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Exploring the Experiences, Challenges, and Perspectives in Digital Literacy Training of Older Thai EFL Teachers with Low Digital Literacy

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Although technology has been seamlessly integrated into classroom teaching, there is room for improvement in the way professional development is implemented. The aim of this study was to explore the experiences of Thai teachers of English as a Foreign Language (EFL) in implementing digital literacy training. Focusing on technologically illiterate teachers (and particularly older ones), the study aimed to investigate the production of online videos by these teachers to be used in their classrooms. The study was conducted in Trang, Thailand, and involved 36 Thai EFL teachers who underwent a one-month training programme in 2020. Data was collected through a questionnaire, observation, and interviews. The results showed that the participants required additional training time, and faced challenges such as teaching style, computer specifications, and Internet accessibility. Despite these challenges, the teachers reported a positive perceptions of teaching English with technology, and found it was easier than they had anticipated. These findings have pedagogical implications for future implementations of digital literacy training for somewhat technologically illiterate language teachers.

Keywords: Technology in the classroom, technological literacy, fostering technology, online video, professional development, older teachers, challenges in training

INTRODUCTION

The integration of technology in education has had a profound impact on the world, and language learning and teaching is no exception to this integration (Deerajviset, 2014). Indeed, numerous studies have focused on the role of technology in enhancing student language learning (Zhao, 2003); however, little research has explored the implementation of technology in teacher education.

In the Thai context, it has been observed that technologically literate teachers have successfully incorporated technology into their classrooms, finding it useful, user-friendly, and resource-rich (Kampookaew, 2020). On the other hand, for technologically illiterate teachers, and particularly older Thai teachers of English as a Foreign Language (EFL), using technology for teaching English has proven to be a challenge.

Given this background and the importance of the issue, this study seeks to explore the implementation of digital literacy training for older Thai EFL teachers with low digital literacy in terms of experiences with digital literacy training, challenges the teachers face during and after the training, and perspectives on teaching English with technology. Hence, the following research questions will be addressed:

(1) What are the Thai EFL teachers' experiences of digital literacy training for teaching English with technology?

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(2) What challenges do the teachers face during and after their digital literacy training?
(3) What are the teachers' perspectives on teaching English with technology?

Literature Review

The Role of Technology in Enhancing Language Learning

Technology has been widely used in language learning and teaching to support the language development of students and increase their motivation to learn (Warschauer & Mathews, 1999). The use of technology, such as computer-assisted language learning (CALL) and mobile-assisted language learnin (MALL), has been found to have a positive impact on various aspects of language learning including vocabulary acquisition, grammar development, and oral communication skills (Chapelle, 2001; Lee & Anderson, 2013).

One of the benefits of using technology in language learning is that it provides students with authentic and interactive language input (Warschauer & Mathews, 1999). For example, students can use multimedia resources such as videos, audio recordings, and simulations to experience the target language in real-life situations and practice their language skills in a safe and supportive environment (Chapelle, 2001).

Moreover, technology can also support personalized learning and increase students' autonomy by providing them with individualized feedback, opportunities for self-reflection, and self-paced learning (Chapelle, 2001; Lee & Anderson, 2013). Additionally, technology can also foster student engagement and motivation to learn by providing them with engaging and interactive activities that are relevant to their interests and needs (Warschauer & Mathews, 1999).

However, it is important to note that the effectiveness of technology in language learning depends on its implementation and use (Warschauer & Mathews, 1999). For example, simply incorporating technology into the language classrooms does not guarantee improved language learning outcomes as the quality and relevance of the technological resources and activities used is also critical (Chapelle, 2001).

Clearly, technology can play a crucial role in enhancing language learning by providing students with authentic and interactive language input, by supporting personalized learning, by increasing engagement and motivation, and by providing opportunities for self-reflection and self-paced learning.

The Use of Technology in Teacher Training

The integration of technology into education has prompted the need for teacher training in digital literacy and the use of technology in the classroom (Warschauer & Mathews, 1999). Teacher training in digital literacy is crucial to ensure that teachers are equipped with the necessary knowledge and skills to effectively integrate technology into their teaching practices (Kampookaew, 2020).

Studies have shown that well-prepared, technologically literate teachers are more likely to incorporate technology into their teaching and use it to support student learning (Zhao, 2003). On the other hand, technologically illiterate teachers may face challenges in using technology in the classroom, particularly when it comes in finding and utilizing relevant technological resources (Kampookaew, 2020).

To address this issue, teacher training programmes should be focused on providing teachers with hands-on technology training and opportunities to explore and experiment with different technological tools and resources (Warschauer & Mathews, 1999). Indeed, this hands-on training can help to increase teachers' confidence and comfort level when working with technology and encourage them to incorporate it into their teaching practices (Zhao, 2003).

