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Castledown

Technology and the private sector: Language teachers' perspectives toward technology and the role of CALL training in professional development

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English teachers in Vietnam have integrated technology in education for the past several years, particularly those who are working in the private sector. Regardless of the high number of Vietnamese teachers working in this sector, how they perceive technology integration and how important it is to their professional development have not yet been thoroughly studied. Therefore, this study sought to provide evidence to understand Vietnamese teachers' perspectives toward technology in more detail and shed light on how to support them with technology training so that the training not only improves their teaching skills but also helps facilitate their professional development. The study employed a mixed-methods approach with classroom observations, semi-structured interviews, and a questionnaire survey. Data collected were analyzed by using thematic analysis and triangulated to ascertain the final findings. The results have shown that the language teachers in this study expressed enthusiasm toward technology regardless of the insufficient training and the challenges of technology self-education. Interview data also revealed the importance of a community of practice to the participants as it encouraged them to learn and overcome technology-related difficulties. The community in this study has also played a key role in the relationship between technology education and teachers' professional development in their workplace. Finally, based on Cairns and Malloch's (2011) concept of workplace learning and the results of data analysis, the study advocates for a comprehensive three-level CALL training scheme which are individual, peer, and institutional that can promote technologies and facilitate support teachers' professional development.

Keywords: teacher development, in-service teachers, CALL training, professional development, the private sector.

Introduction

The year 2008 marked a monumental milestone in Vietnam when the Ministry of Education and Training (MOET) started implementing a new language policy called the "National Foreign Language Project 2008–2020." According to this policy, English officially became a compulsory subject in the mainstream curriculum starting from primary school (Shepherd & McEntee-Atalianis, 2021). Given the complexities of teaching English, it is not surprising that many pedagogical approaches have been integrated. Together with public schools, English language institutions in the private sector play a major role in implementing this policy as they have the necessary resources for language teaching and motivating students such as materials, well-qualified teachers of English, and most importantly, cutting-edge technologies. However, little attention has been paid to those institutions in the private sector even though there have been studies focusing on technology integration in public institutions (Ghavifekr et al., 2016; Saidouni & Bahloul, 2016).

Comparatively little teacher education has been conducted to date with regards to language teachers and technology. Thomas et al. (2012) and Yamazaki (2018) have argued that even though using technology competently can have a positive impact on learning outcomes (Gerger, 2014) and enhance teacher-student communication (Domingo & Gargante, 2016), differences exist in the application of computer-assisted language learning (CALL) in classrooms. Additionally, while Hsu (2010) emphasizes the need for training in technology integration that goes beyond enhancing computer skills, Hur et al. (2016) has pointed out the complexity in the relationship among direct and indirect factors influencing teachers' technology use. Specifically, they need to understand how to use it for different subjects, which applies to language teachers when they have to teach different topics and English skills. Furthermore, learning how to use and effectively integrate technology into their classrooms is not the skills language teachers have. They have to constantly learn and adapt when they teach, which relates to the concept of workplace learning suggested by Cairns and Malloch (2011). This, in the long run, affects not only their motivation but also their professional development if they do not have sufficient support from their workplace. A planned and sustainable professional development should be facilitated if we expect teachers to have successful technology integration in designated educational environments (Muir et al., 2004). Regardless of this, language institutions have not yet found a solution to meeting their teachers' needs in time, which eventually results in teachers changing their career pathways.

While research examining the role of technology and technology training in language classrooms has continuously been carried on, little is known about how those two aspects affect language teachers' professional development and workplace learning environment. Particularly, in conjunction with pedagogical

approaches, professional development is an important factor affecting teachers' decisions to choose which technology to be used in their courses (Heitink et al., 2016; Mishra & Koehler, 2006; Tondeur et al., 2017). Thus, the current study was conducted as a case study focusing on one language institution in the private sector in Ho Chi Minh City with the aim to examine language teachers' perspectives toward technology as well as the importance of CALL training in their professional development. Not only can the findings help understand teachers' decision-making process, but institutions and policy-makers can also use the results as future references to support language teachers.

Literature review

Teachers' perspectives toward technology integration

Recently, there have been a number research studies into teachers' perspectives toward technology integration (Andoh, 2015; Dirjal et al., 2022; Poonpaiboonipat, 2019; Sherer et al., 2017). Empirical studies have found that how teachers perceive technology influences substantially their technology integration in their classrooms. In other words, teachers' beliefs and technology integration are closely related, to the extent that if they perceive technology differently, it is going to affect the outlook on technology integration in their curriculums (e.g., Ertmer et al., 2012; Kim et al., 2013). The more welcome and acceptant they feel about CALL, the more likely they are to learn and face the technological challenges. For instance, Gilakjani and Leong (2012) argue that teachers' acceptance of technology might bring about success to the initiatives of any educational program. Similarly, teachers' positive attitudes toward technology may also result in the higher frequent use of technology in their lessons (Drossel et al., 2016; Eickelmann et al., 2015).

However, researchers have also addressed occasions where teachers resist technology integration and provided possible explanations for this resistance. Wang (2021) in her study of Chinese language teachers' perceptions toward technology integration in Japan argues that teachers' language learning and their experience might lead to their resistance to technology. Teachers who have a strong opinion of what should and should not be used might refuse to welcome any gadgets into their classrooms. Stockwell (2012), for instance, suggests that when teachers already have some preconceived ideas toward CALL such as how effective CALL might be or its outcomes, they tend to opt for a more conventional approach, which is non-technology integration. Moreover, learning a new skill or approach, especially when it is technology-related, might be a daunting task for teachers. Ertmer et al. (2012) argue that it is challenging for teachers who are already familiar with traditional teaching methods to learn and use technology in their classes. Another reason for their resistance can be attributed to insufficient training or unfamiliarity with the technologies introduced in their workplace. Teo and Milutinovic (2015) propose that if teachers do not understand the affordances technologies entail, they might reject CALL integration.

