK including knowledge of the content, knowledge of the technology, knowledge of the technological content, and ethical considerations. Following that, teachers were asked about their beliefs of values and costs of using AI-powered tools. Questions 21-29 were to illuminate the institutional support and facilitating conditions.

After all the closed-ended questions, respondents were requested to answer two open-ended questions to gain more insights into their past experience of using AI-based tools and the intentions to use AI in the imminent future. To encourage the teachers to share, both Vietnamese and English were accepted. The questionnaire was distributed and administered via Google Forms of Google Corporation.

3.6. Data Analysis

Data from the close-ended questions were analyzed through descriptive statistics, including means, medians, and standard deviations, to capture central tendencies and variability across the 6 subscales defined by Li and Liang's (2025) framework: Technological Innovativeness, AI-TPACK, Value Beliefs, Cost Beliefs, Institutional Support, and Facilitating Conditions.

In addition, Cronbach's alpha coefficients were calculated for each subscale to examine internal consistency. The results indicated that AI-TPACK ($\alpha = 0.82$) and Value Beliefs ($\alpha = 0.80$) had relatively high consistency, while Institutional Support ($\alpha = 0.66$) and Facilitating conditions ($\alpha = 0.78$) demonstrated medium internal reliability. Technological Innovativeness achieved borderline acceptable consistency at 0.45. Cost Beliefs was an exception with a negative alpha ($\alpha = -0.18$), indicating a violation of the reliability model assumptions. As questions 18, 19, 20 were negatively-worded to examine the participants' perceptions of barriers in adopting AI-powered tools in teaching (e.g. 'For me, using AI in teaching is time-consuming and effort-costing.', 'I do not have enough time and energy to learn how to use AI in teaching.', 'Learning how to use AI in teaching requires more effort than I am willing to put into it.'), coding was reversed to examine teacher readiness (completely disagree = 5, disagree = 4, I'm not sure = 3, agree = 2, completely agree = 1). These results were interpreted cautiously in light of the small sample size and the exploratory nature of the study.

The responses to the two open-ended questions underwent thematic analysis to provide deeper insight into instructors' experiences and intentions regarding AI integration.

4. Findings

4.1. University EFL Instructors' Readiness to Integrate AI-Powered Tools in Teaching

4.1.1. Personal Assets

Table 1

Descriptive Statistics of Personal Assets

Subscale	Item	Mean	Median	Std. Dev
Technological Innovativeness	Q1	3.85	4.00	.376
	Q2	2.31	2.00	.630
	Q3	3.23	3.00	.832
AI-TPACK	Q4	3.69	4.00	.630
	Q5	3.54	4.00	.519
	Q6	3.69	4.00	.480

Q7	3.62	4.00	.506
Q8	3.69	4.00	.480
Q9	3.62	4.00	.506
Q10	3.62	4.00	.650
Q11	3.54	4.00	.519

As can be seen from Table 1, there was a high agreement with very low variability (SD = .376) in the first question, which indicated respondents perceive themselves as technologically innovative. However, in question 2, with low mean (2.31) and low median (2.0), there was a general disagreement and a moderate variability, suggesting some divergence in agreement. Similarly, responses to question 3 were mixed because of relatively high variability (SD= .832). Also, mean and median was around the neutral value. This suggests that though respondents seemed to be technological enthusiasts as they stated wanting to explore and experiment with new technologies, they usually did not take the initiative or become a pioneer to approach cutting-edge technological items.

Regarding teachers' AI-TPACK which is comprised of their knowledge of AI technology, the integration of AI-based tools in language teaching and the ethical considerations when using AI, all items showed a mean above 3.5, showing a high level of perceived confidence in their knowledge. Median = 4 across all items confirmed that all participants agreed that they possess some knowledge in adopting AI technologies. Standard deviations were low to moderate (mostly < 0.55), indicating consistent agreement among respondents. Q4 (knowing about the AI applications that are prevalent in language education) and Q10 (how to use AI to offer students meaningful learning experiences that meet their learning needs) showed slightly more variability, which could point to areas for further support or clarification. In short, based on their responses, the participants appeared to be well-prepared and confident in integrating AI to their teaching practice, based on their responses.

