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Research Article

Uncovering the Expectations of English as a Foreign Language Students: Key to Improving Teacher Expertise and Technological Pedagogical Content Knowledge Mastery

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ABSTRACT

Introduction: In the current digital age, it is crucial for education to evolve to meet the changing demands of students. English language education is one such field that has been impacted by the growing expectation among students that their teachers use technology to facilitate learning. The objective of the present study was to assess the expectations of English as a Foreign Language (EFL) students regarding the proficiency of their English teachers in using technology for instructional purposes, using the Technological, Pedagogical, and Content Knowledge (TPACK) framework.
Methodology: This study utilized a quantitative approach, and data was collected through a 22-item e-questionnaire to measure the students' expectations of their English teachers' TPACK competence. The sample consisted of 363 EFL students from two universities in the Mekong Delta, Vietnam.
Results: The results showed that pedagogical knowledge was the most expected component by students, while technological knowledge was the least expected. To put it differently, the students desired their English teachers to excel in structuring lessons, managing the classroom, evaluating and assessing their progress, and being able to provide various learning experiences that catered to the unique requirements and preferences of individual learners. However, the students were not particularly concerned about their teachers' proficiency in using various digital tools, hardware, software, and technological resources.
Conclusion: The findings of this study highlighted the importance of improving English teachers' TPACK competence through TPACK-centered professional development programs. This study provides practical strategies for the same and opens up avenues for future research in this field.

1. Introduction

The landscape of English as a Foreign Language (EFL) pedagogy has undergone significant transformation in recent times, driven by increasing globalization and the widespread recognition of English as the primary medium for intercultural communication (Xue & Zuo, 2013). This shift has underscored the need for proficient and skilled EFL educators. The Technological Pedagogical Content Knowledge (TPACK) framework, introduced by Mishra and Koehler (2006), offers a comprehensive approach to evaluate and enhance teachers' capabilities in integrating technology into their pedagogical practices.

Understanding students' expectations is crucial for designing and implementing effective professional development programs for teachers (Paechter et al., 2010; Sander et al., 2000). As the primary beneficiaries, students are directly affected by their teachers' adeptness in incorporating technology into their teaching methodologies (Masry-Herzalah & Dor-Haim, 2022), and their perceptions of EFL teachers' TPACK competencies can provide invaluable insights into areas requiring improvement or

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further development.

Despite the importance of aligning teacher competencies with student expectations, there appears to be a dearth of research investigating the potential disparities between EFL students' expectations and their teachers' current TPACK competencies. This gap in the literature hampers the development of targeted professional development programs and limits our understanding of how to effectively enhance EFL teaching practices.

Therefore, this study aimed to examine EFL students' expectations regarding their teachers' TPACK competencies and explore the implications for teacher professional development. Furthermore, it seeks to identify potential discrepancies between students' expectations and teachers' existing levels of TPACK competencies, thereby contributing to the growing body of research on technology integration in language pedagogy. Ultimately, the findings of this study will inform the design and implementation of tailored professional development programs aimed at improving EFL teachers' TPACK competencies to better meet the needs of their students.

2. Literature review

2.1 Technological pedagogical and content knowledge

The TPACK framework embodies a holistic approach to appraising and cultivating educators' aptitudes in the efficacious amalgamation of technology into their pedagogical practices. The TPACK paradigm, proposed by Mishra and Koehler (2006), accentuates the intricate interdependence of the essential tripartite constituents of pedagogical erudition, namely technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK). This schema asserts that proficient incorporation of technology into instruction and learning mandates a nuanced apprehension of the subject matter, an adroitness in pedagogical methods, and a reasonable employment of technology. An educator with advanced TPACK acumen is furnished with the cognition and prowess to make astute determinations regarding the consummate utilization of digital instruments and resources in the classroom, as well as the ability to adeptly communicate intricate notions through the execution of proper pedagogical techniques and stratagems (Benson & Ward, 2013; Erdogan & Sahin, 2010).

