Integrating TPACK to Enhance Quality Assurance in General English Teaching: A Case Study in Higher Education

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https://orcid.org/0000-0002-9297-2733

https://doi.org/10.54855/paic.24618

Received: 11/08/2024 Revision: 24/12/2024 Accepted: 26/12/2024 Online: 30/12/2024

ABSTRACT

This paper explored the integration of Technological Pedagogical Content Knowledge (TPACK) to enhance the quality assurance of General English instruction within higher education. Despite the recognized significance of TPACK for ESL teachers, scant research exists on its application, specifically in ensuring the quality of General English teaching. The study in a public university focused on a division of General English consisting of 61 lecturers. Data was collected using both quantitative and qualitative methods, including a questionnaire adapted from Schmidt et al. (2009) and an interview combined with class observation. The findings revealed that although most lecturers self-rated their TPACK competence at a high level, a small percentage of them integrated technology into their teaching. Therefore, lecturers are recommended to participate in peer observation to share authentic applications of their TPACK knowledge. Regular internal workshops should also be held to revive lecturers' TPACK skills. More significantly, lecturers have to attend external workshops on AI in TESOL and available TESOL conferences to improve their teaching skills in general. As for managers, incorporating TPACK competencies into teacher evaluations, particularly observation strategies, is recommended to recognize and encourage effective teaching practices. These comprehensive approaches can enhance the quality of general English teaching in this digital era.

Keywords: TPACK, quality assurance, General English

Introduction

The rapid digitization of society and economy has profoundly transformed educational landscapes, which requires a corresponding development in teaching methodologies. The

CITIATION | Quach, T. T. N., Le, V. C., Pham, T. X. T., Pham, P. P., & Nguyen, T. T. X. (2024). Integrating TPACK to Enhance Quality Assurance in General English Teaching: A Case Study in Higher Education. *Proceedings of the AsiaCALL International Conference*, 6, 250-267. ISSN: 2833-6836, ISBN: 979-8-9870112-6-3. DOI: https://doi.org/10.54855/paic.24618

COVID-19 pandemic accelerated this shift, and the critical role of technology in education is revived. This event challenged teachers' technological competence. Researchers highlight teachers' struggles with student motivation, technical skills, and technological obstacles in online education (Pham et al., 2021; Kamal & Illiyan, 2021; Sangeeta & Tandon, 2020). To bridge this gap and enhance teaching and learning outcomes, this research investigates the integration of the TPACK framework into General English instruction at higher education institutions.

TPACK is a conceptual model encompassing technological, pedagogical, and content knowledge. It is increasingly recognized as essential for effective technology integration in education. Equipped with TPACK skills, English teachers are believed to significantly improve teaching quality and student engagement. Believing in the potential of TPACK to enhance the quality of General English (GE) courses, this study seeks to address two key questions: how do GE lecturers at the participating higher institution perceive their TPACK and how do they apply it in practice? Based on the findings, recommendations for further steps in a continuous development plan are proposed.

Literature review

Key concepts

Mishra and Koehler (2006, p. 1029) have enhanced the PCK framework by adding Technological Knowledge (TK), resulting in the TPACK (Technological Pedagogical Content Knowledge) model. They describe the TPACK model as "the foundation of effective teaching with technology." This model involves understanding how to use technology to represent concepts, employing pedagogical techniques that integrate technology to teach content effectively, recognizing the challenges or ease of learning specific concepts and how technology can address these, knowing students' prior knowledge and theories of epistemology, and understanding how technology can build on existing knowledge and develop or reinforce epistemologies. The interactions among these components lead to seven TPACK elements, defined as follows:

Content knowledge (CK): CK is based on Vergnaud's theory of conceptual fields (1990), which posits that representations and invariants are intertwined in forming a situational understanding of a concept. It pertains to the subjects that students have studied. Mishra and Koehler (2006, p. 1026) define CK as the "knowledge about actual subject matter that is to be learned or taught."

