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Teachers' perspectives about the benefits, challenges, and strategies for using generative AI in English language teaching

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The emergence of generative artificial intelligence (GenAI) tools in recent years has entailed arguments both for and against their use for teaching and learning among policy makers, schools, teachers, and researchers. While the debates have not reached a consensus yet, many teachers struggle with using them. To help build the literature on GenAI for English language teaching (ELT) and assist teachers to use GenAI effectively in their teaching, the current study adopts a qualitatively driven convergent mixed methods research design with Technology, Pedagogy and Content Knowledge (TPACK) as the theoretical framework. TPACK domains serve as the major themes for data analysis on benefits, challenges and strategies regarding GenAI in ELT. Data collection involves 41 ELT teachers at universities, K-12, and language schools engaging with background and reflection surveys, focus group discussions, and activities during two virtual workshops. A three-month interval between the workshops allows teachers to apply what they learn in the first workshop in teaching and addressing challenges while using GenAI. The results reveal various benefits for teachers, e.g. saving time and generating ideas for teaching preparation. There are also challenges relating to technology (e.g. lack of technological competence), pedagogy (e.g. students' misconduct), and content (e.g. response accuracy). The study proposes a set of strategies for good practice including pedagogy first, quality focus, prompt engineering, and appropriateness. The results highlight the

significance of teacher and learner agency to complement the TPACK model and the importance of pedagogical principles (e.g. flexible and creative use of GenAI for teaching) in ensuring appropriate and effective adoption of GenAI in ELT.

Keywords: Generative AI, English language teaching, teacher perspectives, pedagogical principles and practices, TPACK

Introduction

In recent years, generative artificial intelligence (GenAI) tools that can generate text, audio, image, and other media have been used by teachers and students across the world. At the same time, there have been growing beliefs that GenAI may lead to significant transformation or disruption to education (Yeralan & Lee, 2023). While GenAI can offer various opportunities (Bonner et al., 2023), it is still a largely unexplored territory for teachers and researchers. For example, recent research revealed that many educators and institutions struggled with GenAI tools like ChatGPT (Moorhouse et al., 2023). Some educational authorities, therefore, even banned these new tools due to concerns regarding possible student cheating, GenAI overreliance, biases, inaccuracies, and misinformation (Cassidy, 2023; Kishore et al., 2023). While schools and governments were divided about the benefits and opportunities of GenAI, the lack of official guidelines and regulations left teachers navigating uncharted territory without institutional support, having to educate themselves on how to use these tools.

In English language teaching (ELT), an established field of educational research, technology plays an important role and new technologies like GenAI being introduced can also have significant impact on teachers and learners. ELT is therefore an area where GenAI adoption is paid much attention. Considering all the debates on whether students should be allowed to use GenAI tools for schoolwork, and the reality that students would keep using them regardless, ELT teachers face a new dilemma: not whether, but how they should use GenAI tools.

The current literature reveals both benefits and challenges exclusively for the use of GenAI tools in ELT. For example, a scoping review by Xiao et al. (2025) listed a number of studies that found ChatGPT struggles with providing culturally and contextually sensitive feedback for English language learners' writing, and its biased language use distances learners from authentic language learning through real human interaction. While regulators started to recognise a blanket ban to GenAI may not work (Harrison et al., 2023), the need for ELT teachers to have a better understanding of these tools becomes more pressing so that they can use the technology appropriately, ethically, and responsibly in their professional practice. This suggests that research on GenAI is urgently needed to provide scientific evidence for teachers and schools on how to use GenAI in ELT. This study targets ELT practitioners who seek actionable strategies for GenAI integration and solutions to the challenges that teachers face when adopting these tools.

The current study responds to the call for more research on GenAI as an emerging technology for ELT. It adopts the Technology, Pedagogy and Content Knowledge (TPACK) framework (Koehler & Mishra, 2009) to answer the research questions on teachers' perspectives and strategies to address the technological and pedagogical challenges for GenAI implementation in the English classroom. The TPACK framework is highly suitable for analysing the use of GenAI in ELT thanks to its focus on technology and the dynamic interactions between technology, pedagogy and content. This study extends TPACK by exploring how teachers adjust to the fast-evolving nature of GenAI in ELT and highlights the importance of teacher and learner agency to complement the TPACK framework. The strategies proposed, therefore, would empower teachers to retain agency in GenAI-aided classrooms.

Literature review

GenAI in ELT

AI is "a machine-based technique with algorithmic power for making predictions, diagnoses, recommendations, and decisions" (Chen et al., 2022, p. 28). AI was developed in the 1950s (Woolf, 2015) and has been utilised in education in different areas: profiling and prediction, assessment and evaluation, adaptive systems and personalization, and intelligent tutoring systems (Zawacki-Richter et al., 2019).

In ELT, AI has been found to be useful in the teaching of all four language skills, grammar, and pronunciation, as it can detect errors, give feedback, and create language content (Huang et al., 2023). AI has also been commonly used for speech recognition, translation, morphology, and syntax (Chen et al., 2022). Using AI offers various benefits: personalised learning and feedback (Gillani et al., 2023), automated marking and improved teaching efficiency (Chiu et al., 2023), reduced workload, and enhanced pedagogical practice (Grassini, 2023).

GenAI was a subset of AI that did not have a widely agreed definition due to its recent emergence. The term was first proposed by Goodfellow et al. (2014) but has only drawn extensive attention since late 2022 thanks to the launch of ChatGPT. The current study adopts the GenAI definition as complex models that can create high-quality, human-like material (Foster, 2023) for its simplicity and comprehensive coverage of GenAI tools.

Some studies have identified various benefits of GenAI. For example, ChatGPT was found to be time-saving for teachers in lesson planning, content generation, assessment, and feedback (Kasneci et al., 2023). In ELT, GenAI tools enable communication skill practice with chatbots (Hong, 2023), automated marking, assessment design, and translation (Alharbi, 2023). GenAI was particularly useful for writing teachers thanks to its ability in sample essay creation and feedback provision (Bonner et al., 2023; Kasneci et al., 2023). For teaching reading skills, teachers can use AI-generated personalized reading texts and tailor topic difficulty to their learners' skill level (Ahmed et al., 2025). More specifically, pre- and post-test results revealed that AI tools helped

increase students' performance in writing and reading skills by 16.6% and 13.8%, respectively, about three times more than those of speaking (5.4%) and listening (4.2%) (Abedi et al., 2025).

However, GenAI also poses challenges for language teaching, for example, the inability to provide culturally and contextually sensitive feedback, biased language use, and a lack of authentic human interaction (Xiao et al., 2025). Other challenges reported include prompting complexity, ethical concerns, teachers' resistance, technical constraints, access limitations, response depth, and content accuracy (Diep & Dang, 2025). For example, teachers reported they found inaccurate information regarding the U.S., UK, and Canada economies and non-existent references in lesson plans created by ChatGPT (Diep & Dang, 2025). These studies suggest that while GenAI tools have much potential in ELT, there are challenges that need addressing, and more research is needed to maximise the benefits and address the challenges for language teachers and learners.

Teachers' perspectives of GenAI

Studies on GenAI found positive attitudes among teachers worldwide. For example, an international study surveying 147 teachers, including those from the USA, Canada, and the UK, reported that GenAI was a valuable instructional tool that enhanced teachers' professional development and competence as educators (Kaplan-Rakowski et al., 2023). In Europe, Bulgarian teachers reported that using ChatGPT helped them save time, engage learners, and develop their critical thinking (Kiryakova & Angelova, 2023). In Asia, Taiwanese pre-service teachers found GenAI helpful to create positive learning experiences thanks to the convenience and interaction (Yang & Chen, 2023).

There have also been studies that pointed out teachers' negative perspectives towards GenAI. For example, Hong Kong teachers felt they lacked the necessary competence and experience to use GenAI (Moorhouse & Kohnke, 2023). This aligns with Chinese teachers who reported anxiety, stress, worry, and frustration regarding the use of these tools in their teaching (Shen & Guo, 2024). In Turkey, ELT teachers reported concerns regarding inaccuracies, unreliable information, prompt difficulties, ethical issues, overreliance, and ineffective outputs (Tayşı et al., 2025). In Europe, Chounta et al. (2022) highlighted teachers' limited knowledge and the need for supporting them in using AI in teaching. These results suggest the need for further research to help fill the gap identified by Mishu et al. (2025) regarding the lack of understanding of GenAI from ELT teachers' perspectives.