The cultivation of TPACK stipulates that pedagogues possess an exhaustive comprehension of the subject matter they disseminate, encompassing the cardinal principles, notions, and viewpoints of their discipline (Li et al., 2022). This necessitates mastery of instructional methodologies, pedagogical theories, and classroom management techniques that underpin and enable efficacious teaching and learning (Flores et al., 2004; Shulman, 2000; Sonia, 2017). Moreover, educators must maintain an extensive familiarity with a wide array of digital instruments, software, and hardware (i.e., TK) that can be harnessed in academic environments to enhance and optimize the learning experience (Chai et al., 2010; Phaal et al., 2004). Also, this necessitates a comprehensive grasp of the subject matter within a specific discipline, including the fundamental principles, concepts, theories, and practices pertinent to that particular field of study (i.e., CK), which serves as the foundation for efficient teaching and learning (Ball et al., 2008; Schmidt et al., 2009). Moreover, educators must be adept at discerning connections between related concepts and elucidating intricate ideas in an accessible manner, thus fostering a deeper understanding and nurturing critical thinking and problem-solving skills among learners. The amalgamation of these triadic knowledge domains (i.e., TPACK) is indispensable for engendering meaningful, enthralling, and fecund educational experiences for learners. The TPACK framework proffers an invaluable blueprint for pedagogues, pedagogical educators, and educational policymakers in the conceptualization and realization of professional growth programs aimed at fortifying educators' competencies in the integration of technology into their instructional practices, ultimately culminating in augmented student learning outcomes.

2.2. Technological knowledge

Technological knowledge epitomizes a crucial component of the TPACK framework, which examines the educator's awareness and adroitness with an array of technological modalities (Phaal et al., 2004). The TPACK paradigm encompasses TK as the comprehension and familiarity with diverse digital instruments, hardware, software, and technological assets that can be harnessed in scholastic environments to cultivate and enhance pedagogical practices. Pedagogues possessing a robust TK are equipped to make astute selections, employ, and integrate appropriate technologies into their instructional methodologies (Chai et al., 2010). They are acquainted with an extensive gamut of digital tools and resources, discerning the merits and demerits of each, and possess the capacity to acclimate to novel and emerging technologies as they materialize.

2.3. Pedagogical knowledge

Pedagogical knowledge embodies a pivotal constituent within the ambit of the TPACK framework. It pertains to the educator's exhaustive comprehension of the theories, strategies, and axioms of teaching and learning, encompassing an expansive array of facets such as lesson schematization, classroom orchestration, evaluation, and assessment, as well as the aptitude to facilitate a diverse repertoire of learning experiences tailored to the idiosyncratic needs and predilections of individual learners (Shulman, 2000). In the context of the TPACK paradigm, pedagogues boasting a robust PK exhibit dexterity in the employment of efficacious instructional approaches, the contrivance of enthralling learning activities, and the cultivation of an inclusive learning milieu (Flores et al., 2004; Sonia, 2017). They possess an understanding of assorted learning theories and instructional models and are capable of adapting their pedagogical practices correspondingly to optimize student learning outcomes.

2.4. Content knowledge

Content knowledge constitutes a crucial facet of the TPACK framework, which epitomizes the interplay of cognizance in the realms of technology, pedagogy, and content. It encompasses the comprehension of the subject matter or discipline being disseminated, incorporating the salient concepts, theories, and principles associated with that particular domain (Ball et al., 2008). CK is indispensable for pedagogues, as it empowers them to convey precise and germane information to their learners, thereby fostering a comprehensive apprehension of the subject matter. Within the TPACK paradigm, educators boasting a robust CK possess an unwavering command of the subject they instruct and can proficiently articulate the material to their learners (Schmidt et al., 2009). They maintain an awareness of the cardinal concepts, ideas, and perspectives within their discipline and can organize and sequence the information in a manner that enables student learning. Moreover, they are equipped to identify and address prevalent misconceptions and challenges that learners may encounter while assimilating the subject matter.

2.5. Technological pedagogical knowledge

The Technological pedagogical knowledge (TPK) constituent of the TPACK framework pertains to the fusion of TK and PK. TPK encompasses an educator's awareness and execution of the most efficacious methodologies for integrating technology into their pedagogical practices, thereby enhancing the teaching and learning processes. In the context of the TPACK paradigm, pedagogues who boast robust TPK possess the capacity to ascertain the most suitable technologies to buttress their instructional techniques and are well-versed in the potential merits and demerits of these technologies within an educational setting (Lachner et al., 2019). They demonstrate adroitness in utilizing technology to engender innovative and captivating learning experiences, adapting their teaching methodologies to harness the capabilities of digital instruments, and discerning how technology can be employed to address a diverse array of learning needs and predilections. TPK focuses specifically on the nexus of technology and pedagogy.

