

Utilizing ChatGPT for Self-Directed Professional Development: Practices of Southeast Asian Language Teachers

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Abstract

This study investigated the common issues and challenges faced by Southeast Asian English language teachers in their teacher professional development (TPD) activities and explored how they utilized ChatGPT to address these challenges. Using qualitative data collected from participants from 10 Southeast Asian countries, this study found that limited time, heavy workload, limited support and resources, irrelevant training content, limited technical skills, and inability to identify professional development needs were the most common TPD challenges encountered. To address these challenges, the participants utilized ChatGPT as a learning companion, facilitator, adviser/coach, and collaborator for their self-directed TPDs. They used the tool as a partner or collaborator in planning and completing teaching and learning tasks. They used the tool to analyze their TPD needs and design their personalized, self-directed TPD activities. In addition, they also used it to independently learn new concepts and practices by prompting it with relevant questions or instructions. Moreover, they also used it to generate initial ideas and subsequently enhanced these ideas with their personal knowledge and experiences. Lastly, they used the tool to polish the language of their outputs for clarity and effectiveness. Insights and implications of these findings for language teacher education and professional development are discussed.

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Introduction

Teacher professional development (TPD) is crucial to language education reform. Equipping language teachers with relevant and up-to-date knowledge and skills in a

practical, collaborative, reflective, and ongoing manner can lead to better student learning outcomes and school performance (Henessy et al., 2022; Hubbard & Schulze, 2025; Meniado, 2023; OECD, 2024; Sadeghi & Richards, 2021). With effective TPD programs, language teachers can confidently address current language education issues (OECD, 2024; Ventista & Brown, 2023). With carefully designed TPDs, language teachers can also develop their expertise and growth mindset, ensure high compliance with the language education standards, and nurture a lasting commitment to the English language teaching profession (Kohnke & Moorhouse, 2024).

However, despite these positive impacts, many language teachers remain less engaged with TPDs due to several constraints. Primary to this is the lack of sufficient time (Henessy et al., 2022; Meniado, 2025; OECD, 2024; Ventista & Brown, 2023). Teachers are often burdened with numerous teaching and non-teaching tasks in school, as well as other family responsibilities at home, making it difficult for them to find a convenient time to learn and develop professionally. Another constraint is the incompatibility or irrelevance of the content of the TPD programs to their work contexts, resulting in the non-application of gained knowledge and skills thereafter (Meniado, 2025; Ventista & Brown, 2023). Other challenges include insufficient financial resources, support from school management, and corresponding incentives or rewards for TPD participation (Meniado, 2025; OECD, 2024).

Considering the above-mentioned constraints in TPD, it is worth exploring how available digital technologies may help address these. ChatGPT, a conversational generative artificial intelligence (GAI) tool, is believed to be capable of facilitating personalized learning and development at the user's preferred time, pace, and space. With its extensive knowledge and human-like interaction, it can facilitate personalized conversations across a broad range of topics, leading to a deep understanding of relevant language teaching concepts, issues, and practices (Peachey, 2024; Yousey, 2023). Given the accessibility and ubiquity of this tool, language teachers can rely on it for immediate, bite-sized learning and development solutions anywhere, anytime. According to Yousey (2023), language teachers can use ChatGPT to personalize learning plans, break down or explain complex concepts, explore advanced topics, test understanding, and uncover further learning opportunities. Language teachers can also use it as a mentor or guide in conducting teacher reflection, exploring different methodologies, designing action research projects, and creating a learning journey (Peachey, 2024).

Teacher Professional Development

Teacher professional development (TPD), also known as continuing professional development or in-service training, is a continual process of intellectual, experiential, and attitudinal growth during which in-service language teachers engage in relevant professional activities that enhance their knowledge, skills, and attitudes or mindsets leading to the improvement of the quality of their teaching and performance of their

learners and respective learning institutions (Curtis, 2018; Hubbard & Schulze, 2025; Maggioli, 2020). It consists of planned, facilitated, voluntary, or private learning activities aimed at achieving the goals of extension, renewal, and growth beyond the initial teacher preparation program (Hubbard & Schulze, 2025; Ousseini, 2018). These activities can be formal, informal, non-formal, individual, collaborative, teacher-initiated, or institutionally mandated (Hayes, 2019; Li et al., 2025). More specifically, these activities can be in the form of self-directed independent learning, mentoring, coaching, work-based projects, action research, peer observation, individual reading of relevant articles, personal reflection, study groups, enrolment in post-graduate courses, or participation in formal training, workshops, and conferences (Meniado, 2023).