Technological knowledge (TK): Hofer and Grandgenett (2012, p. 85) describe TK as the "knowledge about standard technologies, such as books, chalk, blackboards, and more advanced technologies like the Internet and digital video," including interactive whiteboards and software programs (Baran, Chuang & Thompson, 2011). Schmidt et al. (2009) highlight the use of technology tools and resources.

Pedagogical knowledge (PK) refers to the instructional methods and their application. Pedagogical Content Knowledge (PCK) focuses on both the teaching process and an

understanding of the content to enhance teaching practices. According to Wilson et al. (2002), a strong foundation in PCK represents a form of professional knowledge essential for teaching the content of a specific subject area.

Technological Pedagogical Knowledge (TPK) refers to understanding how various technologies can enhance the teaching process and specific pedagogical practices. It includes knowledge of pedagogical strategies and how to effectively present and review a course using certain technologies (Margerum-Leys, 2002).

Technological Content Knowledge (TCK) involves understanding how to use technology to create new representations of content areas. In education, it includes the ability to determine which technology is suitable for presenting and learning a specific subject (Slough et al., n.d.).

Technological Pedagogical Content Knowledge (TPACK) encompasses the knowledge teachers require to successfully incorporate technology into their teaching across different subject areas (Baran, Chuang, & Thompson, 2011; Koehler & Mishra, 2009).

Koehler and Misha (2009) illustrate this in Figure 1 below.

Fig. 1

TPACK Model

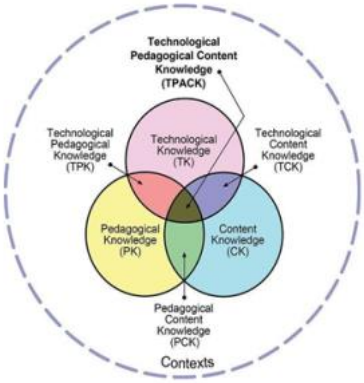

Figure 1. TPACK Model and its components (Koehler & Mishra, 2009)

Teaching General English

Jun Song (2014) mentioned that General English teaching (GET) emphasizes developing socio-linguistic communication skills and cultural awareness, aiming to equip students with the ability to use English for social and cultural interactions and extensive reading.

Empowering instructors

Empowering lecturers involves enhancing their autonomy, agency, and capacity for positive change in their teaching practices, primarily through professional development. This strategy, employed by educational institutions, ensures that teaching and administrative staff continually improve their skills and competencies throughout their careers (Mizell, 2010). It is well-established that professional development enhances university teaching (Cannon, 1983). As described by Lange (1990), teacher development is an ongoing process of intellectual,

experiential, and attitudinal growth, allowing teachers to evolve in their methods throughout their careers.

The most effective method in empowering instructors is via professional development activities. The National Council of Teachers of English (NCTE) outlines four key dimensions of effective professional development. It should involve collaborative learning, where educators engage in writing, respond to various genres, and share insights. It is also believed to promote inquiry into practice and encourage reflection and sharing of teaching methods. Additionally, professional development is expected to provide immersive reading and research opportunities, deepening educators' pedagogy interpretation. Finally, educators are supposed to take on leadership and advocacy roles. Thus, a community of leaders who inspire and guide others is formed.

TPACK and its application in assuring the quality of language education

TPACK (Technological Pedagogical Content Knowledge) provides a robust framework for integrating technology into teaching and learning (Tyarakanita et al., 2021; Ertmer, 2013; Greene, Jones, 2020). By merging technological, pedagogical, and content knowledge, TPACK empowers language lecturers to design and deliver engaging, effective, and relevant teaching practices (Ilgaz & Usluel, 2014; Sarıçoban et al., 2017; He et al., 2021). It is expected that when aligned with quality assurance principles, TPACK can significantly enhance the overall quality of language education.

Previous research has explored the multifaceted nature of TPACK. Greene and Jones (2020) emphasized the contextual diversity of TPACK in teaching English as a Second Language. The study pointed out the need for a critical perspective on teacher development. Similarly, Lim et al. (2021) identified key trends in TPACK research, ranging from its measurement to relationships with other variables, development strategies, implementation challenges, and assessment tools.

