

PPG-Certified Teachers' Lived Experiences in Using Digital Edutainment: A Phenomenological Study Through the TPACK Lens

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Abstract

As a core outcome of Indonesia's Pre-Service Teacher Professional Education Program (PPG), teachers' competency in integrating digital educational technology is essential for effective classroom practice. Facilitating today's students in learning a foreign language is increasingly inseparable from how contemporary culture shapes their engagement with digital tools. Although digital edutainment as a form of educational technology has been widely studied in the 21st century, research focusing on PPG-certified teachers under this relatively new government program remains limited. This study explores the lived experiences of PPG-certified teachers in using digital edutainment in the classroom. Six PPG-certified teachers in Indonesia participated in this study. A phenomenological research design was employed as the most appropriate approach to investigate the aim of this study: to explore how these teachers experience and enact digital edutainment in their teaching practice. Data were collected through semi-structured interviews, classroom observations, and document analysis. The findings reveal that teachers' effective use of edutainment reflects a balanced integration of pedagogical knowledge, content understanding, and technological awareness. Rather than functioning as passive users of digital tools, teachers acted as critical decision-makers who selected, adapted, and created digital content based on students' learning needs. This study contributes to the ongoing evaluation of educational policy in Indonesia, particularly in developing teachers' competency in fostering student engagement in foreign language learning to improve overall educational quality.

Keywords : Educational Technology, Digital edutainment, Teacher Education Program, Phenomenological study, TPACK

Introduction

The integration of digital technology into education has become one of the most significant transformations in twenty-first century learning (Bećirović et al., 2021; Wei, 2022). Rapid technological advancement has changed the way students communicate, access information, and engage in educational activities (Zhang & Yang, 2025). In the context of foreign language learning, digital technology plays a particularly important role because language acquisition is closely related to communication, interaction, and exposure to authentic materials (Wei, 2022). Recent studies have shown that digital learning environments can enhance students' motivation, engagement, and language proficiency when technology is integrated meaningfully into instructional practices

(Huang et al., 2023; Yu et al., 2022). In addition, interactive technologies such as mobile-assisted language learning applications, virtual classrooms, and gamified learning platforms have provided students with more flexible and personalized learning opportunities (Ishaq et al., 2021; Shortt et al., 2021). Students in today's digital era are highly familiar with technology-based platforms such as social media, online games, interactive videos, and mobile applications. As digital natives, they tend to prefer learning experiences that are interactive, collaborative, and technology-supported (Ai et al., 2024; Zhang & Yang, 2025). Consequently, teachers are expected not only to master pedagogical skills and subject content, but also to integrate technology effectively into classroom

instruction (Çebi et al., 2022; Dolezal et al., 2025).

In Indonesia, one of the major educational reforms aimed at improving teacher quality is the implementation of the Pre-service Teacher Professional Education Program, commonly known as Pendidikan Profesi Guru (PPG), which aligns with broader international efforts to strengthen teacher professionalism (Köstler & Wolff, 2025; Zhang et al., 2026). This program was developed as an effort to produce professional teachers who possess pedagogical, professional, social, and personal competencies, including digital competence for technology-enhanced instruction (Zhang et al., 2026). Recent educational policies have also highlighted the importance of preparing teachers who are adaptive to digital transformation and capable of implementing innovative learning approaches in diverse classroom settings (Köstler & Wolff, 2025; Dolezal et al., 2025). Among these competencies, the ability to integrate educational technology into teaching practices has become increasingly emphasized (Çebi et al., 2022; Zhang et al., 2026). Through such programs, prospective teachers are trained to design innovative learning activities, apply student-centered learning approaches, and utilize digital educational media in classroom contexts (Köstler & Wolff, 2025). Several studies in teacher education contexts revealed that sustained participation in structured digital training positively influences pre-service teachers' readiness to use digital learning media, collaborative platforms, and interactive instructional technologies (Çebi et al., 2022; Dolezal et al., 2025; Zhang et al., 2026). These initiatives also encourage teachers to adapt to the characteristics of twenty-first century learners who are closely connected to digital culture and technological interaction (Belda-Medina & Calvo-Ferrer, 2022; Zhang et al., 2026). In addition, contemporary teacher education emphasizes reflective teaching

practices and encourages teachers to continuously evaluate the effectiveness of technology integration in promoting student engagement and learning outcomes (Köstler & Wolff, 2025; Zhang et al., 2026). Therefore, graduates of such programs are expected to demonstrate strong competence in integrating technology into meaningful learning experiences, including foreign language education, where digital technology can support authentic communication, multimodal learning resources, and interactive language practice that align with students' contemporary learning preferences (Huang et al., 2023; Zhang & Yang, 2025).