The above studies reveal both positive attitudes and negative perspectives towards the use of GenAI in ELT (Creely et al., 2025). However, a significant gap remains in the existing literature since current studies have mostly focused on the advantages and limitations of GenAI tools while overlooking the experiences and views of classroom practitioners (Khattak et al., 2025).

The mixed opinions regarding GenAI also highlighted the need for a theoretical framework to ensure effective GenAI integration and tackle concerns



regarding privacy, security, and accountability (Chan, 2023). While the above studies provide a timely understanding of teachers' perspectives regarding GenAI use, most of them did not adopt a theoretical framework as a structured lens to guide the data collection and finding interpretation to ensure the study is grounded in existing knowledge and theory. The current study, therefore, aims to explore teachers' perspectives on GenAI uses for ELT and map them into TPACK - a sound theoretical framework explaining the intersection between technology, knowledge, and content (Koehler & Mishra, 2009) to assist teachers in integrating GenAI into ELT. The current literature so far has mostly focused on the use of GenAI tools in ELT from a technical perspective and identified challenges with content knowledge rather than from a pedagogical one.

Challenges of GenAI practice and how to address them

There are various challenges in applying GenAI in ELT, ranging from general technical aspects like biased input data (Gillani et al., 2023) to the cost of training, maintenance, data privacy, and security (Kasneci et al., 2023). For example, ChatGPT users reported issues regarding data reliability (Ulla et al., 2023), plagiarism (Grassini, 2023), and accuracy (Kiryakova & Angelova, 2023). There has also been concern that the over-reliance on GenAI would limit its users' social interaction and development of general skills (Chan, 2023). The patchy literature regarding GenAI tools in ELT, due to its recent emergence, suggests that further research is urgently needed to help users better address the challenges identified.

Recent studies also revealed other non-technical challenges of GenAI. User-related challenges, for example, included teachers' lack of knowledge (Pratama et al., 2024), little confidence to use GenAI effectively (Kostka & Toncelli, 2023), and how to distinguish human answers from AI-generated responses (Kasneci et al., 2023). Pedagogically, a literature review on the use of AI in education from 2012–2021 found that teachers lacked the necessary pedagogical knowledge to use the technology (Chiu et al., 2023). A recent study found that while there is a favourable attitude towards the use of AI tools, human contribution is still preferred and more highly valued than what is created by AI (Chen, 2024). The current literature, while includes studies that align with the TPACK components, namely technical, content, and pedagogical aspects of GenAI use, has overlooked the human factors, which are critical for technology adoption in ELT.

The overwhelming number of challenges faced by teachers was intensified by the fear that humans may one day be replaced by AI (Kaplan-Rakowski et al., 2023), which has been a hot debate recently (MindRush-AI, 2023). These challenges and the fragmented literature of GenAI use for ELT suggested the need for a sound pedagogical framework and practical recommendations to assist teachers in applying GenAI effectively and appropriately to their teaching practice (Chiu et al., 2023).

In conclusion, the current literature on the use of GenAI for ELT is emerging with the focus on benefits and challenges regarding technical and content

quality. There are few studies exploring pedagogical approaches and the significance of human factors in GenAI adoption. Moreover, the current studies have hardly adopted a theoretical framework to examine teachers' perspectives towards the use of GenAI tools for ELT. To address the above-identified gaps in the literature and assist teachers in using these tools effectively and appropriately, the current study aims to answer the following research questions:

1. What are ELT teachers' perspectives on the use of GenAI tools for teaching?
2. What strategies can ELT teachers employ to address challenges while using GenAI tools?

Research method

Research design

To explore how ELT teachers deployed GenAI tools and identified principles of good practice in their teaching practice, this study adopted a qualitatively driven convergent mixed methods research design (Creswell & Plano Clark, 2018) with a focus on collecting data from participants in their natural social settings. The adopted approach is primarily qualitative, being supported and enhanced with quantitative data. Both types of data were convergently collected, coded, and analysed to provide an interpretation of complex reasoning and holistic understandings of teachers' experiences, actions, and perspectives in using GenAI tools over the 12-week period between and including the two workshops.

Theoretical framework

To assist teachers in mapping their perspectives and principles of good practice regarding the recently emerging GenAI technology, we adopted TPACK (Koehler & Mishra, 2009) as the theoretical framework throughout data collection methods and analysis. TPACK, developed by Mishra and Koehler (2006), was a framework commonly used to assess and train ELT teachers (Santos & Castro, 2021), identify the capabilities and knowledge areas to be improved by teachers for effective use of technology in teaching (Koh et al., 2014). This framework explains what knowledge teachers need to integrate technology successfully into their teaching, especially how technology can affect what and how teachers teach.

The TPACK framework consists of seven domains (TK, PK, CK, TPK, TCK, PCK, and TPACK), with TK referring to Technological Knowledge, PK to Pedagogical Knowledge, and CK to Content Knowledge. Figure 1 presents the seven domains of the TPACK framework and how they are interrelated with each other.

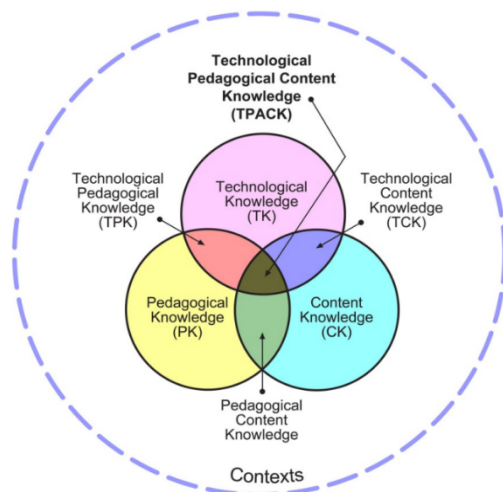


Figure 1. The TPACK framework and its knowledge components (Koehler & Mishra, 2009)

In the current study, the T in the domains refers to GenAI tools adopted by teachers during the 12-week period between the two workshops, including ChatGPT, Bard (currently Gemini), and Bing Image Creator. The domains containing P involve language teaching methodologies like task-based language teaching, classroom management, and assessment. Finally, the C-domains are about knowledge of the English language, including its grammar, vocabulary, pronunciation, and language skills.

Data collection

Data were collected over a four-month period in late 2023 in accordance with the ethics guidance by British Educational Research Association (2018) via online surveys, workshop activities, and focus group discussions via Zoom video conferencing. Firstly, the researchers posted a call for research participant recruitment and an information sheet to their professional networks on Facebook for one week. ELT teachers were invited to attend a virtual workshop on the use of GenAI for ELT without any obligation to become a research participant.

In the first workshop, the English language teachers as participants took part in various activities using GenAI tools, including ChatGPT (for writing prompts and essay revision), Gemini (formerly Google Bard – for speaking input and debates), and Bing Image Creator (for speaking games and storytelling). Teachers also participated in a focus group discussion using The Six Thinking Hats activity on the facts, perspectives, benefits, challenges, usefulness, and adoption of GenAI in ELT. In the second workshop, teachers played a game called “GenAI for ELT Bingo”, then engaged in a Design Sandpit group discussion activity in which they developed a teaching and assessment task using GenAI tools of their choice. The activities allowed teachers to experience

various GenAI tools as well as their benefits and challenges before and after adopting them in their teaching over a 12-week period.

These GenAI tools were adopted due to their popularity and ready availability with a free account, which suits the contexts of participants as not-so-well-paid ELT teachers in a developing country. They then had 12 weeks to experiment with these GenAI tools in their teaching practice. The three-month interval was supposed to provide these teachers with sufficient time to experience the technology. The participants then attended a second workshop in which they reflected on their use of GenAI tools since the first workshop using a Bingo game, focus group discussions, and a reflection survey. The teachers also employed GenAI tools for designing assessment tasks to showcase what they learned in the past three months. The procedure for data collection is summarised in Figure 2.

