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Abstract

This study explores English teachers' attitudes toward technology-supported reflection in professional development, focusing on its role in fostering deeper engagement with the new teaching methods. The research addresses the issue of limited sustained reflection in professional development programs, which often undermines long-term teacher growth. The study aims to understand how integrating tools such as Padlet and Google Doc into reflective practices influences teachers' attitudes and enhances their professional development experiences. Using a qualitative case study design, ten English teachers were purposively selected based on their successful completion of assigned tasks during a one-month online professional development program centered on new teaching methods. Data were collected through semi-structured interviews, reflective journals, and observations of the teachers' interactions with the technology tools provided for reflection. Findings revealed that most participants held positive attitudes toward technologysupported reflection, citing its convenience, ability to provide immediate feedback, and facilitation of collaborative discussions. However, some expressed challenges, including technical issues and initial resistance to adapting to digital tools. The study highlights the potential of technology to make reflective practices more engaging and practical for teachers. Implications suggest that professional development programs should integrate user-friendly technology to foster reflective practices, ultimately enhancing teaching efficacy and teacher satisfaction.

Keywords: Reflective practice, online professional development, English teachers, teacher's attitude, online learning tools

Introduction

The integration of technology in reflective practices is increasingly recognized as a critical component of teacher professional development (PD), especially in online settings. Reflective practice has long been considered essential for enhancing pedagogical knowledge and teaching efficacy. It encourages teachers to critically assess their experiences, challenges, and successes with technology integration,

which fosters meaningful growth in their instructional methods (Baran et al., 2023). This critical evaluation empowers teachers to refine their approaches, enhancing their ability to adopt innovative strategies (Kaya & Adiguzel 2021). Positive attitudes toward technology play a significant role in the effective adoption of OPD. Teachers with favorable perceptions of digital tools demonstrate greater engagement with resources, which translates into improved pedagogical outcomes (Pongsakdi et al., 2021).

Building on the importance of reflective practices, technology-supported tools provide specific advantages in helping teachers critically analyze and improve their methods. Technology-supported reflective practices, such as video-based analysis and online tools, have demonstrated significant benefits in enhancing teacher noticing and classroom interactional competence. Tools like SETTVEO enable teachers to evaluate their practices effectively, driving deeper reflective learning (Li & Walsh, 2023). Other studies emphasize the role of structured tools like rubrics in fostering self-regulation and skill development in online PD (Biencinto et al., 2021). Similarly, Padlet and Google Docs have been shown to promote collaboration and streamline the reflection process, offering scalable and practical solutions for teachers' self-evaluation (Henseruk et al., 2022). These tools provide opportunities for deeper self-analysis, collaboration, and structured feedback, making reflective practices more accessible and effective in the digital age.

The effectiveness of these technological tools is closely tied to teacher attitudes, which significantly shape their adoption and use. Teacher attitudes play a critical role in the adoption and efficacy of technology in PD. Positive teacher attitudes are pivotal for the effective integration of these tools, as they influence engagement, willingness to experiment, and openness to new methodologies (Akram et al., 2022). Teachers who view technology as an enabler of professional growth are more likely to adopt these tools and benefit from their potential. Conversely, resistance to technology, often stemming from challenges such as unfamiliarity, perceived irrelevance, or technical difficulties, can hinder their use and reduce the efficacy of reflective practices (Chen & Cao, 2022). Programs that integrate hands-on experiences with digital tools have been found to boost both confidence and competence, further reinforcing the importance of cultivating positive attitudes (Heinmäe et al., 2022).

While existing studies explore the technical effectiveness of these tools, less attention has been given to the role of teacher attitudes and how they shape the integration of technology into reflective practices. Studies have highlighted that factor such as perceived ease of use, alignment with pedagogical goals, and direct relevance to teaching experiences are critical in shaping positive attitudes (Aquino et al., 2022). However, many teachers struggle with low self-efficacy in using digital tools or feel that these tools do not adequately address their needs. This gap underscores the need to explore how teacher attitudes can be influenced, as well as how PD programs can be designed to foster positive perceptions of technology. Additionally, while tools like Google Doc and Padlet show promise, their success depends on teachers' confidence and willingness to engage with them. Without addressing these attitudinal challenges, the broader implementation of technologysupported reflective practices will remain limited. The research question is What are teachers' attitudes toward the use of Padlet as a tool for reflective learning during the Online Teacher Professional Development (OTPD) program?. The aim of this study is to investigate the role of teacher attitudes in the adoption and effectiveness of technology-supported reflective practices. Specifically, it seeks to understand how attitudes are shaped by factors such as the perceived utility of tools, ease of use, and the alignment of technology with teachers' reflective goals. By focusing on the interplay between attitudes and technology, the study aims to provide actionable insights for designing PD programs that address both technical and psychological barriers to adoption.