While previous findings (Davis, 2014; Hartman et al., 2019; Hsu, 2016; Wang, 2021) are significant in terms of providing insights to understand how teachers perceive technology integration in their classrooms, most studies (e.g., Ghavifekr et al., 2016; Saidouni & Bahloul, 2016; Sanchez-Mena & Marti-Parreno, 2017) are carried out in either the public sector or public institutions. Also, little is known about the relationship between teachers' perspectives and their professional development. Therefore, an inquiry that focuses on the private sector and investigates how teachers perceive technology and its influences on their professional development might help provide more evidence to support previous findings. Particularly, by understanding how language teachers perceive technology in their workplace in the private sector, the results can also shed light on how institutions can tailor their policies and regulations to teachers' needs accordingly and bring about welcome changes to technology and language education.

Technology and English education in the private sector in Vietnam

According to Nguyen and Bui (2016), the language project launched in 2008 can be regarded as the most noticeable language reform the country has ever had. Thanks to this project, language institutions have been putting considerable effort into their curriculum, particularly using English as a medium of instruction (Nguyen & Bui, 2016). However, the implementation of an EFL program is not without challenges when English is not the official language of the country and Vietnamese teachers of English do not necessarily learn the language from an early age. As a result, not only do they encounter a language barrier challenge (Le, 2011) which has led to concerns being raised about the quality of in-service teachers in Vietnam (Le, 2007; Nunan, 2007), but they also have to face other obstacles the challenge entails, such as anxiety, confidence, and student outcomes. Particularly, regardless of the effort put into training, not so much improvement has been noticed in English classes (Van, 2018). Other implementation challenges are teaching resources (Le, 2007; 2012), ineffective teaching methodologies (Le & Barnard, 2009), and inequity (Bui, 2013).

Regarding the implementation of CALL in language classrooms, while technology integration is also an important aspect of language education, whether the approach presents another challenge or becomes a positive aspect motivating and advancing language teachers' professions has not yet been studied in the context of Vietnam from 2008 to 2020. For example, Stockwell (2009) warns us about the obstacles teachers may encounter when they need to incorporate CALL into their environments. Some apparent difficulties have been evident in previous studies related to Vietnamese contexts such as a lack of guidelines for technology application and insufficient communication between the parties (teachers, students, institutions, etc.) at stake (Gruba & Nguyen, 2019). Adding to this, Nguyen (2019) argues that demands for language teaching and a lack of time to integrate technology are two other hindrances teachers have with CALL. This means if they are not trained and supported, language teachers might view technology as a hindrance to their career. Also, while institutions in

the private sector have made substantial contributions to language education in Vietnam, there has not been yet sufficient evidence to understand whether technology is key in those outcomes. For instance, how language teachers in this sector perceive and apply technology to their classes has not yet been fully examined, especially at institutions in the private sector.

For this reason, how language teachers' perspectives influence their professional development may help lend support to technology training. Moreover, understanding language teachers and their opinions toward technology integration in the private sector would potentially bring about more sweeping changes in not only pedagogy but also in language policymaking, which Fullan (2015) argues that teachers' perspectives and actions can help transform the educational system. Finally, findings can also be useful to understand how teachers, particularly Vietnamese teachers, in the EFL context, perceive technology integration and professional development from the viewpoint of a country where English is not the official language.

Technology training and its role in the development of teachers' professions in their workplace

Technology training is not a new topic in applied linguistics. However, its role in language teachers' professional development has not yet been fully examined even though language teaching has long been regarded as a challenging field for both teachers and institutions. Suryani and George (2021) argue that encouraging suitable candidates to pursue a teaching profession and retaining them, in the long run, is not an easy task around the globe. This could be even more worrying with language education when in-service language teachers, especially novice in-service teachers, are required to teach English and learn technology simultaneously in their workplace.

While there has been empirical evidence in language teaching, research relating to technology learning in language teachers' workplaces has not yet gained momentum in the field. As suggested by Eraut (2011), it is significant to investigate the subject matter at both individual and social levels in order to understand the workplace learning aspect thoroughly. At the individual level, similar to other professionals and technicians, a deep learning curve is an obstacle that language teachers have to face until they gain enough knowledge and expertise. It is also suggested that upon overcoming that curve, they also have to challenge themselves emotionally and cognitively. Those challenges might become harder as they seek to further themselves in their career pathway (Eraut, 2011). At the social level, teachers do not work on their own. As a part of the teaching community of their institution, not only are they responsible for their relationship with colleagues and managers, but their participation in the community is also vital to their profession (Edwards & Burns, 2016; Eraut, 2011; McMillan et al., 2014). Hodkinson et al. (2004, cited in Evans et al., 2011) argue that an individual best executes agency when they participate in the "social-organizational view of learning" at work. Furthermore, a manager plays a highly important role in facilitating workplace learning. Nevertheless,

according to Hegstand and Wentling (2004), "mentoring in the workplace has only relatively recently claimed recognition as a powerful HRD intervention that assists employees in career advancement, serves as a form of on-the-job training, and helps create learning organization" (p. 423). As a part of their responsibilities, managers are supposed to create an environment where their employees can take initiative and join the managing role in learning in their workplace (Eraut, 2011).