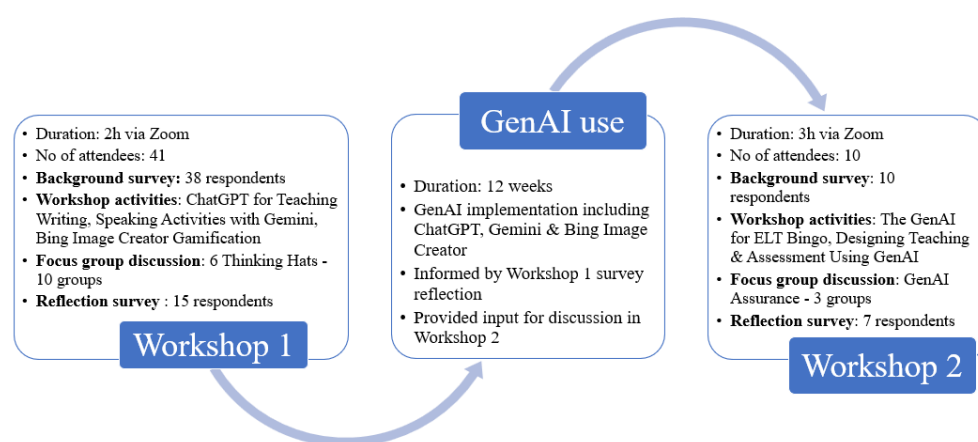


Figure 2. The data collection process

Figure 2 presents the four main sources of data collected:

1. A background survey at the beginning of each workshop to understand teachers' demographic information, professional competence, and experience using GenAI.
2. A reflection survey at the end of each workshop for teachers to record their perspective, principles to keep in mind, and intention to use the GenAI tools for their future teaching.
3. Teachers' oral and written responses during activities in the two workshops, including Zoom chat, and Padlet posts and comments showing teachers' perspectives of GenAI use.
4. Semi-structured focus group discussions in both workshops to explore teachers' perspectives, challenges, and strategies.

Among the data collection methods, questions for the surveys and focus group discussions were informed by the existing literature. For example, the following reflection survey items were developed based on the four main components of reflective practice in an educational context (Mohamed et al., 2022):

- (i) Reflecting: What have you found most useful in today's workshop?
- (ii) Planning for future action: Do you intend to use any GenAI-powered tools in your future classes?
- (iii) Acting: What principles will you keep in mind regarding the use of GenAI-tools in your future teaching?
- (iv) Evaluating the outcomes: Have your opinions regarding GenAI-tools use for ELT changed after this workshop? In what ways?

These questions align with the ongoing reflection-in-action, reflection-on-action, and reflection-for-action approach proposed by Schön (1983). Moreover, the focus group discussions and workshop activities adopted the iterative design-evaluation-refinement approach for design-for-learning proposed by Tracey and Baaki (2023) to ensure their validity and relevance in capturing teacher perspectives on using GenAI for ELT.

All the questions were reviewed internally by all researchers and aimed to gauge teachers' practical experiences, perceived benefits and challenges, their intention, and strategies to use GenAI tools in their future teaching. The current study relied primarily on open-ended questions to collect qualitative data, as it aims to provide an in-depth exploration into teachers' perspectives regarding using GenAI for ELT. However, we also collected quantitative data from the surveys to help establish the teachers' contextual background and identify patterns in their intended adoption of GenAI. The survey data also helped to cross-validate qualitative insights, for example the evaluation question provided a comparison of teachers' perspectives before and after each workshop to highlight the benefits of using GenAI. Moreover, the quantitative demographic data of participants provided a statistical overview of teachers' competencies in terms of technological, pedagogical, and content knowledge regarding GenAI tools for ELT as per the TPACK framework (Koehler & Mishra, 2009). All the quantitative data were analysed using descriptive statistics due to the small sample size, and the triangulation of data helped validate our results and strengthen their reliability.

The Zoom sessions were recorded with consent from all participants. Participation in all activities, discussions, and surveys was voluntary, and information provided by attendees who did not consent to be research participants was removed before data analysis. The recordings were then transcribed, and the transcripts were manually and independently checked by all researchers to ensure the reliability and quality of data analysis (Braun & Clarke, 2022). The various data sources, including both qualitative and quantitative data, ensure the methodology rigour of the study and better triangulation for enhanced validity and reliability of data collected.

Participants

Participants of the study were Vietnamese ELT teachers who self-selected to respond to the call for AI workshop participants. Purposive sampling was adopted to screen participants who must be English language teachers with

some experience or interest in the use of technology for language teaching to ensure that they have the necessary knowledge and context relevant to the research purposes of the current study. Of the 105 eligible participants who registered for the first workshop, all but one provided consent to participate in the study. Among these 104 consented participants, 39.4% ($n = 41$) attended the two-hour workshop. The participants were then recommended to implement GenAI-tools they used in the first workshop (ChatGPT, Gemini, and Bing Image Creator) in their teaching for the next 12 weeks.

At the end of the three-month implementation period, a second invitation was extended to the participants to attend the second workshop to further discuss how to use GenAI in their ELT practice. 34 teachers registered, and 29.4% of them ($n = 10$) attended the three-hour workshop.

Among the 41 participants of the first workshop, 38 filled in the background survey, providing more information about their capabilities and experience using GenAI for ELT. Of these 38 attendees, the vast majority were female (81.6%, $n = 31$). Similarly, of the 10 attendees in the second workshop, nine were female.

In the first workshop, 60.5% of the participants ($n = 23$) were at C1 proficiency level of English, while about one-third ($n = 11$) had a B2 level according to the Common European Framework of Reference for Languages (CEFR). These figures of the second workshop participants were 80% ($n = 8$) and 10% ($n = 1$), respectively. These suggested that most of the participants had good language proficiency and could use English confidently. Figure 3 presents the levels of teaching experiences among the workshop participants.

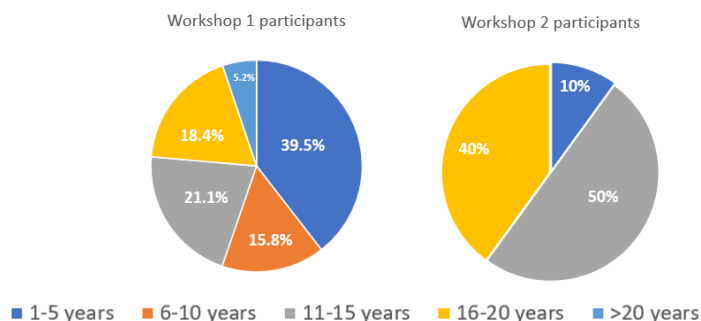


Figure 3. Participants' teaching experience

Figure 3 reveals that Workshop 1 attendees had a more diverse range of teaching experience, while 90% of workshop 2 participants were highly experienced, with between 11 and 20 years in the profession. Figure 4 displays the types of schools the participants work at.

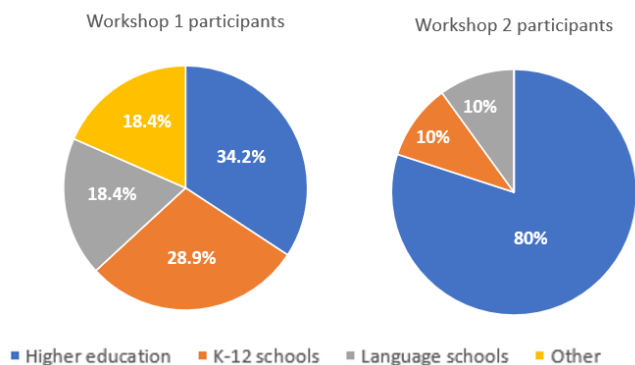


Figure 4. Participants' school types

Figure 4 suggested more diversity among attendees of the first workshop, while workshop 2 attendees were mostly university lecturers. The participants' geographical distribution is presented in Figure 5.

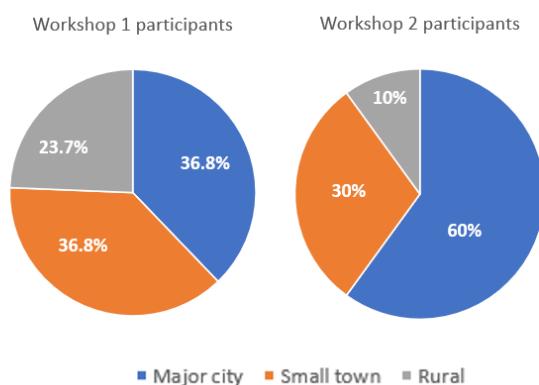


Figure 5. Location of participants' workplaces

The pie charts suggest that most participants were based in urban areas, and the number of rural attendees was less than a quarter of the total participant number in both workshops.