In an effort to provide a broader context for quality assurance in language education, the Quality Assurance Guidelines and Criteria for Providers of English Language Teaching (QA Guidelines for ELT) constructed a standardized framework for evaluating teaching quality. Combining TPACK with these guidelines, educators are supposed to systematically enhance their practice and demonstrate alignment with language education standards.

Integrating TPACK in Continuous Professional Development (CPD) as a quality assurance approach

It is undisputable that CPD has emerged as a cornerstone for enhancing teacher competence and improving learning outcomes. Especially in the 4.0 technology era, the integration of Technological Pedagogical Content Knowledge (TPACK) within CPD programs has been increasingly recognized as a crucial strategy for quality assurance in teaching.

Researchers have agreed on the importance of TPACK in teacher development. Originally, Mishra and Koehler (2006) introduced the TPACK framework, which highlighted the intricate interplay between technology, pedagogy, and content knowledge. Subsequent studies have explored the implications of TPACK for teacher education and professional development. For

instance, Ertmer et al (2013) emphasized the possibility of TPACK-based CPD programs in fostering teachers' ability to effectively integrate technology into their classrooms.

CPD in language education quality assurance has also been proven to be significant. Fullan (2007), for example, emphasized the significance of ongoing professional learning in raising educational standards. Cuban (2001) argued that teachers require sustained support and development to effectively utilize technology for instructional purposes in the context of technology integration. Those studies pointed out that in order to maintain teaching quality, language lecturers have to participate in ongoing professional development activities.

Therefore, it is logical to expect that merging TPACK with CPD will benefit educators in terms of creating a synergistic approach to quality assurance. Akcayir and Demirbilek (2012) concluded that TPACK-focused CPD programs can significantly improve teachers' self-efficacy in using technology and their ability to design technology-rich learning environments. Furthermore, Wang and Tsai (2016) demonstrated that TPACK-integrated CPD can practically enhance teachers' pedagogical content knowledge and, ultimately, student achievement.

However, challenges remain in implementing TPACK-based CPD programs effectively. Cuban (2001) cautioned against the "technological imperative ."Instead, he suggested aligning technology integration with pedagogical goals. Mishra and Koehler (2006) also noted the complexity of developing TPACK. To master TPACK, lecturers must undergo self-practice and reflect on their technology use.

The best way to tackle these challenges is to construct CPD programs that provide teachers with both theoretical knowledge of TPACK and practical experience applying it to their classrooms. Ertmer et al. (2013) recommended a blended approach combining face-to-face workshops, online learning, and coaching support. Additionally, Akcayir and Demirbilek (2012) emphasized the importance of creating supportive school environments that encourage technology integration and teacher collaboration.

Integrating TPACK into in-service CPD can be a promising approach to enhancing teacher competence and quality assurance in language education. Schools should nurture a culture of innovation in language teaching and learning by providing teachers with the necessary knowledge, skills, and support.

Research Questions

Based on those landscapes, researchers conducted this study to explore dual issues of integrating TPACK to empower lecturers and assure the teaching quality of the General English program at the investigated HEI. To meet these study objectives, research questions were raised:

1. How do GE lecturers at the participating higher institution perceive their TPACK?
2. How do GE lecturers at the participating higher institution demonstrate their TPACK?

Methods

Pedagogical Setting & Participants

The study was conducted at a public university with a student body of up to 36,000. Among these students, 90% are enrolled in General English courses, which contribute to 6 of the 140 credits required for their degree programs. The participants in the study were all general English instructors (45 tenures and 16 visiting) from the Faculty of Foreign Languages, who had nine to twenty years of experience teaching this subject. These instructors are aged between 33 and 53. Those were officially trained in Technology in Teaching English in their Master's program. Then they were exposed to in-service ICT workshops, namely MsTeams, Zoom meetings, LMS, EduTech in Teaching English, ChatBOT, and AI in Language Education.

The General English program consists of two courses, each worth three credits. The curriculum is designed to develop A2-level proficiency in listening, reading, speaking, and writing skills, using the LIFE (Pre-intermediate) textbook. Students are evaluated through both summative and continuous assessments, which help prepare them for exams like TOEIC, TOEFL, IELTS, and VSTEP at the B1 level. Upon completing both courses, students have the option to take a preparation course aimed at achieving B1 proficiency, which is necessary for obtaining an English certificate required for graduation.