2.6. Technological content knowledge

The confluence of CK and TK is denoted by the notion of Technological content knowledge (TCK) within the TPACK framework. TCK encompasses an educator's aptitude to harness technology to enhance the representation, communication, and exploration of the subject matter, thereby elevating the learners' educational experience. In the context of TPACK, pedagogues boasting a potent TCK possess the proficiency to astutely select and employ technology to effectively convey intricate concepts and ideas within their discipline, rendering the subject matter more accessible and enthralling for students (Chai et al., 2013). They are well-versed in discerning the potential of various digital instruments to augment the acquisition of specific content, while also cognizant of the constraints and potential challenges that may ensue when integrating technology into their pedagogical practices. TCK concentrates on the nexus between technology and content.

2.7. Pedagogical content knowledge

Pedagogical content knowledge (PCK), as a quintessential facet of the TPACK framework, epitomizes the interplay between PK and CK. PCK signifies an educator's aptitude to adroitly transmit subject matter to learners through the application of germane pedagogical approaches specifically calibrated to the content being disseminated. The concept of PCK was initially introduced by Shulman (1986) to accentuate the salience of the relationship between pedagogy and content in the educational process. Within the context of the TPACK paradigm, pedagogues who boast robust PCK possess an in-depth comprehension of the subject they instruct and are proficient in employing a gamut of teaching methodologies to effectively convey intricate ideas and principles to their learners (Voogt et al., 2013). They are well-versed in recognizing the potential difficulties and misconceptions that learners may encounter while assimilating the content and are equipped to devise instructional strategies to address these challenges. PCK enables educators to translate their CK into an accessible, engaging, and meaningful format for their learners. PCK specifically underscores the nexus of pedagogy and content.

While each component contributes to enhancing the quality of teaching and learning, the TPACK framework accentuates the importance of the integration of all three core components (i.e., CK, PK, and TK) to attain a comprehensive understanding of pedagogical practices. Developing TPACK necessitates that teachers seamlessly amalgamate their knowledge in these domains, allowing them to create compelling learning experiences for their learners by employing appropriate technologies and pedagogical methods in the context of their subject matter.

3. Methodology

3.1. Research design

This study aimed to discern EFL learners' expectations of their instructors' TPACK proficiencies amid the escalating demand for technology integration in English language pedagogy. Utilizing the TPACK model as a theoretical framework, a quantitative research methodology was employed to systematically and objectively assess learners' expectations across TPACK's seven dimensions. The quantitative approach enabled the computation of mean scores for each TPACK component (Rahman, 2017), facilitating comparative analysis, enhancing the potential for generalizability (Hughes & Garrett, 1990), and yielding reliable, consistent results (Sürücü & Maslakçi, 2020). The 22-item questionnaire expedited data collection, providing a comprehensive understanding of learners' expectations

and informing the identification of areas necessitating improvement or further development.

3.2. Ethical approval

This study was approved by the relevant ethics committees, and all participants provided informed consent before participating in the study.

3.3. Participants

The study's participants comprised 363 EFL students from a diverse demographic, encompassing disparate cultural, linguistic, and educational backgrounds, as well as heterogeneous English language proficiency levels. Enrolled in two higher education institutions in the Mekong Delta of Vietnam, their EFL courses may have exhibited variations in pedagogical objectives, curriculum design, and teaching modalities. The study employed a non-probabilistic, convenience sampling methodology, selecting participants based on accessibility and availability rather than through random sampling. Researchers recruited participants from various EFL courses and institutions where students could participate in the study. Despite the ease and expeditiousness of convenience sampling, it potentially limits the generalizability of the study's results, as the sample may not entirely represent the broader EFL student population.

3.4. Questionnaire as a data collection instrument

The questionnaire consisted of 22 items in a Likert scale and aimed to evaluate the students' expectations of their English teachers' competency in TPACK domains (See Appendix A). The items included in the questionnaire were developed based on previous studies in the field (e.g., Ball et al., 2008; Chai et al., 2010; Flores et al., 2004; Li et al., 2022; Phaal et al., 2004; Schmidt et al., 2009; Shulman, 2000; Sonia, 2017). The questionnaire was designed in Vietnamese, which is the participants' mother tongue. The e-questionnaire outlined in this study was used to gather information from students who speak Vietnamese as their mother tongue.

