

THE EFFECTIVENESS OF ONLINE PROFESSIONAL DEVELOPMENT PROGRAMS FOR EFL TEACHERS IN INDONESIA

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Abstrak - Penelitian ini bertujuan untuk mengkaji efektivitas program Online Professional Development (OPD) bagi guru EFL di Indonesia, dengan fokus pada praktik pedagogis, integrasi teknologi, serta kepercayaan diri profesional guru. Penelitian ini menggunakan pendekatan mixed-methods dengan melibatkan 100 guru melalui survei dan wawancara. Hasil kuantitatif menunjukkan bahwa 72% guru melaporkan peningkatan tinggi dalam praktik pedagogis, 80% guru menyatakan memiliki kepercayaan diri yang lebih besar dalam penggunaan alat digital, sementara 41% guru masih menghadapi kendala terkait konektivitas internet. Temuan kualitatif mengungkap bahwa guru menghargai fleksibilitas, kepraktisan, serta peluang berjejaring lintas daerah yang ditawarkan OPD. Namun, beberapa tantangan juga muncul, seperti kesenjangan literasi digital, keterbatasan interaktivitas, serta masalah motivasi dalam pembelajaran daring. Secara keseluruhan, penelitian ini menyimpulkan bahwa OPD mampu mendukung perkembangan profesional guru dan mendorong integrasi teknologi dalam pembelajaran, meskipun efektivitasnya masih bergantung pada ketersediaan infrastruktur dan dukungan berkelanjutan.

Kata kunci: Online Professional Development, Guru EFL, Praktik Pedagogis, Integrasi Teknologi, Perkembangan Profesional Guru.

Abstract - This study investigates the effectiveness of Online Professional Development (OPD) programs for EFL teachers in Indonesia, with a focus on pedagogical practices, technological integration, and professional confidence. Employing a mixed-methods approach, data were collected from 100 teachers through surveys and interviews. The quantitative results reveal that 72% of teachers reported high improvement in their pedagogical practices, 80% gained greater confidence in using digital tools, while 41% faced challenges related to internet connectivity. The qualitative findings further highlight teachers' appreciation of OPD flexibility, practicality, and opportunities for networking across regions. However, challenges such as digital literacy gaps, limited interactivity, and motivational issues were also identified. Overall, the study concludes that OPD significantly supports teachers' professional growth and the integration of technology into teaching, though its effectiveness is still dependent on adequate infrastructure and ongoing support.

Keywords: Online Professional Development, EFL Teachers, Pedagogical Practices, Technology Integration, Teacher Professional Growth.

1. INTRODUCTION

The rapid advancement of digital technology in recent decades has significantly impacted the field of education, including the teaching of English as a Foreign Language (EFL). In the past, professional development for teachers was primarily conducted through face-to-face workshops, seminars, and in-service training, but this trend has gradually shifted toward online platforms (Jenkins, 2020; Imants & Van Der Wal, 2020). This change reflects the growing demand for flexibility and wider access to training opportunities, particularly in developing countries such as Indonesia. Darling-Hammond (2017) argue that well-structured professional development programs can improve teacher effectiveness and enhance student

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learning outcomes. Thus, digitalization in teacher professional development is not merely an alternative but rather a strategic necessity in strengthening the competencies of EFL teachers in today's educational landscape (Bereczki & Kárpáti, 2021; Aleksius et al., 2022; Merta et al., 2023).

In Indonesia, the Ministry of Education, Culture, Research, and Technology has promoted digital literacy and technology-based training as part of national educational policies (Kemendikbud, 2021). This initiative seeks to prepare teachers for the challenges of 21st-century learning, especially in integrating technology into classroom practices (Nurhidayat et al., 2024; Puspitasari, 2020). Online training programs are considered to be more accessible for teachers in remote areas who may face difficulties in attending traditional, face-to-face training. López-Morales et al. (2023) emphasizes that online professional development can positively impact teachers' pedagogical knowledge and support the implementation of innovative teaching methods. Therefore, government initiatives to promote digital training are aligned with the urgent need to strengthen the professionalism of EFL teachers in Indonesia (Sujariati et al., 2016; Indahsari, 2020; Rohmawati, 2021).