Teacher training programs should also address the challenges that teachers may face when using technology such as limited access to technology resources and technical difficulties and provide support and solutions to overcome these challenges (Kampookaew, 2020). Additionally, teacher training programs should also provide opportunities for teachers to reflect on their experiences with technology and provide feedback on their teaching practices (Warschauer & Mathews, 1999).

In sum, the inclusion of technology in teacher education is essential to equip teachers with the knowledge and skills necessary to effectively integrate technology into their teaching practices. Additionally, teacher training programs should focus on providing hands-on training with technology, addressing potential challenges, and providing opportunities for reflection and feedback.

The Use of Technology in Teaching English as a Foreign Language (EFL) in Thailand

The integration of technology into language learning and teaching has had a profound impact in many countries including Thailand. The use of technology in teaching English as a Foreign Language (EFL) in Thailand has been observed to be beneficial, user-friendly, and resourceful for technologically literate teachers (Kampookaew, 2020). However, for technologically illiterate teachers, especially older Thai EFL teachers, the use of technology in teaching English has proven to be challenging.

Studies have shown that technology can support language learning by providing students with access to authentic language materials and resources, facilitating collaboration and communication, and enhancing student motivation and engagement (Warschauer & Mathews, 1999). For example, the use of online videos has been shown to be an effective tool for language learning as it provides students with access to authentic language input and opportunities to practice their language skills (Deerajviset, 2014).

In the Thai context, technologically literate teachers have successfully incorporated technology into their classrooms and have found it to be a valuable resource for teaching English as a Foreign Language (EFL) (Kampookaew, 2020). However, for technologically illiterate Thai EFL teachers, especially the senior teachers, using technology to teach English has proven to be a challenge. Numerous studies have provided evidence to suggest that Thai EFL instructors with deficient technological skills face challenges in integrating contemporary tools into their teaching methodologies. An illustration of this is the research by Pim (2021), which focused on the use of digital technologies by Thai EFL teachers and revealed a significant disparity in digital literacy abilities between younger and older teachers. The latter demographic frequently encounters obstacles while attempting to effectively incorporate technological devices into their classrooms. This highlights the importance of teacher training in digital literacy to ensure that all teachers have the necessary knowledge and skills to effectively integrate technology into their teaching practices (Kampookaew, 2020).

Thongsri, Tasena, and Wannapiroon (2022) investigated the impediments faced by Thai EFL teachers when incorporating technology into their English language teaching. The study revealed that a significant obstacle among older teachers was insufficient digital competence. Additionally, it was observed that teachers' inadequate digital proficiency resulted in less productive integration of technology in their instruction.

The significance of the digital gap for the technological proficiency of Thai educators teaching English as a foreign language is of critical concern. According to Srichanyachon's (2021) report, teachers residing in rural regions generally face limited access to technology and inadequate chances to enhance their digital literacy abilities compared to their urban peers. This inequality is further worsening the difficulties encountered by digitally unskilled Thai EFL instructors.

Enhancing the digital literacy skills of Thai EFL teachers, especially those who are advanced in age or located in rural regions, is an essential measure to guarantee productive and technology-driven

teaching. Henceforth, rectifying these discrepancies in digital proficiency should be regarded as a major focus area for the growth and advancement of Thai EFL teachers via professional development programmes (Suknaisith, Panichpathom, & Palanukulwong, 2023).

Overall, the use of technology in teaching English as a Foreign Language (EFL) in Thailand was found to be beneficial for technologically literate teachers, but challenging for technologically illiterate teachers. Teacher training in digital literacy is crucial to ensure that all teachers have the necessary knowledge and skills to effectively integrate technology into their teaching practices. The focus of this article is on the use of online video for teaching English in the Thai context, which will be discussed in the following section.

The Use of Online Videos in Teaching English as a Foreign Language in Thailand

The use of online videos has proven to be an effective tool for language learning and has been increasingly used in the teaching of English as a Foreign Language (EFL) in Thailand. Online videos provide students with access to authentic language input and opportunities to practice their language skills (Deerajviset, 2014). Furthermore, it can help to enhance student motivation and engagement and promote language development (Warschauer & Mathews, 1999).

Studies have shown that online videos support language learning by providing students with opportunities to practice their listening and speaking skills, exposure to native speaker pronunciation, and giving them access to a variety of language input and materials (Zhao, 2003). Additionally, online videos can also provide students with opportunities to engage in collaborative learning activities such as discussion and problem solving tasks (Warschauer & Mathews, 1999).

In the Thai context, technologically literate teachers have successfully incorporated online videos into their EFL classrooms and have found it to be a valuable resource for teaching English as a Foreign Language (EFL) (Kampookaew, 2020). However, for technologically illiterate teachers, especially older Thai EFL teachers, using technology to teach English has proven to be challenging. This highlights the importance of teacher training in digital literacy to ensure that all teachers have the necessary knowledge and skills to effectively incorporate online videos into their teaching practices which needed 10 digital competences, and two of which was application of video conference system and development of instructional video (Wannapiroon et al., 2022).