One educational innovation that has gained attention in recent years is digital edutainment (Ongoro & Fanjiang, 2022; Zhou, 2024). The concept of edutainment combines education and entertainment to create enjoyable, interactive, and meaningful learning experiences (Ongoro & Fanjiang, 2022; Wei, 2022). Digital edutainment may include learning games, animated videos, online quizzes, virtual simulations, storytelling applications, and interactive multimedia platforms (Ishaq et al., 2021; Kazu & Kuvvetli, 2023). These tools are believed to increase students' motivation, engagement, and participation in the learning process (Liu et al., 2025; Yu et al., 2022; Zhou, 2024). In foreign language classrooms, digital edutainment can help students improve language skills through authentic interaction, visual support, immediate feedback, and collaborative learning opportunities (Chowdhury et al., 2024; Kazu & Kuvvetli, 2023; Wei, 2023). Furthermore, digital edutainment aligns with the learning preferences of contemporary students who tend to respond positively to visually attractive and interactive digital content (Ai et al., 2024; Zhang & Yang, 2025). As a result, many educators have started integrating digital edutainment into their teaching practices to create more dynamic and student-friendly

learning environments (Pingmuang & Koraneekij, 2022; Ongoro & Fanjiang, 2022; Shortt et al., 2021).

Digital Edutainment

The phenomenon of digital edutainment has emerged as a cornerstone of modern pedagogy, redefining the intersection of entertainment and instructional rigor within the digital landscape. For PPG-certified teachers (Pendidikan Profesi Guru), the adoption of these tools is not merely a technical shift but a profound lived experience involving complex meaning-making and professional identity reconstruction (Garone et al., 2022; Murphy & Evangelou, 2024). Recent phenomenological inquiries suggest that teachers' perceptions of edutainment ranging from gamified platforms like Quizizz to interactive simulations are deeply rooted in their technological pedagogical content knowledge (TPACK) and their capacity for reflective practice (Seaton et al., 2024; Williams & Brown, 2025). As these educators navigate the "digital educational ecosystem," they often encounter a dual reality: the heightened classroom engagement afforded by immersive media and the persistent challenges of infrastructure and digital literacy gaps (Caviglia et al., 2024; Revko et al., 2026).

Pedagogical adaptation in this context requires a high degree of technological confidence, where PPG-certified teachers must transition from traditional content deliverers to "designers of blended learning environments" (Murphy & Evangelou, 2024; Negara et al., 2021). This transition is frequently marked by a tension between the desire to foster 21st-century skills and the socio-emotional burden of managing digital distractions (Garton & Copland, 2022; Parveen & Ramzan, 2024). In the Indonesian context, specifically, the professional development journey within the PPG framework acts as a critical

catalyst for enhancing digital competence, yet the "lived experience" remains one of navigation through resistance and institutional constraints (Al Aamri et al., 2023; Moran et al., 2023). Ultimately, the integration of digital edutainment serves as a mirror reflecting a teacher's professional identity, where the successful "meaning-making" of technology translates into more inclusive and student-driven learning outcomes (Hamzenejad et al., 2025; Konstantinidou & Scherer, 2022). This evolving digital pedagogy underscores the necessity for sustained, context-specific mentorship that transcends basic technical training to address the holistic, humanized experience of the modern educator (Dilling et al., 2024; Seaton et al., 2024).

The TPACK Framework and Professional Identity

The growth of digital edutainment use in English learning aligns with the growing emphasis on Technological Pedagogical Content Knowledge (TPACK), which highlights the importance of teachers' ability to combine pedagogy, content knowledge, and technology in meaningful ways (Mishra & Koehler, 2006; Valtonen et al., 2022). The growing need for technologically competent teachers has encouraged many governments and educational institutions to redesign teacher education programs in order to prepare teachers for modern learning environments (Kusuma, 2021; Choi & Chung, 2025). Furthermore, several recent studies have emphasized that teacher professional development programs should focus not only on technical digital skills, but also on teachers' confidence, creativity, and readiness to implement technology-enhanced learning in real classroom contexts (Tondeur et al., 2021; Rahimi & Fathi, 2023).