Reflective Practice for Teacher Growth

Reflective practice is essential for teacher growth as it encourages educators to critically analyze their teaching experiences, identifying areas for improvement and celebrating successes. This practice involves systematic self-evaluation, enabling teachers to understand their professional challenges and adapt to diverse educational needs. Reflective practice helps in building teacher autonomy, as educators continuously refine their instructional methods to enhance student outcomes (Chen, 2023). Key characteristics of this practice include iterative learning, critical thinking, and documentation of pedagogical strategies. Reflection is particularly relevant in today's dynamic educational environments, where teachers

must navigate rapidly evolving challenges such as remote teaching and digital integration (Zajić et al., 2023).

Research demonstrates the profound impact of reflective practices on teacher growth. Zajić et al. (2023) explored how reflective strategies during the COVID-19 pandemic improved teachers' abilities to manage emergency remote teaching, fostering adaptability and resilience. Similarly, Chen (2023) emphasized that reflective practice enhances teacher agency, enabling educators to tackle pedagogical challenges proactively. Both studies highlight the need for structured reflective opportunities to support continuous professional growth. The present research builds on these findings by investigating how reflective practices, combined with online professional development (OPD), can further amplify teaching efficacy and long-term professional growth.

Technology in Supporting Reflective Practice

Technology has revolutionized reflective practice by providing tools that facilitate deeper analysis, documentation, and collaboration. Platforms such as video observation tools and discussion forums empower teachers to critically evaluate their instructional methods. Technologies like cloud computing enable seamless sharing of insights and collaborative reflections, promoting professional growth (Li & Walsh, 2023). The integration of digital resources in reflection offers realtime feedback and actionable insights, allowing teachers to make informed decisions for pedagogical improvement (Potapchuk & Pukas, 2022).

Studies underline the effectiveness of technology in supporting reflective practices. Li and Walsh (2023) demonstrated how video-enhanced observation tools deepened reflective engagement and helped teachers identify areas for development. Potapchuk and Pukas (2022) highlighted that cloud-based technologies foster collaborative learning and accessible professional development. These findings underscore the transformative potential of technology in modern education. The current research extends this discussion by examining how integrating technology into OPD frameworks can maximize reflective opportunities, ultimately enhancing teaching practices and outcomes.

Attitudes Toward Using Technology for Reflective Practice

Teachers' attitudes toward technology significantly influence the adoption and effectiveness of reflective practices. A positive attitude fosters confidence and willingness to engage with digital tools, enabling educators to assess and refine their instructional strategies. However, negative perceptions, often stemming from limited technical proficiency or perceived irrelevance, can hinder technological integration in reflective practices (Inoue-Smith, 2021). Teachers' intrinsic motivation and prior experiences with technology also play a critical role in shaping their perceptions (Ballidağ & Dikilitaş, 2021).

Empirical studies support the significance of attitudes in integrating technology for reflective purposes. Inoue-Smith (2021) found that teachers with positive attitudes toward digital tools demonstrated greater engagement with electronic resources, resulting in improved professional development outcomes. Similarly, Ballidağ and Dikilitaş (2021) observed that teachers with favorable perceptions were more likely to engage in self-directed learning through technology, fostering reflective practices. This present research aligns with these findings by exploring how cultivating positive attitudes toward technology can enhance the integration of digital tools in OPD, ultimately supporting reflective practices and professional growth.

Research Methodology

Research Design

This study utilized a qualitative case study design to investigate secondary EFL teachers' reflective practices during a ten-week tailor-made Online Teacher Professional Development (OTPD) program. Initially, 100 teachers were organized into four cohorts, each consisting of 20 participants. These cohorts were further divided into two larger groups: active groups and observer groups. Each group participated in live weekly training sessions facilitated by native English tutors. At the conclusion of the program, 10 Secondary English teachers (five man and five woman) were purposively selected for in-depth analysis based on their completion of all assigned tasks, including the submission of weekly reflective journals. These journals, totaling 40 entries (4 per participant), were published on Padlet after the weekly learning sessions. This design allowed for a focused exploration of teachers' reflective practices in the context of their professional development.