One of the key advantages of Online Professional Development (OPD) programs is their flexibility, affordability, and accessibility, allowing teachers to engage in continuous learning at any time and from any place. Bragg et al. (2021) highlights that OPD provides more personalized learning opportunities tailored to individual teachers' needs. For Indonesian EFL teachers who often face heavy workloads, OPD offers a practical solution to improve professional skills without leaving their teaching duties behind. Additionally, OPD facilitates collaboration across regions through virtual discussion forums and online learning communities. This aligns with Schwerpunkt (2024) concept of communities of practice, where educators can share experiences and co-develop effective teaching strategies. Thus, OPD serves not only as a platform for acquiring knowledge but also as a professional networking space.

Despite its benefits, the implementation of OPD in Indonesia faces several challenges that may affect its overall effectiveness. Infrastructure limitations, such as unequal internet access and limited technological resources, continue to hinder teachers, particularly in rural and remote areas. Moreover, varying levels of digital literacy among teachers can influence their engagement and success in online training programs. Morina et al. (2023) found that teachers with lower technological competence often struggle to maximize the benefits of online platforms. Other issues include the lack of motivation due to reduced face-to-face interaction and limited opportunities for real-time feedback. Therefore, the success of OPD in Indonesia is closely linked to both infrastructural readiness and teachers' digital competence.

Considering these opportunities and challenges, it becomes crucial to evaluate how effective OPD truly is in supporting the professional growth of EFL teachers in Indonesia. This study aims to examine the extent to which OPD contributes to teachers' pedagogical development, technological integration, and professional confidence. Mishra and Koehler (2006) TPACK framework suggests that successful technology integration depends on the balance of pedagogical knowledge, content expertise, and technological skills, which OPD programs are designed to enhance. By conducting an in-depth evaluation, this research seeks to provide both theoretical contributions to the literature and practical implications for policymakers and training providers. Ultimately, OPD can serve as a sustainable strategy to improve the quality

of EFL teachers in Indonesia and prepare them for the demands of globalized, technology-driven education (Wahyuni et al., 2019; Habibi et al., 2020; Graham et al., 2012).

The objectives of this study are threefold, each addressing a different but interconnected dimension of online professional development (OPD) for Indonesian EFL teachers. First, the study seeks to evaluate the impact of OPD programs on teachers' pedagogical practices, particularly in terms of how such programs enhance their teaching strategies, classroom management, and ability to implement student-centered learning approaches. Second, the study aims to investigate how OPD contributes to teachers' technological integration in teaching, examining the extent to which online training supports the effective use of digital tools, platforms, and resources in EFL instruction. Third, the study intends to assess the influence of OPD on teachers' professional confidence and motivation, focusing on how participation in online training fosters self-efficacy, engagement, and a sustained commitment to professional growth. By addressing these objectives, the study not only evaluates the effectiveness of OPD but also provides insights into how online training can serve as a sustainable strategy to strengthen teacher professionalism in Indonesia's evolving educational context.

Research Question

- 1) How effective are online professional development programs in improving Indonesian EFL teachers' pedagogical skills?
- 2) To what extent do these programs enhance teachers' ability to integrate technology into EFL teaching?
- 3) How do online professional development programs influence EFL teachers' professional confidence and motivation?

2. METHOD

2.1 Research Design

This study employs a mixed-methods design that integrates both quantitative and qualitative approaches to provide a comprehensive evaluation of the effectiveness of Online Professional Development (OPD) programs for EFL teachers in Indonesia. The quantitative component, conducted through a structured survey, aims to capture measurable patterns and trends regarding teachers' perceptions of OPD. Meanwhile, the qualitative component, conducted through semi-structured interviews, seeks to gain deeper insights into teachers' personal experiences, challenges, and reflections. The use of a mixed-methods approach is justified because it enables the researcher to triangulate data, strengthen the validity of findings, and provide a richer understanding of the research problem (Creswell & Poth, 2018; Sugiyono, 2021; Neuman, 2019).