In conclusion, the use of online videos has proven to be an effective tool for teaching English as a Foreign Language (EFL) in Thailand. Moreover, online videos support language learning by providing students with access to authentic language input as well as opportunities to practice language skills and to engage in collaborative learning activities. Most importantly, teacher training in digital literacy is crucial to ensure that all teachers have the necessary knowledge and skills to effectively integrate online videos into their teaching practices.

Research Design, Sampling, and Context

Methodological Design, Theoretical Sampling, Participants, and Context

The study was structured into three phases. The first phase, referred to as the pre-training phase or preparation phase, was conducted among a group of schools in Trang Province, Thailand. The schools were selected using convenience sampling as they were very supportive of the study and were located close to the researcher's residence. The schools consisted of 36 English teachers, 28 of whom were primary Thai English teachers and eight Thai secondary English teachers. Some of the 28 primary teachers also taught kindergarten students. Initially, the study focused on 8 Thai English teachers for ease of administration, but later all teachers expressed interest in participating and voluntarily participated as research participants. The main objective of the study was to focus on older and technologically illiterate teachers, and this was openly communicated to all participants.

A pre-questionnaire was administered to the 36 teachers to analyze their competence in using computer technology and digital software for English language instruction. After the data was collected, it was then calculated, analyzed, and categorized into four levels of computer, technological, and digital literacy: expert users, proficient users, operational users, and technologically illiterate users. During the pre-questionnaire period, the researcher was allowed to observe two Thai English teachers in their better to use classrooms through random sampling selection. Following data collection, the stratified random method was used to select 12 participants whose pre-questionnaire scores indicated low technological literacy. These participants were then divided into two groups based on age - i.e., an older group and a younger group.

The second phase, referred to as the while-training phase or implementation phase, consisted of two stages. The first stage involved training in computer literacy, software training, and approaches and was consisted of eight steps: 1) goal setting, 2) content, 3) material, 4) computer literacy, 5) software training, 6) approaches and procedures, 7) teaching demonstration, and 8) evaluation.

The second stage, referred to as the teaching stage, immediately followed the training stage and consisted of six steps: 1) planning, 2) presentation, 3) technology implementation 1, 4) practice, 5) technology implementation 2, and 6) assessment/ evaluation/ reflection. Both groups of participants took part in this phase, which lasted 4 weeks.

The third phase, referred to as the post-training phase or implication phase, was separated by two weeks apart to allow participants time to prepare for teaching lessons and teaching materials. Participants took on the role of teachers in actual classes and taught a topic of their choice. The researcher observed two participants who had already been observed during the pre-training phase, and two additional participants had requested a desire to be observed. Immediately following the training, the participants completed a post-questionnaire, which was identical to the pre-questionnaire. All 12 participants were also invited to participate in a focus group interview to collect additional data about the training course. Participants were informed that pseudonyms would be used to replace their real names throughout the study.

The entire training program lasted one month: the pre-training phase lasted one week, the while-training phase took two weeks, and the post-training phase took one week. The training content was divided into four parts: 1) general knowledge of using technology which consisted of computer skills, cyber security awareness, and cyber security practices; 2) implementation of learning approaches related to language and technology which consisted of blended learning, flipped learning, and using the TPACK Model; 3) implementation of essential office programs such as word processing, spreadsheets, and presentation programs; and 4) implementing online platforms for language teaching including Internet skills, online collaboration, and graphic editors.

Instruments

The present study utilised a combination of three research instruments, including a questionnaire, an observation and an interview. The questionnaire was used in two different periods of the study, referred to as the pre-training period (pre-questionnaire) and the post-training period (post-questionnaire). Both questionnaires were identical, with the pre-questionnaire designed to assess the teachers' competence and performance in computer technology and digital literacy prior to the training. Alternatively, the post-questionnaire aimed to evaluate the participants' experiences after the training. The questionnaire was based on the Thailand Professional Qualification Institute (Public Organisation) (2019) and consisted of questions related to computer skills, internet skills, cybersecurity awareness, word processing, spreadsheets, presentation programs, online collaboration, graphic editors, and cyber security practices. The questionnaire was scored on four levels of computer, technological, and digital literacy, i.e. 1.) expert user, 2.) proficient user, 3.) operational user, and 4.)

illiterate user. As the questionnaire was employed from the Thailand Professional Qualification Institute (Public Organisation), it can be trusted in terms of its validity and reliability.

The observation used a note-taking method describing the participants' teaching without a specific list to explore. The first observation was conducted in the pre-training phase to explore the normal class teaching practices of the teachers while the second observation was conducted during the training phase to assess the participants' performance in applying the training knowledge to teaching demonstration. The third observation was conducted in the post-training to assess the participants' experiences and performance before and after the training course as well as any challenges encountered during teaching. As the observation was a note-taking observation, there was no structure but free notetaking from the researcher using the process of Strauss and Corbin's (1990) qualitative analysis.