The background survey responses also revealed Workshop 1 teachers' capabilities as per the TPACK framework as follows (see Figure 6).

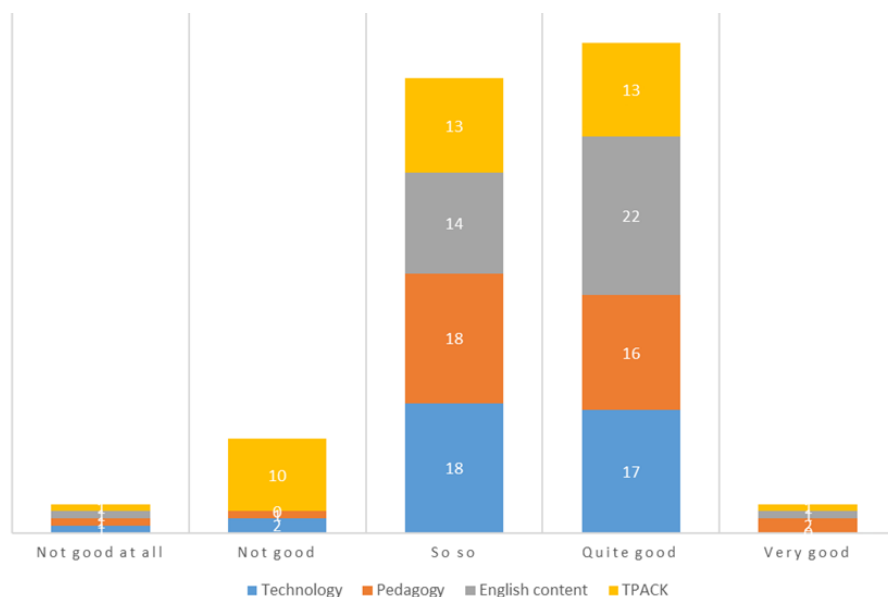


Figure 6. Workshop 1 teachers' TPACK capabilities

Figure 6 shows that most of the teachers in the first workshop reported an average or quite good ability in using technologies pedagogically to teach English, with about a quarter ($n = 10$) seeing themselves as not good in their TPACK capabilities. This is consistent with the results of the participants of the second workshop, as shown in Figure 7.

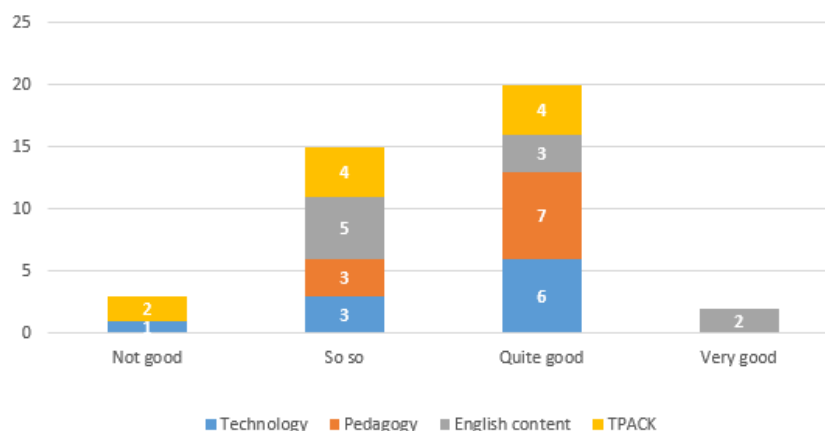


Figure 7. Workshop 2 teachers' TPACK capabilities

In short, the participants of the current study were mainly female teachers with good levels of proficiency in English. They taught in a range of educational settings from K–12 schools and language centres to universities in urban areas, with various levels of teaching experience. In Workshop 2, the 10 participants were mainly highly experienced teachers with 11–20 years of teaching at

universities. While Workshop 1 participants had a more diverse demographic distribution, both cohorts saw themselves as having average to pretty good TPACK capabilities.

Data analysis

For quantitative data collected from backgrounds and reflection surveys in the two workshops, descriptive statistics were adopted for a demographic overview of the participants as well as their perspectives and strategies for the use of GenAI tools. For qualitative data analysis of workshop recordings, focus group discussions, Zoom chat logs, and written responses to activities, thematic analysis method was employed to explore the rich and deep data provided by the participants (Braun & Clarke, 2022; Terry & Hayfield, 2021).

The coding process was both deductive from the literature review findings and inductive from the data themselves. The iterative coding process for thematic analysis was conducted manually. Firstly, in the data familiarisation phase, we read all transcripts and teachers' responses repeatedly and took notes for data familiarisation. Then, during the data coding phase, we created preliminary codes both deductively from the literature and inductively from identifying the data features. For example, we produced the main codes of "teachers' use of GenAI" and "strategies for good practices" and assigned these codes to the transcripts appropriately to identify the relevant codes in the transcripts, including "purpose of use", "benefits", and "challenges". Next, in the theme aggregation phase, all codes were organised into the broader-level patterns and aggregated into key themes, which associated significant data with the research question. For example, the aggregation of the theme "teachers' perspectives" was based on the patterns developed from "opinions", "benefits", and "challenges."

The same procedure was conducted for the identification of all themes of "Teacher perspectives of GenAI use" and "Strategies in response to perceived challenges" that were then analysed to represent key findings of the current study to answer the two research questions. We conducted an iterative process of revised codes and themes to reach a saturation point during the theme refinement phase (Clarke & Braun, 2017; Terry & Hayfield, 2021). Two researchers in the team independently conducted the coding process twice with a seven-day interval to ensure the intra-rater reliability and accuracy that identified the identical categories, indicating a high intra-rater reliability in the current study. The third researcher then double-checked the aggregated themes for inter-rater agreement. They recognised minor differences in the coded themes between the two coders, and a 90% agreement rate of inter-rater coding. Following this member checking, the research team conducted a critical discussion of the coded themes to reach an agreement on the analysis outcomes. This multi-layered analysis procedure contributed to the comprehensive understanding of how the research questions were investigated.

Research question 1: Teachers’ use of GenAI

About two-thirds of the teachers who registered for the first workshop ($n = 67$) reported they had used GenAI, with about a half ($n = 30$) having used ChatGPT. Some also used Google Gemini and Bing AI; however, most had only tried GenAI for a short time using the free version and noted issues with quality, reliability, and prompting to get an acceptable response from these tools. About half of those registered ($n = 47$) reported they wanted to learn more about using ChatGPT, for example, to teach speaking and writing skills. Another 31 teachers (29.8%) were interested in learning about any GenAI tools that could help with their teaching practice.

In the first workshop¹, nine out of ten focus groups (90%) reported observing that GenAI was increasingly used by teachers and students at schools and universities. In the second workshop, teachers were asked what GenAI tools they had used in the 12 weeks since the first workshop, in what ways, and their opinions about these tools. Their responses are summarised in Table 1.

Table 1. Teachers’ use of GenAI for ELT

Tools	Uses	Pros	Cons
ChatGPT	- Lesson preparation, e.g. generate a vocabulary list - Tasks and activities for reading, speaking and writing - Assessment: design gap-fill exercises and quizzes - Search for information and teaching ideas - Guideline / Template development - Address teaching issues or research - Feedback provision	- Logical and useful synthesis and organisation of information - Quick response, resourceful answers - Convenient - Can produce tables with appropriate prompting - Can explain the mistakes / responses - Can create tasks and exercises using the provided vocabulary and grammatical structures	- Inaccurate or unsatisfactory responses - Time-consuming to edit the generated answers - Prompt engineering is a must - Follow-up prompts needed to get acceptable answers - Limited functions - Access issue, e.g. on a browser - Subscription costs
Gemini	Same as ChatGPT	- Free of charge - New features, e.g. different versions of responses - Enhanced reliability thanks to links to sources	- Responses not as neat and direct as ChatGPT - Prompt engineering
Bing Image Creator	- Create course cover photo - Design slides - Teaching vocabulary illustration	- Satisfactory output - Worth trying	- Surplus to needs

Apparently, teachers used GenAI for various tasks, from lesson planning to teaching, with ChatGPT being tried out by most teachers. The focus group discussions also revealed various benefits of these GenAI tools (see Figure 8).