The questionnaire assessed the students' perceptions of their instructors' proficiency in various TPACK components, such as:

- TK - Teachers' comprehension of technology and its pedagogical applications. (3 items)
- PK - Teachers' understanding of educational theories and practices. (5 items)
- CK - Teachers' subject matter expertise and content knowledge. (4 items)
- TPK - Teachers' insight into technology's role in bolstering teaching and learning. (4 items)
- TCK - Teachers' grasp of technology's function in content delivery and learning. (4 items)
- PCK - Teachers' aptitude for effectively teaching specific content. (4 items)
- TPACK - The amalgamation of TK, PK, and CK in teachers' practices.

The questionnaire aimed to capture students' expectations of their instructors' competencies in these TPACK components. The data procured through this instrument can elucidate students' perceptions of instructors' technology integration abilities and identify areas necessitating further support or professional development.

To ensure the instrument's reliability and validity, multiple steps were undertaken to ascertain its accuracy and dependability. A preliminary test was administered to a subset of 50 individuals to identify potential ambiguities or biases in the questionnaire's design and content, enabling refinement and accurate measurement of the intended variables. It is worth noting that no modifications were required for the questionnaire as it was developed with great care to ensure its reliability and validity. To assess the instrument's reliability, an internal consistency technique analyzed the correlation between items, confirming their measurement of the same underlying construct. Furthermore, a Scale test was administered using the Statistical Package for Social Sciences (SPSS) to verify the Cronbach's alpha coefficient of the instrument. The obtained results evinced that the questionnaire exhibited high reliability, with an alpha coefficient of α=.92. The questionnaire's design and development were facilitated by an expert in innovation-based research, further bolstering its reliability and validity. Consequently, the questionnaire was meticulously constructed to ensure both reliability and validity.

3.5. Procedure

The procedures of this study involved the following steps. The researchers designed a questionnaire based on previous literature, which aimed to assess EFL learners' expectations of their English instructors' competency in TPACK domains. After the questionnaire was developed, it was forwarded to three distinguished specialists with experience in carrying out research concerning innovation within the sphere of English pedagogy and learning. The intent of this action was to ascertain that the questionnaire items were comprehensible and possessed the requisite validity to gauge the specific aspects central to the study's focus. The experts proffered commentary on the questionnaire, which did not deviate substantially from the original instrument. Consequently, the questionnaire underwent only minor revisions prior to its progression to the subsequent phase. The questionnaire was then pilot-tested to identify potential ambiguities or biases in the instrument's design and content, allowing for refinement and accurate measurement of the intended variables. The researchers sent consent letters to students learning English as a foreign language at two different universities in the Mekong Delta of Vietnam, inviting them to participate in the study. After obtaining informed consent from the participants, the researchers sent the official questionnaire to the students, which consisted of 22 items and was written in Vietnamese. The reliability of the data obtained through the questionnaire was checked through a Cronbach Alpha

provided by SPSS version 29. An internal consistency technique was also used to analyze the correlation between items, confirming their measurement of the same underlying construct. The data were analyzed using mean scores and ranking, allowing researchers to discern the relative salience of each TPACK component from the students' standpoint. Paired-sample t-tests were conducted to determine whether significant differences existed between the TPACK component clusters. The results were presented in the paper, offering insights into students' expectations and priorities regarding their English instructors' TPACK competencies.

3.6. Data analysis

Subsequent to the notification of the termination of data gathering, the investigative team initiated a process to verify the dependability of the survey instrument via the utilization of the Scale test. The outcomes of this assessment signified that the amassed data possessed sufficient reliability to facilitate additional examinations (αTPACK = .92), as previously delineated. In addition, the feedback derived from each designated cluster was subjected to an analysis to confirm the consistency of each respective entity (αPK = .90; αCK = .94; αTK = .92; αPCK = .90; αTPK = .94; αTCK = .91).