Finally, a focus-group interview was conducted to gather the experiences gained during the training course and the participants' perspectives on the training. The interview took place immediately after the end of the post-training period.

Data Analysis

Questionnaire

The pre- and post-questionnaires were analyzed using the Statistical Package for the Social Sciences (SPSS version 17) for Windows. The results of the study were described by mean (*M*) and interpretation (expert users, proficient users, operational users, and illiterate users)

The data obtained from the questionnaire were analyzed using the Statistical Package for the Social Sciences (SPSS) for Windows. The results of the study were described by percentages, mean, and S.D. as follows:

(1) The demographic information of the participants was described by frequencies and percentages.

(2) Computer, technological and digital literacy was classified into 4 levels: 1.) expert users, 2.) proficient users, 3.) operational users, and 4.) illiterate users according to the following criteria.

Table 1
Criteria for computer, technological and digital literacy

Levels of Computer, Technological and Digital Literacy	Mean ($\overline{X}$)
Expert Users	3.25-4.00
Proficient Users	2.50-3.24
Operational Users	1.75-2.49
Illiterate Users	1.00-1.74

(3) The opinions towards the competency development on computer, technology and digital for English language teaching.

Observation

Observation was used as a tool to collect data from the participants' teaching demonstration in both the pre-training and post-training periods. The field note-taking method was employed in the observation which allowed for the description of the events occurring during the teaching demonstration. The richly descriptive notes were then analyzed using a reflective approach, as outlined by Creswell (2007), to facilitate the interpretation of the study's findings.

Interview

A two-step process was used to analyze the interview data. Firstly, a review of the literature and relevant documents was undertaken to construct pre-determined categories of data which served as the theoretical framework for analysis. The three categories used in the analysis were: perceptions, difficulties, and factors.

The data obtained from the questionnaire was analyzed the participant selection model of intensity sampling in order to select participants for the interview section. The analysis was performed using the intensity sampling method which resulted in the selection of six participants of whom included two males and four females. After the interview was conducted, the data was analyzed according to the 12 question items which were grouped into five main questions: 1) grand tour, 2) specific/concrete example questions, 3) comparison and contrast questions, 4) new elements, and 5) closing. The analysis was based on the three predetermined categories of perception, difficulties, and factors.

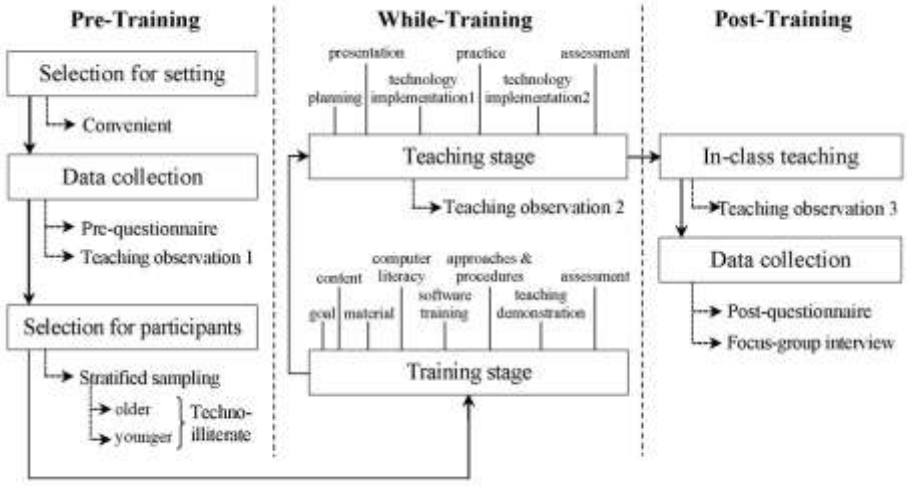

Figure 1
Methodological design of the study

Analysis of the Participants' Background

Since the beginning of this study, attempts have been made to find a school in which to conduct this research. The researcher tried to visit two institutions in Bangkok without success. One school denied permission to conduct research with the instructors, and the other school expressed interest, but the coordinator did not make contact with the researcher. Later, a former student expressed interest in research work, and he reached out to express his interest. To acquire the data, the researcher travelled to the province of Trang and conducted research over a total period of four days. The results of Part 1 of the pre-questionnaire regarding the demographic information of the participants are presented below in Tables 2 to 6 below.