Addressing this matter, Stockwell and Reinders (2019) suggest that technology training is still uncommon in language institutions despite its potential contribution to enhance language education. Although the importance of technology competency in a language classroom has been evident in previous studies on ELT, the contributions of technology training and learning to language teachers' professional development remain unclear. More importantly, for in-service language teachers' career advancement, it is necessary not just to learn the provided technologies but also to use them proficiently without any difficulties. While professional development and workplace learning are not uncommon in other social science studies, these two topics have not gained much attention in applied linguistics, especially in English language teaching. In terms of engagement in the workplace, the enhancement of technological affordances for learning at both individual and social levels might result in radical changes in language education. Evans et al. (2011) suggested that in entering an environment facilitated with modern IT and digital technologies, many employees show their interest in sustaining and developing capacities to make use of that environment. Also, they found that if these interests are not considered seriously by institutions, rather than helping, technologies may become barriers to learning and eventually demotivate their users. Therefore, understanding how technology training can affect teachers' professional development in their workplace would benefit both language teachers individually and language institutions. For those reasons, the research questions are proposed as follows:

1. How do Vietnamese teachers in the private sector perceive the role of technology integration in their professions?
2. How do they perceive the role of technology learning and training in their workplace?
3. What suggestions can be made to motivate teachers and enhance their professional development?

Methodology

Procedure

Together with an ethnographic approach to collect data in its natural contexts (Wang, 2021), a mixed-methods research design was employed with its main focus on qualitative analysis. Classroom observations were employed to understand the participants' classroom procedures and the amount of technology integrated into their classrooms. Subsequently, semi-structured interviews

were conducted to gain more insights into the rationale for using technology, teachers' expectations toward technology training, and how important technology training is to their profession. Finally, a questionnaire was administered at the same institution to ascertain the findings.

Research context

The institution chosen for this study was a popular English language center in Ho Chi Minh city and the recommended language of instruction at the school was English. As part of its policy, language teachers were recommended to employ the communicative teaching approach in their lessons to maximize the opportunities and practice students have with English. In terms of courses offered, the institution focuses mostly on general English and proficiency test preparation courses (e.g., IELTS, TOEFL, TOEIC, etc.). For general English courses, students sit a placement test to determine their language level and then are placed accordingly in three main types of classes according to their ages and the placement test results, namely "Super Kids" for young learners, "Young Leaders" for teenagers, and "International Communication English" for adults. For both general English and proficiency test courses, textbooks and teaching materials are chosen and syllabuses are designed following the proficiency level testing system of the Common European Framework (CEFR).

Participants

Convenience sampling was employed to recruit participants for classroom observations and interviews (Dörnyei, 2011). Also, based on the institution's policy, language teachers' schedules, and their agreement to participate in the study, two in-service English teachers, coded Teachers A and B, were employed from the teaching quality manager's suggestion for the classroom observations and the semi-structured interviews. Furthermore, with the manager's permission for further research, a questionnaire was administered to other teachers through Google Forms in one month. The participants for the closed-ended questionnaire were recruited using snowball sampling technique (Creswell & Poth, 2018). To gather as many responses as possible, there was no limit on the number of participants. Overall, 27 responses were obtained at the end of the data collecting period. In terms of teaching experience, there were 14 participants who had one year experience, 10 with one to three years, and three participants who had been teaching for more than three years. Regarding their educational background in CALL, there were 17 participants indicating that they took courses related to CALL in their undergraduate degree and 10 participants had not undergone any CALL courses. It should be noted that as the responses were anonymous, the responses might have included answers from Teacher A and Teacher B.

Technologies provided by the institution

There were three main technologies mostly used by the teachers in this study. They were iTools, the school's intranet called 'shared folder', and MS PowerPoint slides. Also, other technologies could also be employed depending on the lesson types and teachers' methodologies. At this institution teachers were at liberty to use these applications as they saw fit.

- **iTools:** This is a copyright application developed by Oxford University Press and available together with English textbooks used at the institution. The application comes with a textbook PDF file incorporated with various functions to assist users, such as zoom in, zoom out, paint, and highlight. It also has embedded recordings from textbooks.
- **"Shared folder":** This is a cloud storage system developed exclusively by the IT department in this institution. This is a place where teachers get all the school's teaching and reading materials for self-training. Teachers can also upload their own materials onto the system.
- **Prepared MS PowerPoint files:** Teachers have access to numerous PowerPoint slides prepared in advance by the institution to support their classes.

Data collection

Classroom observations and observation sheets. Classroom observations were employed (Bernard, 2006), and in order to ensure its validity, the non-participatory approach was adopted. This was to ensure that the researcher's presence would not interfere with the teachers' normal routines and classrooms could be observed objectively. Hence, what was recorded can be regarded as similar as to what teachers did in a normal lesson. Four classes were observed with a total duration of three hours (45 minutes for each class). In order to understand how teachers used technology in their classrooms and how often they did so, the researcher also used an observation sheet (see Appendix A) to record classroom routines, as well as any incidents that might happen during the observation. Instances related to technology integration and teaching methodologies, therefore, were recorded in a chronological order and subsequently compared in the analysis.

