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Replacing the old with the new: long-term issues of teacher professional development reforms in Indonesia

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Abstract

Purpose – This paper is among the first case studies in developing countries that comprehensively investigate the historical evolution of a country's teacher professional development (TPD) system, the outcomes of the current TPD and the factors underlying the stagnation of TPD quality.

Design/methodology/approach – The authors collected data from three types of sources—documents, observations and interviews. Documents examined included the handbooks of the TPD program, handouts for teachers, training modules from TPD workshop sessions and research publications or reports on TPD programs in Indonesia introduced from the 1970s to 2018. The authors conducted formal interviews with trainers, education stakeholders and teachers who participated in recent TPD.

Findings – The findings indicate that, on paper, TPD initiatives in Indonesia have included some of the positive features of TPD highlighted in the literature. However, these factors have not been consistently included in the reforms rolled out over the decades, and, indeed, many of the less desirable features of those reforms have endured. The analysis also reveals the absence of four key factors in multiple TPD reforms that led to teachers' and other stakeholders' dissatisfaction with the TPD implementation. These include consideration of teachers' skills, background and capacities; relevance of training; feedback provided to teachers; and workshop follow-up.

Originality/value – The research indicates that the long-term issues of ineffectiveness of TPD in Indonesia are driven by the incoherence of different elements of the education system. This extends beyond the technical and operational elements of the TPD itself. The absence of a clear vision of the purposes of teacher development has created confusion and uncertainty for teachers.

Keywords Teacher training, Teacher professional development, Education policy, Education reform, Education system coherence

Paper type Research paper

Introduction

Rapid growth in student enrollments puts a strain on education systems (UNESCO, 2015; Suter *et al.*, 2023). A challenge that often surfaces as education systems expand relates to the

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need to rapidly recruit a large number of teachers. This higher need may force education systems to accept less qualified individuals, reducing average teacher quality. In this context, while school participation is high, the students do not receive adequate quality education. The outcome is a situation where children spend more years in school but do not actually learn. Cross-country studies show that this is happening in many parts of the world. Le Nestour *et al.* (2022) show that while schooling increased and children became wealthier and healthier, literacy rates after completing five years of schooling have declined. World Bank (2021) finds that 53% of children in low- and middle-income countries complete primary school without acquiring the ability to read and understand a simple story. Another challenge is related to teacher deployment. In many cases, qualified teachers are unwilling to work in less desirable locations, for example remote or high-poverty areas. However, hiring less qualified teachers to work in areas with arguably higher needs can exacerbate existing gaps in learning outcomes (Little and Bartlett, 2010; UNESCO, 2015; OECD/ADB, 2015).

In Indonesia, while access to education is almost universal, student learning outcomes have been low and stagnant (Beatty *et al.*, 2021). The Indonesian government has identified teacher quality as one of the factors that contribute to the low and stagnant learning outcomes described above (World Bank, 2018). Other constraints include low parental and community participation (Pradhan *et al.*, 2014), ineffective education policies (De Ree *et al.*, 2018) and poor teacher management (Rosser and Fahmi, 2018).

One aspect of teacher effectiveness that Indonesian education policymakers have focused on in recent years is teacher professional development (TPD). Over the past 40 years, the Ministry of Education and Culture (MoEC) has implemented six major TPD reform initiatives (see Table 1). Ideally, teacher education and development programs will provide teachers with the necessary experiences and skills to become effective instructors (Darling-Hammond *et al.*, 2017; Borko *et al.*, 2010). Yet, recent research on this topic in Indonesia indicates that TPD initiatives do not always have a strong impact on teacher performance (Lim *et al.*, 2020).

In this paper, we examine the evolution of TPD reforms in Indonesia and analyze how teachers and other stakeholders perceive the effectiveness of those initiatives. Although other researchers have referred broadly to the implementation of professional development provided to teachers in developing countries (Popova *et al.*, 2022), this will be among the first case studies that comprehensively investigate the historical evolution of a developing country's TPD system, current TPD outcomes and factors underlying TPD quality stagnation. The study is anchored by three research questions: (1) How have TPD programs in Indonesia evolved over the past few decades? (2) How do teachers and education stakeholders perceive the recent TPD reforms? (3) Which key factors supported or undermined the goals of those reform efforts?

Answering the questions above can enhance our understanding of which specific components of TPD programs have led to improved performance for Indonesian teachers—and which aspects of those programs have been ineffectual. This information can lead to more effective decision-making related to TPD in Indonesia as well as in other developing countries facing similar issues.

