UNDERSTANDING EFL TEACHERS' KNOWLEDGE AND SKILLS VIA TPACK FRAMEWORK

Nguyen Tien Dung

Thanh Do University
Email: *ntiendung1005@gmail.com*

Received: 27/11/2022
Reviewed: 28/11/2022
Revised: 7/12/2022
Accepted: 27/12/2022

DOI: *https://doi.org/10.58902/tcnckhpt.v1i2.23*

Abstract:

This qualitative study aimed to understand English as a Foreign Language (EFL) teachers' knowledge and skills concerning the integration of Information and Communication Technology (ICT) into classroom teaching practices at a private university in Vietnam. The Technological Pedagogical and Content Knowledge (TPACK) framework was used to guide research design, data collection, and data analysis. Findings show that participants vary significantly in terms of knowledge and skills needed by EFL teachers. The study suggests that to support meaningful integration, EFL teachers need to develop three key knowledge types: technology, pedagogy and content, and the skills to combine these types of knowledge.

Keywords: *English as a foreign language; ICT in English language teaching; Integration of information and communication technologies; Teachers' knowledge and skills; Technological pedagogical and content knowledge framework.*

1. Introduction

English as a foreign language (EFL) is where English is taught as a subject to students, and where the broader community does not use English for everyday communication. Students in the EFL context, therefore, have few opportunities to use English both inside and outside classrooms, as is the case in a Vietnamese private university.

Over the years, English language teaching and learning methodologies have changed from traditional teaching methods, known as teacher-centred methods, to more student-centred methods, such as Communicative Language Teaching (CLT), Task-Based Learning (TBL), and Skill-Based Approach (Son, 2018). The objectives of these changes are to engage students in more active learning, and to encourage them to collaborate to enhance their communicative English competence. Simultaneously, the growing advancement of ICT, such as computers, smart phones and innovative interactive software, has the potential to engage students more actively in the learning process and to bring authentic English learning experiences into classrooms to improve the quality of both teaching and learning.

While it is argued that there is no *one best way* to integrate ICT into teaching, the intersection of three key knowledge types of technology, pedagogy and content, plus the relationships among and between these bodies of knowledge, is considered the "heart of good teaching with technology" (Koehler & Mishra, 2009, p. 62). Koehler and Mishra (2006) developed the Technological Pedagogical and Content knowledge (TPACK) framework by adding the component of *technology* into Shulman's concepts of Pedagogical and Content Knowledge (PCK). Since then, TPACK has been used to study the adoption

of ICT in teaching and learning in various subject areas and thus was employed as a framework in this study to understand EFL teachers' knowledge and skills needed to teach in the 21st century.

To understand EFL teachers' knowledge and skills, the following research questions have been formulated to guide this study:

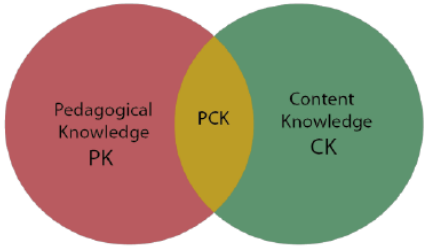
1. What are EFL teachers' knowledge and skills concerning the integration of ICT in English language teaching?
2. What are EFL teachers' knowledge and skills required to better integrate ICT in English language teaching?

Addressing these research questions will aid in the development of a deeper understanding of the three types of knowledge held by EFL teachers, as well as the skills required to integrate this knowledge in order to make teaching and learning English a more meaningful and effective process.

