

Assessing AI Readiness in Teaching English Writing at the Tertiary Level: A Case Study of FPT University

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ABSTRACT: *The advent of artificial intelligence (AI) has opened up not only useful learning tools for students but also a whole new horizon for teachers. However, there are also many hidden aspects of using AI in education that we don't fully understand. This study, conducted at FPT University with 17 English lecturers, investigated whether lecturers were willing and flexible in applying AI to teaching academic writing in English. This is a qualitative study, focusing on understanding the thinking and habits of using AI in building academic writing lesson plans. The results show that, although most lecturers are familiar with common tools such as ChatGPT or Grammarly, the use of AI in the classroom is still limited and only goes as far as correcting grammar errors. More importantly, the study also reveals a significant gap that needs further exploration regarding the awareness of using AI among some lecturers who currently feel they are not yet proficient with the technology. Furthermore, ethical concerns regarding the use of AI also pose potential risks to academic integrity, as students are currently unaware of the consequences of over-reliance on AI in academic writing. This study applies the AI-TPACK assessment framework to gather in-depth empirical insights into the challenges of integrating artificial intelligence into writing instruction in higher education. The results show that effective AI integration requires faculty to have a strong grasp of pedagogical theory, the ability to assess the learning environment, and thus make the most appropriate choices to create the most holistic learning space. In addition, supportive policies from the university and professional training sessions on the use of AI tools also play a significant role in improving the quality of university teaching today.*

KEYWORDS: Artificial Intelligence (AI), digital readiness, English academic writing, teachers' perspectives, ethical issue

→ Received 25/11/2025 → Revised manuscript received 19/3/2026 → Published 18/6/2026.

1. Introduction

1.1. Background

English is regarded as the most widely spoken language globally, facilitating communication across diverse cultures through several modalities, including listening, speaking, reading, and writing. English instruction has become a mandatory component of the curriculum at all educational levels, not only in Vietnam but also in numerous other countries globally. Consequently, the instruction and acquisition of English consistently engage educators, who continually seek to enhance pedagogical approaches. According to Q. Zhai (2023), writing in English is one of the hardest skills to teach or improve.

Q. Zhai (2023) and Dastgeer and Tanveer Afzal (2015) share the same agreement on the

explanation that writing examinations focus solely on grammar and vocabulary, which leads to a lack of measuring students' capacity to use genuine language; students are somehow unable to learn the language itself. Additionally, Magombo (2015) believes that the biggest obstacle that students face in mastering writing skills is the lack of English-language sources that allow them to truly engage with the academic language of native speakers. As a result, according to Moses and Mohamad (2019), if learners fail to acquire English writing skills, it may impede communication and hinder self-improvement, which subsequently poses a barrier to securing learners' future employment.

To solve the aforementioned issue, the authors Al Asadi and Al-Issa (2022) performed research on the efficacy of using online platforms to

improve students' writing abilities. The findings revealed that students' writing skills increased dramatically as a result of the technology that enabled instructors to transmit knowledge in the most intuitive and intimate manner possible. The advantages that internet platforms provide to education, particularly in English language acquisition, have been substantiated by several studies conducted by researchers from various nations worldwide. Both Masitoh *et al.* (2024) and Ariantini *et al.* (2021) claim that the utilization of digital platforms enhances the proactivity of both teachers and students in the learning process, enabling them to study at any location and at any time of their choosing. Educators now find it more convenient to facilitate distance learning without encountering geographical barriers as previously. Furthermore, amidst the current explosion of AI across different fields, the adoption and advocacy of AI's benefits in writing instruction have emerged as a significant asset for university educators. Unlike traditional methods of assessing and providing feedback on writing, AI—specifically ChatGPT—enables educators to promptly identify grammatical and lexical problems, hence reducing the time required for paper corrections, which formerly imposed significant pressure on instructors (Baskara, 2023). Similarly, Fitria (2021) indicates that students can quickly acquire many expressions using QuillBot—an AI program commonly used in paraphrasing—and as a result, students can quickly expand vocabulary and expressions in English. Thanks to the benefits that online platforms and AI provide, lecturers are driving a clear global trend away from traditional teaching methods towards blended teaching methods. The increasing shift from conventional learning environments to internet-based platforms has been confirmed by Stallings (2002) and Zhou and Zhang (2022) in their research.

However, some researchers raise concerns about contextual accuracy, emphasizing the need to align AI feedback with individual writing styles and contexts, despite the enormous benefits that AI brings to both students and teachers. Another major issue is the over-reliance on AI tools like ChatGPT, which may hinder students'

critical thinking and creativity (Aljuaid, 2024; Song & Song, 2023). In alignment with the other researchers, Gayed *et al.* (2022) emphasize that the word suggestion and backward translation features might distract the writing experience of EFL students, which could hurt their performance later. Not to mention, with the explosion of AI, assessing and evaluating students becomes increasingly difficult if teachers are not fully equipped with skills and proactively seek solutions to deal with this situation of taking a confrontational approach to students (Saliba, 2022). Even though these technology-enhanced learning environments have some benefits, they also have some major problems that, if not fixed quickly, could turn benefits into liabilities. As a result, the goal of teaching will be missed, and the online platform will go from helping students learn to hurting them by making it harder for them to think critically and study on their own.