TPDs positively correlate with classroom teaching performance and achievement of student learning outcomes. Effective TPDs demonstrate a sequential relationship with enhanced teacher pedagogical content knowledge, improved classroom teaching performance, and higher achievement of student learning outcomes (Borg, 2018). In the Teaching and Learning International Survey (TALIS) conducted by the Organization for Economic Co-operation and Development (OECD, 2017), it was found that teacher engagement in TPDs leads to more effective and sustained implementation of classroom practices crucial to student learning. This was supported in the studies by Gore et al. (2017), McAleavy et al. (2018), Fletcher-Wood and Zucollo (2020), and Kalinowski et al. (2019), confirming that high-impact TPDs can result in a better quality of teaching and learning by closing the gaps between existing and desired levels of teaching and learning performance. However, to achieve these outcomes, certain TPD characteristics and conditions must be met.

TPDs should aim to deepen teachers' understanding of the teaching and learning processes, their contexts, and the learners they serve (Darling-Hammond et al., 2017). They should be impactful, needs-based, context-based, practical, engaging, sustained, collaborative, reflective, and measurable (Darling-Hammond et al., 2017; Dogan et al., 2025; Maggioli, 2020; Ousseini, 2018). Any TPD activity should be based on a teacher's identified professional needs, teaching context, and personal circumstances (Hayes, 2019; Hubbard & Schulze, 2025; Kohnke & Moorhouse, 2024). It must be practicable and capable of addressing specific concerns or issues. It should also be collaborative, involving different available resources and stakeholders of the institution, so that it is more engaging, sustainable, and impactful (Hayes, 2019). In the study by Kalinowski et al. (2019) investigating the common characteristics of effective TPDs, it was found that successful TPDs tend to be long-term and intensive, consisting of multiple learning opportunities aimed at mastering and applying the newly learned knowledge and skills. They should provide practical assistance, allow collaboration, and consider teachers' needs and students' circumstances.

While the qualities of successful TPDs are identified, they are not always reflected in many TPD programs. Many TPD activities language teachers are asked to participate in are not personally meaningful to them as they are not based on their identified professional learning and development needs (Hayes, 2019). Many of these TPDs are often conducted in a one-shot, one-size-fits-all model, leaving issues of contextuality, applicability, continuity, and sustainability (Kohnke & Moorhouse, 2024). Formal and mandated TPDs also tend to be transmissive rather than transformational, where language teachers are encouraged to be reflective on their decisions and practices (Hayes, 2019). These realities have caused less engagement of language teachers in TPDs, in addition to common reasons such as lack of time to invest in professional learning and development due to excessive teaching tasks and tight schedules, lack of time to apply new knowledge and skills in class, and lack of financial and technological resources (Abakah, 2023; Hayes, 2019). Given these realities and constraints, there is a need to consider adopting an alternative approach to TPD that allows language teachers to find meaning and practicality in their professional learning and development while continually engaged in collaborative and reflective TPD activities (Kohnke & Moorhouse, 2024).

Self-Directed Teacher Professional Development

Self-directed teacher professional development (SDTPD) refers to teachers' self-initiated, informal, unstructured, and uncredentialed learning activities to enhance their professional knowledge and competencies needed in a situated teaching context (Li et al., 2025; Tan, 2024; Tufan & Öztürk, 2025). It is based on the concept of self-directed learning (SDL), where learners initiate and manage their own learning to fulfill their self-determined learning needs and objectives (Younas et al., 2025). As a framework, it comprises three main components or elements: a) self-management, which involves the ability to identify professional development (PD) needs, set corresponding PD goals, and determine relevant PD activities and required resources; b) self-monitoring, which refers to the capability to assess the overall outcomes of the PD activities undertaken, reflect on the effectiveness of the strategies and processes employed, and adjust strategies and resources when necessary; and c) motivation which refers to the ability to initiate and sustain learning efforts despite constraints until the PD goals are achieved (Li et al., 2025; Graham et al., 2025). It is an iterative, dynamic, flexible, and situated process, where learners adapt and modify their strategies based on the outcomes or progress toward their goals and the evolving demands of the learning context (Mante et al., 2025).

SDTPD is reportedly beneficial for many teachers. It allows contextualized and flexible professional learning and development, where teachers can freely engage in learning activities that are suited to their existing work circumstances and evolving learning needs (Alshaihi, 2020). It also fosters sustainable development for teachers as it improves their autonomy, motivation, and internalized commitment to grow professionally (Lan, 2022). Research shows that teachers who engage in SDTPD tend to develop openness for

continuous professional learning, professional expertise, and commitment to the teaching profession (Mante et al., 2025). However, to be more transformative and sustainable, it must be driven by a strong motivation and supported by relevant resources, systems, and environments. Teachers must have a strong desire to learn and grow and should have access to the required learning tools/technologies and supportive learning environments (Lan, 2022).

