

Tertiary English Lecturers' Perspectives on Technology Integration in Vietnamese Language Classrooms– A Case Study in Vietnam


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 <https://doi.org/10.54855/ijte.26624>

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Received: 07/07/2025

Revision: 08/05/2026

Accepted: 11/05/2026

Online: 24/05/2026

ABSTRACT

Keywords:

technology, foreign language education, educational technology, Vietnam, tertiary education

This research examines the incorporation of technology within foreign language teaching in Vietnam, assessing its advantages and existing obstacles. A mixed-methods approach was employed, gathering data from 50 English lecturers at the tertiary level during the second semester of the 2024–2025 academic year. The study used questionnaires, semi-structured interviews with fifteen participants chosen for specific reasons, and a review of relevant academic literature. The findings indicate the advantages of using technology in language teaching. Specifically, instructors reported a decreased workload, while students showed increased engagement and improved learning outcomes. In addition to these benefits, the study shows significant challenges, such as inadequate access to necessary learning resources and limited digital literacy among the participants. This study specifies how workload pressure constrains lecturers' transition from basic to advanced tools in Vietnamese universities.

Introduction

Digital tools have reshaped how languages are taught and learned across a wide range of educational settings. In foreign language instruction, the change has been particularly visible: where teaching once depended almost entirely on textbooks and teacher-fronted delivery, lecturers can now draw on online corpora, multimedia content, and collaborative platforms to give learners more frequent and varied contact with the target language (Chapelle & Sauro, 2017). Authentic materials and real communicative tasks, once logistically difficult to arrange, have become considerably more accessible in technology-enabled classrooms.

Vietnam offers a valuable national context for analyzing how these broader trends translate into concrete institutional and pedagogical realities. Beginning in the early 2000s, the Vietnamese government has consistently emphasized investments in digital infrastructure and the integration of information and communication technology (ICT) into its broader educational reform initiatives (Nguyen et al., 2025). Ministry of Education and Training (MOET) has

formalized this commitment through successive national policy frameworks, with foreign language education identified as a priority area, and English occupying a particularly prominent position within it. As a fundamental component of the national curriculum, it has grown in importance alongside Vietnam's expanding engagement in regional commerce and international collaborations. Consequently, universities face substantial demands to produce graduates proficient in English. Many institutions have therefore integrated technology as a pragmatic strategy to achieve this objective. Nevertheless, progress has been inconsistent. Le et al. (2023) document several recurring difficulties in Vietnamese English classrooms: unequal access to devices and digital resources, limited ICT skills among teaching staff, weak institutional support, and financial constraints affecting both lecturers and students. Taken together, these conditions reveal a persistent gap between what national policy sets out to achieve and what individual teachers can realistically implement, and it is this gap that motivates the present study.

Literature review

Theoretical Framework of Technology Integration in Education

Two theoretical frameworks inform this study. The Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), developed by Venkatesh et al. (2003), identify perceived usefulness, perceived ease of use, and behavioral intention as the key factors shaping technology adoption in educational settings. Both models have been widely applied in educational technology research, though they have also attracted criticism for focusing primarily on individual user attitudes while giving less attention to the institutional and structural conditions that shape adoption outcomes (Kirkpatrick & Liddicoat, 2019). This investigation further employs Vygotsky's social constructivist perspective, specifically the Zone of Proximal Development (ZPD). The central tenet posits that optimal learning occurs through collaborative engagement with more expert individuals (Lantolf & Thorne, 2016). In technology-enhanced language instruction, digital resources tend to support learning by creating structured opportunities for meaningful interaction rather than simply providing passive exposure. Read together, these two theoretical strands address complementary questions: the adoption frameworks help account for why teachers and students may or may not use digital tools, while the constructivist perspective addresses how those tools, once in use, can be organized to support language learning.

Global Perspectives on Technology in Foreign Language Teaching

Studies on the use of technology in foreign language teaching show varied results across countries. In many developed countries, interactive whiteboards, mobile applications, and online platforms have been associated with improvements in language learning outcomes (Godwin-Jones, 2019), and mobile-assisted language learning (MALL) has extended learner access to materials and real communicative opportunities beyond the classroom. Research from developing nations presents a more circumspect perspective. Kirkpatrick and Liddicoat's (2019) investigation, focusing on Thailand, Malaysia, and the Philippines, identifies three persistent challenges: inadequate infrastructure, insufficient teacher training, and limited financial

resources for sustained technology implementation. The success of strategies used in well-resourced environments doesn't automatically apply to settings with different structures. This is especially true for the Vietnamese university context studied here.