Technological Pedagogical Content Knowledge (TPACK) offers a robust lens

for understanding how PPG-certified teachers make sense of integrating digital edutainment tools such as games, animation, storytelling videos, and interactive platforms within their classroom practice, since TPACK explicitly conceptualises the interplay of technological, pedagogical, and content knowledge (Chang et al., 2024; Kirana & Nabhan, 2021; Su, 2023). As a holistic knowledge framework, TPACK situates technology use in relation to teachers' previous experiences, beliefs, and professional identities, especially in EFL contexts where digital literacy and role negotiation have shifted markedly in the post-pandemic era (Su, 2023; Daulay, 2024). From a phenomenological standpoint, teachers' lived experiences with technology integration are shaped by evolving digital literacy, self-efficacy, and reflections on what it means to be a "good" teacher in increasingly digital learning environments (Su, 2023; Drajadi et al., 2023; Purniningtyas et al., 2024).

Despite the increasing popularity of digital edutainment, its implementation in classroom practice is not always straightforward. Teachers report challenges linked to infrastructure, institutional support, and the pedagogical fit of tools, as well as tensions between innovation and classroom management (Alibakhshi et al., 2025; Ray & Ilangovan, 2024; Shortt et al., 2021). Studies on TPACK in Indonesian and wider EFL settings indicate that the successful integration of digital resources depends heavily on teachers' knowledge, beliefs, creativity, and decision-making processes, rather than on access alone (Chang et al., 2024; Daulay, 2024; Kirana & Nabhan, 2021). Teachers are therefore required to select appropriate digital tools, adapt them to students' needs, and combine them effectively with pedagogy and content in ways that sustain engagement and learning (Belda-Medina & Calvo-Ferrer, 2022; Dmitrenko & Panchenko, 2025).

To understand this integration process, the TPACK framework has become one of the most widely used perspectives in educational technology and language teacher education, including in Indonesian PPG research (Chang et al., 2024; Darsih et al., 2026; Eddraoui et al., 2023). Developed from Shulman's notion of Pedagogical Content Knowledge, TPACK emphasizes that effective technology use occurs when teachers can mobilise technological, pedagogical, and content knowledge simultaneously and context-sensitively (Su, 2023; Daulay, 2024). In the context of digital edutainment, TPACK provides a useful lens for examining how teachers design engaging learning activities, negotiate constraints, and draw on professional identity in making instructional decisions (Kirana & Nabhan, 2021; Drajadi et al., 2023).

Previous Study and Research Gap

Numerous studies have explored the use of educational technology and digital media in language learning contexts. Previous research has shown that digital learning platforms can increase student engagement, motivation, collaboration, and learning achievement (Lai & Tai, 2021; Xu et al., 2024). Studies have also discussed teachers' perceptions, attitudes, and readiness toward educational technology integration (Scherer et al., 2021). However, much of the existing literature focuses on general in-service teachers, pre-service teachers in broader educational settings, or technology use in developed countries. Research specifically investigating the lived experiences of PPG-certified teachers in Indonesia remains limited (Pratama et al., 2024). In particular, there is still insufficient understanding of how these teachers experience the integration of digital edutainment in actual classroom practice after completing the government's professional teacher education program. Existing studies often

focus on quantitative measurements of technology competence or student outcomes, while the personal experiences, reflections, and instructional decision-making processes of teachers receive less attention (Tondeur et al., 2021; Pratama et al., 2024). Numerous studies have explored the use of educational technology and digital media in language learning contexts, showing that digital platforms and game-based environments can increase engagement, motivation, collaboration, and achievement when thoughtfully integrated (Belda-Medina & Calvo-Ferrer, 2022; Ray & Ilangovan, 2024; Shortt et al., 2021). A growing body of work addresses teachers' perceptions, attitudes, and readiness toward technology integration and TPACK in EFL settings (Chang et al., 2024; Daulay, 2024; Darsih et al., 2024). However, much of this literature focuses on general in-service or pre-service teachers, often in urban or well-resourced environments, and relies heavily on quantitative measures of competence. Studies that specifically investigate the lived experiences of Indonesian PPG participants and graduates, particularly in relation to classroom use of digital edutainment, remain relatively scarce (Angelina, 2024; Mukrim et al., 2023; Pasha et al., 2024).