While SDTPD promotes contextualized, flexible, and continuous professional learning and development, it may be challenging for some teachers. Due to its being informal and unstructured, it is often unrecognized and unsupported by formal organizations and institutions. Any learning that is gained under SDTPD cannot be credentialed or transferred to a formal qualification. It can also be burdensome as it requires significant time for individual planning, regular monitoring, and necessary adjustments throughout the process. Teachers are already burdened with many teaching duties and workloads, and engaging in SDTPD tasks that require planning and monitoring may add to the existing loads. Lastly, it requires utmost focus and resilience, as there may be many distractions, frustrations, and disappointments along the way. However, despite these challenges, SDTPD still holds transformative potential (Li et al., 2025). An ecosystem needs to be created where the ideas and practices of SDL and SDTPD are valued and supported, and where school administrators, teachers, and other education practitioners work together to address the challenges in SDTPD.

AI-Driven SDTPD

The emergence of new and more powerful AI technologies has revolutionized the education landscape, including lifelong learning and professional development (Dogan et al., 2025). The integration of artificial intelligence has provided more personalized, more accessible learning opportunities, allowing teachers to develop content knowledge, pedagogical expertise, and digital competencies at their own pace and space, overcoming persistent constraints such as limited time, support, and resources (Mante, et al., 2025). AI technologies with intelligent tutoring systems, dialog systems, AI-based recognition, automated scoring and evaluation, real-time feedback and suggestions, and adaptive learning features can facilitate self-directed teacher professional development as they help teachers to identify their professional learning needs, set relevant PD goals and tasks, monitor their progress, and reflect on their performance (Kohnke, 2024; Tufan & Öztürk, 2025; Younas et al., 2025).

In the study by Younas et al. (2025), it was found that AI supports self-directed learning and professional development by providing “personalized learning support, question-answering support, timely feedback, action recommendations, and interactive learning support” (p. 38397). Moreover, it was found that AI tools can provide “on-demand tutoring, sustained interactivity, increased content access, enhanced learning satisfaction, and reduced cognitive load while engaged in self-directed learning” (Younas

et al., 2025, p. 38397), which are all important in developing learners' overall engagement and motivation, autonomy, and competence development. Kohnke (2024) also found that AI can: a) offer personalized learning paths based on teachers' strengths, weaknesses, and preferences; b) facilitate the creation of teaching-learning scenarios where teachers can practice different teaching methodologies without causing any disruption, harm, or trouble; and c) provide data analytics that help teachers and administrators make informed educational/instructional decisions. Lastly, Tufan and Öztürk (2025) also confirmed that AI can support SDTPD by serving as a personalized tutor, resource creator, and motivator. It can answer queries and provide immediate feedback, curate and suggest related learning materials, and engage learners with interesting and interactive resources and activities.

To leverage the full potential of AI for SDTPD, the following steps can be adopted: a) conduct a TPD needs assessment; b) define the TPD goals and objectives; c) select appropriate learning resources and AI tools that meet the TPD needs and objectives; d) ensure availability or compatibility of the AI tools with the existing IT infrastructure; e) engage in self-directed professional learning and development using AI; f) monitor learning progress and evaluate effectiveness of activities/strategies; g) integrate learning into relevant contexts; and h) reflect on the overall self-directed TPD experiences (Kohnke 2024). While AI-supported SDTPD can be beneficial, teachers should be mindful of AI's issues and limitations that may affect the quality of their SDTPD experiences. These include accuracy of information, data privacy and security, potential bias, transparency, and accountability (Lakhe Shrestha et al., 2025). To address these, teachers need to develop the required AI literacy competencies so that they will be more proficient in navigating the AI tools and more responsible in interpreting and utilizing the information they receive from these tools (Meniado, 2024).

ChatGPT-Supported SDTPD

In recent years, there have been attempts to exploit ChatGPT, a generative AI chatbot capable of interacting and generating human-like texts, for self-directed teacher professional development, paving the way for the so-called ChatGPT-supported self-directed teacher professional development (SDTPD) where the generative AI tool is used for any purpose, form, activity, or process of self-directed TPD to transform teachers' knowledge, skills, perspectives, and attitudes towards teaching (Chang & Hwang, 2025; Cukuruva et al., 2024; Dogan et al., 2025; Meniado, 2025). In this model, language teachers interact or collaborate with ChatGPT-supported PD assistants to seek professional advice and direction to complete a particular learning and development task. They interact with the conversational chatbot to practice and reflect on different teaching approaches and strategies, and work with simulators for various classroom scenarios to enhance different teaching skills and competencies (Cukuruva et al., 2024; Mante et al., 2025; Meniado, 2025; Peachey, 2024). Guided with appropriate prompts, ChatGPT can provide human teachers with relevant scenarios and guidance on various

education topics and issues (Kohnke, 2024). They can also guide teachers in understanding unfamiliar subject-matter concepts through concrete examples, explanations, and illustrations, designing and evaluating concept reinforcement activities, pedagogical tasks, customized multimodal instructional materials, assessment tasks and criteria, and professional learning needs analysis (Cukuruva et al., 2024; Peachey, 2024; Meniado, 2025; Tufan & Öztürk, 2025).