The effective features of teacher professional development

Research indicates that both the conceptual framing of TPD and the methods used to support teachers have evolved. In the earliest days, TPD was often seen as a promotional pathway. It focused on instilling a government's standards rather than students' milestones (Lee, 1997). Through the 1970s up to the late 1990s, the dominant view was that teacher learning had to take place within the teacher classroom context. During that period, most teachers were taught by practicing instructors, whether in one-off seminars or collaborative/peer teaching activities and that learning was centered around reflective activities. Isozaki (2018) observed that during that era, policymakers emphasized the need to acknowledge teachers' accumulated expertise and integrate it into their learning materials.

Table 1. The evolution of teacher professional development programs in Indonesia

TPD program	INPRES (Thair and Treagust, 2003)	PKG (Thair and Treagust, 2003; Somerset, 1988)	*Sanggar* PKG (Thair and Treagust, 2003)	KKG/MGMP (Van der Werf *et al.*, 2000; Chang *et al.*, 2014)	PLPG (Jalal *et al.*, 2009; World Bank, 2015)	PKB
First implemented	1970s	1980s	1982	1993	2007	2013 (some changes in 2015)
Objective	Equip teachers without teacher training experience	Support teachers to implement student-centered learning	Scale-up PKG to district-level implementation	Facilitate teacher learning within a school cluster	(1) Remedial program for teachers who did not pass Teacher Certification (2) From 2010 to 2017, PLPG is mandatory in Teacher Certification program	(1) Remedial program for teachers who scored low in the National teacher competence test (2) TPD activities to earn credit points for civil servant promotion
Duration and forms	Three weeks of in-service training	A total of 16 weeks (in-service training and classroom coaching)	One week of in-service training	One day every month	A total of 90 h of in-service training	Total of 60 h of in service training
TPD model	Cascade model	Intensive coaching program	Cascade model	Teacher working group	Centralized by Teacher Training Institutions	Cascade model
Targeting based on teaching experience	No differentiation for novice or experienced teachers					
Involving teaching practice activity	–	Two cycles of two-week lesson observation	1–3 lesson observation	–	Peer-teaching as part of final assessment	–

Source(s): Authors' own creation

Providing a space for teachers to reflect on the decisions they make within their own classrooms has been a central tenet of effective TPD since the early 2000s. Professional development approaches outlined by Darling-Hammond *et al.* (2017), Borko *et al.* (2010) and Desimone (2009) have been widely regarded as the global standard for assessing the effectiveness of TPD. According to these scholars, effective professional development should be inquiry-driven, developmentally appropriate and scaffolded to provide participants with ongoing observation and coaching. An effective TPD program allows teachers to critically assess their instructional practices in their classrooms and establishes a professional learning community that provides participants with support and ideas (Van Veen *et al.*, 2012; Lund, 2020).

However, in resource-constrained systems, the less desired TPD models often persist. In a study focusing on the impactful features of TPD programs in low- and middle-income countries, Popova *et al.* (2022) reported that programs situated at schools or targeted teacher learning based on skill gaps and years of experience are rare. Most TPD programs are offered in a cascade model and one-off seminars with successive days of in-person training. Cascade models often endure because they enable the government to reach large numbers of teachers at a low cost. Yet researchers have found that teachers who participate in cascade training tend not to develop a thorough understanding of the concepts introduced in those workshops (Turner *et al.*, 2017). This is likely because trainers often present broad information about teaching rather than facilitate discussions about strategies that could be employed to address the specific challenges that participating teachers face in their classrooms.

Moreover, literature on TPD highlights the critical impact that the broader context has on the success of any TPD initiative. As Bolam and McMahon (2005, p. 35) explain, “TPD policies and practices are necessarily rooted in the particular context of a single educational system and, indeed, are often the product of unique and dynamically changing sets of circumstances—political, economic, social, cultural, historical, professional, and technical—in that system.” In other words, assessments of a program’s efficiency or inefficiency should consider the local context (Pritchett, 2017). In Indonesia, indeed, these contextual factors, such as teacher characteristics and school conditions, have had a powerful impact on teacher professional learning.

The socio-political context of the Indonesian education system has added complexity to TPD implementation efforts (Rahman, 2019). Teachers and school leaders have traditionally regarded school-based and collegial forms of TPD, such as lesson study, as incompatible with the broader bureaucratic culture in Indonesia (Kusanagi, 2014). Research conducted in other Southeast Asian contexts, similarly, highlights the importance of contextual factors to the success of TPD. For example, Tran *et al.* (2020) showed that in Vietnam, collaboration, teacher empowerment, supervision and evaluation and teachers’ motivational strategies were conditions created by principals to promote TPD at schools. Khan *et al.* (2021), likewise, observed that Malaysian teachers perceived collaboration, shared leadership, decision-making, supportive conditions and school culture as crucial elements in their learning in any TPD programs.