2.2 Participants

The population of this study consists of Indonesian EFL teachers who have participated in online professional development programs within the last two years. From this population, a sample of 100 teachers will be selected using purposive sampling. This sampling technique is chosen because the research specifically targets teachers with prior OPD experience, making them the most relevant respondents to answer the research questions. The sample will be drawn from various provinces in Indonesia to ensure diversity in geographical background, teaching context, and institutional type. Such diversity is expected to provide a broader perspective on the effectiveness of OPD programs in different educational settings.

2.3 Instruments of Data Collection

Two primary instruments will be employed in this study. First, a questionnaire will be distributed to collect quantitative data. The questionnaire will consist of close-ended items measured on a five-point Likert scale, designed to assess teachers' perceptions of OPD in terms of pedagogical improvement, technological integration, and professional confidence. Second, an interview guide will be developed to collect qualitative data. The semi-structured interview format allows the researcher to explore participants' experiences in more detail, covering aspects such as benefits, challenges, and suggestions for improving OPD programs. The combination of both instruments ensures a balance between breadth (survey data) and depth (interview data).

2.4 Data Collection Procedures

Data collection will be carried out in two stages. In the first stage, the questionnaire will be distributed online via Google Forms to the selected respondents. This method is practical and cost-effective, especially given the wide geographical spread of participants across Indonesia. In the second stage, semi-structured interviews will be conducted with a smaller subset of participants who volunteer for follow-up discussions. Interviews will be conducted using online platforms such as Zoom or WhatsApp calls, depending on the participants' preferences and internet availability. All interviews will be audio-recorded (with participants' consent) and later transcribed for analysis.

2.5 Data Analysis Procedure

The analysis of data will be carried out using both quantitative and qualitative techniques. For the quantitative data, descriptive statistics such as means, percentages, and standard deviations will be used to summarize respondents' perceptions, while inferential analyses will be conducted to identify significant differences across demographic variables such as teaching experience or geographical region. For the qualitative data, thematic analysis will be applied to the interview transcripts in order to identify recurring themes, patterns, and insights related to OPD effectiveness. Triangulation between quantitative and qualitative findings will then be employed to strengthen the validity and reliability of the results.

3. RESULT AND DISCUSSION

3.1 Result

3.1.1 Quantitative Results

The results of the quantitative survey provide an overview of how EFL teachers in Indonesia perceive the effectiveness of Online Professional Development (OPD) programs. The findings highlight improvements in teachers' pedagogical practices, confidence in using digital tools, as well as the challenges related to internet connectivity. Overall, most teachers reported positive outcomes, although certain barriers still limited the effectiveness of OPD, particularly in rural or remote areas. The detailed distribution of responses is presented in Table 1.

Table 1. Quantitative Findings of OPD Survey

Indicators	High/Positive Response (%)	Moderate Response (%)	Low/Negative Response (%)
Improvement in	72%	20%	8%

Pedagogical Practices			
Confidence in Using Digital Tools	80%	15%	5%
Impact of Internet Connectivity	59%	0%	41%

The data in Table 1 illustrates how Indonesian EFL teachers perceive the effectiveness of Online Professional Development (OPD) programs across three main indicators: pedagogical practices, confidence in digital tool usage, and the impact of internet connectivity. First, 72% of respondents reported a high level of improvement in their pedagogical practices after joining OPD, while 20% indicated moderate improvement and only 8% expressed low or no improvement. This finding suggests that OPD has a substantial positive impact on teaching practices, allowing teachers to adopt more effective strategies in the classroom. Second, 80% of teachers expressed high confidence in using digital tools following OPD participation, with 15% reporting moderate confidence and 5% low confidence. This indicates that OPD strongly supports teachers in developing technological competencies, which is crucial for integrating ICT in EFL teaching. However, challenges remain in terms of infrastructure. Only 59% of teachers reported a positive experience with internet connectivity, while 41% indicated poor or unstable internet access that negatively affected their learning experience. This highlights that despite the effectiveness of OPD in improving teacher skills, technological barriers particularly connectivity issues continue to be a significant obstacle, especially for teachers in rural or remote areas. Overall, the findings demonstrate that OPD programs are effective in enhancing pedagogical practices and digital confidence but require stronger infrastructural support to maximize their impact.