Data Collection

Data were collected using three primary methods: reflective journals, observations, and in-depth focus group discussions (FGDs). The teachers' reflective journals served as the main source of data, capturing their weekly reflections on their experiences, challenges, and strategies during the OTPD sessions. These journals offered valuable insights into their reflective practices and professional growth over the ten-week program. Observations were conducted during the live training sessions to document real-time interactions between participants and tutors, monitor task implementation, and analyze engagement dynamics within the active and observer groups. These observations provided contextual understanding of the participants' learning environments and how reflective practices were integrated into the sessions. In addition to journals and observations, two online semi-structured FGDs were held with the 10 selected participants. Each FGD lasted for one hour via Zoom, providing an opportunity for participants to discuss their perceptions of the OTPD program, the role of reflective practice in their professional development, and the challenges they encountered throughout the process. The group setting encouraged the exchange of ideas, enabling richer data collection through collaborative dialogue. To ensure ethical compliance and confidentiality, all participants provided signed written consent prior to their inclusion in the study. This multi-method approach facilitated a holistic understanding of the teachers' reflective practices and their experiences within the OTPD program.

Data Analysis

Thematic analysis was employed to analyze the data, enabling the identification and interpretation of patterns across the qualitative datasets. The process began with familiarization, where the data from journals, observations, and interviews were reviewed multiple times. Next, initial codes were generated to categorize recurring themes. These codes were then grouped into broader themes, such as reflective growth, technology integration, and group dynamics. The themes were reviewed and refined to ensure alignment with the research objectives, and finally, interpreted to draw meaningful insights. This procedural approach provided a comprehensive understanding of how reflective practices in an OTPD program contributed to secondary EFL teachers' professional development.

Findings and Discussion,

Findings

Teachers' Attitudes Toward the Use of Padlet for Reflective Learning

Analysis of reflective journals, focus group discussions (FGDs), and observations revealed that teachers demonstrated overwhelmingly positive attitudes toward the use of Padlet for reflective learning during the Online Teacher Professional Development (OTPD) program. Padlet was perceived as a user-friendly, interactive platform that significantly facilitated reflective practices. Its features allowed teachers to systematically document their learning, critically analyze their instructional strategies, and share experiences with peers. Many participants praised its ability to foster collaboration and mutual learning, which contributed to a sense of community. For instance, one teacher shared during the FGD:

"I felt motivated using Padlet because I could reflect on my teaching practices while reading my colleagues' reflections. It was like learning from each other without formal meetings."

This collaborative aspect was particularly valuable, as it created an informal yet productive space for professional dialogue among teachers. The mutual exchange of ideas and reflections enabled participants to not only refine their own practices but also gain fresh perspectives from their peers.

The teachers' reflective journals corroborated these positive sentiments. One teacher reflected:

"I have learned how to plan lessons effectively by critically analyzing my past teaching practices. Padlet has helped me organize these reflections in a structured way, making it easier to track my progress."

The structured nature of Padlet provided a digital repository where participants could revisit their earlier reflections, track their growth over time, and identify recurring challenges or successful strategies. This ability to document and reflect on professional development in an organized manner was consistently noted as a key advantage of the platform. Padlet's flexibility in accommodating various formats further enhanced its usability. Teachers could post text, images, links, and multimedia elements, allowing them to creatively express their reflections. This multimodal capability was particularly appreciated by teachers who wanted to integrate visual and digital elements into their reflective practice. For instance, one teacher shared how they used Padlet to post screenshots of lesson plans or share video recordings of classroom activities to critically evaluate their teaching methods. The interactive format of Padlet also encouraged peer engagement, as teachers could comment on each other's posts, providing feedback and support. One teacher noted:

"The comments from my peers on Padlet gave me new ideas to try in my classroom. It was encouraging to see that others faced similar challenges and how they overcame them."