The Vietnamese Context: Educational Technology Landscape

Vietnam's educational technology landscape has undergone considerable transformation since the Doi Moi reforms began reshaping the country in the 1990s. During this period, government spending on digital infrastructure, teacher professional development, and the procurement of technological resources has increased significantly. Moreover, the National Education Development Strategy 2021–2030, as outlined by the Ministry of Education and Training (2020), explicitly identifies technology integration as a crucial strategy for improving both the quality and accessibility of education. These initiatives have yielded tangible infrastructure improvements, particularly at urban universities, though progress has been inconsistent across the system.

Recent research reveals varied progress patterns. Urban areas have successfully adopted technology, whereas rural areas face challenges including poor infrastructure, limited financial resources, and insufficient technical support (Nguyen & Cao, 2023). The COVID-19 pandemic accelerated technology adoption across the Vietnamese education system, as institutions moved rapidly to online and blended learning formats. The period under consideration demonstrated technology's capacity to facilitate educational continuity amid major disruption; however, it also revealed substantial disparities in digital access, including unequal access to network infrastructure, computers, and internet connectivity (Luu & Pham, 2021). The digital divide, a concern that predated the pandemic, was exacerbated during this time. Consequently, the issues it illuminated continue to shape contemporary discussions regarding equitable and sustainable technology implementation.

Several studies in Vietnam have examined the effects of technology in English as a Foreign Language (EFL) learning outcomes and student engagement. However, there are not many research on this topic. Pham (2022) found that PowerPoint and Kahoot were beneficial, increasing motivation and participation among secondary school students, who reported that technology made lessons easier to understand. Nguyen (2021) noted that combining learning management systems with social media platforms improved collaboration and self-confidence among university students. However, the ability to apply these findings more broadly is limited by reliance on self-reported data and by the research being conducted in relatively affluent urban areas. Furthermore, Nguyen and Nguyen's (2024) investigation into adult education revealed that EFL learners were predominantly driven by professional aspirations, while concurrently encountering pragmatic challenges, such as time constraints and deficiencies in fundamental language skills. While technology generally fosters engagement when integrated in structured, well-supported ways, contextual elements, encompassing learner attributes and institutional provisions, seem to significantly influence the outcomes. This study aims to fill a gap in understanding how university instructors perceive and respond to these conditions in their teaching.

Technology Integration in Foreign Language Education: Opportunities and Benefits

Technology provides tangible advantages for foreign language instruction. Adaptive platforms and intelligent tutoring systems can tailor content, pacing, and feedback to individual learners. They potentially address the diverse learning preferences and proficiency levels present within a single classroom (Hubbard, 2013). Furthermore, online platforms and multimedia resources provide access to authentic language and cultural materials that are frequently absent from conventional classroom settings. This availability helps develop communication skills and cultural understanding (Kern, 2014). Interactive technologies, such as gamification and multimedia presentations, generally foster active learning by offering immediate feedback and enhancing student motivation (Prensky, 2001). Furthermore, online forums, collaborative platforms, and video conferencing enable students to engage with peers and native speakers from diverse nations. O'Dowd and Lewis (2016) propose that these instruments may contribute to the development of intercultural competence and global awareness, both of which are increasingly prioritized in modern educational contexts.

Challenges and Barriers to Technology Integration

Despite opportunities, integrating technology presents challenges that can hinder its practical effectiveness. A major challenge is inadequate infrastructure, particularly in developing countries. Unreliable internet and a lack of necessary hardware hinder the effective use of technology in education (Warschauer & Matuchniak, 2010). Furthermore, the absence of requisite digital skills among both instructors and students constitutes another obstacle, thereby exacerbating implementation challenges (Mishra & Koehler, 2006). Economic constraints compound these difficulties. The costs of hardware, software licensing, maintenance, and technical support are often difficult for institutions with limited budgets to sustain (Cuban, 2001). As technology continues to change, institutions face ongoing financial demands, rather than one-time costs. Moreover, using technology without considering instructional design principles can lead to difficulties in teaching. Bax (2003) claims that technology alone does not ensure enhanced results, as successful integration requires meticulous planning, appropriate strategies, and continuous assessment. To use technology effectively in teaching, educators need to develop skills in instructional design, technology management, and digital teaching methods

Research Questions

To fulfill the purpose of the study, the survey *sought* to answer the following research *questions*:

1. What are the key opportunities and challenges faced by Vietnamese university English lecturers in integrating technology into language teaching?
2. How do digital literacy, institutional support, and infrastructure impact the effectiveness of technology integration in English instruction at the tertiary level in Vietnam?