The quantitative data analysis implemented in this inquiry entailed the computation of mean scores for each TPACK component, ascertained from responses obtained via the electronic questionnaire. These mean scores acted as a barometer of the average level of expectations harbored by students vis-à-vis their English instructors' proficiencies in each TPACK component. The computation of these mean scores enabled researchers to discern the relative salience of each TPACK component from the students' standpoint. Subsequently, the TPACK components were ranked based on these mean values, providing a perspicuous depiction of the areas of TPACK considered most crucial by students alongside those deemed less significant.

This ranking mechanism facilitated the identification of the components in which students held the highest expectations, as well as those with relatively lower expectations. Through scrutinizing these rankings, researchers gleaned insights into students' priorities and predilections pertaining to their English instructors' technology integration, pedagogical competencies, and content knowledge. Such insights can inform the development and execution of teacher professional development initiatives targeting areas deemed most significant by students, thereby fostering more efficacious and engaging EFL teaching practices.

Furthermore, paired-sample t-tests were conducted to determine whether significant differences existed between the TPACK component clusters. P-values were calculated, and if they were less than .05, they indicated the presence of significant differences. These tests provided additional valuable insights into the students' expectations and priorities regarding their English instructors' TPACK competencies.

4. Results and Discussion

Table 1 presents the outcomes derived from the Descriptive Statistics analysis pertaining to the students' anticipations of the six primary TPACK clusters.

The findings of this investigation divulged that students harbored significantly elevated expectations concerning their instructors' TPACK proficiency, exemplified by a mean score of 4.42. Specifically, students held high expectations for their English instructors to demonstrate expertise in PK, as denoted by the highest mean score of 4.58, closely succeeded by CK at 4.57 and PCK at 4.53. Moreover, students anticipated instructors to exhibit proficiency in TPK with a mean score of 4.51 and TCK at 4.39. However, students possessed the lowest expectations for instructors' TK, with a mean score of 4.02.

The outcomes of this study, which accentuate the significance of pedagogical and content-related aspects in students' expectations of their English instructors' TPACK proficiency, can be contrasted and compared with prior investigations in this domain. This study's findings concur with previous research underscoring the importance of PK and CK in the realm of English language education. For instance, Shulman (1986) emphasized the crucial role of PCK, which encompasses PK and CK, as a fundamental aspect of teaching proficiency. The preeminence of PK and CK in students' expectations implies that instructors' foundational comprehension of efficacious teaching methods and the subject matter remains paramount, even in the context of technology integration (Kaplon-Schilis & Lyublinskaya, 2020).

Conversely, the comparatively diminished expectations for instructors' TK could be construed in various ways. One potential elucidation is that students may not entirely grasp the benefits of technology integration in English language education (Vo et al., 2020) or may have experienced limited exposure to technology-enhanced learning environments (Young et al., 2003). This interpretation aligns with prior research, which indicates a dearth of technology integration in language teaching due to various obstacles, such as restricted access to resources, insufficient teacher training, and instructors' attitudes toward the role of technology in language education (e.g., Ertmer, 2005; Liu, 2013).

Additionally, the lower priority assigned to TK in students' expectations may also exemplify the intricate and

Table 1.
Students' Expectations of Their Teachers' Technological Pedagogical Content Knowledge Competences

Cluster	N	Min	Max	Mean	SD
PK	363	1.00	5.00	4.58	.75
CK	363	1.00	5.00	4.57	.73
PCK	363	1.00	5.00	4.53	.70
TPK	363	1.00	5.00	4.51	.72
TCK	363	1.00	5.00	4.39	.74
TK	363	1.00	5.00	4.02	.99
TPACK	363	1.00	5.00	4.42	.66

perpetually evolving nature of technology, with continuous advancements making it challenging for instructors to stay abreast of the latest developments. This conclusion corresponds with previous studies emphasizing the indispensability of continuous professional development to aid instructors in seamlessly integrating technology into their teaching methodologies (e.g., Koehler & Mishra, 2009; Tondeur et al., 2012).

In summary, the results of this investigation concur with prior studies emphasizing the importance of a well-rounded approach to teacher professional development, encompassing not only technological proficiency but also pedagogical and content-related knowledge. Within the TPACK framework, this suggests that instructors necessitate support in fostering an in-depth understanding of how to effectively integrate technology into their pedagogy in a manner that enriches student learning outcomes while preserving a robust foundation in pedagogical and content knowledge.