Table 2
Gender of participants of the study

Gender	Frequency	Percent
Male	5	13.89
Female	31	86.11
Total	36	100.00

A total of 36 teachers in the Trang Province participated in the research. Of these, 13.89% were males and 86.11% were females. The majority of the participants were between 26 and 30 years old (30.56 percent). The youngest age group of participants were between 21 and 25 of age (11.11%), which was the same as the oldest group. The age of the participants varied as shown in Table 3:

Table 3
Gender of participants of the study

Age	Frequency	Percent
21-25 years	4	11.11
26-30 years	11	30.56
31-35 years	7	19.44
36-40 years	1	2.78
41-45 years	6	16.67
46-50 years	3	8.33
More than 50 years	4	11.11
Total	36	100.00

In terms of the years of experience in teaching English, 75% of the participants had worked in the field between one and ten years. Additionally, more than 11.11% of participants had over 20 years of experience, as shown below in Table 4:

Table 4
Years of experience of participants of the study

Years of experience	Frequency	Percent
Lower than 1 year	2	5.56
1-5 years	16	44.44
6-10 years	11	30.55
11-15 years	2	5.56
16-20 years	1	2.78
More than 20 years	4	11.11
Total	36	100.00

In terms of administrative position, there were 12 participants (33.33%) who served as heads of their respective foreign language learning departments. Meanwhile, 24 participants (66.67%) did not hold any administrative position. This information is presented in Table 5 below.

Table 5
Administrative position of participants of the study

Years of experience	Frequency	Percent
Head of foreign language learning area	12	33.33
No position of administration	24	66.67
Total	36	100.00

Part 2 of the pre-questionnaire contained questions about the participants' computer, technological, and digital competency in English language teaching and provided the data used to select the participants for the study. The results are presented in Table 6 below.

Table 6
The mean and interpretation of the 36 participants on computer, technology and digital competency in English language teaching

Participant's Pseudonym	Questionnaire Items[1] and Mean Scores										$\bar{X}$
	1	2	3	4	5	6	7	8	9	10	(Interpretation)
Tree	2.33	2.14	2.40	2.00	1.57	2.00	1.50	1.40	1.50	2.00	1.88 (Operational)
Sirinton	2.50	2.14	2.20	2.86	2.00	3.00	2.00	1.80	2.00	1.40	2.19 (Operational)
AB	2.67	2.00	2.00	2.57	2.29	2.00	1.75	2.00	2.00	1.00	2.03 (Operational)
PPTT	3.33	4.00	2.60	3.43	2.86	3.40	2.50	2.40	3.00	2.60	3.01 (Proficient)
Uncle Too	3.17	3.57	2.80	3.57	3.14	2.80	2.50	3.00	2.50	2.40	2.95 (Proficient)
Waenkaew	2.67	3.29	2.60	3.00	2.29	3.00	2.50	2.00	2.00	2.40	2.58 (Proficient)
Nu	2.00	2.14	2.40	2.00	1.00	1.40	1.00	1.20	1.00	2.00	1.61 (Illiterate)
Icemocha	2.00	2.57	2.00	2.00	2.00	2.60	2.00	1.00	1.00	2.00	1.92 (Operational)
Kru Baby	3.83	3.43	3.00	4.00	4.00	4.00	1.50	2.20	1.75	1.00	2.87 (Proficient)
Mangek	3.17	3.57	4.00	4.00	3.00	4.00	3.75	3.60	4.00	3.00	3.61 (Expert)
Nelena	3.00	4.00	3.40	4.00	3.71	3.00	3.00	3.00	3.00	3.00	3.31 (Expert)
Papaya	4.00	3.71	3.40	4.00	3.43	3.00	3.00	3.20	3.00	3.40	3.41 (Expert)
Tomato	3.17	3.00	2.80	2.57	3.00	3.00	3.00	3.00	3.00	2.80	2.93 (Proficient)
Mali	3.83	4.00	3.00	4.00	4.00	4.00	3.00	3.00	2.00	1.00	3.18 (Proficient)
Mirin	2.83	3.29	2.00	3.71	2.71	3.00	1.75	1.20	1.00	2.60	2.41 (Operational)
Daii21	3.00	3.14	2.40	3.29	3.00	3.00	2.75	2.80	2.50	3.00	2.89 (Proficient)
August	3.00	3.00	2.60	3.00	3.00	3.00	3.00	2.80	2.75	2.80	2.90 (Proficient)
Star	2.17	1.29	2.00	2.00	1.14	1.00	1.00	1.00	1.00	1.00	1.36 (Illiterate)
Three	1.83	2.29	2.00	2.29	1.71	2.00	1.50	2.00	1.25	1.80	1.87 (Operational)
Kay	1.50	2.00	2.00	2.43	1.29	1.00	1.50	1.60	1.50	2.00	1.68 (Illiterate)
Heart	1.67	1.71	1.20	2.29	1.00	1.00	1.00	1.00	1.00	1.80	1.37 (Illiterate)
Tech	3.67	2.00	1.20	1.00	1.14	1.00	1.00	1.00	1.00	3.00	1.60 (Illiterate)
Train	3.00	4.00	3.00	3.43	1.71	3.00	4.00	2.00	3.00	3.00	3.01 (Proficient)
Tesgo	2.83	3.43	2.40	3.43	2.29	3.80	2.00	1.40	3.50	3.40	2.85 (Proficient)
Mouse	3.33	4.00	2.60	3.00	2.86	3.00	2.75	2.20	1.00	2.80	2.75 (Proficient)
Sho	2.83	4.00	3.40	3.71	3.71	3.20	3.75	3.80	3.50	3.80	3.57 (Expert)
Trang	4.00	3.57	3.00	3.00	3.29	4.00	3.00	3.80	3.00	3.40	3.41 (Expert)
Doll	1.00	3.57	3.00	2.57	2.00	2.80	2.25	2.20	2.00	4.00	2.54 (Proficient)
Best	2.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.37 (Illiterate)
Chanel	2.67	4.00	3.80	4.00	3.57	4.00	4.00	2.40	3.00	3.00	3.44 (Expert)
ROV	3.83	3.86	3.40	4.00	2.29	3.80	3.00	2.00	2.50	3.00	3.17 (Proficient)
Game	2.50	3.14	3.00	3.57	3.71	3.60	3.00	3.00	3.00	3.40	3.19 (Proficient)
Pepper	2.83	3.00	3.00	3.00	3.00	3.00	2.25	2.00	2.00	2.80	2.69 (Proficient)
River	2.67	3.00	3.00	3.00	3.00	3.00	1.00	2.00	2.00	4.00	2.67 (Proficient)
Maple	2.00	4.00	4.00	4.00	3.71	3.00	3.75	2.80	4.00	3.40	3.47 (Expert)
Shark	3.50	3.71	3.00	4.00	2.00	3.60	3.75	3.60	3.25	3.20	3.36 (Expert)
$\bar{X}$	2.81	3.07	2.66	3.05	2.54	2.81	2.39	2.23	2.24	2.62	2.64 (Proficient)