2. Literature Review

2.1. Understanding of Technological Pedagogical and Content Knowledge (TPACK)

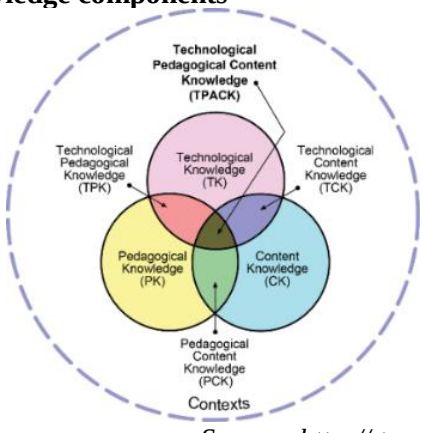
Figure 1: A graphical representation of Shulman's pedagogical content knowledge



As discussed above, TPACK was developed based on Shulman's PCK. Shulman (1986) argues that PCK is a "special type of knowledge that represents the blending of content and pedagogy into an understanding of how particular topics, problems or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction. Pedagogical content knowledge is the category most likely to distinguish the understanding of content specialist from that of pedagogy" (p. 8). Shulman (1987) argues that quality instructional techniques or strategies used to engage learners in student-centred lessons are effective only when teachers have a deep understanding of the content being taught; and that effective instruction results from teachers uniting deep content knowledge with effective instructional strategies and approaches to assessment, as shown in Figure 1.

This combination is considered as teachers maximizing their pedagogical-content knowledge to provide learners with meaningful and effective learning experiences; and this framework has served as a solid foundation for understanding pedagogical-content knowledge for the last three decades (Cherner & Smith, 2016). However, this framework needs revision to encompass digital resources designed for instructional uses. The framework was therefore further developed by Koehler and Mishra to add the technological knowledge component. This additional knowledge is described as the ability to operate different types of digital technologies, to install and remove software, and to create and store products that are created with the technology (Koehler & Mishra, 2009). The TPACK framework as shown in Figure 2 below is bounded within a certain context.

Figure 2. TPACK framework and its knowledge components



Source: http:// tpack.org

The TPACK framework argues that no individual technological approach can be applied to every educational setting; that it is necessary to provide specific strategies for each context, always considering the multifaceted relationships between technology, pedagogy, and content. In other words, teachers with only knowledge of technology are not well equipped to teach with it; and teachers who are well-equipped with pedagogical and content knowledge but lack

technological knowledge cannot succeed either in integrating ICT into their teaching practice (Koehler & Mishra, 2009).

2.2. Definitions of the TPACK components

The definition of each component is synthesized from the work of Shulman (1987), Koehler and Mishra (2006), and other relevant work.

2.2.1. Technological knowledge

Technological knowledge (TK) is knowledge of how to teach today's students using technology. It can also be understood as the ability to operate digital devices and to use software (Fernández et al., 2017). This ability includes understanding information technology broadly enough to be able to apply it productively at work and in everyday life, being able to recognize when it can assist or impede the achievement of a goal, and being able to adapt to its continuous changes (Koehler & Mishra, 2009).

Schmidt et al. (2009) suggest that TK also relates to being able "to solve technical problems, to learn technology easily, to keep up with important technology, to play around with technology, to know a lot of technologies, to have technical skills and to have opportunities to work with different technologies" (p. 145).

2.2.2. Pedagogical knowledge

Shulman (1986) defined pedagogical knowledge (PK) as the entire teaching process, including how to teach. It includes knowledge of differentiated instruction and rigor, literacy skills, lesson planning and reflection, classroom management strategies such as establishing class rules, grouping students, setting up class routines, using techniques and strategies to enhance learning environments, assessment and feedback (Cherner & Smith, 2016).

2.2.3. Content knowledge

Content knowledge (CK) is defined as teachers' knowledge of the subject matter to be learned or taught. The content to be covered at each educational level is different. As Shulman (1986) noted, this knowledge would include knowledge of concepts, theories, ideas, organizational frameworks, knowledge of evidence and proof, and established practices and approaches toward developing such knowledge (Koehler & Mishra, 2009).

2.2.4 Technological pedagogical knowledge

Technological Pedagogical Knowledge (TPK) is defined as "an understanding of how teaching and learning can be changed when particular technologies are used in particular ways. This includes knowing the pedagogical affordances and constraints of a range of technological tools as they relate to disciplinarily and developmentally appropriate pedagogical designs and strategies" (Koehler & Mishra, 2009, p.65). In more simple terms, TPK includes teachers' knowledge of how to plan lessons that integrate technology-enhanced activities, how to implement these activities in their teaching practice, or how to construct tutorials and learning experiences that support students' use of technological tools during instruction.