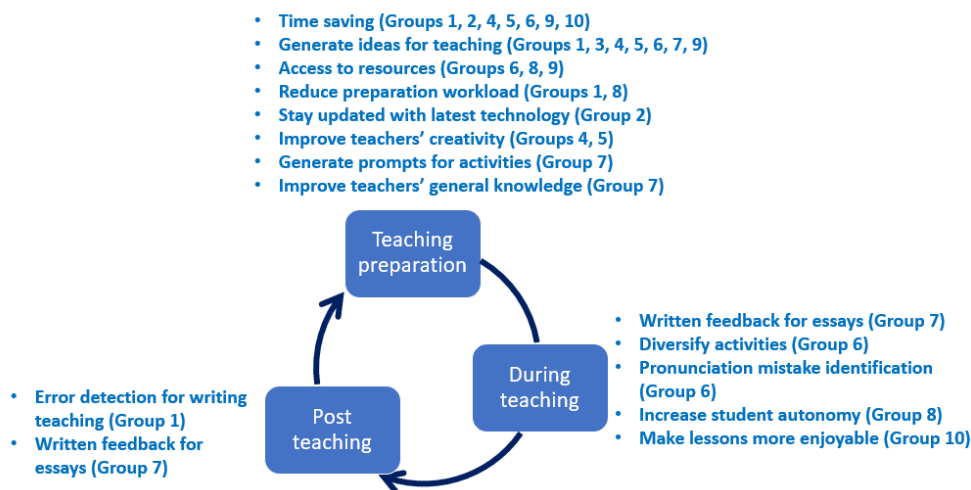


Figure 8. The benefits of GenAI for ELT teachers

The results indicated that teachers found GenAI most useful for teaching preparation, and they adopted it more before than during and after the class. For example, a teacher described how he used GenAI tools during the three-month interval between the two workshops as follows:

I have used this [GenAI tool] to prepare my lessons. I asked AI to generate vocabulary, and create some exercises, such as fill-in-the-blank drills. I also asked AI to generate some activities for reading. I also asked AI to give feedback on my students' writing. (Mr. T.)

The teacher has mostly used GenAI to prepare for his lessons beforehand rather than after teaching, except for getting feedback on students' writing. As for the reason for GenAI adoption, 70% of all groups in Workshop 1 ($n = 7$) reported that the two greatest benefits were to save time for their teaching preparation and help generate ideas and inspiration. For example, a Group 1 representative commented: "They are pretty helpful in brainstorming ideas." Similarly, a Group 7 teacher reflected: "Sometimes, it can give me useful advice when I have no ideas of what to do." Three groups also reported that GenAI was helpful as it provided teachers with access to diverse teaching resources.

The focus group discussions also revealed a range of challenges for teachers using GenAI for ELT. Interestingly, the technology itself is not the most challenging, as most groups reported struggles with pedagogy and content issues, as summarised in Figure 9.

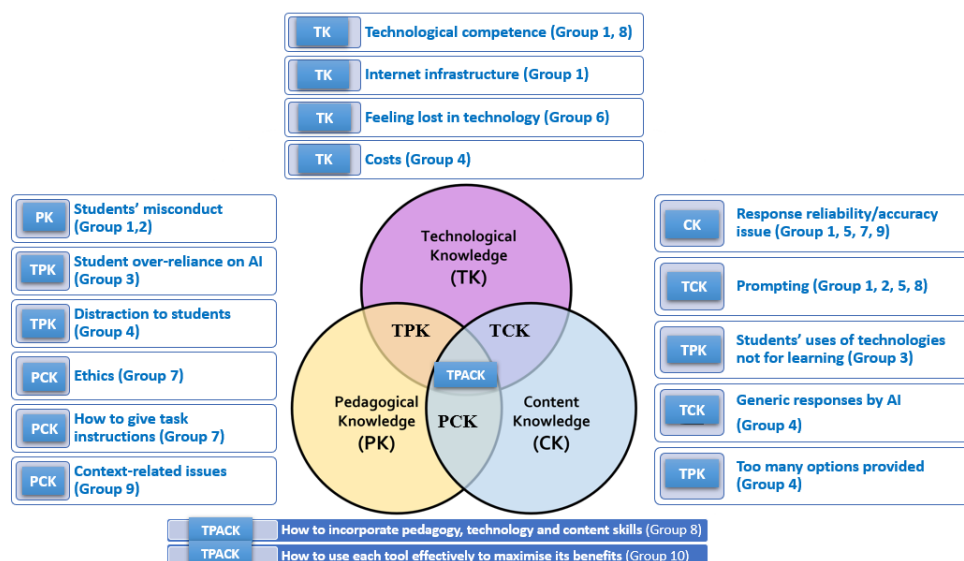


Figure 9. Challenges for teachers to use GenAI for ELT

The focus group discussions revealed that the challenges teachers encountered spread across all of the TPACK components, as can be seen in Figure 9. Among the challenges, there was strong consensus among the teachers regarding those relating to technological and content knowledge, namely struggles with prompt engineering, and the reliability and accuracy of AI-generated responses. Each of these challenges was raised by 40% of teacher groups, and both required much of teachers' time and effort in verifying and revising. In terms of technological knowledge, the most common challenge was teachers' technological competence, as reported by 20% of the groups. Pedagogically, students' misconducts, e.g. using GenAI for cheating were the most noteworthy issue as raised by two groups. Some teachers reflected that their students used AI tools in their assignments, but they could not prove it, as there was no reliable tool (Group 9), even if they found a high similarity rate when checking for plagiarism (Ms. H.). Some teachers admitted they felt helpless, saying: "It's hard to control whether students are using their phones or laptops in class with the right purpose" (Group 3). A teacher insisted that:

There is little we could do. There has been no policy, no regulation, no guidelines, nothing [on how to deal with GenAI use]. My students have become so dependent on these tools. Ask them a question, and they go check with AI right away, not even think about it for a second. (Ms. G.)

Apparently, the pedagogical challenge was amplified by technological and content issues, leaving teachers wondering what they could do to incorporate pedagogy, content, and technology skills effectively in using GenAI for their teaching practice. Data analysis revealed a clear consensus among teachers regarding challenges that lay at the centre, overlapping section of the TPACK Framework: how to use GenAI effectively and appropriately to maximise the identified benefits and address the concerns.

However, there are also challenges that do not really fall into any categories of the TPACK framework. For example, 30% of the teachers mentioned the subscription costs were too high (Ms. M., Ms. Y., Ms. J.), and 20% struggled with choosing of the right GenAI tool for specific tasks (Ms. K., Mr. Q.). The range of challenges prompted discussions among the teachers on how to use GenAI effectively, which was an urgent need for teachers who do not want to be left behind while everyone around them has started using these tools (Ms. K.).

When asked if they found GenAI useful for their teaching, the teachers expressed different levels of reservation, with “Yes, but...” being a common response. Many teachers were aware that GenAI was not the silver bullet, claiming “They are useful as long as we know how to effectively use them” (Group 1), and, more specifically, “[They are] Useful, but I have to learn how to use the prompts effectively” (Group 5). While about 50% of the teachers noted GenAI was helpful in designing lesson plans, activities, and assessments (Groups 1, 2, 4, 7, 9), they reported different levels of usefulness. For example, Group 1 teachers mentioned AI was “quite useful” to look for ideas for specific topics or creating games and exam questions, and “great for writing feedback”: however, Group 6 commented that “ChatGPT is not perfect for checking writing mistakes.” These different perspectives are presented in Figure 10.