Indonesia presents a distinctive educational context characterised by regional disparities, uneven technological access, and diverse institutional support, all of which shape how teachers enact technology-related competencies gained from PPG (Arochman & Fortinasari, 2024; Mukrim et al., 2023; Purwasih et al., 2025). Research on PPG and related professional education indicates that teachers experience both opportunities and constraints as they attempt to apply program content in real classrooms, including in rural schools (Mukrim et al., 2023; Purniningtyas et al., 2024). Exploring their lived experiences is therefore important for understanding

how national policies and formal training are mediated at classroom level and how they intersect with teachers' professional identities and local conditions (Angelina, 2024; Eddraoui et al., 2023). Such understanding can offer nuanced insights into the effectiveness of teacher education reforms and the realities of technology integration in Indonesian schools, thereby informing efforts to better support teachers' use of digital edutainment within a TPACK-oriented framework (Chang et al., 2024; Darsih et al., 2024; Pasha et al., 2024).

Furthermore, Indonesia presents a unique educational context characterized by diverse cultural backgrounds, unequal technological access, and varying institutional support across regions (Suryani et al., 2022; Hidayat et al., 2024). These contextual factors may influence how teachers implement digital edutainment in their classrooms (Tondeur et al., 2021). Teachers may experience both opportunities and challenges as they attempt to apply the competencies gained through the PPG program in real teaching situations (Pratama et al., 2024). Exploring their lived experiences is important because it allows researchers to understand how educational policies and teacher training programs are interpreted and practiced at the classroom level (Merriam & Grenier, 2021). Such understanding can provide valuable insights into the effectiveness of teacher education programs and the realities of technology integration in Indonesian schools (Hapsari & Wulandari, 2025).

To fulfill the research gap, this study is conducted with a research question: How is the lived experiences of PPG-certified teachers in using digital edutainment in foreign language classrooms through the lens of the TPACK framework?

This study is expected to contribute both theoretically and practically to the field of educational technology and teacher education. Theoretically, it

enriches the literature on technology integration by providing an in-depth understanding of teachers' lived experiences through the TPACK perspective (Mishra, 2021). Practically, the findings may provide insights for policymakers, teacher educators, and educational institutions in evaluating and improving the implementation of the PPG program, particularly in preparing teachers to integrate digital technology effectively in classroom instruction (Pratama et al., 2024). In addition, this study may support future efforts to develop innovative and engaging learning environments that enhance students' participation and foreign language learning experiences in Indonesia (Hidayat et al., 2024).

Methodology

Phenomenology is particularly suited for this inquiry as it seeks to uncover the "essence" of a phenomenon through the first-person perspectives of those who experience it in this case, the intersection of technological mastery and pedagogical adaptation (Creswell & Poth, 2018). By adopting the TPACK lens, the methodology focuses on how teachers navigate the complex overlaps of technology, pedagogy, and content in their daily instructional lives.

By employing a phenomenological research design, this study seeks to capture teachers' experiences, perceptions, challenges, and strategies in integrating digital edutainment into their teaching practices (Creswell & Poth, 2022). Phenomenology is considered appropriate because it focuses on understanding participants' subjective experiences and the meanings they attach to those experiences (Moustakas, 2021).

Five teachers are engaged to be participated in this research. Positioned both as a philosophical stance and a methodological approach, phenomenology places lived experience at the center of inquiry, emphasizing how

individuals perceive, interpret, and make meaning of their experiences. Typically, this approach involves a relatively small number of participants commonly ranging from three to ten individuals that are engaged through intensive and prolonged interaction to allow patterns and shared meanings to emerge (Moustakas, 1994; Creswell, 2018).

The criteria for selection include: (1) completion of the Pendidikan Profesi Guru (PPG) certification, (2) a minimum of one year of teaching experience post-certification, and (3) active utilization of digital edutainment tools (e.g., gamified platforms such as wayground, kahoot, quizlet, wordwall, animation videos from the digital platform, or interactive multimedia) in their classrooms. The study is situated in various schools in Central Java providing a diverse range of institutional contexts, from well-equipped urban schools to those with limited digital infrastructure.

Table 1. Participant demographics by data collection method.