1.2. Problem Statement

The increasing integration of AI into higher education has impacted the way teachers teach students how to write. In recent years, digital technology, in general, has allowed teachers to embrace alternative and dynamic ways of teaching writing. However, despite the increasing number of AI tools being introduced in higher education settings, many teachers/lecturers are still experiencing difficulties in effectively integrating these tools into their practices. Previous studies have shown several barriers, including limited technological knowledge, difficulties transitioning from traditional teaching approaches to technology-enhanced learning, and insufficient institutional support (Coman *et al.*, 2020; Koo, 2008). To address these problems, various authors have proposed that professional development programs should be conducted to help lecturers develop the required skills and confidence in using digital platforms in their practices (Ersin *et al.*, 2020; Junus *et al.*, 2021; Mardiana, 2020). Although this may help lecturers develop their digital competence, the emergence of AI is a recent issue that poses a number of pedagogical and ethical challenges that are beyond the normal usage of digital tools.

Unlike traditional digital technologies, AI-powered tools such as ChatGPT and automated writing assistants can generate text, paraphrase content, and provide instant feedback, fundamentally reshaping the process of writing instruction and assessment. The authentication of information resources should also be taken into account, as suggested by Noto La Diega and Koolen (2024). Using AI in education is even called “countermeasures” by Ahmad *et al.* (2023) in the battle of fighting plagiarism due to its potential for bias. According to Pedersen (2023), the use of AI in teaching writing at the higher education level raises concerns that AI lacks an adequate grasp of each country’s culture to produce texts that accurately reflect the user’s goals. In addition, AI causes humans to become dependent and lose their creativity. Therefore, educators also need to verify resources when using AI in the teaching process, such as brainstorming, drafting, or evaluating.

Aligned with Anson and Straume (2022), Eslit (2023) and Barrett and Pack (2023), the team of researchers agrees that assessing the readiness to use AI-based technology platforms in teaching writing in English is not only limited to assessing the technological knowledge or willingness of teachers, but it must also extend to assessing the level of awareness of teachers about the potentially harmful effects that AI or digital platforms can cause to students. Such awareness is essential for determining how well educators are prepared to design writing lessons that balance technological benefits with responsible pedagogical practices in the evolving educational landscape.

While the use of digital technology in the teaching and learning of writing has been researched extensively, there has been limited empirical work done on the lecturers’ AI readiness, particularly in the context of higher learning institutions (Montero-Mesa *et al.*, 2023). Most studies on the use of technology in the classroom assess the lecturers’ digital technology knowledge without considering their perceptions and understanding of the pedagogical and ethical issues associated with AI technology in the teaching and learning of writing. Similarly,

there has been limited empirical work done on the lecturers’ perceptions and understanding of the balance between the advantages and disadvantages of AI technology in the teaching and learning of writing and how they affect the lecturers’ ability to teach effectively. Thus, in evaluating the lecturers’ AI readiness, one must not only assess their technological knowledge and understanding of AI technology but also their pedagogical and ethical understanding and perceptions of AI technology in the teaching and learning of writing. This has become important, particularly in the context of higher learning institutions, as AI technology has become an integral part of the students’ learning process. This study aims to explore the lecturers’ readiness, perceptions, and understanding of AI technology in the teaching and learning of writing, with the aim of providing insights on how lecturers can effectively use AI technology in the teaching and learning of writing.

1.3. Significance of the Study

The findings and results of this study are expected to shed light on the way educators integrate digital and AI-powered tools in delivering writing instructions to students. First and foremost, the study will focus on the effectiveness of these technologies depending largely on lecturers’ technological readiness and understanding of AI ethics. Assessing the digital and AI readiness of lecturers is essential to guarantee their ability to utilize these tools for improving student learning, while also tackling ethical issues like academic integrity and responsible AI usage. Without adequate digital literacy and AI competence, lecturers may struggle to provide meaningful guidance on AI-assisted writing, leading to student overreliance on AI-generated content rather than genuine skill development (Liew *et al.*, 2024). Secondly, it seeks to offer actionable recommendations for institutions to enhance lecturers’ digital literacy and AI awareness through targeted training programs and policy support. By identifying both pros and cons of AI adoption, this research will help develop strategies that empower lecturers to effectively exploit digital tools while

maintaining pedagogical integrity. Ultimately, improving both digital and AI readiness among lecturers will ensure a balanced, ethical, and student-centred approach to writing instruction in the modern classroom.

2. Literature Review

2.1. Digital Learning in Writing Instruction

With the creation and fast development of digital platforms, students are gaining great benefits when learning and practicing writing skills. Instead of going to the library to search for information from piles of written books and documents, students now can access, interact with, and personalize online resources. Moreover, students can also enhance their writing performance by getting immediate feedback, collaborating, and developing their writing skills via digital writing platforms. The benefits of digital learning can be as follows.