Semi-structured interviews. Two 30-minute interview sessions were conducted and recorded individually with Teacher A and Teacher B after the observations to understand their perspectives toward technology integration and how important technology training is to their professional development. Also, why the teachers used the technologies was investigated during the interviews. To fulfill these purposes, the interview questions suggested by Hubbard and Levy (2006) were adapted. Both teachers were initially explained the aims and the process of the interview to obtain their consent and give them the opportunity to ask questions. The interviews started with questions about the participants' educational backgrounds in technology and language teaching. The next

part of the sessions focused on Teacher A and B's perspectives toward technology integration and how they think about its role in their teaching approach. The final part of the sessions was dedicated to giving teachers more space to elaborate on how technology training helps them with their career pursuits.

Closed-ended questionnaire – Appendix C. At the end of the period, 27 responses were obtained. Overall, the participants were asked to complete 18 questions about their educational background in technology integration, their perspectives toward the technologies integrated at the institution, and their expectations of future training in their workplace. The questionnaire was adapted from a study on how to help teachers take the initiative to learn technology by Stockwell (2009).

Data analysis

Since the pedagogical practice in the real world involves complex factors that can hardly be conducted in experiment settings (Nunan, 1992), this study was carried out as ethnographic research in naturalistic contexts to observe teacher behaviors with (or without) using technology for teaching purposes. Since the two primary data were collected in Vietnamese, the analysis was first conducted in the same language. The final results were then translated into English. First, data from observations and journals were compared and analyzed to understand the teachers' routines. The analysis also focused on studying how often teachers used technologies (iTools and other supporting applications) and how the integration assisted them in their classrooms. Next, to analyze the data from the interviews, the researcher listened to the recordings initially and compared them with the interview notes and classroom observations. After finishing the analogy between the two main data, the researcher analyzed the recordings one more time with the aim of categorizing teachers' answers into appropriate themes. The obtained data were coded using thematic analysis (Creswell & Poth, 2018). Finally, data from a questionnaire survey were analyzed through Google Forms. The results were later triangulated with the ones from the other two methods with the focus on the similarities and differences to finalize the findings.

Rigor of the study

To maintain the validity of the study, a second rater, who is a Vietnamese teacher of English, was employed to check the data from observations, interviews, and the survey. He was also familiarized with the analysis and coding process before starting his own analysis. In order to finalize the results, the researcher and the second rater held a meeting to find out any discrepancies in coding or translation.

Results

Classroom observations

Data from the classroom observations suggested three main types of lessons, namely usual lessons, skill-focused lessons, and pre-superkid lessons with students from three to five years old. The analysis also revealed how often teachers employed technology in their teaching.

For the usual lessons, as shown in Table 1, iTools was used for almost every activity in Teacher A and Teacher B's teaching routines, except for the attendance checking, which was done through the school's online system, at the start and the end of the lesson with wrap-up activities. Also, they did not use the application to show the textbook pdf file only but incorporated it into their communicative teaching approach. Thanks to this application, both teachers were able to manage their classrooms with ease. However, even though iTools was used during the observed class time, the researcher noticed that both teachers only used the application for visual aids. Other useful functions incorporated were not fully exploited.

Table 1. Technology Employed in Usual Lessons

Teaching routines	Teacher A's routine	Teacher B's routine
Attendance checking	School's website	School's website
Vocabulary and pronunciation review	iTools + realia	iTools
Warm-up activities	Flashcards	Flashcards
Teaching new vocabulary	Flashcards + iTools	iTools
Grammar structures	Games + iTools	iTools
Concept check	Games + iTools	Game + PowerPoint files for time management
Wrap-up activities	Games	Songs
Workbook and correction	Workbook	iTools

In the skill-focused classes, students do exercises to improve their reading and writing skills. For this reason, activities and exercises were usually done individually. However, classroom observation results indicated that technology was used quite often as shown in Table 2.

Table 2. Technologies Employed in Skill-focused Practice Lessons

Teaching routines	Teacher A's methods	Teacher B's methods
Reading and writing practice	School's materials and iTools	School's materials and group works
Correction	School's PowerPoint files	Game and school's PowerPoint files
Extra activities	N/A	Games

The final observation data were collected and analyzed from Teacher B's pre-superkid class. Table 3 shows the routine organized into six stages as well as technologies employed in detail. Different from other "Super Kids" courses, the aim of this class is to familiarize students with an English-speaking environment. To fulfill this, Teacher B integrated iTools and other technologies during most of her teaching routine.

Table 3. Technologies Employed in pre-superkid class

Teaching routines	Teacher B's methods
Start-up activities	Imagine Learning, iPad, and copyright application
Warm-up activities	iTools
Pronunciation	Drill
Listening exercise	iTools and textbook
Attention	Songs from iTools
Wrap-up activities	Games

Interviews

Interview data analyzed from Teacher A and Teacher B were translated into English and then coded thematically according to their answers. The main themes were (1) background and experience with technology integration; (2) perspectives toward technology; (3) the role of technology training in their professional development.

Teachers' background and experience with technology integration. Both teachers had to obtain a certificate called "Teaching and Technology Integration" to meet the graduation requirements of their undergraduate degree. However, according to them, the course focused mostly on MS PowerPoint competency and had little to do with technology integration. Moreover, language teaching was not the content of this course as it was desired for the whole pedagogical program.