In the study by Li et al. (2025), it was found that teachers used ChatGPT in their SDTPD to get models or samples of how to design lessons and implement instructional activities using specific pedagogies or approaches. They also used the generative AI tool to efficiently monitor and manage their SDTPD tasks and activities, allowing them to save their time, efforts, and resources. Lastly, they used the tool to stay motivated in achieving their PD goals as they engaged with and reflected on the tool's outputs. In another study by Tran et al. (2024), it was also revealed that language teachers utilized ChatGPT to personalize their professional learning and development goals and activities, develop a better understanding of complex concepts and theories, seek ideas on how to apply educational concepts and theories into actual teaching, and engage in peer collaborative activities. Lakhe Shrestha et al. (2025) also found that ChatGPT can support SDTPD by providing real-time insights to refine teaching practices and ideas on how to address diverse learners' needs, while Chang and Hwang (2025) conclude that ChatGPT, when used for professional development, can enhance language teachers' learning achievement, self-worth, and self-confidence. Li et al. (2024) also confirm that ChatGPT can help language teachers develop higher critical thinking and task efficiency. However, due to technical limitations (e.g., hallucination, unverified sources of information) and ethical issues (e.g., cultural bias), teachers must always treat all information generated by ChatGPT with a critical eye (Kohnke, 2024). They must verify and confirm information through readings and professional experiences.

With the affordances and impacts of ChatGPT, there is a growing recognition of its role in TPD. However, how human language teachers effectively and efficiently utilize it for their self-directed professional development remains underexplored (Tan et al., 2025), particularly in the context of Southeast Asia, where many teachers lack access to formal TPDs, technology infrastructures that support formal TPDs, and other knowledge development resources. This study aimed to fill this gap by exploring various ways that language teachers use ChatGPT for their self-directed professional development, so that a deeper understanding of how ChatGPT can support self-directed TPD can be developed to inform future teacher development policies, teacher education curriculum reforms, and in-service teacher training programs. Specifically, it aimed to find answers to the following questions:

RQ1: What challenges do the participants encounter in their professional development as language teachers?

RQ₂: How do the participants utilize ChatGPT for their self-directed professional development, addressing the challenges they often encounter in their teacher professional development?

The findings of this empirical study will expand the existing literature on the use of ChatGPT for language teacher professional learning and development. Classroom language teachers, especially those in under-resourced areas who cannot afford to access expensive professional learning and development programs, can gain new ideas and insights on creatively leveraging ChatGPT for their personalized, self-directed professional learning and development. Education leaders and policymakers can also adopt some information that will inform policies relevant to the use of ChatGPT for in-service teacher professional development. Lastly, the findings will provide baseline data for future researchers interested in investigating use cases or best practices in using ChatGPT for continuing professional development.

Method

This study used the qualitative research design, specifically the phenomenological research method, where qualitative data (narratives) were collected, analyzed, and interpreted systematically to gain insights into the phenomenon under investigation, in this case, the use of ChatGPT for self-directed teacher professional development. It aimed to develop a deeper understanding of why and how the participants utilized ChatGPT for their self-directed teacher professional development by describing and interpreting their lived experiences and personal perceptions on such experiences; hence, the phenomenological research method was appropriate for this purpose (Mertler, 2019).

Samples

Participants in this study were 20 English language teachers teaching in different schools/universities from 10 Southeast Asian countries (Brunei, Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor Leste, and Vietnam). They were course participants at a teacher training institution in Singapore. They were selected purposively based on their prior reported use of ChatGPT for their professional learning and development when they were studying at the institution. Their inclusion in the study was guided by the purpose of gaining a rich understanding of their experiences and perceptions on using ChatGPT for SDTPD rather than generalizing findings applicable to all teachers in the Southeast Asian region. All the participants were experienced basic education English teachers and university language and communication lecturers with teaching experience ranging from 5 to 35 years, an overall upper intermediate language proficiency level, and an average level of digital/AI literacy. They were all very interested in exploring the use of digital tools in language teaching, learning, and assessment. However, not all of them were from well-resourced teaching contexts. Some of them were from remote areas with limited internet connectivity. Many were teachers of large classes (45 to 90 students per class) and were given additional tasks beyond teaching in school.

Instrument

To answer the research questions, a researcher-made survey questionnaire was utilized (See Appendix A). Survey questions were open-ended to give the participants freedom to express their ideas, practices, and perspectives. The questionnaire was developed based on the research questions. An external examiner examined the face validity of the questionnaire and gave comments on the clarity of the items, the appropriateness of the language to the target respondents, and the likelihood of measuring the intended construct. The comments were then used to revise/refine the items. The revised questionnaire was transformed into an online format using Google Forms and was tried out on five random adult learners. It was further revised based on the comments and suggestions received in the try-out phase before it was administered fully online.