First, digital platforms can provide students with accessibility and flexibility. Digital writing platforms like Google Docs and Padlet give instructions beyond the classroom setting. Students can make a draft, revise, access resources, and arrange learning schedules and learning paces. For example, a student might use Google Docs to draft an essay before class and get real-time suggestions from grammar and spelling checkers that are already built into their smart devices while searching for a template for the essay structure on reliable sources available on the Internet. These platforms enable learners to organize their writing process more independently and adapt their learning pace according to individual needs. Previous studies have shown that such technologies encourage greater learner autonomy and engagement in writing activities (Ariantini *et al.*, 2021; Masitoh *et al.*, 2024). Moreover, digital learning environments facilitate distance learning and reduce geographical barriers that previously limited access to educational resources (Stallings, 2002; Zhou & Zhang, 2022).

Second, students are provided with interactive and immediate feedback from digital writing platforms. Automated feedback tools like Grammarly are likely to deliver instant corrections

on grammar, spelling, and style and significantly boost students' writing performance. Ranalli (2018) found that students were five times more likely to correct errors accurately when using these types of automated written corrective feedback (Grammarly). This shows that the type and timing of feedback strongly affect students' ability to improve their writing skills.

Third, digital tools are now tailored to meet individual needs and enhance students' writing performance via practical feedback. An automated tool such as Quill might recognize the overuse of passive voice and suggest active voice for a student. Graham *et al.* (2015) revealed that students using personalized automated feedback have enhanced their writing skills twice as fast as those relying solely on human feedback. Additionally, platforms that provide analytical data, such as Turnitin, can save and track revisions while offering both students and teachers the information needed to monitor students' writing improvement.

In short, the support of digital platforms benefits students in their writing process by providing accessibility, delivering immediate and personalized feedback, and fostering revision. By combining technology with their writing instruction, teachers can improve their students' writing performance effectively (Danesi, 2023).

2.2. Previous Research on Digital Writing Instruction

The integration of digital competence in tertiary education has become a crucial part of modern pedagogy. Several studies have been conducted to explore teachers' digital readiness in teaching.

A study by Fernández-Morante *et al.* (2023a) was carried out in the university system of Galicia, Spain, to examine the digital teaching competence of about 4900 lecturers. Findings show that the overall digital competence level is medium-low, with younger and less experienced teachers showcasing higher competence. On a smaller scale, secondary research by Fernández-Batanero *et al.* (2021) collected data on 20 articles related to university lecturers' digital competence after a thorough selection from 184 articles. The result shows that teachers are

highly aware of the application of technology in university classrooms. In addition, the use of technology is mainly through basic tasks such as visual presentation and word processing, with only 10% reported as advanced applications of technology. Another study conducted by Amhag *et al.* (2019) presents some interesting results among 105 lecturers. Findings indicate that the majority of participants are not confident in establishing digital learning environments and lack the pedagogical knowledge in ICT; as a result, they need further training in this field. Sharing the same urge to find a moral way to use AI in teaching writing skills, Fleckenstein *et al.* (2024) focus on how important it is to keep researching and developing practical measurements due to the lecturers' inability to distinguish between human-made or artificial products.

Hence, based on the gap in numbers of research on using AI in education from students' perspectives and teachers, Tan *et al.* (2024) stress that more study needs to be done on how AI can help teachers strengthen their skills and how AI technologies can be used in education from both the point of view of students' learning and teachers' teaching. To make sure that AI is used responsibly and effectively in education, studies on AI in professional development should focus on solving technological and moral problems (Hesse & Helm, 2024). Nevertheless, there is limited insightful data on lecturers' awareness of the advantages and disadvantages of applying technology in teaching. These studies were also carried out without the consideration of AI and its impact on teachers and students. Moreover, there are not many recent studies that specifically explore teachers' digital competence in teaching English writing skills in higher education.

Consequently, research on the application of AI in higher education has been increasing, but some gaps remain. Firstly, many studies focus on the general use of AI tools, while few examine the pedagogical impacts of these tools. Secondly, studies often assess faculty's digital competence, for example, whether they are proficient in using these tools, but rarely address whether they genuinely feel the need and willingly use them in teaching. Finally, empirical research is still

limited in exploring faculty's perceptions of both the pedagogical benefits and ethical challenges, particularly in AI-assisted writing instruction within the context of higher education in Vietnam. Addressing these gaps is essential to empower faculty to confidently evaluate the use of AI in teaching, thereby significantly improving educational effectiveness at the university level.

3. Research Objectives

This study examines English teachers' readiness to use digital tools in their writing instruction, the barriers to success, and ways to improve their digital readiness. Firstly, to assess English lecturers' digital readiness to teach writing skills, this study recognizes that technology adoption is difficult without a thorough understanding of current abilities. Some professors use collaborative platforms and AI-based grammatical checks, while others use pen-and-paper methods. Lecturers' knowledge is varied. The research will provide a baseline for equipping lecturers for a rapidly growing, technologically enhanced academic environment. We will achieve this goal by carefully assessing skill levels, training, and comfort with technology.

Secondly, to highlight challenges in using technology for writing education, acknowledge that knowing about digital resources does not ensure their effectiveness in the classroom. Even tech-savvy educators may struggle to integrate software, online learning platforms, and mobile apps due to institutional support, infrastructure, or time constraints. These challenges may hamper their technology learning and integration. Concerns about academic integrity, especially AI-generated work, may also raise questions about the usefulness of these technologies in the classroom (Rudolph *et al.*, 2023). These issues can be exacerbated by the lack of uniform digital curricula, sufficient professional development programs, and student digital literacy levels. By mapping out these difficulties, the study can highlight the most pressing needs and guide administrators and policymakers in making targeted changes (Strobl *et al.*, 2018).