Design of the Study

Creswell's (2014) emphasis on using simultaneous mixed methods underscores the growing recognition that complex social and behavioral matters often require multiple approaches for a comprehensive understanding. Hence, this research employed a mixed-method approach to evaluate instructors' perceptions and demonstrations of their TPACK. The quantitative data was collected from a questionnaire, while a qualitative method was used concurrently to collect evidence of how instructors demonstrated their TPACK competence. The triangulation of data is the foundation for the researcher to identify gaps in the instructors' TPACK competence.

Data collection & analysis

The questionnaire was structured into three sections: (1) Demographics, (2) lecturers' perceptions of TPACK to address research question 1, and (3) lecturers' demonstration of TPACK in the form of a self-report, partially addressing research question 2. Sections 2 and 3 of the questionnaire were adapted from Schmidt et al. (2009). To further answer research question 2, additional qualitative data were collected through class observations and interviews, drawing on Harris (2010).

The quantitative data were analyzed using SPSS 26, employing descriptive statistics to summarize and describe the key features of the dataset. The qualitative data were analyzed using content analysis and thematic analysis.

Results/Findings

GE lecturers' perception of their TPACK

The following section presents and analyzes quantitative survey results to explore GE lecturers' perceptions of their TPACK competencies. Lecturers provided detailed self-assessments of their teaching knowledge, content knowledge, pedagogy knowledge, teaching content knowledge, teaching pedagogy knowledge, and technological knowledge.

The questionnaire was distributed to 61 online and offline instructors based on their preferences and convenience. Out of the 53 instructors who returned their surveys, 5 were incomplete and thus excluded from the data analysis, leaving a total of 48 complete responses.

Table 1.

Self-evaluation of teaching knowledge

Technological knowledge breakdowns	N	Mean	Std. Deviation
TK1 (I know how to solve my own technical problems)	48	3,68	,58
TK2 (I can learn technology easily)	48	3,68	,68
TK3 (I keep up with important new technologies)	48	3,43	,87
TK4 (I frequently play around the technology)	48	3,62	,60
TK5 (I know about a lot of different technologies)	48	3,37	,93
TK6 (I have the technical skills I need to use technology)	48	3,87	,48

The data presents a breakdown of technological knowledge (TK) related to technology use among 48 respondents, with each item measured on a scale. The items assess various aspects of technological competence, including problem-solving (TK1), ease of learning technology (TK2), staying updated with new technologies (TK3), engagement with technology (TK4), familiarity with different technologies (TK5), and possessing necessary technical skills (TK6). The mean scores ranging from 3.37 to 3.87 indicated a generally positive self-assessment across these areas. Standard deviations, ranging from 0.48 to 0.93, showed that responses were not uniform, with the greatest variation in TK5 and the least in TK6.

Table 2.

Self-evaluation of content knowledge

Content knowledge breakdowns	N	Mean	Std. Deviation
CK1 (I have sufficient knowledge of English)	48	3,93	,90
CK2 (I have various ways and strategies of developing my understanding of English)	48	4,00	,94

Table 2 illustrates two components of content knowledge (CK) related to English language proficiency among 48 respondents. CK1, 3.93, and CK2, 4.00 suggest that respondents generally feel confident in their knowledge and strategies for English knowledge. The standard deviations, 0.90 for CK1 and 0.94 for CK2 indicate moderate response variation.

Table 3.

Self-evaluation of Pedagogy knowledge

Pedagogy knowledge breakdowns	N	Mean	Std. Deviation
PK1 (I know how to assess student performance in a classroom)	48	4,00	,94
PK2(I can adapt my teaching based on what students currently understand or do not understand)	48	4,06	,97
PK3 (I can adapt my teaching style to different learners)	48	4,00	,94
PK4 (I can assess student learning in multiple ways)	48	4,00	,94
PK5 (I can use a wide range of teaching approaches in a classroom setting)	48	3,87	1,00
PK6 (I am familiar with common student understandings and misconceptions)	48	4,00	,94
PK7 (I know how to organize and maintain classroom management)	48	4,12	,93

The data outlines pedagogy knowledge (PK) among 48 respondents. The items cover various aspects of pedagogy, such as assessing student performance, adapting teaching based on student understanding, modifying teaching styles for different learners, using multiple assessment methods, employing diverse teaching approaches, understanding common student misconceptions, and managing classroom organization. The average mean scores of 4.0 indicate high confidence in participants' pedagogical skills.