Accessibility was another key factor contributing to Padlet's success. Many teachers noted that the platform was easy to access from different devices and could be used at their convenience, making it ideal for busy schedules. Teachers often reflected during evenings or weekends, finding the flexibility of Padlet crucial in balancing their professional development with other responsibilities. Padlet emerged as a powerful tool for fostering reflective practices among teachers. Its user-friendly interface, collaborative features, and flexibility in format and accessibility enabled participants to engage deeply with their professional development. By facilitating structured reflection and peer collaboration, Padlet supported teachers in critically evaluating their practices and fostering a community of shared learning.

Challenges and Mixed Perceptions

Despite the overall positive attitude, some teachers faced challenges related to internet connectivity and initial unfamiliarity with the platform. One teacher stated:

"The concept of Padlet was new to me, and in the first week, I struggled to understand how to post reflections. However, by the second week, it became more intuitive, and I started enjoying the process."

A reflection shared on Padlet highlighted a specific challenge:

"Time management during this week was tough, especially balancing teaching and reflection tasks. However, Padlet provided a space to organize my thoughts when I found the time."

Despite these obstacles, most participants adapted to the platform over time, with several commenting on how Padlet enhanced their ability to reflect critically and consistently. The reflective practice logs captured on Padlet often emphasized critical analysis of instructional strategies and ideas for improvement.

Example of a Padlet Reflection

Teachers' reflections on Padlet showcased its role in supporting reflective practices, particularly in the context of experimenting with innovative teaching strategies like multimodal digital composing. A typical Padlet entry read:

"This week, I experimented with multimodal digital composing in my class. I observed that my students were highly engaged when combining text, images, and audio to create digital narratives. However, I faced challenges in ensuring that all students had access to the necessary tools and devices. To address this, I plan to introduce pre-class preparation sessions to familiarize students with the tools and provide additional support during class. I also appreciated how this week's training session provided strategies to scaffold the use of multimodal elements in composing."

This entry highlights a teacher's critical engagement with the teaching process, identifying both successes and challenges. By experimenting with multimodal digital composing, the teacher fostered student engagement and creativity. However, barriers such as unequal access to technology surfaced, prompting the teacher to propose a solution involving pre-class preparation. This proactive response demonstrates how reflective practices, facilitated by Padlet, enable teachers to address classroom challenges constructively. The collaborative nature of Padlet allowed peers to engage with these reflections, providing feedback and sharing their own experiences. For example, in response to the above entry, another participant commented:

"I faced similar challenges with technology access. I like your idea of pre-class preparation—it could help reduce stress during the actual composing activity."

Such interactions illustrate Padlet's effectiveness in fostering peer-to-peer learning. Teachers not only reflected on their experiences but also gained insights from their colleagues, enriching their professional development. These exchanges created a supportive community where participants shared strategies, validated each other's efforts, and collaboratively addressed common challenges. Padlet's interactive features were instrumental in facilitating these discussions. Teachers could easily comment on posts, share resources, and build upon each other's ideas. For instance, some teachers shared links to free or low-cost digital tools that could enhance multimodal composing activities, while others provided examples of lesson plans incorporating these tools. This sharing of resources extended the reflective process, turning it into a collaborative endeavor that benefited the entire cohort.

Padlet proved to be an effective tool for supporting reflective practices in the context of multimodal digital composing. Its collaborative features fostered a community of shared learning, where teachers could exchange ideas and support each other's growth. By enabling consistent reflection and peer feedback, Padlet helped teachers critically evaluate their teaching methods and address challenges constructively, contributing to their overall professional development.

Discussion

The present study reveals that teachers hold overwhelmingly positive attitudes toward the use of Padlet for reflective learning during the Online Teacher Professional Development (OTPD) program. These findings align with existing research, reinforcing the value of digital platforms in fostering reflective practices and professional development. This section discusses how these findings compare to previous research, the underlying theories they support, and their implications for reflective learning and professional growth. The findings of this study corroborate prior research emphasizing the importance of digital tools in enhancing reflective practices and professional collaboration. For instance, research by Aamri et al. (2021) highlights the significance of digital platforms like Padlet in creating userfriendly and interactive environments that promote self-reflection and peer learning among teachers. Similarly, studies by Densmore-James et al. (2023) have demonstrated how such tools foster a sense of community among professional development by enabling them to share experiences and collaboratively refine their practices. These parallels underscore that Padlet's ability to facilitate structured reflection, promote collaboration, and support multimodal expression aligns well with established trends in digital professional development.