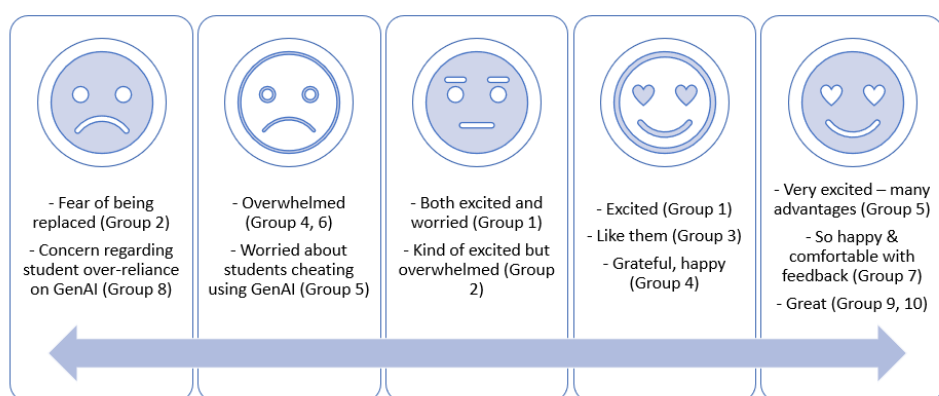


Figure 10. Teachers' feelings towards GenAI

Figure 10 revealed a wide range of teachers' feelings towards GenAI, with some teachers admitting that they had a complicated mix of feelings towards GenAI, including both eagerness and anxiety at the same time. However, the negative feelings did not deter teachers from wanting to try out new GenAI tools. In the discussion, all groups agreed they would adopt GenAI for their future teaching, for example, using Bing Image Creator to design warm-up activities (Group 3) and storytelling (Group 5), ChatGPT for students' information search (Group 4), or practise summarising AI-generated essays (Group 5). At the end of the first workshop, all reflection survey respondents reported they would likely adopt GenAI in their future teaching, with two-thirds ($n = 11$) saying it is “highly likely.”

In short, data analysis revealed that teachers recognised the benefits and

usefulness of GenAI and showed their intention to use it in their teaching practice but are prudent not to be over-excited about it, as commented by a Group 1 teacher: “GenAI is a powerful tool to look for ideas in teaching, but the teacher has to be responsible for the usage of output it generated.” This justifies the need for teachers to know how to address the challenges identified so they can use GenAI effectively in their teaching.

Research Question 2: Strategies to Address Challenges in Using GenAI for ELT

Data analysis revealed the strategies teachers adopted to address challenges in using GenAI for ELT, as presented in Figure 11. Among the components of TPACK (Mishra & Koehler, 2006), teachers insisted on the significance of pedagogical principles while using GenAI for ELT and placed more emphasis on content quality than technological struggles. Teacher and learner agency, however, was highlighted by both individual participants and groups as the decisive factor in determining the effectiveness of GenAI adoption in ELT. Figure 11 provides a summary of strategies that teachers used to address the challenges identified while using GenAI.

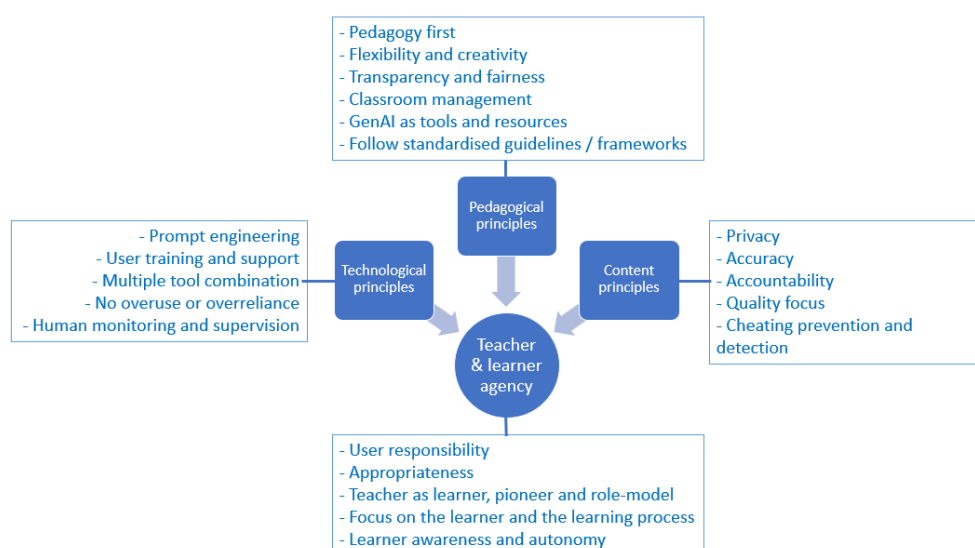


Figure 11. Strategies to address challenges in using GenAI for ELT

Technological principles. For technological principles, there is a strong consensus among the participants on the importance of prompt engineering to address the struggles with prompting while using GenAI. Participant 1D argued: “The questions we give GenAI tools will decide the quality of the answers we receive.” Similarly, Participant 1F insisted: “Garbage in, garbage out.” The teachers reported having to paraphrase their queries multiple times until they had an acceptable response from ChatGPT, Gemini, and Bing Image Creator.

To address the challenges regarding technological competence, the participants insisted on the provision of user training and support for both teachers and students. A Group 2.1 representative noticed:

Many students have good technological competence; however, they need guidance on how to use it appropriately. Students may simply hand in submissions copied as is from GenAI responses, and it looks good, so busy teachers may skip verifying the reliability of these works. This will result in serious issues with students' performance evaluation. Teachers also need support in identifying AI-generated content and helping students use GenAI correctly.

The group response highlighted that both teachers and students needed help with training and support on how to use GenAI responsibly and ethically. Group 2.2 noted that teachers needed assistance to ensure that testing and assessment practices were fair and equitable when GenAI may be in use. However, the participants also made it clear that they did not encourage overuse of or over-reliance on GenAI tools (Group 2.1, Teachers 1C, 1N, 2E). To address the challenge regarding *how to incorporate pedagogy, technology and content skills*, the teachers insisted on combining GenAI with other technological tools to meet their needs. For example, a Group 2 teacher reported:

We used Bing AI to create teaching activities, which was pretty useful. We created a lesson plan, and a test for our target students. Each tool was good at one thing, not everything. So we used prompts to get information from Gemini, then used the Google It function within Gemini to check for the reliability of its response. After that, we used a text-to-speech converter tool to turn Gemini responses into an audio recording for teaching listening. (Ms. P.)

The above reflection described how the participants combined a range of apps and websites to prepare a lesson plan for teaching listening. The teachers started by gathering information using Bing AI and Gemini, then verified the accuracy of generated responses with Google It to create the listening transcript. The transcript was then turned into an audio recording using a text-to-speech converter. They also used Bing AI to create a test to check students' understanding after listening. Throughout the process, the teachers ensured the accuracy and reliability of the information they used, as Teacher 2E noted: "GenAI is only a tool to support our teaching, don't depend on it a lot. Check the information it gives us". On the other hand, a teacher in Group 2.3 insisted:

There are so many GenAI tools out there, but teachers shouldn't try using them all without mastering them. To ensure students' positive learning experiences, teachers must know the tools well to use them effectively. You should still deliver the language knowledge though, not teach students the technological skills. (Ms. T.J.)

The teachers above expressed a clear preference to focus on efficiency and content rather than the technology used. They were also very critical about quality

assurance and insisted on the need to monitor and supervise the use of GenAI to address the concerns regarding content accuracy, reliability, and misconduct. Teachers 1A and 1I committed to carefully check the GenAI output before putting it in use. More importantly, Teacher 1G advised: “To effectively apply GenAI tools, teachers need to incorporate their technological skills into their pedagogical skills, and content knowledge. GenAI alone cannot make teaching and learning successful. How teachers apply it is very important.” This opinion was strongly supported by other teachers in both workshops, who believed that pedagogical principles needed to be the first to be followed while using GenAI for ELT.