Table 4.

Self-evaluation of Pedagogy Content Knowledge and Teaching Content Knowledge

Pedagogy Content Knowledge and Teaching Content Knowledge	N	Mean	Std. Deviation
PCK (I can select effective teaching approaches to guide student thinking and learning in English)	48	3,87	1,00
TCK (I know about technologies that I can use for understanding and doing English)	48	3,87	,93

The data provides insights into Pedagogical Content Knowledge (PCK) and Technological Content Knowledge (TCK) among 48 respondents, focusing on teaching and technology use in English instruction. The PCK measure reflects respondents' confidence in selecting effective teaching approaches to enhance student learning in English, with a mean score of 3.87 and a standard deviation of 1.00. The TCK measure assesses knowledge of technologies that can be used for teaching and understanding English, also with a mean score of 3.87 and a slightly lower standard deviation of 0.93. These scores suggest that respondents generally feel capable in both areas, with some variation in their self-assessed knowledge and skills.

Table 5.

Self-evaluation of Teaching Pedagogy Content Knowledge

Teaching Pedagogy Knowledge breakdowns	N	Mean	Std. Deviation
TPK1 (I can choose technologies that enhance the teaching approaches for a lesson)	48	3,75	1,15
TPK2(I can choose technologies that enhance students' learning for a lesson)	48	3,81	1,19
TPK3(I am thinking critically about how to use technology in my classroom)	48	3,75	1,04
TPK4(I can adapt the use of the technologies that I am learning about to different teaching activities)	48	3,62	1,17
TPK5(I can select technologies to use in my classroom that enhance what I teach, how I teach, and what students learn)	48	3,75	1,15
TPK6 (I can use strategies that combine content, technologies, and teaching approaches that I learned in my classroom)	48	3,68	1,16
TPK7 (I can provide leadership in helping others coordinate the use of content, technologies, and teaching approaches at my school)	48	3,25	1,10
TPK8 (I can choose technologies that enhance the content for a lesson)	48	3,75	1,15

The data outlines the Teaching Pedagogy Knowledge (TPK) of 48 respondents, focusing on their ability to integrate technology into teaching. The items measure various skills, including choosing technologies to enhance teaching methods (TPK1), enhancing student learning with technology (TPK2), critical thinking about technology use (TPK3), adapting technologies for different teaching activities (TPK4), selecting technologies that complement content and pedagogy (TPK5), combining content, technology, and teaching strategies (TPK6), providing leadership in technology integration (TPK7), and enhancing lesson content with technology (TPK8).

The mean scores range from 3.25 to 3.81, indicating a moderate to high level of confidence in these areas. The standard deviations, ranging from 1.04 to 1.19, suggest considerable variability in respondents' perceived abilities, with the highest variability observed in TPK2 and TPK4. This variability indicates differing levels of confidence in using technology to enhance student learning and adapting technology to various teaching activities.

Table 6.

Content knowledge breakdowns

Content knowledge breakdowns	**N**	**Mean**	**Std. Deviation**
TPACK (I can teach lessons that appropriately combine English, technologies, and teaching approaches)	48	3,68	1,05

Table 4.6 depicts the self-assessed TPACK, which measures respondents' ability to integrate English content, technology, and teaching approaches in their lessons. The mean score of 3.68 suggests that respondents were generally confident in their overall competence.

The quantitative data provides a general overview of how lecturers perceived their TPACK competence. They generally expressed confidence in their technological abilities, English language proficiency, and pedagogical expertise. While mean scores indicate overall positive self-assessment, individual responses varied. It can be interpreted as differing levels of comfort with specific skills, such as technology integration and pedagogical content knowledge.