Teachers' perspectives toward technology. The analysis of teachers' interview data showed three main aspects indicating the role of technology in their occupational development. The findings were summarized in the following table:

Table 4. Teachers' perspectives toward technology integration

	Examples
Optimistic toward technology integration	Extract 2: "It was amazing seeing what technology can do in a language classroom. I was drawn to it completely. After figuring out how to obtain visual materials with high resolution from the application, I have been doing it ever since". – Teacher A
The importance of technology to their careers	Extract 3: "I think technology is difficult, but I still want to learn how to use it in my class because it helps bring more innovation to language teaching. I can't wait to get more training on this subject matter." – Teacher A Extract 4: "I love using technology in my class. It makes my lessons more stimulating and engaging." – Teacher B
The assistance that technology provides in the workplace	Extract 5: "I feel great to be working in an advanced working environment like this. the facilities and technology provided here are much better than my previous workplace." – Teacher A Extract 6: "thanks to the cloud system of the school, I am able to access my teaching materials at any campus without any difficulty." – Teacher B

The role of technology training in their career development. The final part of the interview analysis has shown the insufficiency of the technology training they received in their workplace. Both teachers noticed that they only had a brief orientation session with their manager before starting any new courses. Little was mentioned about how to use the provided technologies as well as what technical issues they might encounter.

> Extract 7: "I try my best to make full use of iTools but I still can't figure out the purpose of some functions in this application. I don't know if I really need those functions, or I am just wasting my time." – Teacher A.

Among all those factors, findings showed that they regarded technology training as the determining factor when it comes to making decisions about their career prospects.

> Extract 8 "I always ask my colleagues when it comes to technology integration. However, it would be nice if there were more training on this matter since I want to use technology independently." – Teacher A.

Finally, when asked specifically more about the type of technology training they thought might be useful for the development of their professions, they both mentioned the training on the currently used technologies at the center. Teacher A elaborated further that she was really fond of the school intranet and the attendance-checking website.

> Extract 9: "there was a time when I forgot to check attendance but there weren't any troubles thanks to the school's attendance checking system. They noticed that and the student care department came and informed me immediately, which was really helpful. – Teacher A

Teacher B also mentioned that had she been trained more on iTools, she would have known how to use it more effectively.

> Extract 10: "It would be nice if training on how to use iTools for textbooks used at the school were provided. For example, even a very brief orientation would be helpful enough. – Teacher B

Closed-ended questionnaire – Appendix D

The closed-ended questionnaire was structured into three parts to understand: (1) teachers' backgrounds in their education of technology integration; (2) their training and experience with iTools; (3) their perspectives toward the role of technology training in advancing their career. While 17 out of 27 participants (63.0%) underwent technology training courses during their education, only 15 teachers indicated that they always used technology in their lessons. As far as iTools is concerned, it was indicated that the application was mostly incorporated into lessons, with 14 teachers (50.0%) using it most of the time. However, there still existed 19 teachers (73.1%) who did not have any training on this application, which coincided with both Teacher A and B's responses from the interview data. Also, in terms of iTools training, it was notable that 24 teachers (88.9%) indicated that they wanted more training on how to apply it to their classrooms. The last part of the questionnaire investigated Vietnamese teachers' perspectives and their expectations toward technology training in their workplace. Overall, 24 teachers (88.9%) were quite satisfied with the technologies provided at the institution. Interestingly, even though 22 responses (81.5%) indicating that the training in their workplace was sufficient, questionnaire results showed that a great number of teachers 25 out of 27 teachers (92.6%) wanted to have more training on how to use and incorporate technologies into their classroom activities.

Discussion

Language teachers' perspectives toward technology integration

Optimistic and welcome. The outcomes of the current studies differed from previous studies suggesting that language teachers resist technology implementation (Ertmer et al., 2012; Teo & Milutinovi, 2015), the language teachers in this study were optimistic toward CALL. Their positive attitude might be attributed to the facilities of the language institution, which created a positive first impression on in-service teachers, especially those who had recently graduated. Both Teacher A and B emphasized the "state-of-the-art" facilities as one of the reasons they chose to work here. Teacher B mentioned that she had gained a new perspective on technology integration thanks to her experience as a teaching assistant here. This experience gave her an opportunity to learn how to incorporate technology into teaching. Also, the peer support at the institution might help explain their positive attitude toward technology integration.

Teacher A mentioned that although she was inexperienced, the support she had from her colleagues helped her overcome the initial difficulties and feel more positive toward iTools.

> Extract 11: "A colleague showed me how to use the function in iTools for visual aids. I was captivated by that technique and have been using it excitingly ever since. – Teacher A.

Overall, technology integration does not seem to be a hindrance to the teachers in this study. They were eager and welcome to the approach. During the interviews, both teachers addressed the overarching role of CALL in their classes. Thanks to the provided technologies, they were able to bring about diverse classroom activities into their lessons. In fact, 88.9% of the participants in the questionnaire thought that the technologies in their workplace were beneficial to their careers. This is in line with Ertmer and Ottenbreit-Lefwich's (2012) argument of how technology can help bring about innovation in pedagogical approaches. They suggested that by incorporating new tools into their lessons, not only do teachers engage students, but those tools also provide them with more ideas, which is not just a slide presentation through a projector as Thomas et al. (2012) mentioned in their study. This could be because in the private sector, teachers do not have any difficulties gaining access to all desired resources and, hence, are able to devise their lesson plans creatively with the provided tools.

Challenged but determined. Even though learning new technologies might be daunting, Teacher A and B did not shy away from this challenge. They were determined as they claimed that every obstacle entails a learning opportunity. They showed no sign of reluctance toward CALL during the observations. They applied and handled issues related to iTools consistently even when confronted with technological difficulties during class time. This is different from Uerz et al.'s (2018) study in which technology was rarely applied to teachers' practices. Also, the belief in the effectiveness of the combination of technology integration and teaching approaches may be the reason for the determination of teachers in the private sector. Both Teacher A and B emphasized the importance of technology to their communicative teaching approach. Findings from interviews indicate that this may have driven them toward deeper self-research to enhance their technological competency, particularly iTools. Moreover, they also mentioned that even though they had to learn a handful of technologies at first, they did not perceive them as obstacles. More importantly, as both teachers explained, they were determined because they believed that technology was an important part of a sound teaching approach. In the same vein, Stockwell (2007) argues that technology and sound pedagogy mutually rely on one another, and the focus should be on the teaching practice rather than what technology to use.