Methods

We employed a qualitative case study to investigate the historical evolution of Indonesia’s TPD system, the outcomes of the current TPD and the factors underlying the stagnation of the TPD quality. This method enables the researchers to explore the issue in-depth through a wide range of data sources (Yin, 2014). It challenges researchers to explore an issue within its context from a variety of perspectives. This approach “allows for multiple facets of the phenomena to be revealed and understood” (Baxter and Jack, 2008, p. 545).

Data collection

We collected data from three types of sources—documents, observations and interviews—over a period of six months in 2018. Drawing multiple data sources, we were able to employ data triangulation during the analysis. Document analysis was especially useful for understanding how the TPD policies evolved over time, and for corroborating other data sources (Bowen, 2009). Documents examined included the handbooks of the TPD program, training modules from TPD workshop sessions, handouts distributed to teachers and research publications and reports on TPD programs introduced from the 1970s to date. The document analysis resulted in a summary of TPD evolution presented in Table 1. To understand the full picture of what happened in the TPD program and to collect information about the stakeholders' thoughts and perspectives (Guest *et al.*, 2013), we conducted in-depth interviews and focus group discussions (FGD) with trainers, teacher working group administrators, school principals and teachers who participated in the recent TPD, known as PKB (*Pengembangan Keprofesian Berkelanjutan*, or Continuous Professional Development) program, held in three districts: Yogyakarta, Gorontalo and Kebumen. Apart from the established cooperation between the research team and the local education agency (LEA) in the three districts, we considered the variation in geographic size (small and large districts) to anticipate if there were fewer teachers in smaller districts or where more TPD support was available, as in the case of Yogyakarta, may determine how the TPD was carried out. Additionally, we interviewed officials from the LEA, senior officers at the district level and MoEC officials in Jakarta. In total, we conducted 35 interviews and FGDs involving these informants. The participants ranged in age from 35 to 57, with the majority being public primary school teachers with teaching experience ranging from 8 to 32 years. Most teachers in this study hold civil servant or permanent teacher status and are certified.

Data analysis

We analyzed the interview and FGD data in five phases, adapting the thematic analysis protocols suggested by Braun and Clarke (2006) and Scharp and Sanders (2019). First, our research team sorted, categorized and analyzed the data in relation to the different stakeholder's perceptions and attitudes toward the recent TPD and previous TPD programs in the past. Second, we carefully classified the data into initial themes that emerged from the data. Third, we refined and expanded our initial themes and underlined the excerpts from our interviews that represented each category. We also developed a matrix to organize information by theme, which allowed us to condense the data and compare their responses. We re-coded the data in this matrix to identify patterns. Fourth, we compared the patterns that emerged with the features of effective TPD described by Popova *et al.* (2022) and Darling-Hammond *et al.* (2017). The overarching aspects of the themes that emerged from the data were targeting TPD to match the teacher's years of experience, building on what teachers already know and their daily experience, continuous feedback and follow-up sessions. Fifth, we triangulated our interpretations using the information from the collected documents to determine the final categories.

Outcomes of the recent teacher professional development reform

The analysis of interview and FGD data we conducted highlights four key factors that led to stakeholders' dissatisfaction with the TPD implementation. These include the absence of the following components of TPD reforms: relevance of training, consideration of individual teachers' profiles and capacity, post-program follow-up and feedback on teacher performance. Our findings indicate that although the latest TPD approach to teacher development does represent an improvement over the approaches used to train Indonesian

teachers in the past, the initiative fails to meet its objectives in several key respects, including its failure to facilitate teacher learning to improve their test scores on the post-training assessment, or to motivate teachers to continuously develop their competency. The cascade model employed by the MoEC has affected the quality of training, particularly in remote districts, such as Gorontalo. The goal of quickly training as many teachers as possible was also considered unrealistic by both teachers and instructors. As one instructor commented,

> I have to teach several batches of teachers in one period [of three months]. And in one batch, I could have up to 50 teachers. Sometimes even more. Not to mention that during PLPG a few years ago, we had a whole year for teacher training, teaching the same materials from batches to batches. [INT INS 2, GT]

In addition, our data indicate that PKB lacks some features that research suggests are essential to effective TPD. PKB does not target teachers based on their years of experience, does not offer post-training activities to teachers and has not built upon existing teacher capacities. Given the differences between the characteristics of the program and the characteristics of successful TPD contained in the literature, it is unsurprising that we did not observe any significant improvement in teachers' instructional practices after completing the TPD. As a result of the above factors, most of the stakeholders we interviewed for this study indicated that the TPD activities they participated in fell short of their expectations. For instance, although teachers initially felt enthusiastic about the opportunity to enhance their instructional skills, over the course of their participation in the workshops, they came to believe that the training materials were too theoretical and were not directly relevant to their practice; therefore, upon completion of the training, teachers had trouble applying information to their lessons. Analysis of the data we collected points to four key factors that led to teachers' and other stakeholders' dissatisfaction with the TPD implementation.