[1] Question items refer to the competency in: 1. Computer Skills 2. Internet Skills
3. Cyber Security Awareness 4. Word Processing
5. Spreadsheets 6. Presentation Programs
7. Graphics Editors 8. Cyber Security Practices
9. Technology-Based Language Learning and Teaching Approaches

Table 6 shows that, overall, the participants are proficient users of computer, technological, and digital equipment (M = 2.64). However, a closer examination of individual results reveals that there are eight expert users (22.22%), 16 proficient users (44.44%), six operational users (16.67%), and six illiterate users (16.67%). The operational and illiterate users (12 participants in total) were selected for the study.

Next are the results from Teaching Observation 1, which were obtained from the researcher's field notes while observing the regular teaching practices of two teachers. The researcher was informed of the study's objectives beforehand.

On 10 March, 2020, as part of the research, an observation of Kay's and Nu's classes was conducted at Banbangduan School. Prior to Nu's class, there was the opportunity to witness Kay's academic presentation.

Kay is responsible for teaching Grade 4 students in all subjects; however, her specialty is teaching English. Her lesson, observed from 9:10 a.m. to 10:00 a.m., was quite traditional, interactive, and well-organized. The room was organized in such a way that each student had their own separate workspace. The learning atmosphere was relaxed, and the teacher was able to manage the lesson's activities effectively. English was used in the lesson 90% of the time, but some Thai explanation and conversation would occasionally take place when the students repeatedly gave incorrect answers.

The class began with a traditional Thai greeting, a common practice in Thai classes. During the warm-up stage, all students had the opportunity to speak using a brainstorming technique to determine their prior knowledge. Kay also employed various techniques such as Total Physical Response (TPR), the Audiolingual Method (ALM), and drill and practice when difficulties arose. The warm-up stage lasted about 20 minutes. Kay then taught a new lesson that was linked to the warm-up stage, focusing on the responses "No, thank you" and "Yes, please". Likely due to the use of English as the primary language of communication, this new lesson caused confusion among the students at times. However, with her experience in teaching, Kay was able to effectively manage the class. Additionally, she did not demonstrate the use of computers, technology, or digital tools in her teaching.

After observing Kay's class, the researcher waited three hours before starting to observe Nu's class at Banbangduan School. Nu was teaching Grade 5 students who had lower English proficiency compared to Kay's students due to the school's policy of accepting all students without a screening test. Before the class began, Nu informed me that the students in this class were weak and still confused about the letters 'b' and 'd' which they wrote interchangeably.

Nu's overall teaching style was different from Kay's. It was difficult to identify the steps of his teaching, such as warm-up, presentation, practice, or production, because he followed the textbook without any clear procedures. The room was suitable for group activities, but there were no group activities, and the students were seated next to each other in two big groups. Nu primarily used the Grammar Translation Method (GTM), and his teaching was teacher-centered, unlike Kay's class where English was used more frequently and interactively. The majority (80%) of the class was conducted in Thai which did not pose any problems for Nu as he was operating the class in Thai. Additionally, the researcher could hear some southern Thai dialect and accent, which was the students' mother tongue. However, it was surprising to observe that the students did not even know how to start greeting their teacher and only responded when Nu gave a signal in a soft and quiet tone.