These research questions are designed to provide a comprehensive understanding of both the practical aspects of technology integration and the broader factors that shape its implementation. The study's conclusions have broader applicability and may offer valuable

insights for other developing nations facing similar challenges in educational technology. The emphasis on foreign language instruction further underscores its relevance for countries seeking to bolster multilingual proficiency through technology-enhanced pedagogical methods. This research contributes empirical data to the existing educational technology literature and may guide subsequent research endeavors, policy formulation, and implementation methodologies. The findings are intended to be of practical use to educators, administrators, and policymakers by providing a grounded analysis that can inform the development of more effective and equitable approaches to technology integration in Vietnamese higher education.

Methods

Pedagogical Setting & Participants

The data were collected from 50 tertiary-level English lecturers from the Faculty of Foreign Languages at Hanoi Metropolitan University and the Faculty of English at Hanoi Pedagogical University No 2. Data collection occurred during the second semester of the 2024–2025 academic year. To ensure fair representation across gender, age, teaching experience, and institutional affiliation, participants were chosen using stratified random sampling. The sample included 32 females (64%) and 18 males (36%), aged 25 to 55 years. Participants' teaching experience ranged from 2 to 25 years. This experience was divided into three career stages: early career (2–8 years, $n = 18$, 36%), experienced (9–17 years, $n = 20$, 40%), and expert (18–25 years, $n = 12$, 24%).

All participants met three inclusion criteria: current employment as a tertiary-level English lecturer, at least 2 years of teaching experience, and use of at least 1 educational technology tool in the preceding academic year. Participants varied considerably in digital confidence, from those familiar only with basic tools to those experienced with more advanced platforms, and this variation was a deliberate feature of the sampling strategy. From the full survey sample, 15 participants were purposively selected for semi-structured interviews. Selection was guided by three criteria: variation in career stage, institutional affiliation (seven from Hanoi Metropolitan University and eight from Hanoi Pedagogical University No. 2), and self-reported digital confidence (low, moderate, or high). This method ensured that the interview data accurately reflected the demographic and experiential diversity of the larger sample.

Design of the Study

This study used a mixed-methods design, collecting both quantitative and qualitative data simultaneously (Creswell & Plano Clark, 2018). A 45-item questionnaire administered to all 50 participants served as the primary data strand, yielding a broad descriptive picture of technology use patterns, perceived benefits, challenges, and digital literacy levels. Semi-structured interviews with 15 purposively selected participants were embedded within this primary framework and explained and contextualized the quantitative patterns that the survey data alone could not account for or address. This design was appropriate for the study's aims because technology integration in language education involves both measurable attitudes and context-specific practices that numerical data alone cannot capture.

Data collection & analysis

The survey included 45 questions, organized into six main sections: demographic information, current technology use, perceived benefits, obstacles to integration, self-assessment of digital skills, and institutional support. Items were used on a five-point Likert scale. Cronbach's alpha

coefficients, which ranged from 0.82 to 0.91, indicated strong internal consistency across the subscales. Descriptive statistics, including frequencies, means, and standard deviations, were used to analyze the quantitative data. Furthermore, inferential statistical methods, specifically chi-square tests and one-way ANOVA, were used to examine observed patterns and assess group differences. From February to April 2025, semi-structured interviews were conducted with the fifteen selected participants. Each interview, which lasted about ten to fifteen minutes, was recorded and then transcribed word-for-word. The questions were open-ended, focusing on participants' encounters with technologies, the support systems provided by their institutions, and the obstacles they perceived in the integration process. A third data strand consisted of document analysis: policy documents from MOET, institutional digital resource inventories, and relevant academic publications were examined to provide contextual background and to corroborate or qualify patterns emerging from the survey and interview data. Documents were selected for relevance to the research questions and analyzed using directed content analysis, organized around the same six thematic areas as the questionnaire. Interview data were analyzed using Braun and Clarke's (2006) six-phase thematic analysis framework, proceeding from initial familiarization with the data through coding, theme development, review, and final write-up. Coding was conducted inductively, with multiple rounds of review to ensure that themes accurately represented participants' accounts. Triangulation was achieved by systematically comparing findings across all three data sources at the level of individual themes. Where the quantitative and qualitative evidence converged, this was taken as corroborating support. When the results differed, the reasons for these differences were examined, such as the differences between what people said they thought and how they behaved in the classroom. This comparison of information from different sources helped to confirm the overall validity of the findings.