This study's findings strongly reinforce the principles of constructivist learning theories, which emphasize learning as an active, collaborative process wherein individuals construct knowledge through interaction with others and reflection on experiences (Vygotsky, 1978). The collaborative features of Padlet, such as peer feedback and the sharing of reflections, are consistent with social constructivist

frameworks, which posit that social interactions play a critical role in cognitive development. Additionally, the study supports Schön's (1983) theory of reflective practice, which argues that professionals improve their work by critically analyzing their experiences and identifying areas for growth. The multimodal capabilities of Padlet also align with theories of multimodal learning, which suggest that incorporating diverse formats (e.g., text, images, audio) enhances engagement and deepens understanding (Jaleniauskiene & Katsampoxaki-Hodgetts, 2023). By enabling teachers to document, critique, and improve their instructional strategies through these multimodal elements, Padlet provides a practical application of these theoretical principles. The findings of this study contribute to a growing body of evidence that underscores the efficacy of digital tools in professional development. Padlet's ability to provide an accessible, structured platform for reflection aligns with the findings of Dahri et al. (2021), who noted that platforms with collaborative and user-friendly features significantly enhance teachers' ability to critically engage with their practices and improve over time. The observed benefits, such as fostering a sense of community and enabling mutual learning, further validate the importance of collaboration in professional growth.

Despite the overwhelmingly positive response, some challenges, such as initial unfamiliarity with Padlet and time constraints, were noted. These challenges are consistent with prior studies that have highlighted the barriers posed by technological adoption and workload management in professional development contexts (e.g., Adedoyin & Soykan, 2022). However, the adaptability of participants over time and their growing comfort with the platform underscore the potential for overcoming such obstacles through targeted support and training. This study's findings align closely with existing literature, reinforcing the theoretical foundations of reflective learning and the practical benefits of using digital platforms like Padlet. The study highlights the transformative potential of Padlet in fostering reflective practices, professional collaboration, and multimodal engagement. By aligning with constructivist and multimodal learning theories, these findings provide a robust framework for future research and practical applications in teacher professional development.

Conclusion

This research aimed to explore teachers' attitudes toward the use of Padlet as a tool for reflective learning during the Online Teacher Professional Development (OTPD) program. The study sought to determine how Padlet facilitated reflective practices, supported collaboration among teachers, and addressed the challenges faced during its implementation. The findings provide valuable insights into the potential of digital tools to enhance teacher professional development by fostering reflective learning and collaboration in online settings. The study revealed overwhelmingly positive attitudes among teachers toward Padlet as a platform for reflective learning. Teachers praised Padlet's user-friendly interface, multimodal capabilities, and collaborative features, which facilitated systematic documentation of reflections, critical analysis of instructional strategies, and mutual learning among peers. The collaborative nature of Padlet was particularly significant, as it fostered a sense of community where teachers could share experiences, provide feedback, and gain new perspectives. The flexibility and accessibility of Padlet further enhanced its usability, enabling teachers to engage with reflective practices at their convenience. Despite these positive outcomes, some participants encountered challenges, including initial unfamiliarity with the platform and difficulties balancing reflective activities with teaching responsibilities. However, most teachers adapted to the platform over time, highlighting its potential to support professional growth effectively.

The implications of this research are multifaceted. First, it demonstrates the effectiveness of digital platforms like Padlet in fostering reflective practices, supporting professional development, and enhancing collaboration among educators. Second, the study emphasizes the importance of incorporating digital tools into teacher training programs to create engaging and collaborative learning environments. These findings are particularly relevant in the context of online professional development, where digital platforms can bridge the gap between remote participants and foster a sense of community. Despite its contributions, this research has certain limitations. The study primarily relied on qualitative data collected through reflective journals, focus group discussions (FGDs), and observations, which may limit the generalizability of the findings. Additionally, the sample size and demographic characteristics of the participants were not extensively varied, which could affect the broader applicability of the results. The research also focused on the use of Padlet within a specific OTPD program, leaving

its effectiveness in other educational contexts unexplored. Future research should address these limitations by incorporating diverse participant groups and expanding the scope to different educational settings. Additionally, future studies could investigate the long-term effects of using Padlet on teachers' professional development, including changes in teaching practices and student outcomes.

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