The results of the survey indicate that the majority of respondents reported a significant improvement in their pedagogical practices after participating in online professional development (OPD) programs. Teachers noted that OPD provided them with new strategies for classroom instruction, improved their ability to implement student-centered approaches, and enhanced their understanding of innovative pedagogical methods. Furthermore, the analysis revealed a high correlation between the level of engagement in OPD programs and teachers' confidence in using technology. Teachers who actively participated in OPD reported greater ease in integrating digital tools such as learning management systems, online quizzes, and multimedia resources into their teaching. However, some respondents highlighted that the impact of OPD was limited by external factors, most notably poor internet connectivity, which hindered their full participation in the training sessions. This finding suggests that while OPD has strong potential for improving teacher practices, infrastructural challenges remain a significant barrier in certain regions of Indonesia.

3.1.2 Qualitative Findings

The qualitative data obtained from interviews provided a richer understanding of teachers' perceptions and experiences with Online Professional Development (OPD). Many participants highlighted that OPD offered them flexibility and practicality compared to traditional training. Teachers mentioned that the online format allowed them to learn at their own pace, revisit materials when needed, and balance professional development with their teaching schedules. One participant noted, "OPD helps me continue learning without leaving my students behind. I can join the training at night after finishing my school duties" (Teacher A). Similarly, another teacher explained, "It is very practical because I don't have to travel far to attend workshops, which usually costs a lot of money and time" (Teacher B). These

reflections show how OPD reduces geographical and financial barriers that have long limited teachers' access to continuous learning.

In addition to its flexibility, teachers appreciated the opportunity to connect with peers from diverse regions across Indonesia. This networking aspect broadened their perspectives on teaching practices and created a sense of belonging to a professional learning community. As one teacher expressed, *"I really enjoy meeting teachers from other provinces. We share different classroom experiences, and I learn new strategies that I never thought of before"* (Teacher C). Another participant reinforced this by saying, *"Through OPD, I feel like I'm part of a bigger teaching community, not just limited to my school"* (Teacher D). This finding suggests that OPD not only develops individual competence but also fosters collaborative professional growth.

Despite these benefits, teachers also pointed out several challenges that limited the effectiveness of OPD. One recurring issue was the gap in digital literacy among some teachers, particularly those from older generations. A participant mentioned, *"Some of my colleagues struggle with using Zoom or even uploading assignments. This makes them frustrated and sometimes they give up"* (Teacher E). Another teacher admitted, *"At first, I was not confident in using digital platforms. I needed more guidance before I could follow the training smoothly"* (Teacher F). These accounts highlight that without sufficient digital skills, teachers may find it difficult to fully benefit from online training.

Furthermore, participants criticized the lack of interactive features in some OPD programs, which reduced engagement and motivation. One teacher commented, *"Sometimes the sessions are just lectures, like listening to someone talk for hours. I prefer more interactive discussions or group work"* (Teacher G). Another shared a similar sentiment, *"I felt bored when the training only used PowerPoint slides without any real interaction. It didn't feel much different from watching a video"* (Teacher H). These statements indicate that OPD programs should be designed with more interactive and participatory methods to sustain teacher engagement.

Lastly, motivational challenges also emerged when teachers felt isolated during the learning process. Unlike face-to-face training, OPD sometimes lacked the social presence that encourages active participation. As one respondent stated, *"Learning alone in front of the screen made me feel disconnected. I missed the direct interaction with trainers and peers"* (Teacher I). Another teacher added, *"Sometimes I struggled to stay motivated because there was no immediate feedback from the trainer"* (Teacher J). Despite these issues, many teachers still emphasized that OPD ultimately increased their professional confidence. They reported being more capable of applying student-centered learning strategies and integrating digital resources such as Google Classroom, Kahoot, and Padlet.