Pedagogical principles. Thematic analysis of data from both workshops revealed a clear consensus that teachers’ pedagogical approach played a crucial part in the effectiveness of GenAI use for ELT. One teacher summarised her focus group discussion:

GenAI, as a technological tool, could do a lot to help teachers. However, it is pedagogical methods that matter in ensuring teaching and learning quality. GenAI could help teachers with ideas and resources, but it’s the teacher who decides what tool to use, in what way, and in which activities. It all depends on the teacher’s pedagogical approach. (Group 2.2)

The “pedagogical first” principle was largely agreed on by most teachers as a way to address the challenge on how to use each GenAI tool effectively to maximise its benefits. Many teachers saw GenAI as tools (Teachers 1L, 1N, 1O, 2E, 2F) and resources (Teachers 1C, 1I, 1P, 2C, 2D). Teacher 1L clearly articulated: “Though these AI tools are “smart”, they are TOOLS only. I should use them wisely and let them support me, not replace me.” Similarly, Teacher 1J reminded herself to “Use the right prompts, and check Terms and Conditions carefully before using a new AI-powered tool. I’m the boss, not AI.” The belief that GenAI cannot replace the human teacher’s role in an educational context was shared by other participants (Teachers 1J, 1L, 1M, 1N, 2F). A participant clearly set the boundary between what GenAI can and should do as follows:

AI should be viewed as a tool to improve teaching and learning, not as a replacement for all teacher jobs. It should be utilised to supplement and assist teachers’ efforts by suggesting feedback, sharing learned experiences, and performing topic-related tasks. (Teacher 1N)

The above reflection confirmed that the teacher had to be in the driver’s seat during the teaching journey while acknowledging the benefits of GenAI (Teachers 1K, 1M, 1F, 1G). To maximise the pedagogical benefits of GenAI, the teacher needed to use it flexibly (Teachers 1B, 1C, 1M) and creatively (Teachers 1C, 1L, 2E, 2F) rather than simply follow the suggestions by GenAI. Other important principles were to maintain the transparency and fairness in teaching and assessment conduct (Teacher 2C) while constantly managing the classroom for possible student misconduct (Teacher 2F). More specifically, the Group 2.3 representative commented: “We found it challenging to manage students’ use

of these technologies and GenAI. Classroom management is the key to successful technological integration at school. It's about voluntary cooperation and awareness raising, not controlling and prohibiting things" (Ms. N.). Instead of banning students from using GenAI tools completely or closely supervising and monitoring students' use of these tools all the time, the teachers decided to talk openly to students about the *what, how, dos and don'ts* of GenAI to raise their awareness, and encouraged students to cooperate voluntarily and do things the right way rather than use GenAI to cheat.

However, it is also noteworthy that a single strategy application may not work in stopping students from GenAI-assisted misconduct. Students may choose to copy AI-generated responses into their assignments despite raised awareness and teachers' call for voluntary cooperation in not cheating. Therefore, teachers insisted that "there is a need to reform the assessment plan to suit the fact that students use AI more and more in their learning" (Teacher 2C). The teacher explained that she designed test questions that focus on students' particular contexts and critical thinking, requiring students to apply their own reasoning rather than using GenAI to generate an answer. This works in her context as she knows her students well, making it harder for them to cheat using fictitious information provided by GenAI tools.

The focus group also revealed that teachers should be consistent regarding the principles of using GenAI across the different occasions and schools (Group 2.2), and follow established policies, official guidelines, or a standardised framework on how to use GenAI pedagogically in teaching (Group 2.3). Having clear guidance on how to use GenAI for teaching helped teachers feel more confident in dealing with challenges when they adopted the not-so-familiar tools like Gemini (Ms. N.). Sound pedagogical principles were also helpful for teachers when addressing concerns regarding AI-generated content.

Content principles. Data analysis revealed strategies that teachers adopted to address the challenges regarding distraction and inappropriate use of GenAI, for example, quality assurance by ensuring the achievement of teaching and learning goals. A teacher explained:

Teachers may use GenAI to support their teaching, but students may use GenAI to cheat. The challenge is for teachers to find out if students have actually achieved the learning goal. It is not about students' task completion or submissions, but whether they have learned a skill or improved their abilities. Students' output may be GenAI-generated, partly or wholly, but teachers must see through it to evaluate if students have learned anything. (Group 2.2)

The reflection above has captured the teachers' concern about students' genuine learning and content quality while GenAI was involved. To ensure learning quality and address the response reliability and accuracy issue, most participants reflected that they tried to verify the accuracy of ChatGPT and Gemini responses (Teachers 1A, 1H, 1I, 2A, 2E) and the accountability of information provided (Teachers 1F, 1I, 1K, 2B, 2D, 2E). Some participants also raised the

need to protect teachers' and students' information privacy (Teachers 1D, 2B). After the discussion, one teacher admitted: "I have a positive attitude towards GenAI. However, I should be more cautious when using it due to privacy and personal information concerns" (Teacher 1D). Another teacher, however, highlighted that content principles should be used in combination with technological and pedagogical principles to ensure quality teaching and learning:

I realised that AI has become more and more popular and influential in teaching and learning. However, to maximise the teaching quality, teachers need to master technological, pedagogical, and content knowledge. Also, there is a need to reform the assessment plan to suit students' increasing use of GenAI. (Teacher 2C)

The above reflection describes the increasing popularity of GenAI in education, especially in assessment, where many concerns converge, and at the same time proposes a potential solution for teachers regarding the components of the TPACK framework. All the principles identified, however, shared a common focus on the teacher and learner agency, which was agreed as the decisive factor in the effectiveness of GenAI adoption.

Teacher and learner agency. Across the data sources, the participants insisted on the significance of teacher and learner agency to address concerns regarding the effective and appropriate adoption of GenAI for ELT. A teacher who used both ChatGPT and Gemini reminded: "You are responsible for making decisions about whether or not to use GenAI tools and for the outcomes that may result from their usage" (Teacher 1K). Such awareness of the user responsibility and appropriateness of GenAI usage was shared by other teachers (Teachers 1A, 1F, 1I, 2C, 2F). The consensus was that teachers should use GenAI tools prudently and responsibly.

A teacher reported that while there are jokes about schools returning to paper-based tests due to concerns regarding GenAI, she found it "more important to change the way testing and assessment is conducted than ban students from using such technologies" (Ms. P.). While teachers in all focus groups agreed that there are various challenges associated with GenAI, it came to stay so "the focus should be on helping students to use these tools responsibly and appropriately, e.g., to encourage students' critical thinking, manage the human-AI contribution ratio, and justify the use of GenAI" (Group 2.1 representative). Apparently, the question is not on whether to use GenAI but how to use it responsibly and appropriately.

To be able to use GenAI responsibly and appropriately, the participants insisted that teachers must keep learning about these new tools. One teacher commented: "Because AI tools can be utilised by anyone, teachers must learn how to use them wisely and appropriately. Teachers should reconsider their present teaching methodology to ensure that it is appropriate for the current educational context" (Teacher 1M). Some teachers admitted that they may not use GenAI as much or as well as their students (Mr. L., Ms. T.), therefore they need to be more proactive in learning how to use these tools, as proposed by

a Group 2.3 representative: “Teachers must be the pioneer in learning, using, and mastering GenAI tools so that you can use them in teaching and instructing students on how to use them effectively as a role-model” (Ms. N.). Without such a proactive attitude to learning how to make the most out of GenAI, teachers may struggle with their students’ use of tools like ChatGPT.

Besides teacher agency, student agency was also a strong theme raised by focus groups, with a focus on both the learner and the learning process, learner awareness, and autonomy. A Group 2.3 representative summarised:

One of the biggest risks regarding students is that they may become dependent on GenAI and lose their proactiveness in thinking and reasoning. To address this challenge, we must enhance their awareness and autonomy, which is not a piece of cake. It is hard to change students’ mindsets and behaviours, you know, since they are not always honest about their use of GenAI.

The reflection revealed that transparency can help address issues regarding students’ misconduct, which was made possible thanks to improved learner agency, awareness, and autonomy. Students, like teachers, were users of GenAI, and therefore had the responsibility of using it appropriately.

Teachers, however, had different opinions on teaching students how to use GenAI. Some participants believed that teachers should instruct students on how to use GenAI responsibly and appropriately (Ms. N., Ms. T., Ms. H.) while some others (Ms. T.J., Ms. L.) argued that teachers should focus on delivering their lesson content rather than teaching students how to use the technology. Teachers’ workload and technological competence, as well as content-heavy lessons, were some of the reasons why teachers were reluctant to spend time training students how to use GenAI properly.

To address concerns regarding the accuracy and reliability of GenAI responses and students submitting GenAI-polished work that did not reflect their own capabilities, some groups recommended that the teacher should focus on the learning process and what students learned throughout the process, rather than their output and exam performance (Groups 2.1, 2.2):

When students use GenAI, their test results or performance may not reflect their true abilities. Therefore, it is best not to look at the tasks that students completed or the work they submitted, but focus on the learning process, what students learned, and the skills they acquired. It is crucial that teachers assess what students have achieved throughout the learning process and if it matches the teaching and learning goals. (Group 2.2 representative)

The teacher summarised her group’s argument that both teacher and student agency play the key role in coping with widespread GenAI use in education, and it is essential to switch the focus of testing and assessment to the process rather than the output.