The lesson for the day was about constructing questions using wh- questions and yes/no questions. The students performed well in speaking questions and answers, but some students were absent-minded during the teaching. In the researcher's opinion, in order to enhance their understanding of the questions, Nu should have written the patterns of answering each of the question words on the board instead of just telling the students to copy the questions and responses from the textbook.

During the practice stage, when the students were doing exercises from the book and Nu was observing, it was noticed that he tapped the arms of two students to warn them of their wrong answers. This was thought to make the students more active. Nu provided immediate feedback and corrected pronunciation and grammar when mistakes were made.

In conclusion, both Kay and Nu did not demonstrate the use of computer, technology, and digital tools in their teaching.

The results of the focus-group interview are presented below. The interview was conducted immediately after the end of the training in the post-training phase. The teachers understood that there were only twelve participants had been selected from the outset of the training. All of them understood and those who were not involved in the interview left the room. Nevertheless, due to time constraints, the interview was shorter than originally planned.

FINDINGS AND DISCUSSION

Research Question 1: *What are the Thai EFL teachers' experiences of digital literacy training for teaching English with technology?*

In the focus group interview, Uncle Too stated, "It's been a long time since we have had a chance to go to a training course." This sentiment was echoed by all of his colleagues, with some nodding their heads in agreement and others saying "yes." As a result, the researcher decided to change the location from Bangkok's Thonburi district to Trang province once it became clear that teachers in rural areas had fewer opportunities to receive digital literacy training than those teachers in urban areas like Bangkok.

Maple and Game made an interesting point. They stated that, as a group, they were able to understand the lessons and even practice some of the programs they were taught to them at home on their own. This demonstrated their engagement with what was taught to them over the course of four days.

Moreover, during the interview, Pepper, who was remembered as one of the most active learners in the class, pointed out that English proficiency of their student was very low. As a result, simply teaching them can still be a challenging and time-consuming task.

However, if technology were to be used in the EFL classrooms, two considerations would need to be taken into account. First, teachers would need to spend time preparing additional materials each week, so-called a time-consuming act, indeed, for those who are new to technology. Secondly, many of the applications that they would be trained in require interaction with students. This was also similar to El-Ashry et al. (2022) who found that technological factors influenced the e-learning quality, and training was a factor that needed support from the organisation to improve ease of use for teachers. Besides, this means students would need to have a phone to participate in the activities. However, not all students have phones, and among those who do, their phones may not be smart phones and may only be used to make and to receive calls. This issue was also the subject of much discussion as some participants expressing concern about the potential for inequality and bullying issues.

The experiences of Thai teachers of English as a foreign language with regard to digital literacy training demonstrate the importance of context in professional development (Putnam & Borko, 2000). This includes geographic location, as evidenced by the shift to rural areas for training opportunities, and the specific learning requirements of participants, as demonstrated by Maple and Game's engagement with the taught materials. In addition, Pepper's observations highlight the difficulty of integrating technology into the classroom, which requires not only English proficiency but also digital literacy. This is consistent with Puentedura's (2012) SAMR model, which emphasises the gradual transformation of teaching practises through the integration of technology. Notably, the need to prepare additional materials and the potential challenges posed by students' varying access to

technology reveal the interplay of technological, pedagogical, and logistical factors that influence the adoption of technology in EFL classrooms (Ertmer & Ottenbreit-Leftwich, 2010). These findings suggest that teachers require ongoing contextualised support that takes into account their unique challenges and the contexts of their students. They also inform practical applications, such as the development of digital literacy programmes that emphasise experiential learning, technology access equity, and follow-up support mechanisms.

Research Question 2: *What challenges do the teachers face during and after their digital literacy training?*

Three challenges were identified during the training: teaching style, computer specifications, and Internet accessibility. Firstly, the issue of teaching style was raised by some participants. Although all of the attendees appreciated the training, some, such as Star, felt uncomfortable. She stated that she was an older, slower learner and found the lessons challenging because they were taught too quickly. Similarly, Tech expressed that his limited computer skills made it difficult for him to follow the lessons and activities as he was not familiar with using computers in his classes. Nonetheless, these issues will be addressed in future trainings. The difficulty of teaching style, as brought up by participants like Star and Tech, is consistent with Kolb's Experiential Learning Theory (1984), which emphasises the significance of accommodating various learning styles and paces in educational settings. For older or technologically less proficient learners, a paced, scaffolding approach to digital literacy training might be more appropriate and effective (Wagner, Hassanein, & Head, 2008). Future training should, therefore, consider these factors to ensure inclusivity and effective learning outcomes.