The
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Findings from teachers' perspectives have lent more support to the importance of technology learning in the workplace in the private sector both at the individual and social levels. At the individual level, the language teachers regarded themselves as learners of technology integration. Teacher A mentioned that as she did not have enough experience with technology, she saw herself as a learner and always wanted to improve her skills. This is in line with Sahakyan, Lamb, and Chambers' (2018) argument when they drew attention to the similarity between teachers and language learners in their self-image during the acquisition procedure. In this study, the procedure apparently is the process of learning how to use technology judiciously and developing their own identity. At the social level, not only does technology learning play a key role in the community of practice, but it also helps strengthen the connection among members, including language teachers and managers. Both participants stressed the significance of their peer support and how it contributed to their competency in technologies at their workplace. Observation data proved that this support helped them overcome any constraint they could have encountered during their probation. Teacher A expressed her gratitude toward her colleagues because thanks to their advice, she feels more confident in dealing with technological difficulties. In this study, the language teachers in this community of practice not only did play the role of a language teacher. They had taken other responsibilities besides language teaching such as technological training, teaching mentoring, and consulting. In the same vein, other previous studies also show that language teachers are ready to simultaneously play several roles such as task designers, motivators, technical supporters, consultants, progress monitors, learners' trainers, decision-makers, and self-taught developers (Hubbard, 2008; Son, 2018; Stockwell, 2009). While the role of self-taught developers was not evident in this study, the other responsibilities did exist.

Besides assisting language teachers in improving their technological competency, CALL also has an influence on their professional development. The workplace, to some extent, can be regarded as an environment where technology training and learning co-exist. With technology training being part of the union support, there is a preconception that technology without proper instruction could affect language teachers' decisions in their career pursuit and lead to undesirable consequences. However, this was not the case in this study. In fact, those common benefits, facilities, and modern technologies offered to Teacher A and B were actually the reason they chose to pursue their careers at this school. Therefore, in conjunction with the provision of cutting-edge technologies, helping language teachers in learning how to incorporate those technologies, particularly providing training on technology integration and teaching approaches, should be regarded as an integral part of a comprehensive career advancement framework. This may not only help retain skilled teachers but also offer them job security. In order to improve learning in an environment with information and communication technologies (ICT), support on matters such as technology, software, curriculum, and classroom management should be carefully taken into account (Kleiman, 2000), otherwise, there will be little

impact on the learning outputs. (Cain et al., 2021; Özgun & Saritepeci, 2021; Saritepeci & Cakir, 2019)

Technology training and professional development in the workplace

The study has shown that besides the working environment and peer support, technology training played a crucial part in language teachers' professional development with 92.6% of the teachers in the questionnaire expecting to have more training on to integrate technology into their classrooms. Particularly, it is not only a solution to technology implementation (Stockwell & Hubbard, 2013), but also a determining factor in helping in-service language teachers advance their careers. Hence, the study advocates for a technology training framework on three levels, namely individual, peer, and institutional, to support teachers and help them advance their teaching professions.

Individual level. First and foremost, it is recommended that teachers' perspectives toward technology integration and teachers' authority in their classrooms should be considered. Besides interview data, it has been shown that 96.3% of the participants in the questionnaire thought technology was important to their teaching approach. This can help explain language teachers' positive attitudes regardless of the insufficient training. This also motivated them to learn and train themselves on using technologies and take initiative whenever they encountered technology-related difficulties. Moreover, ensuring that teachers have the authority they need in their classrooms might contribute to the advancement of their careers. The fact that the communicative teaching approach and iTools were not imposed gave them a sense of authority in their classrooms. This is in line with Stockwell and Reinders's (2019) argument about the resistance teachers may have toward technology if it is imposed on them. Finally, setting initial goals for in-service teachers during orientation or training sessions might be of great importance. This could help motivate them to learn technology and develop their professions. As suggested by Levy and Stockwell (2006), together with learning objectives, technological options, and pedagogical implications, teachers' goals and perceptions of different types of CALL may also contribute to the success of technology integration in language teaching.

Peer level. The study has also shown the importance of a community of practice (Stockwell, 2009) to technology education and language teachers' professional development. Both teachers in this study expressed great gratitude to their peers during the initial months of working here. This support helped them overcome their technological anxiety and adapt a more open-minded perspective toward the technologies of their school, particularly iTools and the cloud system. They also learned about useful teaching materials and resources from other senior teachers. Not only did the teacher community at this campus help its teachers with their methodologies, but it also successfully gave them, specifically the novice in-service teachers in this study, more encouragement

to enhance their teaching and technology skills. In one community of practice, even though it might be overwhelming for both experienced and novice in-service teachers to work with new technologies (Stockwell, 2012), teachers may perceive technology challenges as a chance to learn from their peers and practice their teaching skills through using technology. In line with Stockwell's suggestions (2007; 2012), having applications such as iTools or the Cloud system has shown the potential to promote a more effective peer collaboration, which eventually leads to more effective integration of technology. Therefore, for institutions in the private sector, encouraging a community of practice in which teachers can seek help and openly express their anxiety toward technology education might be a useful practice to boost teachers' morale and sustainably keep teachers in their professions.