Ultimately, the primary objective is to ensure that professors are digitally prepared. This goal

is to close the gap between current capabilities and optimal educational technology use. One recommendation is a supportive institutional climate that values digital tool experimentation. Others suggest creating continuing, flexible professional development opportunities tailored to lecturers' needs. Structured workshops may teach students digital research, drafting, and revising. Peer mentoring programs may allow tech-savvy instructors to share best practices. Establishing defined ethical guidelines for AI-driven tools would reduce plagiarism problems and encourage responsible writing innovation. When combined, these strategies would boost lecturers' confidence in using technology and expand their pedagogical toolkit, making writing teaching more engaging and effective for students (Misieng *et al.*, 2018). This study seeks to better understand how educational institutions may adapt to digital demands, keep lecturers at the forefront of pedagogical innovation, and improve student writing competency.

To achieve all three objectives, the researchers plan to do the research based on these questions below:

1. How do English lecturers integrate digital and AI-powered tools into writing instruction in higher education?
2. What level of AI readiness do lecturers demonstrate in terms of technological knowledge, pedagogical integration, and ethical awareness?
3. What challenges and ethical concerns influence lecturers' ability to integrate AI tools effectively in writing instruction?

4. Theoretical Frameworks

AI-TPACK Framework

The rapid development of artificial intelligence (AI) technologies has greatly influenced educational practices, especially in higher education settings where digital technologies are becoming integral to teaching and learning processes. As AI-based technologies, such as language generation tools, automated feedback systems, and intelligent tutoring applications, are becoming more accessible than ever, it is not only essential for teachers to use these tools but also to effectively combine them into teaching

methods. In this regard, it is crucial to develop a theoretical framework that can illustrate the concept of teachers' readiness to integrate AI-based writing tools into teaching. For this reason, this current study has adopted the Artificial Intelligence Technological Pedagogical and Content Knowledge (AI-TPACK) model as the theoretical framework.

Before examining the framework, it is important to distinguish between digital literacy and AI readiness. Digital literacy generally refers to educators' ability to effectively use digital technologies for teaching and learning, including skills related to accessing, evaluating, and applying digital resources (Fernández-Morante *et al.*, 2023b). In contrast, AI readiness refers to lecturers' preparedness to integrate artificial intelligence tools into pedagogical practices while understanding their pedagogical implications and ethical considerations. AI readiness therefore extends beyond basic digital competence and includes awareness of AI capabilities, limitations, ethical risks, and strategies for responsible classroom integration. In this research, AI readiness is examined through the lens of the AI-TPACK framework, which emphasizes the intersection of technological knowledge, pedagogical knowledge, and content knowledge in AI-supported teaching.

The AI-TPACK framework builds upon the first version TPACK model originally proposed by Mishra and Koehler (n.d.). The TPACK framework is a conceptual framework that views effective technology integration in education as the intersection of three primary domains of teacher knowledge: content knowledge (CK), pedagogical knowledge (PK), and technological knowledge (TK). Content knowledge refers to teachers' understanding of the subject matter they teach, while pedagogical knowledge concerns instructional methods and learning processes that support efficient teaching. Technological knowledge is defined as teachers' familiarity with digital tools and their ability to apply these tools in instructional contexts. Effective technology-enhanced teaching emerges when teachers combine all three aspects simultaneously, forming TPACK – a form of knowledge that

enables teachers to design meaningful learning experiences that incorporate technology in pedagogically appropriate ways (Chai *et al.*, 2013; Shafie *et al.*, 2019).

Although the TPACK framework has been widely applied to study technology integration in education, it was developed before the widespread adoption of artificial intelligence technologies in teaching and learning environments. The emergence of AI tools has introduced new pedagogical opportunities as well as ethical challenges that require educators to develop additional competencies. Teachers must understand not only how AI systems operate but also how these technologies influence learning processes, writing practices, and academic integrity. To address these emerging educational demands, Celik (2023) proposed an extension of the TPACK model known as AI-TPACK (or Intelligent-TPACK). This framework expands the traditional TPACK model by incorporating educators' knowledge of artificial intelligence technologies and emphasizing their ability to integrate these tools responsibly within pedagogical contexts.

Recent research highlights the relevance of AI-TPACK for examining educators' preparedness to adopt AI technologies in educational settings. For instance, Mishra and Koehler (2006) and Ning *et al.* (2024) demonstrate that AI-TPACK provides a comprehensive analytical framework for understanding how different dimensions of teachers' knowledge interact when integrating AI-based tools into classroom instruction. By examining how educators combine technological knowledge of AI systems with pedagogical strategies and disciplinary knowledge, the framework allows researchers to analyse how AI tools are incorporated into teaching practices in ways that support meaningful learning experiences.