Participants	Current teaching placement
N	Middle School
I	Middle School
S	Elementary School
R	Middle School
V	Elementary School

In line with Creswell's discussion of phenomenological research, data collection typically involves the following sources: In-depth interviews, The primary method of data collection, used to engage directly with individuals who have experienced the phenomenon. Interviews allow participants to articulate their lived experiences in rich, detailed narratives, which form the core of phenomenological analysis. The interview process was conducted through WhatsApp apps with its voice note features and also chat; Additional materials such as documents, observations, and artistic or expressive

artifacts may be included to enrich understanding of the phenomenon.

The data analysis will be used the thematic analysis. Braun and Clarke's (2006) thematic analysis proposes six interrelated and recursive stages that guide researchers in systematically detecting, interpreting, and presenting patterned meanings within qualitative datasets. This analytic framework prioritizes methodological robustness and analytic openness while retaining adaptability across different research contexts. The main source of this phenomenological research is the data of the interview based on Creswell, 2022 that the data will be processed into themes adopted from the TPACK lens and some additional details is provided by the observation and document studies.

Finding and Discussion

Digital Edutainment towards teachers' Technological Pedagogical Knowledge

Teaching English in classroom will be not disconnected with the teacher's technological pedagogical knowledge. Dealing with the atmosphere or students' level of comprehension, teachers have to be aware of using technology as the supporting tool to deliver the material better. This is an effort to enhance students understanding towards the material in learning English language. This is experienced by teacher I, that she was analyzing students' level of understanding and finally decided to use AI video to help explaining the concept of descriptive text.

"One of the most memorable innovations was when I taught descriptive text, which at the time felt abstract to the students because they didn't have a very specific idea of what descriptive text was. Then I gave them a simple animated video with the help of AI and also added a text-to-speech narration to make the delivery clearer and more engaging."

(interview result with Teacher I – translated).

The teacher has the sense to make the students' engaged with the process of learning the new concept of text by using technology with explanation-based type of edutainment content in the classroom observation.

Not only viewing from the students' level of understanding, the edutainment content is also adjusted by the teacher S with the students' modality. The most possible and coverable modality for incorporating edutainment content in the classroom is the audiovisual students. However, teacher S invited the students to do physical activity and still affiliated the edutainment content to be the supporting tool.

"For kinesthetic students, for example, I can combine digital media with project-based learning or simple physical activities. For example, asking them to role-play or create a product. So, I feel that with technology, I can be more creative, flexible, and more responsive to the diversity of ways of learning in the classroom." (interview result with Teacher S – translated).

In the level of beginner learners such as young learners in the level of elementary school, teacher saw that combining digital games induced students' entanglement in the class especially to increase the excitement to get involved independently in the learning process. As stated by teacher 2 – S,

"And also, I used this tool once in elementary learning, there's a game called 'Tug of War.' So two kids come forward, whoever answers the most correctly, the tug-of-war animation pulls. So, they can directly interact, there's more interaction." (translated).

With the ability of teacher to turn up the students' willing to get into the learning activity by benefiting the edutainment content it can build the

students' courage to learn new thing especially for young learners who are exposed for the initial time to the English language as a new foreign language to master.

Teachers' Pedagogical Content Knowledge in integrating Edutainment Content

To deliver English language content or material to the students effectively, the digital edutainment is utilized by the teacher to as the catalyst in explaining topic to the students. Teacher I explained that she looked for the digital edutainment content thoroughly before giving it to the pupils. The determined digital edutainment is assured to match the learning objective formulated by the teacher on the lesson plan.

"So, in choosing digital or edutainment content for the classroom, I start from the learning objectives. I make sure that the media I choose, such as YouTube videos, quizzes, etc., genuinely support the basic competencies or learning objectives to be achieved." (interview with Teacher I – translated).

Matching with the topic is also one of the way teachers done in filtering the appropriate digital content. For example, when teaching vocabulary for young learners, teacher V, will focus on giving 2-dimensional tools as the beginning.

"I also adapt the content to the teaching material being studied, for example, later when students learn the food/drink chapter, I will provide students with images related to food/drinks." (interview with teacher V – translated)

Examining the whole video, contents, or image is activating teachers' role as the controller and filter to the suitable content. Moreover, planning what edutainment content is highly necessary since some contents are not appropriate for certain level of learners. For example, teacher N, stated that she has to make

sure that the Youtube video used in her class is suitably checked before she served it to the pupils.