In short, the focus group discussions identified technological, pedagogical, and content principles as well as the teacher and learner agency to ensure effective and appropriate use of GenAI tools for ELT. At the end of the first workshop, about two-thirds of the reflection survey respondents ($n = 15$) admitted they felt

more confident about using GenAI, as reflected by one participant: “After the workshop, I’ve got some useful tips in implementing AI tools into my English instructional design. I strongly believe that AI tools can substitute, augment, modify, and redefine the traditional language instruction” (Teacher 1F). While acknowledging the challenges regarding the use of GenAI in ELT, the participant became confident that there could be effective integration of GenAI into ELT should the principles be followed.

Discussion

Generally speaking, data analysis revealed that teachers used a variety of GenAI tools, including ChatGPT, Gemini, and Bing Image Creator, most frequently for pre-teaching preparation as a tool to brainstorm for teaching ideas and resources for classroom activities. In line with previous results by Alharbi (2023) and Kasneci et al. (2023), the teachers also used GenAI tools for in-class activities and post-class feedback provision and correction. While agreeing with the findings by Barrett and Pack (2023) on the usefulness of ChatGPT in writing brainstorming, revision, and feedback, the current study explored the use of more GenAI tools, including Gemini and Bing Image Creator, in teaching all language skills and areas and throughout the preparation-teaching-feedback process. The results, therefore, offered a more comprehensive understanding of GenAI application in the wider educational settings and contexts and their benefits, rather than focusing on a single tool such as ChatGPT or a language skill only, like writing.

The participants acknowledged the various challenges they encountered while adopting GenAI for ELT, which was consistent with the findings in previous studies, including the costs, data privacy, and security (Kasneci et al., 2023), as well as technical difficulties (Kostka & Toncelli, 2023). The current study, however, has furthered understanding of the challenges of using GenAI in ELT by mapping them into the TPACK framework (Mishra & Koehler, 2006) for a stronger theoretical and more systematic view of the issues teachers should address to ensure the effective implementation of GenAI in their teaching practice.

In line with previous publications on teachers’ perspectives about adopting GenAI in ELT, the current study found a range of mixed feelings among the participants, including the fear of being replaced by AI, as identified by Kaplan-Rakowski et al. (2023). However, the participants in the current study also reported positive attitudes and eagerness to integrate GenAI further in their future teaching. This positive perspective was consistent with the findings by Kaplan-Rakowski et al. (2023) but different from the findings by Moorhouse and Kohnke (2023) and Lindner et al. (2019) that most participants believed they lacked the confidence and competence to address the implications of GenAI tools effectively. The current study, therefore, contributes to the emerging literature of GenAI by offering a more well-rounded overview of teachers’ perspectives, which consists of both positive and negative attitudes. Such a thorough approach and sound theoretical support by the TPACK framework

enabled teachers to confidently try out and inform their future use of GenAI for effective ELT. The current study, therefore, has had a positive and practical impact on the participants' understanding of GenAI tools and how to use them appropriately.

Throughout the two workshops, the teachers proposed a set of principles for using GenAI tools in ELT regarding the technology, pedagogy, content, teacher and learner agency. The proposal of these principles responds to the call for constructing ethical guidelines for applying GenAI to educational settings by Hwang and Chen (2023). The proposed principles also aligned with previous studies, for example, the call to redesign learning and assessment activities (Kostka & Toncelli, 2023), the need to use GenAI responsibly (Ulla et al., 2023), and technological support through professional training for teachers to master the use of AI tools for EFL (Pratama et al., 2024).

The current study complements the theoretical framework of TPACK by highlighting the significant role of teacher and learner agency while using GenAI tools. The rationale for this addition is that teachers are considered active agents of change who “make intentional decisions and take proactive steps in their pedagogy” (Pu & Barnard, 2025, p. 6). While acknowledging the benefits and challenges of using GenAI tools for ELT, the teachers showed a strong consensus that GenAI should be used as a tool and resource rather than to replace the teacher. The teachers also strongly agreed that the quality of both GenAI output and GenAI-empowered ELT practice depends on the teacher and student, and how they use these tools. In other words, teacher and learner agency should take the decisive role in the use of GenAI tools rather than letting the human be led by the technology. These findings confirmed the unique and significant role of teachers amid the GenAI-induced disruption argued for by Moorhouse et al. (2023).

Our results also align with the findings by Vafayi and Meihami (2024) that the TPACK model is essential for enhancing EFL student-teachers' agency. As facilitators and supervisors of students' engagement with learning and GenAI tools, teachers also have a major impact on students' agency in their use of these technologies through learner training, classroom activities, and assessment task requirements. These results align with the findings on the importance of using technology in developing student agency as part of a systematic literature review by Marín et al. (2020).

Practically, our findings add to the literature by highlighting how the TPACK model may be complemented with teachers' and students' agency while using GenAI tools. As active agents and mediators of reflective practices, teachers effectively take control of the process of incorporating technological, pedagogical, and content knowledge into continually refining GenAI-adopted teaching practices and, at the same time, improve their own TPACK capabilities. For specific TPACK components, the results highlighted the significance of pedagogical principles over content and technological strategies in ensuring teachers' agentic appropriate, and effective adoption of GenAI in ELT.

In short, what set the current study apart from previous projects was that it engaged teachers who used different GenAI tools over a three-month period

and provided them with support and practical demonstration through workshop activities, so the teachers confidently tried the new tools and learned how to use them effectively. The current study, therefore, contributed to the current literature review with a comprehensive account of teachers' perspectives of GenAI use for ELT throughout the learning-implementing-reflection process. Practically, the current study has identified a comprehensive set of technological, pedagogical, content, and human-focused principles to ensure appropriate and effective use of GenAI in ELT. Theoretically, the current study has augmented the TPACK framework by mapping teachers' challenges and principles of GenAI adoption in ELT and adding the teacher and learner agency to complement its current components to ensure the responsible implementation of GenAI in the educational context. Most importantly, the current study offers a set of practice guidelines for teachers on how to integrate GenAI tools effectively into the ELT classrooms, with specific strategies on what to prioritise while adopting these tools. For English language teachers in the wider contexts, professional development opportunities like the workshops conducted in the current study would help enhance their skills in using GenAI tools for their daily teaching.

Conclusion

The current study furthers understanding of the use of GenAI for ELT and principles for their appropriate and effective use, and contributes to building the current literature, teaching practice, and theoretical framework of GenAI as an emerging technology. The results of the study, therefore, provide both practical and theoretical implications for teachers and researchers regarding the adoption of GenAI for ELT. The findings revealed that teachers felt confident and positive about the use of GenAI for ELT after the workshops, as they had found strategies on using these tools in their practice during the 12-week period of implementation. It is also recommended that equitable access to AI resources be facilitated for diverse learner populations due to the significant role of teacher and learner agency in the use of GenAI for ELT.

The study, of course, has some limitations. For example, the small sample of participants and qualitatively driven approach to data collection, while allowing for deep and rich data regarding teachers' use and perspectives on GenAI adoption in ELT, make it hard for the results to be generalised to other educational contexts. Future studies may adopt a more quantitatively driven research design with a larger sample to test the augmented TPACK model with the newly added human-centred principles of using GenAI in ELT. It is also worth noting that teachers' perspectives may be subjective and biased thanks to their previous experiences with these tools.

Another limitation of the current study is that it only focused on teachers' perspectives of GenAI use but did not measure teachers' actual efficacy of using these GenAI tools in their current teaching practices, and did not also involve students as research participants. Future studies may consider collecting data from learners, school principals, and staff who use GenAI for their English

language learning and assessment to provide a more well-rounded understanding on how different groups of stakeholders perceive and adopt GenAI. Future studies may also examine the actual instruction teachers provided and the learning effects on the students when GenAI tools are engaged.

Notes

1. In the first workshops, the focus groups were numbered from 1 to 10, while in the second workshop they were numbered 2.1–2.3. Teachers participating in the focus group discussions were referred to using their initials, for example Mr. T. and Ms. H. to ensure the privacy of their identity. Teachers' qualitative responses to the anonymous surveys are coded using a number (1 for Workshop 1, and 2 for Workshop 2) and a letter from the alphabet to represent their name. For example, 1A refers to the first response in the workshop 1 survey.

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