4.1.2. Value-Cost Beliefs

Table 2

Descriptive Statistics of Value-Cost Beliefs

Subscale	Questions	Mean	Median	SD
	Q12	3.54	4.00	.519
	Q13	4.15	4.00	.555
Value Beliefs	Q14	4.15	4.00	.689
	Q15	3.62	4.00	.506
	Q16	3.38	3.00	.870
	Q17	3.69	4.00	.630
	Q18	3.08	3.00	.760
Cost Beliefs	Q19	3.62	4.00	.650
	Q20	3.23	3.00	.927

Questions 12 to 17 were to examine teachers' perceptions of the values in integrating AI into their teaching. In all items with an exception of Q16, the Mean and Median were relatively high, with mean values ranging from 3.54 to 4.15 and median consistently standing at 4. Low to moderate standard deviation indicated a strong consensus among teachers in the merits of employing AI technologies in their classes, especially item 13 and 14 about alleviating the workload and enhancing the effectiveness of language teaching. In response to Q16 about enhancing enthusiasm for language teaching, data showed the lowest Mean and Median along with the highest variability (M = 3.38; Median = 3.00, SD = 87). This indicated teachers' doubt

about the impacts of AI on their passion for teaching.

Turning to the cost of using AI, Means and Medians were slightly above neutral with moderate variability for items 18 and 19, which represented the mixed perceptions related to the time, cost and energy spent on using AI in teaching. The opinions about the difficulties in implementing AI in language teaching were divergent because of high standard deviation in question 20 (SD = .93). Overall, findings related to the perceived values and barriers in integrating AI showed that teachers unanimously acknowledged the upsides of AI in teaching and believe the costs are manageable.

4.1.3. Contextual Resource Evaluation

Table 3

Descriptive Statistics of Contextual Resource Evaluation

Subscale	Questions	Mean	Median	SD
Institutional Support	Q21	4.15	4.00	.801
	Q22	3.23	3.00	.927
	Q23	3.62	4.00	.650
Facilitating condition	Q24	3.77	4.00	.725
	Q25	3.46	4.00	.660
	Q26	3.77	4.00	.439
	Q27	3.62	4.00	.650
	Q28	3.15	3.00	.801
	Q29	2.85	3.00	.899

In the items from questions 21 to 26, the responses were generally positive with slightly high or moderate variability, which indicated a general agreement on the given statements with some differing views. Specifically, Q21 about the institutional encouragement to use AI in language teaching yielded very positive perception with slight high variability (M = 4.15, Median = 4.00, SD = .80). In contrast, Q22 mentioning relevant policies, teaching examples, or evaluation checklists from the institution to guide teachers in language teaching with AI had Mean above neutral but high variability. This implies that opinions were divided on this aspect of support. Teachers had a clear agreement on question 23 about teacher training on AI integration with moderate variability (SD = .66)

In addition, in facilitating conditions, teachers showed a general consensus on the encouragement from peers and the assistance to better teach with AI in Q24 and A25. The standard deviation was moderate (.73 and .66, respectively), indicating some mixed responses. Nevertheless, when asked if colleagues were willing to share AI teaching techniques and experiences with each other in Q26, all the teachers leaned towards agreement (M = 3.77, Median = 4) with low variability (SD = .44). This might suggest a unity among lecturers of this particular faculty.

The infrastructure was examined in the last three items from Q27 to Q29. It can be clearly seen that facilitating conditions showed mixed results. While there was a moderate agreement on the access to AI services and applications for language teaching in Q27 (M = 3.62, Median = 4, SD = .65), Q28 and Q29 suggested that some facilitating resources or infrastructure were lacking, especially Q29, which manifested the lowest mean and high variability, indicating an inconsistency in opinions regarding the provision with the necessary technical infrastructure from the institution to support the use of AI in language teaching.