Findings

The results are presented in relation to the two research questions.

Table 1

Demographic Summary of Study Participants

Characteristic	Category
Gender	Female
	Male
Age	25-35 years
	36-45 years
	46-55 years
Teaching Experience	2-8 years (Early career)
	9-17 years (Experienced)
	18-25 years (Expert)
Institution	Hanoi Metropolitan University
	Hanoi Pedagogical University No 2

Table 1 summarizes the demographic profile of the 50 participants, drawn from two Hanoi institutions during the second semester of the 2024–2025 academic year: the Faculty of Foreign Languages at Hanoi Metropolitan University (n = 26, 52%) and the Faculty of English at Hanoi Pedagogical University No. 2 (n = 24, 48%). The sample comprised 32 females (64%) and 18

males (36%), a distribution consistent with the typical gender composition of English-teaching faculty at Vietnamese universities. The participants, aged 25 to 55, were grouped by teaching experience. This experience was divided into three categories: early career (2–8 years, $n = 18$, 36%), experienced (9–17 years, $n = 20$, 40%), and expert (18–25 years, $n = 12$, 24%). All study participants met the inclusion criteria: they were currently employed as university English lecturers, had at least two years of teaching experience, and had used at least one educational technology tool in the previous academic year. The participants showed a wide range of digital skills, from basic to advanced, with some very skilled in using complex platforms. Therefore, the study included the full range of digital skills. As a result, the study's design enabled a more thorough understanding of the diverse experiences related to technology integration within the specific group under study.

Table 2

Current Technology Use in Foreign Language Teaching

Technology Category	Item	Percentage	Number
Basic Technologies	PowerPoint presentations	94%	47
	Online dictionaries & translation tools	86%	43
	Audio & video materials	78%	39
	Learning Management Systems	65%	33
Advanced Technologies	Interactive whiteboards	34%	17
	Mobile language-learning apps	28%	14
	AI tools (ChatGPT, chatbots)	22 %	11
Usage Frequency	Daily use	36%	18
	Several times per week	42%	21
	Less frequently	22%	11

Table 2 summarizes how the 50 participants used technology. A significant majority, specifically 82%, reported regularly using technology in their teaching. Conversely, 18% indicated infrequent or limited technology use, a finding that aligns with the study's selection criterion, which mandated prior experience with educational technology. Regarding fundamental tools, PowerPoint was employed by 94% of the participants, followed by online dictionaries and translation tools (86%), audio and video resources (78%), and learning management systems (65%). Adoption rates for more sophisticated technologies were considerably lower: interactive whiteboards were used by 34% of participants, mobile language-learning applications by 28%, and AI tools, including ChatGPT and language-learning chatbots, by 22%. In terms of frequency, 36% used technology daily, 42% several times

per week, and 22% less often. Interview data help account for this disparity. Participants consistently noted that learning to use new applications demands time that is difficult to find alongside existing teaching commitments. The survey results support this finding, with 82% of participants identifying time constraints as a major obstacle (Table 3). This pattern indicates that the difference in using basic and advanced tools is due to structural workload pressures, rather than a general dislike of technology.

Table 3

Perceived Benefits and Challenges of Technology Integration

Category	Item	Percentage	Number
Benefits	Technology enhances student engagement	88%	44
	Technology improves learning outcomes	84%	42
	Accommodates different learning styles	76%	38
	Provides access to authentic materials	72%	36
Challenges	Time constraints for learning new technologies	82 %	41
	Inadequate technical infrastructure	78%	39
	Limited access to devices/equipment	72%	36
	Insufficient technical support	68%	34
	Digital literacy limitations	64%	32

Questionnaire data showed broad agreement on the benefits of technology integration. Using five-point Likert-scale items (Cronbach's alpha: 0.82–0.91), 88% of participants agreed or strongly agreed that technology fosters student engagement, 84% believed it improves learning outcomes, 76% saw it as accommodating diverse learning styles, and 72% agreed that it provides access to authentic language materials.