2.2.5. Technological content knowledge

Technological Content Knowledge (TCK) refers to knowledge of technological tools that are used in a content area, such as how to use probes or databases to collect data in science, or how to repurpose technology tools in other content areas. It involves an understanding of how technology and content influence and constrain one another. Teachers need to master more than the subject matter they teach; they must also have a deep understanding of how subject matter can be changed by the application of particular technologies. Teachers need to understand which specific technologies are best suited for addressing subject-matter learning in their domains and how the content dictates or perhaps even changes the technology - or vice versa (Koehler & Mishra, 2009, p.65).

2.2.6. Pedagogical content knowledge

Pedagogical Content Knowledge (PCK) refers to teachers' knowledge of how to make connections between *what* to teach and *how/the best way* to teach in the context of their daily planning and implementation of lessons. In other words, PCK is knowing how to adopt appropriate teaching methods that can be applied to different subjects, contexts, and learners. Its definition, therefore, is consistent with and similar to Shulman's concept of knowledge of pedagogy that applies to the

teaching of specific content. PCK informs the core business of teaching, learning, curriculum, assessment, and reporting, including the conditions that promote learning and the links that connect curriculum, assessment, and pedagogy (Koehler & Mishra, 2009).

2.2.7. Technological pedagogical and content knowledge

Technological Pedagogical and Content Knowledge **(**TPACK) is defined as knowledge that is underlying truly meaningful and deeply skilled teaching with technology and is different from knowledge of all three concepts individually. It is the basis of effective teaching with technology, requiring an understanding of the representation of concepts using technologies; pedagogical techniques that use technologies in constructive ways to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help redress some of the problems that students face (Koehler & Mishra, 2009).

3. Methodology

The study adopted a qualitative research paradigm with a case study design. The nature of the phenomenon in this study which was ICT integration in EFL teaching and learning and the 'what' of EFL teachers' knowledge and skills necessary to support the integration informed the selection of a qualitative approach. Rich data from a qualitative approach allowed us to seek insights into the EFL teachers' thinking about ICT integration in their practice.

The data were collected from nine semi-structured interview questions involving nine EFL teachers who taught English as a Foreign language at a private university in Vietnam. These interviews were conducted via Zoom. The raw data were transcribed and translated from Vietnamese into English. Then, they were imported into NVivo - a qualitative data analysis software to help organize, code, categorise, and analyse process based on each component of the TPACK framework which was referred to as themes in this study. Key categories identified in each theme were synthesized to reveal and represent the knowledge and skills needed by EFL teachers.

4. Results

The EFL teachers provided a lot of information about technology, pedagogy and content that they taught. Related data were coded in appropriate themes using TPACK framework as discussed earlier. For instance, any types of technology that the EFL teachers mentioned were coded in the theme named *EFL teachers' TK*. All codes in this theme were then grouped into three categories which encompass (i) Using Microsoft Office Programs and Multimedia, (ii) using Mobile, software, apps and social networks, and (iii) using e-dictionaries and online learning environments. The EFL teachers' responses to questions about pedagogical knowledge were coded in the theme *EFL teachers' PK*. All initial codes for this theme were collapsed into five categories: (i) using different teaching methods, (ii) changing methods and styles, (iii) choosing teaching materials, (iv) managing and controlling students, and (v) evaluating students' learning outcomes. This process was repeated to code and categorise all data into appropriate themes of the TPACK. In order to help better understand about EFL teachers' knowledge and skills, all these themes and categories were synthesized in Table 1 below:

Table 1: A synthesis of EFL teachers' knowledge and skills

TK	- Using Microsoft Office programs and multimedia - Using mobile, software, apps, and social networks - Using e- dictionaries and online learning environments
PK	- Using different teaching methods - Changing methods and styles - Choosing teaching materials - Managing and controlling students - Evaluating students' learning outcomes