"I prioritize the content of the material, whether the song or video is appropriate for children aged 12-13 to watch and teach. I also consider whether the content is interesting to students because my goal is to make them more active and develop." (interview with teacher N – translated)

However, when teacher meets no suitable videos and contents to be integrated to the learning process or the teacher need to elucidate a certain context or topic, teachers make the digital edutainment content by themselves. This reflects how the teachers pursue to make digital edutainment effectively help the students in constructing new concept in their thought. Teachers initially start to choose the public digital edutainment, but then when there is no matched content either with the learning subjective, or the students' capability levels, and age, teachers began to create their own digital edutainment content to be used in their classroom and facilitate the pupils.

Teachers' experience related to Technological Content Knowledge aspect of using digital edutainment

One of the experiences that can reflect the teacher in utilizing digital edutainment content is by using the lens of the technological content knowledge. Gen Z teacher are really close in the use of using technology in daily life, it does happen to the next generation which is Gen Alpha, so that consolidating digital edutainment content is one of relevant strategies can be executed by the teachers.

"Students nowadays are Gen Alpha, elementary students especially, can't be separated from mobile phones." (Interview with Teacher S – translated)

That is why teachers nowadays try to follow the change of the era and also start

assisting their role as a teacher in English classroom. Also stated by Teacher S that she always also plans how the technology and content of edutainment will be infused to the students' activity.

“So, from that material, it's connected to what technology or content we will display, we will convey. Then, from the content and wrapped in digital technology, we need a teaching strategy, for example, what is the sequence, then using this technology, this picture, what will the children be asked to do? Discussion or what? Or from this learning video, what activity will the children be directed to: group discussion or what? Just like that.” (Interview with Teacher S – translated)

Hence, not only setting the strategies and approach in teaching English, but she also planned well what type of content is significant with the topic will be learned.

In the other side, teacher also perceive the activity by doing inductive planning, such as determining the content then formulating activities. This kind of strategies is introduced by the teacher 4 – Ivonna, that she told the researcher she usually seeks the content first after fixing the learning objective, then put together the content with the activities in the class.

“I will provide students with images related to food/drinks, asking students to guess the name of the food/drink using English. At the end of the learning session, I will briefly evaluate the previous material, sometimes also guessing.” (interview with teacher V – translated).

Not only by considering the topic and subject matter, teacher also decide the content based on how interesting and effective the content is to supply the information towards the learners. Teacher R acknowledged one of the judgments in relying on the tool is the duration of the video when she determined to use video in her classroom. Long-winded with long duration content mostly will be expunged

from the list of digital edutainment content in teaching. Therefore, it is clearly possible to see how the teachers integrating the digital edutainment content to their teaching strategies in their daily teaching activities.

The results of this study indicate that PPG certified teachers' lived experiences in incorporating digital edutainment into English language teaching closely align with the Technological Pedagogical Content Knowledge (TPACK) framework. These experiences reveal how educators purposefully integrate technological, pedagogical, and content knowledge to enhance instructional effectiveness. Notably, teachers demonstrated strong Technological Pedagogical Knowledge (TPK) through their careful selection and adaptation of digital tools, including AI-based videos and interactive games, to accommodate students' cognitive readiness and preferred learning styles, such as audiovisual and kinesthetic modalities. This deliberate alignment was found to promote higher levels of student engagement and deeper understanding (Kurniasari et al., 2024; Savitri et al., 2024; Bandao, 2025; Chitra & Gunasekaran, 2025). Such practices reflect a central principle of the TPACK framework, which positions technology as an instructional resource that serves pedagogical purposes rather than functioning as an isolated add-on, corroborating earlier studies that link effective technology integration to increased learner motivation and active participation in English classrooms (Daulay, 2024; Savitri et al., 2024; Zhang & Fang, 2022; He & Lei, 2024).

From the perspective of Pedagogical Content Knowledge (PCK), teachers exercised discernment in managing edutainment resources by selectively curating existing digital materials and, when necessary, designing their own content to ensure alignment with curricular objectives and students'

developmental needs. This approach underscores teachers' roles not merely as facilitators but as intentional designers of learning experiences. These practices are consistent with the TPACK framework's emphasis on the interdependence of pedagogy and content, where technology supports effective content representation and comprehension (Anggrarini & Yulianawati, 2025; Setiawan et al., 2018; Savitri et al., 2024). Moreover, teachers' proactive engagement in developing customized digital materials reflects research suggesting that educator-created resources can enhance instructional relevance and effectiveness, particularly in contexts where suitable materials are limited or unavailable (Setiawan et al., 2018; Bandao, 2025; Chitra & Gunasekaran, 2025).