Drawing upon the evidence procured from the paired sample t-test in Table 2, it has been discerned that the students' anticipations related to the TK component received less favorable assessments in contrast to the CK, PK, PCK, TPK, and TCK components, substantiated by a statistically significant p-value of less than 0.05. However, the distinction in the students' anticipations concerning CK and PK, CK and PCK, as well as CK and TPK components, did not achieve a level of statistical significance ($p > 0.05$).

Table 2.
A comparison of the Technological Pedagogical Content Knowledge components

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	SD	SEM	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	TK - CK	-.55	.88	.05	-.64	-.46	-11.83	362	.00
Pair 2	TK - PK	-.56	.92	.05	-.66	-.47	-11.58	362	.00
Pair 3	TK - PCK	-.51	.89	.05	-.60	-.42	-10.84	362	.00
Pair 4	TK - TPK	-.49	.87	.05	-.58	-.40	-10.76	362	.00
Pair 5	TK - TCK	-.37	.83	.04	-.45	-.28	-8.38	362	.00
Pair 6	CK - PK	-.01	.49	.03	-.06	.04	-.47	362	.64
Pair 7	CK - PCK	.04	.45	.02	-.01	.09	1.69	362	.09
Pair 8	CK - TPK	.06	.52	.03	.00	.11	2.05	362	.04
Pair 9	CK - TCK	.18	.59	.03	.12	.24	5.89	362	.00
Pair 10	PK - PCK	.05	.38	.02	.01	.09	2.62	362	.01
Pair 11	PK - TPK	.07	.51	.03	.02	.12	2.52	362	.01
Pair 12	PK - TCK	.19	.56	.03	.14	.25	6.63	362	.00
Pair 13	PCK - TPK	.02	.41	.02	-.03	.06	.75	362	.45
Pair 14	PCK - TCK	.14	.48	.02	.09	.19	5.67	362	.00
Pair 15	TPK - TCK	.13	.40	.02	.08	.17	6.05	362	.00

Furthermore, it has been observed that the anticipations associated with the CK, PK, PCK, and TPK components were rated more favorably as opposed to those associated with the TCK component, confirmed by a p-value of less than 0.05. Lastly, statistically significant divergences were discovered when comparing the students' anticipations concerning PCK and TPK, PCK and TCK, and TPK and TCK components, with a p-value of less than 0.05.

The results obtained from the current investigation bear some interesting correlations and deviations from previously published studies. On the one hand, the less favorable assessments related to the TK component echo the findings of prior research, which also indicated lower student expectations for this particular facet of learning (Sandholtz & Reilly, 2004). This may be attributed to the perceived complexity or unfamiliarity of technology-based learning components among students, a conclusion that aligns with the work of Bains et al. (2022).

On the other hand, the lack of statistical significance observed in the distinctions between students' anticipations concerning CK and PK, CK and PCK, and CK and TPK components seem to contradict the findings of Akyuz (2018), who reported significant differences in these areas. This discrepancy may suggest varying methodology or sample characteristics between the studies, which warrants further examination.

The more favorable ratings associated with CK, PK, PCK, and TPK compared to the TCK component resonate with the observations made by Kim et al. (2022). They suggested that students tend to rate more traditional, non-technology-based components of learning more favorably, likely due to their familiarity and comfort with these aspects.

Lastly, the significant divergences observed between the students' anticipations concerning PCK and TPK, PCK and TCK, and TPK and TCK components align with the results from the research by Jacob et al. (2020). This similarity reinforces the broader consensus on the distinctive nature of these components and their different impacts on students' expectations.

5. Conclusion

The escalating need for adept EFL instructors, propelled by the rise of English as a global lingua franca, underscores the utility of the TPACK framework for assessing educators' technology integration. This study, leveraging a quantitative approach and data from 363 students, probed students' anticipations of teachers' TPACK skills, spotlighting areas necessitating enhancement. Results indicated students prioritized pedagogical and content-related competencies over technological skills, underscoring the imperative for comprehensive professional development across all TPACK facets. This

study enriches the corpus of research on technology integration in language instruction and provides insights for tailoring professional development programs to bolster EFL instructors' TPACK skills, thereby optimizing pedagogical effectiveness. The study's implications highlight the necessity for continuous, adaptable professional development initiatives, incorporating students' perspectives, and addressing proficiency gaps. Such targeted initiatives can augment EFL teaching and learning experiences, ensuring relevance in catering to contemporary learners' needs.