In the context of English writing instruction, the AI-TPACK framework is particularly relevant because writing pedagogy increasingly involves the use of AI-powered tools such as grammar-checking systems, paraphrasing software, and generative language models that assist students in drafting and revising their work. While

these technologies create new opportunities for improving writing instruction, they also raise important concerns regarding authorship, originality, and academic integrity. Consequently, integrating AI tools into writing pedagogy requires lecturers to balance technological opportunities with pedagogical objectives and ethical responsibilities.

Guided by the AI-TPACK framework, AI readiness in this study is conceptualized as lecturers' preparedness to integrate AI technologies into writing instruction through the combination of technological understanding of AI tools, pedagogical strategies for their effective use, and awareness of ethical issues associated with AI-assisted writing. Using this framework as an analytical lens, the study explores how lecturers perceive and apply AI technologies in writing instruction, the challenges they encounter when integrating these tools into their teaching practices, and the strategies they propose for improving AI-supported writing instruction in higher education.

5. Methodology

5.1. Research Design

This study uses a qualitative case study design to investigate AI readiness in teaching academic writing among English lecturers at FPT University's Hoa Lac Campus. This study aims to provide a comprehensive understanding of the instructors' digital literacy levels, how they integrate technology into writing instruction, the challenges they face, and the strategies that could improve their digital readiness. The case study is limited to the setting of teaching English writing at FPT University, allowing for an in-depth analysis of local factors that determine how technology is accepted and used.

According to the suggestion of Celik (2023), a qualitative case study framework was selected for its ability to reflect the variety and depth of the instructional environment. Case studies are very valuable when investigators want to gain a thorough grasp of contemporary occurrences in real-world settings, which may later prepare researchers to conduct a study on a larger scale. The phenomenon under question is the

incorporation of digital tools into English writing instruction. Although some scholars contend that case studies have limited generalizability, this design provides for nuanced, context-specific observations that might feed larger conversations about technology uptake in higher education.

The participants in this study consisted of 17 lecturers teaching English at FPT University. The lecturers were selected through purposive sampling, as they were actively involved in teaching English writing courses and had varying degrees of exposure to digital tools and AI-based technologies used in writing instruction.

The participants represented a range of teaching experiences and levels of familiarity with educational technologies. This diversity allowed the study to capture different perspectives on the use of AI tools in writing instruction, including both experienced lecturers and those who were still developing their technological competence. Although the sample size is relatively small, it is appropriate for qualitative research aimed at gaining in-depth insights into participants' experiences and perceptions rather than generating statistically generalizable results.

5.2. Data Collection Methods

Data for this study were collected using two qualitative instruments: a structured questionnaire and semi-structured interviews. The combination of these instruments allowed the researchers to gather both descriptive information about lecturers' experiences with AI tools and deeper insights into their perceptions and pedagogical practices.

5.2.1. Questionnaire

A questionnaire was sent out to lecturers who are currently teaching English for non-majored first-year students at FPT University, in order to obtain an overview of their familiarity with AI tools and their experiences integrating these technologies into writing instruction.

The questionnaire is designed based on the AI-TPACK framework. Specifically, the questionnaire consists of 15 items delving into three categories. The first one (AI Technological Knowledge) aims to assess lecturers' familiarity,

comfort, usage, and proficiency with AI automated tools for academic writing instruction. The second category (Pedagogical Knowledge) tries to evaluate lecturers' capability to apply teaching strategies, adapt methods, provide feedback, manage class activities, and address challenges in academic writing instruction. The last category focuses on awareness of ethical considerations related to AI-assisted writing.

The questionnaire served primarily as a preliminary exploratory instrument to identify lecturers' experiences and perspectives regarding AI use in teaching writing, rather than generating any statistical results. The questionnaire responses provided contextual information that helped inform the subsequent interview discussions.

5.2.2. Semi-structured Interviews

To get a deep understanding of the respondents' feelings and attitudes toward their readiness to apply digital technologies in teaching writing, a semi-structured interview was carried out. The interview allowed researchers to explore lecturers' perspectives on AI-assisted writing instruction in greater detail while maintaining flexibility to follow emerging themes during the conversation.

The interview questions were also developed based on the AI-TPACK framework and addressed below topics:

- Lecturers' experiences using AI tools in writing instruction
- Pedagogical strategies for integrating AI into writing tasks
- Perceived benefits and limitations of AI tools in language learning
- Ethical concerns related to AI-assisted writing and academic integrity

5.3. Data Analysis

The collected data were analysed using a thematic analysis approach. The analysis followed a systematic process in which patterns and recurring ideas were identified across participants' responses.

First, the researchers reviewed the

questionnaire responses and interview transcripts to gain a general understanding of the data. Next, initial codes were generated by identifying meaningful segments of text related to lecturers' experiences with AI technologies in writing instruction.

In the second stage of analysis, these codes were grouped into broader analytical categories guided by the AI-TPACK framework. The coding process focused on identifying themes that reflected lecturers' technological familiarity with AI tools, pedagogical strategies for using AI in writing instruction, and awareness of ethical considerations associated with AI-assisted writing.

Finally, the identified themes were refined and organized into a coherent structure that reflected the different dimensions of lecturers' AI readiness. Using the AI-TPACK framework as an analytical lens allowed the researchers to interpret the findings in relation to the theoretical concepts of technological knowledge, pedagogical knowledge, and content knowledge in AI-supported teaching.