Institutional level. To begin with, for comprehensive technology education to have an impact on teachers' professional development, how one institution decides to introduce and train teachers on new technologies should be considered thoroughly. Classroom observations have shown that even though teachers used iTools most of the time, they only used the audio files embedded and the paint function. This could have been because of the insufficient technology training at the institution. Questionnaire results have shown that only 26.9% of the participant had their training on this application. Also, both teachers mentioned that the orientation before starting any courses focused mainly on students and teaching methodologies. Even though they agreed that the content was beneficial, they thought that it might be better to have some more technology training. Therefore, it could be indicated that for in-service teachers, especially novices of CALL, orientation on technology should be provided in conjunction with course/classroom orientation. Secondly, it was interesting to learn that both teachers emphasized the importance of training on how to use iTools and the cloud system at the institution. Survey results also indicate a great number of teachers (88.9%) who wanted to have some training on iTools for the advancement of their professions. Therefore, language institutions in the private sector can focus on training teachers on how to use the already provided technologies. The study has shown that introducing state-of-the-art technologies may not be necessary while the training on how to use the provided ones is overlooked. Training in this respect can be a welcome change and benefit both language teachers and institutions. On the one hand, in-service teachers can learn to utilize those technologies and improve their teaching skills, which eventually helps advance their careers. On the other hand, institutions in the private sector may gain financial benefits since training on what has already been provided can be cost-effective, especially when there is a community of practice and experienced managers.

Limitations and recommendations for future research

Even though the findings have been helpful to understand language teachers and CALL training needed in the private sector, the study is not without

limitations. First of all, convenient sampling was employed due to the institution' regulations and the participants' availability. This means that their perspectives toward CALL might not be representative for language teachers in Vietnam. Also, only one institution was investigated due to the time constraint of the researcher and difficulty in gaining access to language institutions in the country. To mitigate these two limitations, further research examining language teachers' attitudes toward CALL in the private sector might consider other language institutions and participants with more diversity in terms of backgrounds and teaching experience. This can also help compare and complement the findings of this study. Finally, since data were collected and analyzed before the COVID-19 pandemic, it is hard to anticipate whether language teachers in the same context have changed their perspectives toward CALL and their language teaching profession during and after this crisis. However, the findings from this study can be a beneficial resource for further research projects that compare and investigate how language teachers' perspectives toward CALL and CALL training have changed due to the COVID-19 pandemic.

Conclusion and implications

By using a case study of one institution in the private sector, this study sought to provide empirical evidence to understand language teachers' perspectives toward technology integration, its influence on technology education in the workplace, and the relationship between CALL training and language teachers' professional development. First and foremost, the results have helped shed more light on in-service teachers' attitudes toward technology integration in their workplace. Insufficient as their training in technology integration may have been, both participants exhibited a positive perspective and strong determination in learning and applying technology to their classrooms. Teachers' competency and their beliefs in technology integration might be one of the reasons for this. Also, their experience and exposure to technology might be another explanation. This experience assisted the participating teachers to see and learn how to apply technology to education regardless of the incomprehensive content of the course they took in their undergraduate courses. Their working experience as teaching assistants also contributed greatly to building up their positive attitudes toward technology integration. While Teacher B had an opportunity to observe all the cutting-edge applications being used at the institution, Teacher A's teaching experience in other schools in the private sector had successfully made her feel more open and eager to learn and apply technology to her own classes. This finding lends more support to the importance of practicing using technology through training to foster language teachers' positive perspectives. However, it should also be noticed that preconceived ideas based on teaching experience might also result in a negative feeling toward technology integration, which was evident in Wang's (2021) study where in-service teachers' attitudes toward CALL were likely to be influenced by their experience in teaching the language. Therefore, creating a positive impression regarding CALL and maintaining teachers' attitudes toward it

might be key to enhancing language teachers' motivation and innovation in language education, especially in the ELT context.

Findings also provide more insights into how language teachers learn to educate themselves at work and the support needed to enhance a working and learning environment. The community of practice in this study has proven to be of great importance to the teachers' education in CALL, especially when it comes to novice in-service teachers' CALL learning. The support Teacher A and B received from their peers not only helped them overcome anxiety but also built up their confidence toward a sound technology-driven teaching approach. Moreover, the community of practice of this institution has also mitigated the problem of differences in CALL educational backgrounds among language teachers. It provided experienced teachers with a place to teach and share their insights while, at the same time, creating an anxiety-free environment for inexperienced language teachers to ask and learn from their veteran colleagues. Hence, it is recommended that creating and enhancing this community would possibly lead to more breakthroughs in CALL training and education, especially when there are differences in CALL practitioners' backgrounds, skills, viewpoints, and perspectives about appropriate technologies in language teaching (Levy & Stockwell, 200).

Finally, besides encouraging language teachers, technology training also plays a key role in the enhancement of their professional development. Based on the language teachers' attitudes and expectations, training in technology can be focused on mostly three different levels, namely individual-, peer-, and institutional levels. While providing support and training on technology integration might be a challenging task for institutions (Son, 2018), it is not unfeasible if there is a solid timeline for technology implementation. Based on the two teachers' positive attitudes in this research, it is recommended that goal setting and consideration regarding language teachers' feelings and well-being, especially toward technology integration, should be considered on a regular basis, especially at the individual level. Learning how to use technology might become a daunting task if they are left to their own devices, which eventually might make them feel anxious, resentful (Chiu & Churchill, 2015; Lindaman & Nolan, 2015) and in some extreme cases, depressed (Cheng & Lam, 2021) toward any implementation related to technology. Together with individual training, workshops utilizing the community of practice would also yield desirable outcomes in CALL training at the peer level. Last but not least, at the individual level, particularly in the private sector, time-consuming as it might be, including language teachers in the decision-making process of language policy and technology promotion can contribute to the development of both teachers and institutions as a whole. Understanding teachers' needs and expectations would help reduce a great amount of unnecessary training, investment and bring more positive energy into the workplace.