The second challenge was related to computer specifications. Chanel mentioned that her laptop screen was different from mine as she was using an older computer model which made her progress slower compared to her colleagues. This was also the case for Mirin, Doll, Kay, and Heart, who all of whom used their mobile phones for the training. The second challenge, computer specifications, underscores the importance of technological standardisation in digital literacy training (Zhang & Aikman, 2007). Older devices or mobile phones may not offer the same user interface or capability as more recent models, potentially hindering learning progress. Strategies to ensure digital equity, such as providing standardised devices for the duration of training, might help overcome this barrier.

Finally, internet accessibility was a problem that was beyond control. Not only was the signal often unstable, but there were also times when there was no internet connection at all. This negatively impacted the training as participants were unable to access the required resources or complete online activities. Concerning the third challenge, internet accessibility, this finding aligns with Selwyn's Post-training, participants encountered challenges related to the recall of learned skills, pointing towards the need for ongoing support mechanisms, such as follow-up workshops, help-desks, or online forums, to help teachers reinforce and apply their newly acquired digital skills (Ertmer & Ottenbreit-Leftwich, 2010). This is also in line with Torres and Cruz (2022) on a teachers' perceived challenge of remote learning that the Internet connection was the main challenges for both teachers and students.

Limited information also became a challenge for teachers after the training due to the COVID-19 outbreak. There was a plan to interview them a week after the training to gather information, but this did not happen, again, as a result of the pandemic. There was, however, one teacher whose pseudonym is ROV who contacted the researcher to ask for help with a problem he had encountered while using a program. He had forgotten a step which was taught to him and was unable to export a video to MP4 file format.

Research Question 3: *What are the teachers' perspectives on teaching English with technology?*

There was general agreement that using technology to teach English was easier than expected. The teachers started to enjoy using technology in their English lessons as they discovered its many possibilities and were able to create teaching materials from the training which gave them self-confidence. No negative perspectives were found in response to this research question.

The most important lesson learnt from the study is that the researcher needs to adapt my teaching style to be slower to accommodate a diverse range of participants in a single class. Furthermore, the researcher should create a training manual that the participants can refer to when they struggle to keep up with the lessons. This would also allow for later revision. This researcher also recommends thoroughly testing the programs or applications should be thoroughly tested on different devices before being used in the training to ensure that they can be used on multiple devices. Lastly, in terms of internet access, it would be better to host the training at a hotel with a reliable Internet system in the future. This is consistent with the framework for Technological Pedagogical Content Knowledge (TPACK) proposed by Mishra and Koehler (2006), which emphasises that successful technology integration requires understanding and negotiating the relationships among technology, pedagogy, and content. As the teachers discovered the technological possibilities and began to create their own teaching materials, it can be assumed that they developed a sense of ownership and confidence in using technology for their teaching needs.

The need for an adapted teaching style and the creation of a training manual are consistent with Vygotsky's (1978) Zone of Proximal Development, which asserts the importance of providing learners with the appropriate amount of support to enable them to progress from what they can do independently to what they can achieve with guidance. A reference manual and slower-paced instruction would provide scaffolding, allowing teachers to learn at their own pace and refer back to the manual as necessary.

These findings have significant implications for the design and implementation of digital literacy education. It emphasises the need to consider the needs and pace of learning of the learners, as well as the significance of providing them with adequate support throughout and after the training. The recommendation to test programmes and applications on various devices prior to the training emphasises the significance of technological readiness in ensuring a seamless learning experience. The recommendation to conduct the training in a location with a dependable Internet connection further emphasises the importance of providing a conducive learning environment.

In terms of application, these insights could aid in refining the design of future teacher training on digital literacy, especially the use of technology as a medium of instruction in the learning process (Puspitarini & Hanif, 2019).

CONCLUSION

The purpose of this study was to investigate the experiences of Thai EFL teachers who participated in digital literacy training including the challenges they faced during and after the training and their perspectives on teaching English with technology. The results showed that the participants needed more training time. The main challenges they encountered were related to teaching style, computer specifications, and Internet accessibility. Despite these challenges, the teachers found that teaching English with technology was easier than they had expected. These findings have implications for future teacher training programs aimed at improving the language skills of teachers with low levels of technological literacy, particularly older teachers. In addition, these results have significant implications for EFL classrooms. The incorporation of technology into the classroom, while advantageous, requires careful consideration of a number of factors, including students' access to technology and teachers' additional preparation time. Incorporating technology into teaching practises should also take into account the possibility of exacerbating social inequalities. Future research should investigate the long-term effects of digital literacy training and the efficacy of ongoing support

mechanisms for reinforcing newly acquired skills. Additionally, it would be advantageous to investigate how teachers can utilise technology more effectively to address issues of low English proficiency among students. Future research could investigate potential technological gap solutions, such as the use of standardised devices during training and dependable internet systems.

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