Thematic analysis of the interview transcripts revealed three prevalent benefit themes. The most frequently cited advantage was technology's potential to enhance lesson interactivity; specifically, multimedia presentations, gamification features, and online exercises were reported to boost student engagement and motivation, as evidenced by observable changes in classroom conduct. A second theme pertained to personalized instruction, with participants emphasizing technology's capacity to adapt to varying learning speeds, provide tailored feedback, and help identify students who require supplementary assistance. Third, access to authentic materials was consistently cited as a practical gain, with several participants noting

that digital resources expose students to current, real-world language use in ways that textbook materials alone cannot. Conversely, participants acknowledged that the advantages of technology are not inherently guaranteed. Several interviewees reported that using tools without enough teaching support often reduced their effectiveness. Moreover, students showed better results when new technologies were introduced gradually and aligned with clear learning goals. The results indicate that the usefulness of a teaching tool depends significantly on how it is used. In contrast, infrastructure problems were the most common obstacle in both datasets. 78% of respondents cited inadequate technical infrastructure as a significant obstacle, while 72% cited limited access to necessary devices and equipment, and 68% reported insufficient technical support. The agreement between the survey and interview results suggests that physical and systemic limitations, rather than attitudes, are the main obstacles to the widespread use of technology in these settings.

Limited digital literacy presented a further notable challenge. Sixty-four percent of participants indicated a deficiency in the technical proficiencies required for successful technology integration, while 82% reported a consistent struggle to allocate adequate time to acquiring new tools. The data suggests that heavy teaching loads hinder opportunities for professional growth.

Interview responses offered additional insights into these difficulties. Infrastructure deficiencies were specifically identified as a significant impediment. Participants at both institutions reported unreliable internet connections and frequent power outages. These issues made it difficult to plan and deliver technology-based lessons effectively. Financial constraints were also frequently cited, with participants noting that limited institutional budgets restricted access to premium educational software and made equipment maintenance difficult to sustain.

Levels of institutional support varied considerably across participants. Some described strong backing from their administration, while others reported a lack of understanding or engagement from institutional leadership. This variation suggests that the organizational environment plays a meaningful role in shaping what individual lecturers can do with technology in practice.

Table 4

Digital Literacy Self-Assessment Scores

Skill Area	Mean (M)	Standard Deviation (SD)
Basic computer operations	4.2	0.8
Email and communication tools	4.0	0.9
Presentation tools (PowerPoint)	3.9	0.9
Learning management systems	3.2	1.0
Interactive tools (Kahoot, Quizizz)	2.8	1.1
Mobile language learning applications	2.6	1.2
Educational software programming	2.1	1.2

Note: Likert scale: 1 = Not confident → 5 = Very confident

Table 4 reveals the self-assessment scores for digital literacy, with participants rating their skills highest in basic computer operations (M = 4.2, SD = 0.8) and lowest in educational software programming or customization (M = 2.1, SD = 1.2).

Table 5

Digital Literacy Confidence and Training Needs (n = 50)

Category	Item	% of Participants	Approx. Number of Lecturers
Confidence Levels	Confident with basic technologies	76 %	38
	Confident with advanced educational technologies	34 %	17
Professional Development Needs	Interested in training on educational technology	88 %	44
	Top-requested: Learning Management Systems (LMS)	72 %	36
	Top-requested: Interactive teaching tools	68 %	34
	Top-requested: Mobile language learning apps	64 %	32