To summarize, the quantitative data indicated that participants reported a moderate level

of technological innovativeness. In fact, while they were generally open to new technologies, individual enthusiasm varied. Their self-perceived AI-TPACK competence was somewhat higher, showcasing a consistent confidence among teachers in using AI to support teaching activities. Regarding the value-cost beliefs, teachers expressed positive attitudes towards the integration of AI via positive value beliefs and did not perceive AI as overly burdensome in terms of time, effort, and energy, which might pave the way for a seamless adoption in the future. Participants also appreciated the training they received from the institution and the collegiality at work where they could receive assistance and sharing from colleagues in AI-incorporation. Of all the elements, the policies and technological provision from the institution had the lowest mean rating. This might indicate a gap between training and detailed guidance, practical support from the institution. It can be concluded that whereas university EFL instructors appeared personally ready and positive about AI integration, systemic support from the institution remained uneven.

4.2. University EFL Instructors' Experiences With AI-Powered Tools in Teaching

4.2.1. AI as an Assistant Behind the Scene

Among the answers from teachers, 11 teachers over 13 have been exposed to AI-based tools, but mostly outside the classroom. The data suggest that they use AI-powered tools to prepare lesson planning, preparing material and in testing and assessment and giving feedback to students. Most commonly, they have used AI for lesson planning, including brainstorming ideas for in-class activities and creating materials and texts. For example, some teachers ask AI to help them design in-class activities:

"I asked AI to design grammar/ vocab exercises for my students (based on my detailed instructions) and to come up with ideas about how to do teaching activities, especially in the warm-up phase." (T11)

AI has also been used to design tests, which was reported by a quarter of participants. Besides designing tests, AI can also help in giving students' feedback, which can significantly reduce teachers' workload.

I use it to prepare practice activities and review students' writing. (T4)

To elaborate this, another teacher has added:
I usually use AI chatbots as tools that help me to […] provide additional feedback for students (only in terms of language, not ideas). (T12)

AI tools also help teachers resolve the difficulties in their subject matter:

I often ask AI to provide everyday examples for difficult terms in the subject or to help come up with teaching ideas related to those terms, making them suitable for the students' level and the subject's goals. I find it effective and time-saving. (T9)

The teacher has asked AI to simplify the lesson content and suggest teaching ideas which are relevant to students' level and course objectives. The most notable benefits of employing AI is its "effectiveness" and "time efficiency".

It is apparent that AI is operating as a silent assistant to relieve EFL instructors' workload as it is frequently utilized at pre-instructional (lesson planning) and post-instructional stages (feedback generation). Nevertheless, the absence of AI during actual classroom interaction indicates a gap between perceived usefulness and practices. Specifically, teachers appear to appreciate AI's productivity (efficiency, time-saving) but have not managed to translate those benefits into real-time engagement with students. This suggests that there could be a lack of institutional support, teacher training, or policy transparency in AI implementation

at this specific institution. In addition, the use of AI to simplify lesson contents (T9) to make them more accessible is deemed to be an underutilization of AI capabilities given its substantial potentials. To most of the teachers, AI merely aids to fulfill laborious tasks rather than playing a transformational role.

4.2.2. AI as a Classroom Energizer

Another teacher pointed out the benefits of having AI design gamified activities on some platforms:

> *"I have found AI-driven quiz platforms like Kahoot, Quizizz, and AI-generated question banks to be incredibly effective in making assessments more engaging and insightful. When I use them in class, students become highly energetic and competitive, eager to answer each question correctly. The real-time leaderboard motivates them to stay focused while reinforcing their understanding of key concepts". (T8)*

As a result of implementing games designed by AI, the classroom atmosphere has changed radically. Students become more energetic, engaged and much more motivated. The teacher has mentioned dual benefits, that is reinforcing students' understanding of key concepts and making assessment more insightful.

It can be seen that AI is mostly adopted in actual classroom practice in the form of a gamification engine to drive student motivation. This is an emerging pattern which suggests that AI is more likely to be integrated into the lesson when it is embedded with already accepted educational technologies by teachers like Kahoot or Quizizz. AI, despite its tremendous potential, has been restricted to merely engaging students rather than deepen learning through cognitive or metacognitive tasks. The use of AI, as described by the participants, mostly focuses on reinforcing existing knowledge instead of fostering creativity and inquisitiveness.