CK	- Teaching four macro and four micro language skills - Level of Language competency - Vietnamese and English used in class - Awareness of cultures of English-speaking countries
TPK	- Evaluating ICT before using them - Using ICT to engage students - Using ICT to design lesson plans and cater for different learning styles - Using ICT to evaluate students
TCK	- Using Microsoft Office programs and multimedia to teach language skills - Using mobile, software, apps, and social networks to teach language skills - Using e-dictionaries, Moodle LMS and MS Teams to teach because of Covid-19
PCK	- Knowing appropriate methods for teaching different subjects - Providing feedback for students - Enhancing learners' cultural awareness - Enhancing awareness of current research in the field of EFL
TPACK	- Different in professional competency - Need professional development and support - Need support with online learning environment to facilitate teaching

The paragraphs below provide discussion of key findings synthesized in this Table.

5. Discussion

5.1. EFL teachers' knowledge and skills

This study seeks to understand knowledge and skills needed by EFL teachers associated with the integration of technologies in EFL teaching. The term *knowledge* involves three knowledge types: knowledge of *technology*, *pedagogy* and *content* while the term *skills* refers to EFL teachers' ability not only to combine content and pedagogical knowledge, but also the three types of knowledge, in order to make teaching and learning processes more meaningful and effective. Key findings from the study are discussed in the following paragraphs.

5.1.1. Technological knowledge

As pointed out by Koehler and Mishra (2009) and Lowther et al. (2009), 21st century teachers need knowledge of teaching and learning technologies if they are to prepare and deliver learning experiences capable of engaging students. This technological knowledge is variously understood. Findings from this study show that the majority of participants are familiar with and use many types of technologies, including Microsoft Office programs, multimedia, digital classroom equipment, electronic dictionaries, online learning environments, mobile technologies, social networks, and specialized software and websites. This finding is evidence to show that in the digital world of the 21st century educational institutions and their students and graduates are now incorporating technologies into their teaching and learning.

All teachers are currently provided with the opportunity and faced with the requirement to integrate technologies into their daily teaching practice. This study has provided evidence that the participants are all using some form of technology to prepare and resource their lessons, to deliver presentations, and to help their students learn more effectively; but the degree of sophistication of use was found to vary significantly. These findings are consistent with those of Li et al. (2015), who noted that to teach effectively with technologies teachers need to "know a lot of technologies, to have technical skills and to have opportunities to work with different technologies" (p.145).

Technology changes rapidly, as confirmed by Koehler and Mishra (2009); it is therefore imperative for any EFL teacher to keep learning. Technological knowledge is essential for teachers to teach in today's digital world, and technology now exists in many forms to

make this happen. A focus on how to use this technology effectively, and how to integrate it into existing practice, has become "a main theme in language teaching circles and has been a key focus in the field of computer-assisted language learning" Son (2018, p.3).

5.1.2. Pedagogical knowledge

In this study, teachers' pedagogical knowledge includes knowledge of different teaching methods, knowledge about changing methods and styles, choosing materials and assessing students' learning outcomes. Lavadenz (2011) emphasizes that good pedagogical knowledge is needed for teachers to provide learners with effective language learning experiences and as Koehler and Mishra (2009) note, that pedagogical competence is necessary to help teachers know how and when to apply ICT tools in their classroom practice.

As outlined in Shulman's (1987) framework, discussed earlier, EFL teachers' pedagogical knowledge depends on knowledge of principles, teaching strategies and methods used to present content and to manage the classroom, and knowledge about educational contexts, learners and learning, and student assessment.

Findings from the study indicate that the teachers adapt a variety of teaching methods, including Audio-Lingualism, Communicative Language Teaching (CLT), Task-Based Learning (TBL), Grammar-Translation, and Content Language Integrated Learning (CLIL); that their teaching approaches are guided by theoretical principles developed for EFL teachers. The findings reflect the teaching methods used and the learning activities designed; and teachers at times are seen to change their teaching style to suit their students' needs; and to choose different sources of materials, for example from the internet, to manage the classroom and to evaluate their students' learning outcomes. The findings suggest, therefore, a degree of flexibility and the ability to adapt.