Table 5 indicates robust interest in professional development, with 88% of participants preferring training programs focused on integrating educational technology. In terms of prioritization, the most frequently cited training needs included learning management systems (72%), interactive teaching tools (68%), and mobile applications designed for language acquisition (64%). Furthermore, the participants uniformly highlighted the need for continuous support rather than isolated training events. Interview data revealed widespread concern about the pace of technological change, with many lecturers reporting difficulties adapting to new tools and platforms. One participant noted that new applications and platforms appear so frequently that it becomes difficult to justify the time needed to learn a tool that may soon be superseded. This response implies that, for certain lecturers, the inherent rapidity of change functions as an impediment to their involvement in professional development initiatives. In terms of Institutional Support and Resources, analysis revealed considerable variation across participating institutions and within institutional contexts. The survey results showed that 58% of respondents thought the institution's support was either good or acceptable. In contrast, 42% of the participants found it insufficient or unsatisfactory. A comparison of Hanoi Metropolitan University and Hanoi Pedagogical University No. 2 revealed similar challenges, despite their different organizational cultures. Both institutions, as public universities located within the Hanoi metropolitan area, typically offered superior infrastructure compared to other institutional settings. Even in these relatively well-resourced settings, participants pinpointed areas needing improvement, specifically continuous technical support and thorough training programs.

The interview data indicated that the success of technology integration was significantly influenced by the existing institutional culture and by the administration's support. Lecturers in institutions where senior management prioritized educational technology, as shown by resource allocation, technical support, and clear institutional policies, demonstrated more consistent and effective adoption. Those working in environments with limited administrative engagement described ongoing difficulties, even where personal motivation and technical capability were not in question. This pattern is consistent with Fullan's (2007) argument that sustained institutional change depends on leadership commitment rather than individual initiative alone. Student-related factors also influenced integration outcomes, but the effects were more varied. 84% of participants agreed that students generally respond positively to classroom technology use. Interview data, however, revealed a more complex picture: students from lower-income households frequently lacked reliable access to devices or internet connectivity at home, making technology-dependent tasks and blended learning formats difficult to implement equitably. Within the classroom settings, student attitudes toward digital tools exhibited considerable variability. Certain students demonstrated a strong affinity for technology-driven activities, whereas others favored traditional instructional methods. Participants noted that they felt reluctant initially, but this attitude gradually lessened when new tools were introduced gradually and clearly linked to specific learning goals. Chi-square analyses and one-way ANOVA revealed no statistically significant disparities between the two institutions concerning any student-related parameter.

The barriers identified in this study, such as limited device access, variable digital proficiency, and unequal home internet connectivity, appear consistently across both institutional settings rather than being concentrated in one. These findings indicate that the difficulties are systemic and that resolving them requires coordinated policy responses rather than leaving solutions to individual lecturers to arrange within their own classrooms. This uniformity implies that these issues are fundamentally systemic and, consequently, their resolution requires coordinated policy interventions rather than ad hoc measures implemented by individual instructors in their classrooms.

Discussion

The findings of this investigation indicate a variable implementation of technology in English language teaching at Vietnamese universities. While basic resources such as PowerPoint presentations, online dictionaries, and video materials are commonly used, the use of more advanced applications, including AI language tools and data-driven assessment platforms, remains limited. This pattern is consistent with findings from comparable contexts. Kirkpatrick and Liddicoat (2019) identify similar disparities in the use of basic and advanced technology across institutional tiers in other Southeast Asian higher education systems. Nguyen et al. (2025) show that simply using familiar tools does not necessarily lead to a deeper integration of teaching methods in Vietnamese universities.

The results indicate that existing professional development programs and institutional support structures are insufficient to promote a transition among lecturers from basic initial technology adoption. This divergence between lecturers' generally positive attitudes toward technology and their limited application of sophisticated tools is not unique to this specific context. Ertmer and

Ottenbreit-Leftwich (2010) distinguish between first-order barriers, which include infrastructural limitations, access issues, and time constraints, and second-order barriers, which encompass beliefs, self-efficacy, and uncertainty about pedagogical application, suggesting that successful integration requires progress in both domains. The present study found evidence of both types. Infrastructure deficits were widely reported in the survey data, while interview responses indicated that many lecturers were uncertain about how to use advanced tools effectively to support their teaching goals. Single training workshops, which remain the dominant professional development model in both participating institutions, are unlikely to address either type of barrier in any sustained way.

Modular professional development programs grounded in the TPACK (Technological Pedagogical Content Knowledge) framework may offer a more effective alternative, particularly when combined with classroom-based mentoring, peer collaboration, and reflective teaching portfolios developed over time. The TPACK framework is useful in this context because it identifies the three distinct knowledge bases, including technological, pedagogical, and content knowledge, that teachers need to integrate technology effectively, and it provides a principled basis for designing professional development that addresses each dimension systematically. Applying TPACK as a diagnostic and design tool may therefore inform the development of more targeted professional development experiences for both pre-service and in-service teachers. This kind of sustained, context-sensitive training may help lecturers build the technical competence and pedagogical judgment needed to use digital tools effectively in the classroom.