Procedure

Before gathering the required data, permission to conduct the study was sought. Potential participants were identified based on their self-reported use of ChatGPT for independent professional development when they were studying in Singapore. They were initially contacted through email to invite them to participate in the study, and to further confirm if they met the eligibility criteria to participate in the study (e.g., must have used ChatGPT for professional learning and development, from an ASEAN country, etc.). After securing their willingness to participate in the study and confirming their eligibility, they were then formally invited to participate in the study by asking them to complete the Consent Form. Upon acceptance of the invitation and completion of the Consent Form, the online survey questionnaire through Google Forms was individually sent out to each participant. Each participant was given up to two weeks to complete and return the questionnaire. Follow-up emails were also sent out to ensure 100% retrieval.

Data Analysis

The qualitative data were analyzed using the inductive thematic approach. It is a process where qualitative data are coded without trying to fit them into a pre-existing coding frame or preconceived themes expected to be reflected based on existing theory or knowledge (Mertler, 2019). The researcher read all the participants' qualitative responses to the questions at least twice to gain a holistic understanding. Then, he identified the recurring words or phrases and interpreted their meanings against the research questions or phenomenon under investigation, and assigned codes for these. Similar or related codes were then clustered into themes. The themes were organized into a new thematic framework that describes or explains the problems encountered by the participants in their TPD and how they utilized ChatGPT for their self-directed TPD. To ensure trustworthiness in the data analysis, the researcher requested an external examiner to peer review or cross-check the analysis.

Results

This section presents the findings of the study based on the following research questions: 1) What challenges do the participants encounter in their professional development as language teachers?; and 2) How do the participants utilize ChatGPT for their self-directed professional development, addressing the challenges they often encounter in their teacher professional development? Sample responses from the participants are directly quoted, with their real names covered with pseudonyms to maintain confidentiality and privacy.

Challenges Encountered by the Participants in their TPD

Time constraints

Many participants encountered challenges in achieving their professional learning and development goals and objectives because of time constraints. They could not participate in many online or in-person trainings, workshops, seminars, or conferences because they had ongoing work/classes. They also struggled to find time to engage in TPD activities due to heavy workload in school and responsibilities at home. Faiz from Indonesia commented, *"There were many things to do simultaneously."* Similarly, Rachel from the Philippines expressed, *"If there were available trainings, they always clashed with the timings of our classes"*. Ratana from Cambodia also shared, *"I could not fully participate in a meaningful way because of the workload I had to take responsibility for."* With the limited time they had, the participants also struggled to process the overwhelming contents of TPDs. Janice from the Philippines commented, *"too much information yet little time."* In addition, participants also had limited opportunities to apply what they had learned to their real classrooms/schools. Time and space in the curriculum were not enough to apply what they had learned from their TPDs. Hannah from Malaysia stated, *"I do not have enough downtime to apply what I have learned from trainings."* Yvonne from Indonesia also added, *"The time available to collaborate with colleagues who share the same TPD goals is becoming increasingly constrained."*

Lack of resources to access TPDs

In addition to time constraints, many participants also experienced difficulties accessing relevant TPDs and securing the needed resources to participate in TPDs. Sandar from Myanmar mentioned, *"I was not aware of the platforms where I could find free and accessible TPDs. I didn't always have access to information informing me about relevant trainings or conferences."* Similarly, Ko Ko from Myanmar also reported, *"I did not have access to digital tools and updated PD resources due to poor Internet connectivity in my place."*

Irrelevance of the training

Some participants were also concerned about the quality of the TPDs they attended. Some trainings were not relevant to their identified PD needs. The course/training objectives were not well-defined, and the contents were mostly theoretical, lacking practical

components. As Monticha from Thailand shared, *"I don't achieve the specific learning goals I set for myself because the training courses I was asked to attend were not what I wanted."* Similarly, Hannah from Malaysia also noted that some courses available were not related to her needs. Lily from Singapore also added, *"Sometimes it is difficult to determine the suitability of the course because learning outcomes/objectives were not well-defined."*

Lack of technological knowledge and skills

Some participants also reported their lack of technological/technical knowledge and skills to access relevant TPD opportunities and engage with TPD activities. For example, Ko Ko from Myanmar mentioned that he was not familiar with some digital tools used to access or participate in TPDs. Similarly, Sopheak from Cambodia shared, *"... the most common challenge is that new technology tools in EFL contexts have been introduced and developed recently. So, as a teacher, I need to upgrade myself to learn how to use these tools."*

Inability to identify TPD needs

Some participants also mentioned their inability to analyze their TPD needs and set corresponding TPD goals and objectives. They could not decide which areas they wanted to improve the most and how they could improve themselves meaningfully. For example, Ratana from Cambodia disclosed, *"Sometimes, I cannot decide which areas I want to improve the most."*

In summary, the main challenges encountered by the participants were time constraints, limited resources to access TPDs of interest, irrelevant TPDs, limited technical skills in accessing TPDs, and the inability to analyze PD needs and set corresponding PD goals and objectives.