GE lecturers' demonstration of their TPACK

The data from the questionnaire indicates that lecturers participated in a series of training sessions focused on modern educational technologies designed to enhance teaching and learning experiences. Two-thirds of the participants reported participation in the technology workshop. They reported having attended workshops such as an E-learning Course on Machine Learning, workshops on AI in Language Teaching, innovative teaching methodologies such as STEM education, and interactive tools like Classkick, Quizizz, and the Flipped Classroom model.

The data collected from interviews and class observations showed that only about 9/48 lecturers authentically integrated technology into their instruction. These ten lecturers were coded as T1, T2, T3, T4, T5, T6, T7, T8, and T9. Various ways teachers incorporate the TPACK framework into their teaching practices were recorded as follows. First, teachers are found to integrate technology to enhance content delivery and engage students through diverse pedagogical approaches. For instance, in writing classes, T1, T5, T7, T8, and T9 used Grammarly, ChatGPT, and Gemini to aid students in refining their grammar and spelling while drafting short stories. In an interactive and collaborative learning mode, T2, T4, T6, and T9 employ Quizzes and Classkick apps to reinforce vocabulary, language structures, reading, and listening skills. Additionally, T1, T3, T6, T7, and T9 utilize tools like Canva for student presentations and Google Docs for writing tasks, through which creativity and teamwork in task-based assignments were promoted. In conversation classes T4, T5, T7, T8, and T9, students were guided to practice dialogue in pairs, record their interactions, and submit them via MS Teams for feedback. For pre-reading activities, T5, T7, T8, and T9 used digital quizzes and Kahoot to make students build vocabulary in an entertaining mode. T1, 3, and 5 used Padlet and "Write & Improve" to foster project-based learning. Students could write and receive constructive feedback on past event narratives in this mode. All participants reported on using available YouTube videos as supplementary sources for their lessons. In brief, the interview and observation resulted in participants' diverse use of technology, demonstrating a commitment to

engaging students and enhancing learning outcomes. Owning to integrate various digital tools, teachers motivate students and equip them with essential skills for the digital age.

Discussion

The quantitative data revealed that participants were generally confident in their overall TPACK competence. However, the high standard deviation indicated significant variation among them. The finding further supported this trend that only a small percentage of lecturers had participated in ICT professional development activities, despite achieving C1-level proficiency in exams like VSTEP or IELTS to meet the Ministry of Education and Training (MOET) requirements for tertiary lecturers.

As can be seen from the qualitative data collected in section three of the questionnaire, the fact that only five out of forty-eight lecturers described their TPACK in the classroom suggests that lecturers rarely integrate technology effectively into their classrooms. This finding aligns with Arnold and Ducate's (2015) assertion that language teachers still struggle to fully leverage technology's pedagogical benefits. Susanto and Yosephine (2019) attribute this lack of usage to the perceived excessive time and effort required, which may deter teachers from realizing technology's full potential. One potential solution is to facilitate internal sharing workshops among General English lecturers to exchange TPACK competencies. This approach echoes Ding et al.'s (2019) suggestion that supporting teachers is crucial for them to recognize how technology can enhance their classrooms. More seriously, in the AI-prone era, the limited pedagogical design of the AI apps or the teachers' insufficient pedagogical understanding may be the root of the problems with the implementation of AI in the classroom, according to Rieland (2017) and Zawacki-Richter (2019). Vo and Le (2023) also discovered challenges lecturers face in online teaching, including finding effective strategies to motivate and interact with learners, insufficient training in designing lesson content that incorporates technological tools, and technical issues that affect the teaching and learning process. Lecturers who lack updated knowledge of AI tools risk falling behind their students and may struggle to detect cheating effectively. However, AI tools do not need to be highly sophisticated; they can include everyday applications that many already use. For example, Nguyen and Pham (2022) found that tools such as PowerPoint, YouTube, speech recognition software, and films can significantly enhance the oral communication skills of EFL learners.