In relation to Technological Content Knowledge (TCK), teachers exhibited a strategic understanding of how technology can be effectively combined with instructional content. This was evident in their thoughtful planning of digital learning activities, including considerations of video length, language simplicity, and information density to reduce cognitive overload. Such practices align with the TPACK framework's focus on the interaction between technological affordances and content characteristics in shaping learning outcomes (He & Lei, 2024; Chen et al., 2022; Zhang & Fang, 2022; Chen, Li, & Xu, 2022). Additionally, Gen Z teachers' awareness of generational differences, particularly Gen Alpha students' familiarity with mobile technologies, highlights the importance of situating digital content within learners' everyday technological contexts, a factor widely emphasized in studies on sustainable TPACK development in EFL settings (Chen et al., 2022; Kurniasari et al., 2024; Anggrarini & Yulianawati, 2025).

These findings are further supported by broader literature on TPACK in English language education, which

consistently underscores the importance of continuous professional development in strengthening teachers' abilities to manage the complex relationships among technology, pedagogy, and content knowledge. Persistent challenges, including disparities in digital literacy and insufficient institutional support, suggest that although teachers are actively innovating through edutainment, systemic conditions play a significant role in shaping the sustainability and depth of TPACK implementation (Daulay, 2024; Anggrarini & Yulianawati, 2025; Chitra & Gunasekaran, 2025; He & Lei, 2024). Furthermore, the increasing use of edutainment reflects post-pandemic pedagogical shifts toward technology-enhanced and learner-centered instruction, reinforcing the relevance of TPACK in enabling more personalized and engaging English language learning experiences (Daulay, 2024; Savitri et al., 2024; Zhang & Fang, 2022).

In sum, PPG certified teachers' lived experiences with edutainment in English language teaching demonstrate a dynamic enactment of the TPACK framework, wherein technological tools are intentionally integrated with pedagogical strategies and content knowledge to support student engagement and comprehension. Their practices of selecting, adapting, and producing digital materials reveal a sophisticated understanding of the intersections within TPACK, consistent with research emphasizing the importance of teacher agency and contextual responsiveness in technology integration. These findings contribute to a growing body of evidence indicating that effective English language instruction in digital contexts requires not only technological competence but also pedagogical awareness and content expertise, all cohesively mediated through the TPACK framework (Setiawan et al., 2018; Chen et al., 2022; Kurniasari et al., 2024; Bandao, 2025).

Overall, this study highlights the pivotal role of TPACK in guiding teachers' integration of edutainment in English language classrooms, emphasizing the need to balance technology, pedagogy, and content knowledge to create meaningful and engaging learning environments. It also points to the necessity of sustained professional development and institutional support to address ongoing challenges and ensure the long-term effectiveness of technology integration, echoing findings from diverse educational contexts (Anggrarini & Yulianawati, 2025; Chitra & Gunasekaran, 2025; Zhang & Fang, 2022; Meng & Fang, 2022). Through this comprehensive approach, digital edutainment is positioned not as a superficial novelty but as a powerful catalyst for enhancing English language learning.

Conclusions

The successful integration of edutainment depends on a teacher's professional agency rather than the mere presence of technology. Research demonstrates that educators must act as critical decision-makers, balancing pedagogical knowledge, content expertise, and technological awareness to adapt digital tools to their students' specific needs. By actively managing cognitive load and ensuring cultural sensitivity, teachers transform passive digital consumption into meaningful learning experiences. This study contributes to the field by shifting the focus from technical infrastructure to human judgment, though it is limited by a small sample size and semi-controlled settings. Future research should utilize longitudinal, ethnographic studies across diverse demographics to better understand these dynamics in naturalistic environments. Ultimately, the findings imply that educational policy must prioritize critical digital literacy and teacher autonomy. Instead of focusing

solely on software training, professional development should empower educators to evaluate and modify technology. By placing pedagogical judgment at the center of digital adoption, schools can ensure that engagement remains secondary to robust, educationally sound objectives in the classroom.

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