6. Findings and Discussion

Findings

Analysis of the lecturers' responses reveals that their readiness to integrate artificial intelligence into writing instruction is complex and uneven, shaped by the interaction of technological familiarity, pedagogical decision-making, and evolving conceptions of writing itself. Although many lecturers reported being familiar with widely available AI tools, their experiences suggest that familiarity does not necessarily translate into confident pedagogical integration. Instead, lecturers appear to occupy different stages of AI adoption, ranging from exploratory experimentation to cautious avoidance. This variation highlights that AI readiness is not solely determined by access to technology but also by lecturers' perceptions of how AI tools should be used within writing pedagogy.

At the pedagogical level, participants expressed a mixture of enthusiasm and hesitation toward AI-assisted writing. While several lecturers recognized the potential of AI tools to

provide immediate feedback and support students during the writing process, they simultaneously raised concerns about the potential consequences of overreliance on automated assistance. This ambivalence reflects an ongoing negotiation between leveraging technological affordances and maintaining the cognitive and creative demands traditionally associated with writing instruction.

More importantly, the findings suggest that the introduction of AI tools is beginning to influence lecturers' understanding of what it means to teach writing. Participants did not only discuss AI as a tool for improving linguistic accuracy; they also raised questions about authorship, originality, and the boundaries between student-generated and AI-generated ideas. These concerns indicate that AI technologies may be subtly reshaping lecturers' content knowledge of writing by shifting instructional emphasis from simply producing grammatically correct texts to developing students' ability to critically evaluate and refine ideas.

Finally, the responses highlight that ethical awareness and instructional guidance play a central role in lecturers' perceptions of AI integration. Rather than rejecting AI tools outright, most lecturers emphasized the need for responsible and transparent use of these technologies in academic contexts. Taken together, these findings suggest that lecturers' AI readiness emerges from the dynamic interplay of technological knowledge, pedagogical strategies, and evolving conceptions of writing instruction, each of which will be examined in greater detail in the following subsections.

Technological Knowledge: Uneven Familiarity with AI Tools

Participants reported varying levels of familiarity with artificial intelligence tools used to support writing instruction. Several lecturers described themselves as relatively comfortable experimenting with AI technologies such as ChatGPT, Grammarly, and QuillBot. For example, one lecturer explained:

"I've actively explored and incorporated tools such as ChatGPT, Grammarly, and QuillBot to support various aspects of writing." (Participant 3)

Similarly, another participant indicated that their familiarity with AI tools developed largely through independent experimentation:

“I feel rather comfortable using them, but they’re not necessarily useful in all situations. I owe much of this familiarity to personal practice.” (Participant 1)

However, not all lecturers reported the same level of engagement with AI technologies. Some participants indicated that they had only recently begun experimenting with AI tools in their teaching, while others reported that they had not yet integrated AI into their writing classes. One lecturer stated:

“I have not used any AI tools in my writing classes yet.” (Participant 9)

This variation suggests that technological familiarity with AI tools is uneven among lecturers, even within a technology-oriented institutional environment. While some educators actively experiment with emerging tools, others remain cautious or uncertain about their relevance to writing instruction.

From an AI-TPACK perspective, this pattern suggests that lecturers’ technological knowledge related to AI tools is developing at different rates. Importantly, familiarity with AI technologies appears to be largely self-initiated rather than institutionally structured, indicating that lecturers’ readiness to adopt AI tools may depend heavily on individual motivation and prior technological experience.

Pedagogical Knowledge: The Role of AI in Writing Instruction

Beyond technological familiarity, lecturers also reflected on how AI tools might be integrated into the pedagogical process of teaching writing. Several participants described using AI to support early stages of writing, such as brainstorming ideas or generating examples. One lecturer explained:

“AI can help students brainstorm ideas and provide examples related to their writing topics.” (Participant 4)

Another participant emphasized the value of AI in providing immediate feedback:

“AI can react instantly and effectively to students’ writing and give clear guidance on how

they can improve.” (Participant 1)

Despite these benefits, lecturers also expressed uncertainty about how extensively AI should be used in writing instruction. Some participants emphasized that AI should remain a supportive tool rather than a replacement for students’ own thinking. For instance, one lecturer noted:

“AI should serve as a smart companion to students, not a replacement for their critical thinking.” (Participant 4)

These responses reveal that lecturers are still negotiating the pedagogical role of AI in writing instruction. While many recognize the potential value of AI-generated feedback and support, they also remain cautious about allowing AI tools to dominate the writing process.

Within the AI-TPACK framework, this tension illustrates the evolving relationship between technological knowledge and pedagogical knowledge. Although lecturers are increasingly familiar with AI tools, they are still developing pedagogical strategies that allow these technologies to enhance learning without diminishing students’ engagement with the cognitive processes involved in writing.

Content Knowledge: AI and the Changing Nature of Writing

Participants’ responses also suggest that AI technologies may influence lecturers’ understanding of what it means to teach writing. While some lecturers viewed AI primarily as a tool for improving linguistic accuracy, others reflected on how AI-generated text may affect students’ approach to writing tasks.