The above discussion highlights the importance of pedagogical knowledge in enabling EFL teachers to teach effectively and the challenges that currently exist within both their systems and their established practices. Deep understanding of pedagogical practices is a prerequisite to enable teachers to select and apply appropriate technologies to support teaching and learning.

5.1.3. Content knowledge

Content knowledge is a core component of EFL teachers' knowledge base. Findings from this study reveal that the EFL teachers' content knowledge consists of language proficiency, which covers the four macro skills of listening, speaking, reading, and writing, and the micro language skills, relating to vocabulary, grammar, pronunciation, and culture, as well as the frequent and competent use of the language themselves. These findings indicate that the participants teach both macro and micro language skills, which requires a wide range of content knowledge in both areas. Having a sufficient level of this content knowledge is an essential prerequisite for being able to apply technology appropriately to support their teaching. Attention to the different types of knowledge and skills, however, varies.

Given the context of the study, it is unsurprising that the findings indicate that both English (L2) and Vietnamese (L1) are used in the classrooms. The degree to which this happens depends on the complexity of the language skills being taught, the competency level of the learners, and the topics being taught. The literature on L2 teaching suggests the usefulness of using the L1 to help learners appreciate more nuanced understandings of language content. Lightbown and Spada (2013), for example, argue that using the L1 is effective when the teacher does so knowingly, controlling when and how to use it for maximum benefit for students.

The findings confirm, for example, that only two of the participants mentioned teaching content relating to cultural knowledge, which suggests that at tertiary level 'culture' may be taught separately from 'language'. Unlike courses offered on cultures of English-speaking countries such as Britain and the U.S.A., the participants individually used materials from various websites to teach topics relating to the cultures associated with the language they are teaching. Using materials from the internet provides

opportunities to teach about the important relationship between language and culture. As argued by Thorne, Sauro, and Smith (2015), using authentic materials from the internet - materials designed by native speakers for native speakers - is one of the most effective ways to do this.

5.2. Knowledge and skills required to integrate three knowledge types

The three knowledge types discussed above constitute the fundamental background knowledge and pre-requisites needed by the EFL teachers in this study. To teach effectively in the digital world they must keep up with changes, developments and innovations - which move fast; and with changes in teaching and learning theories and pedagogical strategies, which are also continuously evolving. One way to keep abreast with change is to encourage teachers to progressively merge technological knowledge into content and pedagogical knowledge, all in one place.

Integration of content, pedagogy, and technology requires the skills or ability to converge pedagogical content knowledge (PCK), technological content knowledge (TCK), and technological pedagogical knowledge (TPK), and technological pedagogical and content knowledge (TPACK). The following paragraphs discuss in more detail.

5.2.1. Convergence of technological pedagogical knowledge (TPK)

Technological pedagogical knowledge refers to teachers' knowledge of how teaching and learning processes can be adopted, improved, changed, or adapted through the integration of specific technologies (Koehler & Mishra, 2009). All participants expressed positive attitudes towards using technology in their teaching. They described it as potentially improving the quality of both teaching and learning, talked about the importance of developing skills to teach online, and of blended learning. This finding aligns with previous studies conducted by Castro Sánchez & Alemán (2011) and Lowther et al. (2008).

Castro Sánchez and Alemán (2011) provided evidence that the integration of technology helps students to engage more frequently in meaningful use of computers to support their learning, while Lowther et al. (2008) reported that the integration of technology in teaching can enhance students' autonomy, capability, and creativity. Son (2018) also described in detail various technologies used in the field of CALL, ranging from computers, multimedia, the internet, wireless networks, mobile devices, and educational resources. The various use of these different technologies is confirmed by the findings from the study.