4.2.3. AI as a Catalyst for Critical Thinking

Only one teacher has reported the use of AI-tools in her class:

> *I've also asked students to evaluate AI-generated contents [on the spot] as a way to practice their critical thinking and apply knowledge that they have been taught. (T13)*

Two teachers have highlighted the assistance of AI in doing research, which does not pertain to the present study, therefore their responses are presented in this part.

To recap, the majority of teachers have used AI in their teaching, yet mostly 'behind the scene' to brainstorm ideas for in-class activities before teaching or to provide feedback for students after teaching. The only case who has utilized AI in teaching was very creative to use AI as a source of text to train their student's critical thinking.

This single instance is an outstanding outlier - demonstrating the underexplored potential of AI to stimulate higher-order thinking. By asking students to critique AI-generated content, the teacher treats AI as a subject rather than regarding it, signaling a fundamental shift in classroom epistemology. This case demonstrates AI's potential to foster media literacy, critical digital literacy, and AI literacy, which are increasingly essential in contemporary education. However, its uniqueness among responses also underscores the lack of systematic support or guidance for such pedagogical innovations.

4.3. University EFL Instructors' Intentions Regarding Integrating AI-Powered Tools in Teaching

4.3.1. Sustained Integration of Current AI Applications

There is a general consensus among teachers' response regarding the imminent use of AI. All the teachers confirmed that they would continue using AI tools for the present purposes, for example, planning lessons, designing tasks, assessing student work and providing feedback.

Of course, yes. I'll continue to use AI to do the same things I'm doing. I'm also investigating how I can integrate it into testing and assessment. (T15)

T15 has made a clear plan about her experiment with AI in a new area (testing and assessment). Half of the participants also sketched their plans to use AI for new experiments.

If possible, all stages of teaching: lesson planning (generate ideas, worksheets, find resources ...), in-class teaching (no ideas at this stage) and post-teaching: giving feedback. (T8)

Unlike her fellow colleagues, T8 will experiment with AI use in class; however, at present, she is still uncertain about what and how she is going to do it. This suggests that the workshops held by the institution may not adequately address their needs and fail to provide the teachers with sufficient knowledge and skills in AI integration.

Overall, the responses indicate that AI has become a vital part in the toolkit of each teaching practitioner for the time being and in the future. Their intentions suggest an instrumental orientation as they will keep using AI for the present purposes (planning, feedback, assessment), rather than envisioning novel pedagogical uses. This continuation of current use, far from transformation, may reflect cognitive or institutional conservatism - teachers are willing to use AI only within familiar instructional boundaries.

4.3.2. Hindrances to AI integration

Among the answers related to intention, almost all the participants describe the challenges they have encountered to integrate AI in their teaching.

Yeah, I will try to use AI for more sophisticated tasks. However, many of the apps that can handle those tasks are not free, for example creating powerpoint slides. (T6)

I think sooner or later we'll all integrate it - the only question is to what extent (depending on the regulations of the department, faculty, and university). I'll integrate it into lesson planning, designing classroom activities, as well as tasks related to assessing students' knowledge after class. (T7)

As can be seen from these responses, teachers are willing to adopt AI in their teaching but are hindered by the fees of AI tools and institutions' policies and requirements. These points align with the quantitative data in item number 22 with moderate Mean and Media but relatively high variability, which means teachers hold differing viewpoints regarding the clarity of policies and requirements from the institution.

In short, responses highlight two significant structural barriers, namely, *economic constraints* (e.g., subscription-based AI tools), and *institutional uncertainty* (unclear policies). This dual burden might culminate in a discourse-action gap which means the organization merely supports in discourse but fails to take concrete actions, for example providing AI subscriptions. From another perspective, this can be regarded as the *readiness paradox* when teachers are personally motivated and curious, yet institutionally unsupported. The result is fragmented, informal adoption rather than coordinated, sustained integration.

The fact that some participants are experimenting despite these challenges (e.g., T15,

T7) illustrates individual agency, but also a potential equity issue: only teachers with time, skills, or resources can pioneer innovation, leading to unequal AI adoption within the same institutional ecosystem.