Lecturers who claimed to have taken Edtech courses showed higher confidence in applying technologies when teaching GE. This result aligns with Kao *et al.* (2020) claiming that prior experience with the internet can boost teachers' confidence in their ability to participate in web-based professional development programs focused on technology integration in the classroom. This, in turn, can lead to more positive views among teachers about the role of technology in education. Moreover, technology also facilitates lecturers' testing preparation. Le (2024) suggested offering more training sessions to guide lecturers on using the chatbot for test design. Additionally, encouraging lecturers to actively participate in a knowledge-sharing community can help maximize the effectiveness of ChatGPT's features in this area.

Letting teachers evaluate their own TPACK competence is a good start to designing a CDP

program. This idea can be firmly based on Mark and Swapna (2014), who developed an educational technology course for preservice social studies teachers based on the Technological Pedagogical Content Knowledge (TPACK) framework (Mishra & Koehler, 2006).

Implications

The findings from quantitative data formed the foundation for implementing lecturers' CPD, particularly in the context of integrating technology into teaching. First, the significant variation in TPACK competence among lecturers, coupled with the low participation in ICT professional development activities, indicates a pressing need for more targeted and accessible training programs. Tailored programs should not only focus on enhancing technological skills but also emphasize the pedagogical integration of technology, as many lecturers struggle to effectively use these tools in their classrooms.

The qualitative data shows that only a small fraction of lecturers are actively integrating TPACK in their teaching, which aligns with broader challenges identified in the literature regarding the effective use of technology in education. It is recommended that institutions conduct internal workshops for lecturers to exchange their experiences and strategies for using technology in the classroom, learn from one another, and collectively improve their TPACK competence.

In addition, educators in the AI era must be equipped to use edTech tools and understand their pedagogical implications. Lecturers' limited use of AI tools detrimentally disadvantages them compared to their students. Self-assessment of their TPACK competence could be a valuable starting point for conducting tailored internal CPD workshops for lecturers.

Conclusion

TPACK has been widely recognized by language educators globally. However, many institutions have not yet found ways to integrate it effectively, especially in public institutions, where lecturers were in a secure tenure status and unwilling to embrace new technology after their official training. Consequently, their early-equipped TPACK was deemed to fade away in a secure teaching environment, resulting in low-quality teaching and learning outcomes.

All educators are required to attain the Certificate of Basic Computer Science. While the majority are adept at utilizing AI tools for educational purposes, they encounter challenges in integrating these tools into their instructional practices. Therefore, there is a pressing need for additional workshops focused on AI tools and their application within the academic context. Furthermore, the adoption of electronic lectures should be promoted to afford students the opportunity to revisit and expand upon lesson content. Institutions launched the electronic lecture project at the outset of the new semester in 2024. However, it is currently in its nascent stage and is subject to limitations in certain disciplines due to a scarcity of video recording equipment. There is an imperative need for precise guidance and comprehensive support in terms of facilities to ensure the production of high-caliber video content for future utilization. All educators must undergo a competency assessment test such as IELTS or VSTEP to attain the standard level of teaching.

Furthermore, they should be well-versed in the latest educational trends and methodologies.

Convening conferences within university faculties, across city-based universities, and even on a national or international scale is essential for addressing in-class issues and exchanging teaching methods. While renowned organizations like Macmillan, Oxford, and Cambridge have been organizing such events for an extensive period, Vietnam requires further development of these workshops due to the different study contexts and educational backgrounds.

Thus, recommendations involved encouraging peer observation to share TPACK knowledge, offering internal workshops to refresh TPACK skills, participating in external workshops on AI in TESOL, and attending various TESOL conferences to improve teaching skills. Moreover, incorporating TPACK competencies into teacher evaluations, particularly observation strategies, is recommended to recognize and incentivize effective teaching practices. These approaches promise to enhance the quality of general English teaching in the digital era.

Acknowledgment

We would like to express our deepest gratitude to all those who contributed to the completion of this study. First and foremost, we extend our sincere thanks to the lecturers who participated in our research. Their insights and willingness to share their experiences provided invaluable data for our analysis. We are also grateful to the faculty managers at the participating institution for their support and cooperation throughout the study.

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