5.2.2. Convergence of technological and content knowledge

Technological content knowledge (TCK) is defined as an understanding how technology and content influence and constrain one another. Teachers need to understand which specific technologies are best suited for addressing subject-matter learning in their domains, and how the content dictates - or perhaps even changes - the technology, or vice versa (Koehler & Mishra, 2009, p.65). This study has revealed that EFL teachers have a wide range of technological and content knowledge, and that they believe that they integrate multiple kinds of technology to teach both macro and micro language skills. Their perceived confidence in their ability to use technologies effectively implies an adequate level of understanding and technological knowledge to select the most appropriate methods and strategies to teach the different language skills. What also emerged from the findings, however, is that teachers not only need to be skilled and knowledgeable, they also need to be supported at an institutional level, in what Koehler and Mishra (2006) call the *context* that surrounds the use of technology, a context which involves certain conditions.

Concurring with Koehler and Mishra, Kozma (2008) suggests a holistic approach to ensuring such conditions are met, including provision of adequate infrastructure development, teacher training, pedagogical and curricular change, content development, and technical support. These are seen to be important operational conditions to support EFL teachers in their engagement with technology. Findings from the study revealed

that the EFL teachers have been equipped digital classrooms with facilities such as TVs, projectors, and speakers. The teachers acknowledge this investment and support, but they are not satisfied with the Wi-Fi system and the use of Microsoft 365 provided to them. This dissatisfaction can be a major inhibiter in terms of levels of engagement with ICT at the university.

5.2.3. Convergence of pedagogical and content knowledge

As noted above, the teachers in this study recognise these two knowledge types as constituting elements of traditional EFL teaching and learning. Koehler and Mishra's (2009) concept of pedagogical content knowledge (PCK) captures this convergence, focusing on how teachers develop the capacity to manage it and to connect content with teaching strategies: in simple terms, how best to teach content. In Koehler's and Mishra's words, this convergence encapsulates the core business of teaching, learning, curriculum development, assessment, and reporting, which collectively represent the conditions and opportunities that promote effective learning.

The findings indicate that the teachers are flexible enough to apply appropriate pedagogical methods to teach the different macro and micro language skills; that they are aware of the need to develop their students' cultural awareness, which helps to fully understand the meaning that is contained within the language, and that they know how to provide formative feedback for their students. The findings also show a desire on the part of these teachers to receive the professional development they need to improve the quality of their teaching and their students' learning.

5.2.4. Convergence of Technological pedagogical and content knowledge (TPACK)

The effective convergence of all the knowledge types discussed above is a complex skill since it is the basis of effective teaching with technology, requiring an understanding of the representation of concepts using technologies; pedagogical techniques that use technologies in constructive ways to teach content (Koehler & Mishra, 2009).

The findings from this study indicate different levels of proficiency among this group of teachers in terms of achieving the TPACK convergence of integrating the three knowledge types. The findings show even in a small group of nine EFL teachers - significant differences in professional competency. Integration of technologies does not happen at the same time or in the same manner for everyone. There is clear evidence of the need for professional development and support to ensure that all teachers progressively develop their knowledge and skills. This section has discussed the significance of the depth of understanding relating to the three knowledge types teachers need in the digital world of today as prerequisites for EFL teaching. It has also discussed the nature of these skills.

6. Conclusion

To summarize, the findings provide evidence to understand EFL teachers' knowledge and skills in relation to teaching English with ICT. The study shows ELF teachers know a wide range of technology, pedagogy and content; however, there is generally greater use of ICT as productivity tools than as pedagogical tools. The study indicates that the EFL teachers focused on the 'step by step' element of procedural knowledge rather than on pedagogical conceptual knowledge. Similarly, it was noted that the more in-depth knowledge and skills EFL teachers develop in the three knowledge areas, the more likely it is that they will integrate technology into their teaching. This study has also suggested that teaching with technology is a complex process, which requires progressive and accumulative professional training and development.

References

Castro Sánchez, J., & Chirino Alemán, E. (2011). Teachers' opinion survey on the use of ICT tools to support attendance-based teaching. *Computers & Education, 56*(3), 911–915.

Cherner, T., & Smith, D. (2016).

Reconceptualizing TPACK to meet the needs of twenty-first-century education. *The New Educator, 13*(4), 329-349.