One participant explained that AI could support writing development through personalized feedback:

“AI has the potential to play a transformative role in supporting university students’ writing development by offering personalized and immediate feedback.” (Participant 3)

However, lecturers also raised concerns that AI-generated text may blur the boundaries between students’ own ideas and externally generated content. One lecturer observed:

“Sometimes it is difficult to know whether the ideas come from the student or from the AI.” (Participant 7)

These responses indicate that the introduction of AI technologies may influence how lecturers conceptualize writing as an academic practice. Instead of focusing solely on producing grammatically correct texts, lecturers increasingly emphasize the importance of critical thinking, idea development, and authorial voice.

Within the AI-TPACK framework, this finding illustrates the interaction between technological knowledge and content knowledge. As AI tools become more capable of generating coherent text, lecturers must reconsider how writing skills are defined and assessed in educational contexts. In this sense, AI integration may gradually shift the focus of writing instruction from text production toward the evaluation and refinement of ideas.

Ethical Awareness and Instructor Responsibility in AI-Assisted Writing

Ethical concerns emerged as a central theme in participants' responses. Many lecturers expressed concern about the potential misuse of AI tools, particularly in relation to academic integrity and plagiarism.

One participant explained:

"I am thinking about situations where students use AI to generate entire assignments and submit them directly." (Participant 4)

Another lecturer emphasized that students must maintain ownership of their ideas when using AI technologies:

"Users need to have their own ideas before using AI." (Participant 2)

These responses indicate that lecturers perceive AI integration not only as a technological issue but also as an ethical challenge that requires careful pedagogical management. Rather than rejecting AI tools entirely, most participants emphasized the importance of guiding students toward responsible use of AI technologies.

Several lecturers also acknowledged that they themselves were still developing the confidence needed to guide students effectively. One participant stated:

"I must develop my own expertise in AI before I can help my students use it." (Participant 1)

Within the AI-TPACK framework, ethical

awareness can be understood as a key component of lecturers' readiness to integrate AI tools into writing instruction. The findings suggest that responsible AI integration requires lecturers to combine technological understanding, pedagogical judgment, and ethical sensitivity, highlighting the complex nature of AI readiness in higher education.

7. Implications

7.1. AI Readiness as an Uneven Interaction of AI-TPACK Dimensions

The findings of this study indicate that lecturers' readiness to integrate artificial intelligence into writing instruction is uneven and transitional, reflecting the dynamic interaction between technological familiarity, pedagogical reasoning, and evolving conceptions of writing instruction. While many lecturers reported familiarity with widely used AI tools such as ChatGPT, Grammarly, and QuillBot, their use of these technologies in teaching remains largely limited to technical functions such as grammar correction, vocabulary suggestions, or idea generation. These patterns suggest that lecturers' technological knowledge of AI tools is developing more rapidly than their pedagogical strategies for integrating these tools into writing instruction.

This imbalance reflects a common phenomenon observed in early stages of educational technology adoption, where educators first use new technologies to improve efficiency rather than to transform pedagogy. Previous studies have highlighted the potential of AI to reduce instructors' workload and assist in large-scale evaluation and feedback processes (Dhara *et al.*, 2022). The lecturers in this study similarly acknowledged that AI tools can streamline tasks such as identifying grammatical errors or generating examples for writing exercises. However, their responses also indicate that AI tools are currently used primarily as supportive editing technologies rather than as pedagogical resources that fundamentally reshape writing instruction.

At the same time, the presence of lecturers who reported not using AI tools at all suggests that AI readiness is influenced by more than

technological availability. Even in a technology-oriented institutional context such as FPT University, some lecturers remain hesitant to adopt AI tools because of uncertainties regarding their pedagogical value or ethical implications. This observation aligns with concerns raised by X. Zhai *et al.* (2021), who argued that uncritical adoption of AI technologies may produce unintended consequences if educators lack the knowledge required to manage these tools effectively.

7.2. Pedagogical Tensions in AI-Assisted Writing Instruction

Another significant finding concerns the pedagogical tension between technological assistance and intellectual independence. While lecturers recognized the benefits of AI tools in supporting students during the writing process, they also expressed concerns that excessive reliance on AI may reduce students' engagement with independent thinking and idea development (Escalante *et al.*, 2023; Pedersen, 2023).

Participants frequently described AI as a “double-edged sword”: on one hand, it can provide immediate feedback and assist students who struggle with language proficiency (Ranalli, 2018; Wu *et al.*, 2023); on the other hand, unrestricted use may encourage students to rely on AI-generated responses rather than developing their own arguments (Anson & Straume, 2022; Fleckenstein *et al.*, 2024). As a result, many lecturers suggested that AI tools should only be used during specific stages of the writing process—such as brainstorming or revising—while instructors maintain close supervision over the learning process (Zawacki-Richter *et al.*, 2019).

From the perspective of the AI-TPACK framework, this tension reflects the evolving relationship between technological knowledge and pedagogical knowledge. Lecturers are not rejecting AI technologies outright; instead, they are attempting to integrate them in ways that preserve the cognitive and reflective nature of writing (Mishra & Koehler, 2006; Ning *et al.*, 2024). On this matter, lecturers' cautious attitudes toward AI may represent a form of

pedagogical responsibility, rather than resistance to technological innovation.