Practices of the Participants in Using ChatGPT for their Self-Directed TPD

Designing self-directed TPD

Many participants used ChatGPT to design their personalized, self-directed professional development activities. This tool helped them identify their areas of development (PD needs analysis), set their PD goals, explore suitable activities to realize such goals, and reflect on their learning. Through interactive conversations, ChatGPT offered the participants suggestions on what areas of their teaching and assessment they needed to improve and how they could improve these in various ways. Aom from Thailand, for example, remarked, *"I used ChatGPT to guide me in improving myself by evaluating the skills I lack and suggesting suitable workshops that align with my needs and preferences."* Similarly, Ratana from Cambodia also added, *"I asked ChatGPT to suggest or generate some useful sources to realize my professional development needs."* Lily from Singapore also shared, *"I used ChatGPT to help me clarify certain professional development goals based on education standards and personal strengths or weaknesses, before enrolling in a specific course."* Lastly, Rachel from the Philippines used the tool to design a customized, personalized PD for herself. She recalled, *"I tried to ask ChatGPT to customize my learning*

path by suggesting training programs based on my skills, goals, and time availability, and optimize my schedule by integrating the training programs into my existing workflow."

Brainstorming ideas

In addition to using ChatGPT as a PD adviser and planner, many participants also used this tool as an immediate source of new ideas in completing tasks, which eventually helped them learn and develop as professionals. For example, when they had no idea about how to teach using a particular approach or technique, they used ChatGPT to brainstorm or generate new ideas. Khadijah from Indonesia shared, *"ChatGPT could help me come up with new ideas on how to improve students' engagement. I just needed to provide learning objectives, and it could help me to determine activities and assessments that align with the objectives."* Phuong Anh from Vietnam also added, *"I used ChatGPT to brainstorm ideas to design learning activities effectively."* In addition, Sokreth from Cambodia also remarked, *"I used ChatGPT to explore valuable ideas for my lessons."*

Sourcing models or samples

Aside from using ChatGPT to generate ideas for lesson planning, participants also used this tool to gather ideas on how to develop or adapt instructional materials suitable for their students. Sandar from Myanmar shared, *"ChatGPT could help me find specific resources appropriate for my lessons and students. For example, when I was looking for resources on how to integrate ClassPoint into my teaching, I asked ChatGPT to recommend advanced resources on using ClassPoint"*. Sopheak from Cambodia also recalled, *"I used ChatGPT to draft a lesson plan and develop learning materials."*

Understanding abstract and unfamiliar concepts

In many situations, the participants also used the tool for learning new things, particularly in understanding abstract or unfamiliar concepts. Participants asked ChatGPT to explain and illustrate unfamiliar, complex concepts encountered in their teaching or independent readings. They also asked the tool to provide initial information about things they were curious about or topics they were interested in investigating. For example, Aisyah from Indonesia reflected, *"I always asked ChatGPT to explain or illustrate ideas I hardly understood."* Similarly, Zin Min from Myanmar recalled, *"I ask ChatGPT any information that I want to know."* Ridwan from Indonesia also remarked, *"I used ChatGPT to help me get information or generate an idea without having to join a course or webinar. It saved me a lot of time and resources in developing myself professionally."*

Enhancing communication skills

The participants also used ChatGPT to improve their ability to communicate their ideas, following the acceptable language and conventions. As the participants engaged in formal and informal, mandated and self-directed TPDs, they thought they needed at least to demonstrate an achievement of their learning goals through performance (e.g., microteaching) and relevant artefacts (e.g., projects, reports, reflections). To effectively

do these, participants used ChatGPT to enhance clarity and accuracy in expressing their ideas. Faiz from Indonesia shared, *"I used ChatGPT to make my work more understandable and acceptable for everyone. My writing is not always good, so I ask ChatGPT to give feedback and suggestions on how I can improve it."*

Discussion

The results indicate that participants could hardly engage in TPDs due to time constraints. Available TPD schedules often conflicted with their working hours and were usually inconvenient due to work pressure in school and family responsibilities at home. Others also had limited awareness of available TPD opportunities due to limited access to information and communication technologies that allow wider networking and fast dissemination of information. Others who had access to TPDs also struggled in completing the courses/trainings due to a lack of resources (e.g., funding, tools, support from school learners). These are similar to the findings reported by Henessy et al. (2022), OECD (2024), and Ventista and Brown (2023). These problems are common in remote/rural areas in developing countries where there is a shortage of teachers and educational funding and investments. Teachers in these areas usually teach large classes (around 45 to 90 students per class) while performing other non-teaching duties and have limited access to funds and resources that facilitate TPD programs. This condition is reflected among most participants, who are teachers in remote areas in developing countries in the Southeast Asian region, like Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Thailand, Timor Leste, and Vietnam. These findings reveal structural and systemic problems in education that have been existing for quite some time. While a top-down approach is desired to address these problems at a massive scale, classroom teachers can help at their own level by engaging in alternative, cost-effective TPD activities.