Infrastructure constraints are a second major barrier. Unequal access to stable internet connections, up-to-date hardware, and licensed software, particularly between urban and rural institutions, or between public and private universities, limits consistent technology use. Nguyen et al. (2025) report similar disparities within Vietnamese higher education. Addressing this requires investment in campus-wide network infrastructure, centralized digital platforms, and dedicated technical support. At the policy level, the Ministry of Education and Training (MOET) could establish national standards for digital infrastructure and direct targeted funding or public-private partnerships to institutions that fall short of those benchmarks.

Institutional leadership shapes technology integration outcomes in concrete ways. Fullan (2007) argues that sustained change in educational organizations depends on strategic commitment at the leadership level, and the interview data in this study support that position. Participants associated more effective technology use with specific institutional conditions: dedicated budget allocations for equipment renewal and software licensing, formal recognition of digitally innovative teaching in staff performance evaluations, and cross-departmental coordination that distributed technical support across faculties rather than concentrating it in a single unit. Lecturers who reported that these structures were in place showed greater confidence in their use of technology and fewer practical obstacles in day-to-day teaching. People without institutional support or guidance reported ongoing difficulties, regardless of their personal drive or technical abilities.

Policy reform must go beyond infrastructure. Embedding digital competence into lecturer evaluation criteria, curriculum design requirements, and accreditation standards would create structural incentives for more consistent engagement with technology. A national open educational resource (OER) repository could also help reduce unequal access to quality teaching materials across institutions. Variation in lecturers' digital literacy further contributes to these difficulties. The gap between basic and advanced users suggests that existing professional development initiatives do not adequately address diverse needs. Tiered training

programs—differentiated by proficiency level and covering basic ICT skills, pedagogical application of technology, and instructional design—may prove more effective than uniform provision. Mentorship schemes and communities of practice can support sustained development over time, consistent with Koehler and Mishra's (2009) case for job-embedded professional learning.

Student-related factors also affect integration outcomes. Differences in learners' access to devices and familiarity with digital tools can impede participation when technology is introduced without adequate preparation. Orientation sessions on digital learning skills, low-bandwidth alternatives for online tasks, and gradual tool-introduction plans can reduce cognitive overload and improve equity of access.

The evidence indicates that potential exists, but only under conditions of more personalized and communicative English teaching in Vietnam—providing access to authentic materials, supporting collaboration, and connecting learners to broader language communities. Realizing that potential, however, depends on addressing infrastructure, professional development, institutional culture, and policy simultaneously. Neither top-down mandates nor individual teacher initiative alone will be sufficient; coordinated reform across all four areas is likely to be needed.

Conclusion

This study examined technology integration in English language teaching at two Vietnamese universities, drawing on questionnaire data from 50 tertiary-level lecturers, semi-structured interviews with 15 participants, and analysis of relevant policy and institutional documents. The findings show that while lecturers broadly recognize the value of educational technology, practical adoption remains concentrated at the level of basic tools, with advanced applications, including learning management systems, AI tools, and interactive platforms, used by a minority. The main challenges are poor infrastructure, a lack of digital skills, and insufficient institutional support. These issues affect both educators and learners, creating a cycle of problems. Addressing these challenges requires structural changes, including ongoing, tailored professional development, fair investment in infrastructure, and institutional policies that create consistent conditions for using technology across all departments, rather than relying on individual instructors to handle integration independently.

The research has several limitations that bear on how the findings should be read. A sample of 50 participants from two Hanoi universities is adequate for a concurrent embedded mixed-methods design, but it does not capture the full range of tertiary English-teaching contexts in Vietnam. Rural institutions, private universities, and disciplines outside foreign language education are not captured here, and findings may not generalize to those settings. Future research should examine technological integration across a broader range of institutional types and educational levels, and longitudinal designs would be particularly valuable for tracking how integration practices develop or stall over time.

Acknowledgments

The authors acknowledge the contributions of the 50 English lecturers who participated in this

study at Hanoi Metropolitan University and Hanoi Pedagogical University No 2. We also thank the institutional review boards for their ethical guidance and approval.

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