Despite valuable insights from this inquiry into EFL students' anticipations of instructors' TPACK abilities, several restrictions exist. The study's sample constituted 363 EFL students, thereby limiting the findings' generalizability. The utilization of a quantitative approach and a 22-item questionnaire, while providing mean scores and rankings, might not fully capture the nuances of students' perspectives. The data collection was based on self-reported expectations, potentially susceptible to biases or inaccurate perceptions. Future research could integrate additional data sources such as observations or interviews for more comprehensive insights. This study, focusing exclusively on students' expectations, overlooked the impact of contextual factors like prior experiences with technology or resource availability. Future research could explore these influences. Lastly, the cross-sectional design provides a snapshot in time, limiting the examination of temporal changes or causality. Longitudinal or experimental designs could address this limitation.

Declarations

Competing interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Authors' Contribution

The authors contributed equally to this study, including the design, data collection, analysis, and writing of the manuscript.

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Availability of data and materials

The data generated and analyzed during this study are available and held by the researchers.

Ethical considerations

All authors undertake plagiarism verification, proffer publishing approval, monitor potential misconduct, scrutinize for data fabrication and/or falsification, evaluate instances of duplicate publication and/or submission, and assess redundancy.

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Appendix A

Questionnaire on students' expectations of their English teachers' competency in TPACK domains

Items	Strongly unsatisfied	Unsatisfied	Neutral	Satisfied	Strongly satisfied
1. I anticipate that my English lecturers will possess the skills to troubleshoot hardware-related technical issues (TK).					
2. I anticipate that my English lecturers will have the capacity to address various computer software-related problems (TK).					
3. I expect my English lecturers to demonstrate the ability to assist students with resolving technical problems with their personal computers (TK).					
4. I anticipate that my English lecturers will possess the expertise to strategically sequence the concepts taught within my class (PK).					
5. I expect my English lecturers to have the ability to determine the scope of concepts taught within my class (PK).					
6. I anticipate that my English lecturers will have the capacity to develop materials in alignment with specific standards (PK).					
7. I expect my English lecturers to have the ability to employ a range of teaching strategies to communicate various concepts to students (PK).					
8. I anticipate that my English lecturers will possess the adaptability to modify their teaching methodology based on student performance/feedback (PK).					
9. I expect my English lecturers to have the ability to confidently develop lesson plans with a deep appreciation for the subject matter (CK).					
10. I anticipate that my English lecturers will have the capacity to identify the most appropriate strategy to teach specific content (CK).					
11. I expect my English lecturers to have the ability to facilitate students in recognizing connections between various lessons within a curriculum (CK).					
12. I anticipate that my English lecturers will possess the discernment to distinguish between correct and incorrect problem-solving attempts by students (CK).					
13. I expect my English lecturers to have the ability to predict potential student misconceptions within a particular topic (PCK).					
14. I anticipate that my English lecturers will have the capacity to foster interactivity among students (PCK).					
15. I expect my English lecturers to have the ability to implement a variety of English teaching methods (PCK).					
16. I anticipate that my English lecturers will have the capability to create a learning environment conducive to the development of new knowledge and skills (PCK).					
17. I expect my English lecturers to have the ability to effectively moderate student interaction (TPK).					
18. I anticipate that my English lecturers will possess the skills to use various courseware programs for instructional delivery (TPK).					
19. I expect my English lecturers to have the ability to use technological representations (e.g., multimedia, visual demonstrations) to elucidate specific concepts (TPK).					
20. I anticipate that my English lecturers will have the capacity to implement a curriculum in an environment conducive to student learning and success (TPK).					
21. I expect my English lecturers to have the ability to meet the comprehensive demands of English teaching (TCK).					
22. I anticipate that my English lecturers will possess the skills to use technology to create effective representations of content that diverge from textbook knowledge (TCK).					
23. I expect my English lecturers to have the ability to utilize technology in student assessment to modify instruction (TCK).					
24. I anticipate that my English lecturers will have the capacity to use technology to predict students' skill/understanding of a specific topic (TCK).					