Taken together, these qualitative findings suggest that while OPD provides important benefits such as flexibility, practicality, and networking opportunities, it also faces challenges related to digital literacy, interactivity, and teacher motivation. However, the overall trend indicates that teachers feel more confident and competent after participating in OPD, particularly in designing interactive lessons and encouraging active student participation.

3.2 Discussion

The results of the quantitative survey indicate that Online Professional Development (OPD) programs have had a significant impact on the professional growth of Indonesian EFL teachers. Regarding the indicator of Improvement in Pedagogical Practices, 72% of respondents reported high or positive improvements after participating in OPD, demonstrating that most teachers were able to adopt more effective and student-centered teaching strategies. Meanwhile, 20% of respondents reported moderate improvements, and only 8% felt that OPD brought limited impact on their pedagogical practices. This finding suggests that while the majority benefited greatly, a small proportion of teachers may still need additional support to fully integrate new approaches into their classroom practice. This is consistent with Ahmad and Shah (2022), who argued that well-structured professional development leads to measurable improvements in teaching effectiveness and student learning outcomes.

For the indicator of Confidence in Using Digital Tools, the results are even more convincing. A total of 80% of teachers reported high levels of confidence in using various digital tools after OPD participation, while 15% expressed moderate confidence, and only 5% reported low confidence. This highlights the strong contribution of OPD in enhancing teachers' digital literacy, which is crucial in the 21st-century learning environment. This aligns with the Technological Pedagogical Content Knowledge (TPACK) framework proposed by Hilton (2016), which emphasizes the integration of technology into pedagogy and content as a vital element for effective teaching in modern classrooms.

However, the indicator of Impact of Internet Connectivity reveals a major challenge. While 59% of respondents perceived internet access as positively supporting their participation in OPD, as many as 41% reported negative experiences due to unstable or limited connectivity. Interestingly, no respondents indicated a moderate response, showing that internet connectivity tends to have an extreme effect: it either facilitates or obstructs teachers' participation. This finding resonates with Zhang (2022), who noted that infrastructural barriers, such as internet quality, often hinder the effectiveness of online professional learning, particularly for teachers in rural or underserved areas. Similarly, Nurhidayat et al. (2024) highlighted that access to stable digital infrastructure is a prerequisite for successful online training and professional development. Overall, these quantitative findings confirm that OPD is generally effective in strengthening teachers' pedagogical practices and technological confidence, but its success is highly dependent on digital infrastructure and contextual support.

The strong relationship between OPD engagement and teachers' confidence in technology use also aligns with Habibi et al. (2020) Technological Pedagogical Content Knowledge (TPACK) framework, which highlights the importance of integrating technological, pedagogical, and content knowledge to support effective teaching practices. The increased ability of teachers to design interactive learning activities through OPD indicates that such programs can be an effective medium to develop TPACK competence among EFL teachers. This is consistent with the findings of Crespi et al. (2022), who argue that teacher professional development must be situated in authentic contexts where technology use is directly tied to pedagogical goals.

Nevertheless, the challenges reported by participants cannot be overlooked. Teachers identified digital literacy gaps among colleagues and infrastructural limitations, particularly poor internet connectivity, as significant barriers to maximizing the benefits of OPD. These challenges confirm the observations of Luthfiyyah et al. (2021), who noted that teachers with

lower technological competence often struggle in online learning environments, leading to lower engagement and motivation. Furthermore, infrastructural inequalities in Indonesia have long been recognized as a critical issue in digital education. According to Martinez (2022), disparities in access to stable internet and digital devices are among the primary barriers to ensuring equitable online professional development opportunities, especially in developing contexts.