7.3. AI and the Changing Nature of Writing Instruction

Beyond questions of technological adoption, the findings also suggest that AI technologies are beginning to influence lecturers' understanding of writing as an academic practice. Participants expressed concern that the increasing availability of AI-generated text complicates traditional notions of authorship and originality. When AI systems can generate coherent paragraphs or entire essays, it becomes more difficult for instructors to determine whether ideas originate from the student or from an algorithmic system (Barrett & Pack, 2023; Fleckenstein *et al.*, 2024).

Within the AI-TPACK framework, this phenomenon highlights the interaction between technological knowledge and content knowledge. As AI tools become more capable of generating text, lecturers are prompted to reconsider the objectives of writing instruction. Instead of focusing primarily on grammatical accuracy, instructors may increasingly emphasize skills such as critical evaluation of ideas, development of argumentation, and demonstration of authorial voice (Mishra & Koehler, 2006; Ning *et al.*, 2024).

In this context, AI technologies may gradually shift the focus of writing pedagogy from producing text to critically engaging with text, including AI-generated content. Such a shift reflects broader transformations in higher education, where the ability to evaluate information critically becomes increasingly important in an environment saturated with algorithmically generated knowledge (Zawacki-Richter *et al.*, 2019; X. Zhai *et al.*, 2021).

7.4. Context-Specific Implications for FPT University

While many studies on AI in education propose general recommendations such as training workshops or policy development, the findings of this study highlight several context-specific considerations relevant to FPT University.

First, despite FPT University's reputation as a technology-oriented institution with strong

digital infrastructure, lecturers reported that their exploration of AI tools is largely self-initiated rather than institutionally coordinated. This suggests that the institution's technological capacity has not yet been fully translated into structured pedagogical guidance for AI-supported teaching. To address this gap, the university could establish faculty-level AI teaching clusters, where lecturers within the same discipline collaboratively design and share AI-supported assignments. For example, English lecturers could co-develop standardized tasks such as *AI-assisted brainstorming exercises* or *AI critique assignments*, accompanied by shared rubrics. In addition, short practice-oriented workshops (60–90 minutes) could be organized monthly, focusing on hands-on activities such as designing prompts, evaluating AI-generated essays, and integrating AI into specific lesson plans rather than general introductions to AI tools. Such initiatives align with the AI-TPACK perspective, which emphasizes the integration of technological and pedagogical knowledge in discipline-specific contexts.

Second, several lecturers raised practical concerns regarding the financial accessibility of AI tools, particularly subscription-based services that offer more advanced capabilities. While free versions of AI tools provide limited functionality, premium services often require subscription fees that individual lecturers may be reluctant or unable to pay. In a technology-driven institutional environment, addressing this issue may require the university to explore institutional licensing models that allow lecturers and students to access AI tools through university-supported accounts.

Third, the findings suggest that institutional policies regarding responsible AI use in academic writing remain underdeveloped. Lecturers expressed uncertainty about how to distinguish between acceptable and unacceptable uses of AI in student assignments. Developing clear institutional guidelines—such as defining acceptable levels of AI assistance in writing tasks—could help instructors maintain academic integrity while still allowing students to benefit from AI technologies. For example, the university can provide a standard AI usage framework that

lecturers include in their course syllabi. Students can also be required to add a short AI declaration to their assignments, explaining how they used AI tools. In addition, lecturers can include small reflection tasks where students explain what they used AI for and what they learned from it. To make sure the work is truly the students' own, courses can also include activities such as in-class writing or short oral presentations.

Taken together, these findings suggest that effective integration of AI technologies in higher education requires alignment between institutional infrastructure, pedagogical support, and ethical guidelines, rather than relying solely on individual lecturers' experimentation with AI tools.

8. Limitations and Future Research

This study has several limitations that should be acknowledged. First, the study relied primarily on lecturers' self-reported experiences and perceptions of AI use in writing instruction. Although these responses provide valuable insights into educators' perspectives, they may not fully reflect how AI tools are actually used in classroom practice. Future research could incorporate classroom observations or analyses of writing assignments involving AI tools to provide a more comprehensive understanding of AI-supported teaching.

Second, the study involved a relatively small number of participants from a single institutional context. While qualitative research aims to provide in-depth understanding rather than statistical generalization, the limited sample may affect the transferability of the findings to other higher education settings. Future research could explore AI readiness among lecturers across multiple institutions to provide a broader range of perspectives and contexts of AI integration in higher education.

Finally, this study focused primarily on lecturers' perspectives. Future studies could incorporate students' experiences and learning outcomes in order to better understand how AI technologies influence the teaching and learning of writing from both sides of the educational process.

9. Conclusions

This study sought to collect lecturers' personal perspectives on the use of artificial intelligence in teaching academic writing at the university level. Most teachers acknowledged AI as a useful support tool, supporting students to address common difficulties in writing, such as basic grammatical errors, limited vocabulary, and insufficient sentence variety. Nonetheless, numerous instructors expressed concerns about students' overreliance on AI. Students are increasingly relying on AI to answer all course questions rather than engaging in independent thought, as they did previously. This is a problem that must be addressed and properly investigated to avoid ethical quandaries in the use of AI in education.

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