Fernández, C., Vicente, M. A., Galotto, M. M., Martinez-Rach, M., & Pomares, A. (2017). Improving student engagement on programming using app development with Android devices. *Computer Applications in Engineering Education, 25*(5), 659-668.

Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge? *Contemporary Issues in Technology and Teacher Education, 9*(1), 60-70.

Kozma, R. B. (2008). Comparative analysis of policies for ICT in education. In J. Voogt, & G. Knezek (Eds.), *International handbook of information technology in primary and secondary education (1083-1096)*. Springer.

Lavadenz, M. (2011). From theory to practice for teachers of English learners. *The Catesol Journal, 22*(1). Retrieved from http://www.catesol.org/Lavadenz%2018-47.pdf.

Li, L., Worch, E., Zhou, Y., & Aguiton, R. (2015). How and Why Digital Generation Teachers Use Technology in the Classroom. *International Journal for the Scholarship of Teaching and Learning, 9*(9), 1-9.

Lightbown, P., & Spada, N. M. (2013). *How languages are learned* (4th ed.). Oxford University Press.

Lowther, D, Inan, F., Strahl, J. D., & Ross, S. M. (2008). Does technology integration ‘‘work’’ when key barriers are removed? *Educational Media International, 45*(3), 189–206.

Schmidt, D., Baran, E., Thompson, A., Mishra, P., Koehler, M., & Shin, T. (2009). Technological Pedagogical Content Knowledge (TPACK): The development and validation of an assessment instrument for preservice teachers. *Journal of Research on Technology in Education, 42*(2), 123–149. https://doi.org/10.1080/15391523.2009.10782544.

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15*(2), 4-14.

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57*(1), 1-22.

Son, J. (2018). *Teacher development in technology-enhanced language teaching* (pp. 1–233). https://doi.org/10.1007/978-3-319-75711-7.

Thorne, S. L., Sauro, S., & Smith, B. (2015). Technologies, identities, and expressive activity. *Annual Review of Applied Linguistics*, 35, 215-233.

HIỂU BIẾT VỀ KIẾN THỨC VÀ KỸ NĂNG CỦA GIÁO VIÊN NGOẠI NGỮ THÔNG QUA TPACK

Nguyễn Tiến Dũng

Trường Đại học Thành Đô
Email: *ntiendung1005@gmail.com*

Ngày nhận bài: 27/11/2022
Ngày phản biện: 28/11/2022
Ngày tác giả sửa: 7/12/2022
Ngày duyệt đăng: 27/12/2022

DOI: *https://doi.org/10.58902/tcnckhpt.v1i2.23*

Tóm tắt:

Nghiên cứu định tính này nhằm tìm hiểu kiến thức và kỹ năng của giáo viên tiếng Anh liên quan đến việc tích hợp Công nghệ Thông tin và Truyền thông (ICT) vào thực tiễn giảng dạy trên lớp tại một trường đại học tư thục ở Việt Nam. Khung kiến thức chuyên môn, phương pháp sư phạm và công nghệ (TPACK) đã được sử dụng để giúp thiết kế, thu thập và phân tích dữ liệu. Nghiên cứu nhận thấy có sự khác biệt đáng kể về kiến thức và kỹ năng cần thiết giữa các đối tượng tham gia khác nhau. Để giúp sự tích hợp giữa kiến thức và kỹ năng cần thiết của sinh viên đạt được hiệu quả cao hơn, giáo viên ngoại ngữ cần phát triển ba loại kiến thức chính, gồm: công nghệ - kỹ thuật, phương pháp sư phạm và kiến thức chuyên môn, song song với các kỹ năng kết hợp các loại kiến thức này với nhau.

Từ khóa: *Công nghệ thông tin và truyền thông trong giảng dạy tiếng Anh; Kiến thức và kỹ năng của giáo viên; Khung kiến thức chuyên môn, phương pháp sư phạm và công nghệ; Tích hợp Công nghệ thông tin và truyền thông; Tiếng Anh như một ngoại ngữ.*