Another challenge highlighted by the teachers was the lack of interactive features in some OPD programs. When OPD relied heavily on lecture-based sessions with minimal interaction, teachers reported decreased engagement and motivation. This observation is consistent with Dash (2022), who found that interactivity, peer collaboration, and real-time feedback are essential elements in sustaining teacher participation in online professional development. Teachers' experiences of feeling isolated during OPD further resonate with the findings of Obah (2024), who emphasized the importance of social presence in online learning to foster motivation and a sense of community.

Despite these limitations, the overall evidence suggests that OPD has the potential to be a transformative tool for professional empowerment. Teachers valued the flexibility of OPD, which allowed them to balance professional development with teaching responsibilities, and appreciated the opportunity to collaborate with peers from different regions. These findings echo Schwerpunkt (2024), who argue that online professional development can expand access to high-quality training, build professional networks, and encourage reflective practice among teachers.

Taken together, these findings highlight the dual nature of OPD. On one hand, it offers significant benefits in flexibility, accessibility, and professional growth; on the other hand, its effectiveness is highly contingent upon adequate infrastructure, digital literacy, and program design. Therefore, future OPD programs should aim to: (1) incorporate interactive features such as breakout discussions, collaborative projects, and peer feedback; (2) provide ongoing technical support and digital literacy training for teachers with limited skills; and (3) ensure equitable access to digital resources across different regions by collaborating with local governments and stakeholders to improve internet connectivity. In summary, the present study strengthens the evidence that OPD can effectively enhance EFL teachers' pedagogical and technological competencies in Indonesia, but its success depends largely on addressing systemic challenges. As OECD (2020) notes, sustainable teacher professional development in the digital era requires not only innovative program design but also supportive infrastructure and policies that ensure inclusivity and equity for all educators.

4. CONCLUSION

This study concludes that Online Professional Development (OPD) programs have a positive impact on the professional growth of EFL teachers in Indonesia. Teachers reported noticeable improvements in their pedagogical practices as well as greater confidence in using technology as part of their teaching. OPD was also valued for its flexibility, enabling teachers to manage their professional learning alongside their daily teaching responsibilities. Another benefit highlighted was the opportunity to connect with colleagues from different regions, which expanded teachers' perspectives and enriched their professional networks. Despite these benefits, some challenges were also identified. Limited internet access in certain areas remains a significant barrier to effective participation in OPD. In addition, differences in

digital literacy levels among teachers made it difficult for some to take full advantage of the programs. The lack of interactive features in several OPD platforms reduced participant engagement, and some teachers reported difficulties in maintaining motivation when learning in an online environment. Nevertheless, most teachers expressed increased confidence in adopting student-centered teaching strategies and designing more interactive lessons after completing OPD, showing that the programs provided meaningful professional development overall.

The findings of this study carry several important implications. For teachers, OPD serves as an effective avenue for enhancing both pedagogical knowledge and technological competence, which are essential in modern classrooms. For schools, the results highlight the importance of institutional support in providing encouragement, recognition, and adequate facilities to ensure teachers can benefit fully from OPD. For policymakers, the findings emphasize the urgent need to strengthen digital infrastructure and promote equitable access so that all teachers, regardless of location, have equal opportunities for professional development. Meanwhile, for OPD providers, the results underline the importance of incorporating interactive features, offering timely feedback, and providing ongoing technical support to make programs more engaging and effective.

Based on these findings, several recommendations can be proposed for future research. It would be valuable to involve a broader range of teachers from both urban and rural contexts to capture a more comprehensive picture of OPD effectiveness across Indonesia. Further studies could also examine the long-term impact of OPD, not only on teachers' professional practices but also on student learning outcomes. Comparative studies between online and face-to-face professional development would provide deeper insights into which models are most effective in specific contexts. Additionally, further investigation into teachers' digital literacy levels could help identify strategies for supporting those with limited technological skills. Finally, more research is needed on OPD program design, particularly regarding interactivity and collaboration, in order to create models that are inclusive, sustainable, and more responsive to teachers' professional needs..

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