Other participants also had issues regarding the quality and relevance of the TPD programs made available to them. They were uncertain whether or not these programs were aligned with their professional development needs and goals. This is similar to the findings of Hayes (2019), Kohnke and Moorhouse (2024), and Abakah (2023), where some TPDs offered to teachers were irrelevant to their needs. Others did not know how to systematically identify their PD needs and set their corresponding PD goals. This can be due to their existing educational contexts, where independent, self-directed TPDs are not widely practiced. This finding reveals some flaws in the existing policies and practices in teacher education and development in many Southeast Asian countries. Many educational systems at the macro, meso, and micro levels mainly adopt the formal and one-size-fits-all approach to teacher training and development and do not (yet) recognize alternative pathways to teacher empowerment and development, making some teachers unmotivated to engage in TPDs and unable to identify their TPD needs. This suggests a need to shift paradigms and practices in teacher professional development, giving more

liberty for teachers to determine their professional learning needs and decide on their professional development pathways.

One of the evolving alternative pathways for TPD capable of addressing the above challenges and difficulties is using generative AI (GAI) technology for self-directed TPD. Participants in this study tried to use ChatGPT for their professional learning and development to address the TPD challenges they often encountered in their contexts. As revealed in the findings, the participants used ChatGPT to analyze their TPD needs and design a personalized TPD for themselves with appropriate PD goals, activities, and resources. They also used the tool to independently learn new concepts and practices by asking/prompting it with relevant questions or instructions. Moreover, they also used it as a collaborator in doing tasks by asking it to generate initial ideas and enhancing them with their personal knowledge and experiences. Lastly, they used the tool to polish the language of their outputs for clarity and effectiveness.

These are aligned with the practices reported by Cukurova et al. (2024) and Li et al (2025), where ChatGPT was used to diagnose the needs of individual teachers to tailor their teacher-training pathways, to serve as teacher-training assistants designed to offer PD advice and directions, and to generate images and videos to effectively explain concepts covered in the teacher-training sessions. Results of the current study are also similar to the findings of Kohnke (2024) and Tran et al. (2024), where ChatGPT was used for developing tailored professional development plans. Moreover, findings of this study also align with the report of Peachey (2024) outlining the varied uses of GAI tools for TPD, such as explaining different teaching methodologies, generating or evaluating ideas, acting as a mentor, and providing teachers with useful language for their presentations, communications, lesson plans, reports, and feedback.

While ChatGPT seemed to have provided the participants with some benefits and helped them address their TPD challenges, they have not fully exploited its powerful affordances for TPD. They could have used ChatGPT to simulate teaching-learning scenarios where they could engage, practice, and receive feedback (Cukurova et al., 2024). They could have used the tool as a conversational agent to help practice research-based instructional strategies in content-based scenarios. Using ChatGPT to mimic challenging scenarios for intentional teaching practice can lead to faster development of teacher competencies and transformation of perspectives (Cukurova et al., 2024). Participants could have also used ChatGPT to guide them in their teacher reflection to gain knowledge from their own teaching experiences (Peachey, 2024). Moreover, they could have also used it in designing action research projects to improve their classroom teaching practices or in creating a learning journey where they are guided to break down concepts into just-in-time, bite-sized/microlearning lessons. This finding reveals the opportunities missed by the participants as they engaged with ChatGPT for their self-directed TPD.

The participants' inability to explore these practices of leveraging ChatGPT for their self-directed TPD can be attributed to several factors, such as insufficient knowledge about the affordances of ChatGPT for TPD (skillset), limited access to the tool due to a lack of required support and technological resources (toolset), and existing personal biases toward generative AI (mindset). To benefit from the full potential of ChatGPT for personalized TPD, there is a need to expand existing knowledge about the affordances of ChatGPT by asking the tool itself or by learning from a professional learning group/community dedicated to exploring the innovative uses of ChatGPT for TPD. Currently, there is limited scholarly literature documenting teacher practices in using ChatGPT for self-directed TPD. However, there are many online communities sharing practices on leveraging the tool for various teaching and learning purposes. There is also a need for teachers and schools to partner with various agencies and organizations to secure funding and support for the needed technological infrastructure (Meniado, 2023). Lastly, there is a need for teachers and school leaders to develop their AI literacy/fluency to transform their mindset or attitudes toward the use of generative AI for TPD (Meniado, 2024). Many academic, government, and non-government organizations now offer free AI literacy and AI integration courses and programs for teachers and education leaders. These should be exploited to foster more effective, productive, and responsible use of generative AI for meaningful and sustainable language teacher professional development.