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Appendix A

Observation sheet

Timeline	Activities	CALL-related activities

Appendix B

Questions for interview

1. How long have you been teaching English?
2. Have you received any training in CALL during your undergraduate course?
3. What do you think about technology and its role in a language classroom?
4. What do you think about the institution's facilities and its working environment?
5. What factors are important to your career?
6. What do you think about iTools?
7. How often do you use iTools?
8. Have you received any training on iTools?
9. What kinds of training do you have at the centre?
10. Besides iTools, have you ever incorporated any other applications into your lessons? If yes, how did you learn about those apps?
11. What do you think about the school support and training?
12. What is your opinion about the school's technologies?
13. What is your opinion about an ideal training program?
14. Would you participate in more technology training sessions if they were provided?
15. Would you mind answering the follow up questions about CALL teacher training?

References: *Teacher education in CALL* (Hubbard, P., & Levy, M. (Eds.), 2006) and *Teacher education in CALL: Teaching teachers to educate themselves* (Stockwell, 2009).

Appendix C

Questionnaire for teachers

1. How long have you been teaching English?
   A. Nearly 1 year
   B. 1-3 years
   C. Over 3 years
2. Did you have to take any courses related to CALL in your undergraduate degree/graduate degree?
   A. Yes
   B. No
3. My CALL/technology related courses that I took in my degree taught me effectively how to teach with technology.
   A. Strongly agree
   B. Agree
   C. Disagree
   D. Strongly disagree
4. The technology for teaching courses that I took was relevant to my future teaching experience:
   A. Always
   B. Sometimes
   C. Never
5. How often do you incorporate technology into your lessons?
   A. Always
   B. Sometimes
   C. Never
6. Do you feel comfortable with technology being used in language teaching?
   A. Yes
   B. No
7. Have you ever used technology in your teaching?
   A. Yes
   B. No
8. How important is technology to the communicative teaching approach?
   A. Important
   B. Neutral
   C. Not important
9. How often is the use of iTools for language teaching recommended at your institution?
   A. Always
   B. Sometimes
   C. Never
10. How often do you use iTools?
    A. Always
    B. Sometimes
    C. Never

11. Do you use iTools together with your activities or you use it separately?
    A. Together
    B. Separately
12. Have you had any training on using iTools?
    A. Yes
    B. No
13. Would you like to have more training on applying iTools into classroom activities?
    A. Yes
    B. No
14. Do you think technology is important to your teaching approach?
    A. Yes
    B. No
15. In terms of technology provided at your workplace, do you think it benefits your career?
    A. Yes
    B. No
16. Do you think the technology training at your workplace is sufficient to your teaching career?
    A. Yes
    B. No
17. Have you ever received any training on technology integration into language teaching at your workplace?
    A. Yes
    B. No
18. Would you like to receive more training on how to integrate technology into classroom activities?
    A. Yes
    B. No

Appendix D

Questionnaire results

Part 1. Background education and experience with technology integration

Questions	Results			
1. How long have you been teaching English?	Nearly 1 year 11.1%	1–3 years 37.0 %	Over 3 years 51.9%	
2. Did you have to take any courses related to CALL in your undergraduate degree/ graduate degree?	Yes 63.0%	No 37.0%		
3. My CALL/technology related courses that I took in my degree taught me effectively how to teach with technology.	Strongly agree 5.0%	Agree 75.0%	Disagree 10.0%	Strongly disagree 10.0%
4. The technology for teaching courses that I took was relevant to my future teaching experience.	Always 57.7%	Sometimes 42.3%	Never 0%	
5. How often do you incorporate technology into your lessons?	Always 57.7%	Sometimes 42.3%	Never 0%	
6. Do you feel comfortable with technology being used in language teaching?	Yes 96.3%	No 3.7%		
7. Have you ever used technology in your teaching?	Yes 100%	No 0%		
8. How important is technology to the communicative teaching approach?	Important 51.9%	Neutral 48.1%	Not important 0%	

Part 2. Training and experience with iTools

Questions	Results		
9. How often is the use of iTools for language teaching recommended at your institution?	Always 70.4%	Sometimes 22.2%	Never 7.4%
10. How often do you use iTools?	Always 51.9%	Sometimes 33.3%	Never 14.8%
11. Do you use iTools together with your activities or do you use it separately?	Together 81.5%	Separately 18.5%	
12. Have you had any training on using iTools?	Yes 26.9%	No 73.1%	
13. Would you like to have more training on applying iTools into classroom activities?	Yes 88.9%	No 11.1%	

Part 3. Technology training and professional development

Questions	Results	
	Yes	No
14. Do you think technology is important to your teaching approach?	96.3%	3.7%
15. In terms of technology provided at your workplace, do you think it benefits your career?	88.9%	11.1%
16. Do you think the technology training at your workplace is sufficient to your teaching career?	81.5%	18.5%
17. Have you ever received any training on technology integration into language teaching at your workplace?	25.9%	74.1%
18. Would you like to receive more training on how to integrate technology into classroom activities?	92.6%	7.4%