5. Discussion

This Vietnamese case study not only corroborates existing literature on teacher AI readiness but also adds contextual depth and complexity to it. Consistent with findings by Cheah et al. (2025), Eke (2024), and Kohnke et al. (2023), the participating university EFL instructors demonstrated generally positive attitudes toward AI integration, adequate technological innovativeness, and strong self-reported AI-TPACK. However, some discrepancies emerge when comparing their readiness and actual classroom practices. Like their American counterparts in Cheah et al.'s (2025) study, these instructors predominantly employed AI for peripheral functions - lesson planning, materials creation, and feedback - rather than for in-class interaction or student-led inquiry. This suggests a global trend in which teachers engage AI in the "comfort zone" of backstage preparation but remain hesitant about deploying it in pedagogically transformative ways.

What sets the Vietnamese context apart, however, is the relatively high level of institutional support, which contrasts with concerns about insufficient training in studies by Reuben and Kabilan (2024) and Yue et al. (2024). Yet despite this support, teachers voiced a shared concern - the absence of clear institutional guidelines and tool accessibility for effective in-class AI use. This tension between individual readiness and systemic ambiguity suggests that institutional enthusiasm has yet to translate into a coherent, practice-oriented AI pedagogy.

Furthermore, the findings raise critical questions about the nature of AI integration. The issue here is whether AI is being used to augment teaching and enhance student cognitive abilities, or merely to automate routine tasks. The dominance of feedback generation and activity design as uses reflects a pragmatic, efficiency-driven model of AI adoption - what is considered as the technocentric trap (Papert, 1987) - which is likely to overlook more critical, reflective, and student-centered applications of AI, such as promoting digital literacy or ethical awareness. While one respondent exemplified transformative use by having students evaluate AI-generated content, such practices remain rare and unscaffolded.

6. Conclusion

This mixed-method study involved 13 university EFL instructors to examine their AI readiness in teaching. The adoption of Li and Liang's (2025) framework has allowed a comprehensive study of their personal assets, value-costs beliefs, and facilitating conditions. The answers to the three research questions have been found. Teachers demonstrated a moderate level of readiness, with positive attitudes towards the use of AI-powered tools in ELF teaching. Most of them have employed AI technologies for pre-instructional and post-instructional tasks such as designing materials, preparing lesson plans and providing feedback. It is unequivocal that they will continue applying AI in their teaching and even experimenting with in-class activities. It is suggested that the institution can accommodate their needs by issuing more explicit guidelines and investing in their technological infrastructure.

The study has made a number of contributions to the growing body of knowledge of AI integration in education. First, it has added geographically and culturally situated knowledge of teacher AI readiness in the Vietnamese EFL context with the backdrop of the centralized governance and rapid digitalization. In addition, the empirical data have validated the newly

developed framework by Li and Liang (2025). The framework with a clear-cut and systematic operationalization of teacher AI readiness seems to vividly portray the readiness of university EFL instructors in Vietnam for embedding AI in teaching. Some issues of the framework, however, have been reported (low Cronbach's alpha of Cost beliefs), suggesting some adaptation to better capture the participants' perceptions. Third, the study has offered new insights into the gap between self-perceived readiness and actual limited classroom application of AI. While teachers are confident and supported institutionally, their actual use of AI remains largely pre- and post-instructional. This is prone to significantly contribute to the literature on the readiness-practice gap in technology adoption. Last but not least, the findings allow the researcher to make actionable recommendations for institutions such as providing clear guidelines, investing in in-class AI infrastructure, and cultivating students' higher level of cognitive thinking with the assistance of AI-based tools.

This study has offered valuable insights into university EFL instructors' readiness for AI-powered teaching, yet it is not without limitations. First, the small sample size (n = 13) limited the generalizability of the findings and may have influenced the stability of statistical results, particularly reliability estimates. Larger-scale studies are encouraged to test the psychometric properties of the subscales more robustly, potentially using factor analysis or item-total correlations. Second, a subscale (Cost Beliefs) yielded low Cronbach's alpha values, suggesting that the internal consistency of this construct was insufficient. Therefore, a review and revision of this construct is crucial. Finally, the absence of interviews as a follow-up qualitative method limited the depth of participants' elaboration on certain close-ended responses. Future research may incorporate interviews or focus groups to delve into teacher perceptions and experiences with AI tools.

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