Conclusion

The findings of this study revealed that limited time, heavy workload, limited support and resources, irrelevant training content, limited technical skills, and inability to identify areas of development constrained the participants from meaningfully engaging in TPD programs. To address these, they used ChatGPT as a learning assistant, facilitator, adviser, and source of knowledge with its capability to provide immediate information, feedback, and assistance anytime, anywhere. They used the tool as a partner or collaborator in planning and completing tasks, which eventually helped them learn and develop throughout the process. The findings indicate that the role of ChatGPT in self-directed teacher professional learning and development is being recognized. As inferred from the practices presented, there is an emerging shift from human trainers/mentors as the sole and authoritative source of knowledge and facilitators of learning to human trainers/mentors and generative AI (ChatGPT) working together as collaborators to bring effective professional learning and development outcomes (Zhai, 2025). This new form of collaboration requires teachers to develop new competencies in managing and integrating ChatGPT into their self-determined and self-directed TPD initiatives to ensure effective and efficient attainment of professional learning and development outcomes.

Since ChatGPT has become an integral part of teacher professional development and will continue to be so in the future with its more complex affordances, it is important to prepare pre-service and in-service teachers on how to leverage the tool for meaningful

and effective SDTPD. Using ChatGPT for independent, self-directed TPD and designing personalized ChatGPT-enhanced TPD can be integrated into technology-oriented education courses in the undergraduate and graduate teacher education programs. These skills should also be enhanced and integrated into school-based in-service training (INSET) programs. More importantly, a culture of voluntarily engaging in ChatGPT-enhanced, self-determined TPDs as a supplement to the mandated training programs implemented by schools should be developed and nurtured among novice and seasoned teachers, so that the quality of teaching is sustained for better student learning outcomes and institutional performance.

While this study has brought new insights into the use of ChatGPT for teacher professional development, it has some limitations that affect the generalizability of its findings. Foremost, the study focused on Southeast Asian teachers, which may not be representative of practices from other regional and educational contexts. It also utilized a qualitative research design with limited participants. Though their narratives are rich, they may be insufficient to capture the whole picture of using ChatGPT for self-directed teacher professional development. Therefore, future studies along this line of inquiry may consider involving a larger sample size with more participants from each Southeast Asian country or expanding the scope to cover other geographical regions beyond Southeast Asia. Future studies may also consider employing a mixed-methods research design combining quantitative and qualitative data gathered through surveys, interviews, and observations. This study revealed that though ChatGPT can be a useful resource to address persistent problems in professional learning and development of language teachers, particularly in under-resourced countries in Southeast Asia, the practices of using and collaborating with it for TPD are still limited. However, it is hoped that with continuous exploration and inquiry from education practitioners and support from various education stakeholders, these practices can be enhanced and expanded, leading to the development of more competent language teachers and competitive learners.

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Generative AI Use Disclosure Statement

Generative AI was not used at any stage of the preparation of the manuscript.

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The required permission and consent were sought before the conduct of the study.

Competing Interests

No competing interests.

Data Availability

Data are available upon request.

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Appendix A

Questionnaire

Directions: Please provide the needed information in each section by typing your answers in the spaces provided or by putting a check (/) mark before the option.

I. BACKGROUND INFORMATION

Name: (optional) _____ Country: _____

Age: _____ Gender: _____

Highest Educational Qualification: _____

Name of School/University: (optional) _____ Grade/Year Level of Students Taught: _____

Joel C. Meniado

Self-Reported English Proficiency Level (CEFR):

_____ (A1 – Beginner)

_____ (A2 – Elementary)

_____ (B1 – Lower Intermediate)

_____ (B2 – Upper Intermediate)

_____ (C1 – Advanced)

_____ (C2 – Expert)

Perceived Proficiency Level in Using Digital Tools:

_____ (5 – Highly proficient)

_____ (4 – Very proficient)

_____ (3 – Moderately proficient)

_____ (2 – Slightly proficient)

_____ (1 – Not at all proficient)

Role/Designation: _____ Length of teaching experience: _____

II. INFORMATION PROPER

Directions: Please answer the following questions exhaustively. Discuss in detail and explain with relevant examples.

1. What challenges or difficulties do you often encounter in your professional learning and development as a teacher? Why do you consider these challenges or difficulties? How do these affect your professional learning and development?
2. How do you use ChatGPT to address/manage these challenges or difficulties? Please illustrate with relevant examples.
3. How do you usually use ChatGPT to learn and develop yourself professionally? Can you give specific situations where you used ChatGPT to learn and develop yourself professionally (*e.g., understanding an abstract/unfamiliar concept, learning how to apply a theory, approach, or strategy in a specific context, reflecting on your practice, etc.*)? What activities did you do, how did you prompt ChatGPT, and what did you do with its responses? Please discuss with relevant examples.

THIS IS THE END OF THE QUESTIONNAIRE.

Thank you!