Consideration of teachers' skills, background and capacities

Our data on PKB participation indicate that the majority of PKB participants in 2017 had over ten years of teaching experience and had earned "certified" status from the government. The majority had also previously attended PLPG training workshops. Experienced teachers considered the PKB training materials to be refreshers rather than new or updated knowledge. Some senior teachers shared that they felt the training was more suitable for recent graduates of teacher training institutions, as it focused on content knowledge. As one interviewee stated,

> I realize that my mathematical content knowledge is limited. But [the government] should have known that a training that asks participants to complete 200 pages of a module [in 60 hours] and do all the exercises is not for old teachers like me. Perhaps the younger teachers needed more training like this type. [INT TE 8, KB]

Likewise, nearly all instructors we interviewed revealed that senior teachers did not show much enthusiasm for or commitment to the training. They often copied assignments from younger participants who showed more motivation to learn about the content. These senior teachers were occasionally absent during the in-service training days. Many of them failed the PKB post-training assessment. This was one logical outcome of a program that did not tailor its content to participants' needs.

Interestingly, we found evidence that PKB implementation only sometimes aligns with its design. Ideally, according to PKB objective, the module that a teacher takes should be linked to a skill that she is lacking. But the process of assigning modules to participants for PKB is complicated. In general, the administrators chose the modules that the largest number of teachers had failed in the teacher competence test or *Uji Kompetensi Guru*. Teachers who failed certain module but were not chosen by the administrators—perhaps due to budget

limitations—were required to wait for the next cycle of training. Another condition that led to a mismatch between content and capacity was that some teachers who were chosen to participate in PKB workshops did not fail the modules that were offered; they were selected to participate due to seniority or because they were willing to self-finance the training. As a result, the material they studied did not always meet their needs. One administrator revealed that the bureaucracy of TPD registration and implementation is indeed very frustrating for both the administrators and teachers:

> To open a training class or session for a module in our district, we need about 30–40 participants. Let's say there are 15 participants registered for module A and 20 participants registered for module B. With that number, we usually suggest everyone taking module B as many participants are failing module B, and for the participants who failed in module A to just participate in whatever training available, so they are eligible to take post-training tests to improve their score. We know this is not ideal, but that is how it works around here. [ADM 2, YK]

As the information presented indicates, when teachers were required to participate in TPD that did not fit their needs, they invested minimal effort in the workshops.

Relevance of training

PKB training does not provide teachers with opportunities to hone their skills through lesson enactment. In the final training session, teachers are required to present their mastery of information included in the modules, and the instructor provides feedback on the homework or assignments. However, the training does not include a peer teaching component. As a result, teachers found the training materials overly theoretical and irrelevant to their practice. The two-to-three workshops included a combination of lectures, content-focused coaching activities and individual and group written assignments. The training activities did not elicit teachers' opinions or ideas. Teachers indicated that they would like to receive more practical training that can help them to improve their classroom instruction. In one FGD, teachers commented that the PKG they participated in did not include the active learning component that research identifies as a key component of effective TPD programs:

> We valued the methods more than the theory. We wanted to discuss our experiences in our own classrooms and learn new methods so we can change our teaching to be more effective. [FGD TE 1, KB]

Officials working at LEAs reported similar findings. For example, one interviewee shared that the lack of relevance and unclear expectation of the training led teachers to feel less and less enthusiastic about participating in the program:

> It is difficult for instructors to measure teacher improvement. If you refer to the Four Teacher Competencies set by the government [pedagogical, professional, social, and personality competence], the training does not match with the efforts needed to develop a competent teacher. [LEA 1, KB]

The mismatch referred to by this LEA employee has led many PKB participants to question the value of investing in workshop activities and assignments.

Feedback provided to teachers

Many teachers shared their initial expectation that PKB would improve not only their scores but also their instructional practice as a result of participating in the training:

> I realized that my score [in the competence test] was low. So, I want to improve my score. I heard that if my score does not improve, the government will cut my certification allowance. Of course, I will also feel proud if I can get a higher score after the training and improve my practice. [FGD TE 3, GT]

However, the administrators and teachers we interviewed explained that the MoEC does not provide teachers who participate in PKB with their pre- or post-training test scores or with

feedback on their performance throughout the training. The only feedback teachers received was the outcome of their performance on each module: red (fail) or green (pass). More ambiguously, when a teacher failed a module—each module combines content related to primary school subjects such as mathematics and the general theory about teaching and learning—she was not sure whether it was due to her low score on the pedagogical knowledge section or the subject matter section. Since teachers do not have access to their test scores, they do not know why they receive the scores they do. The teachers do not receive any constructive feedback on their performance during or after the completion of the training. The attempt made by the module developer to combine both subject matter and general pedagogical knowledge in a module, which caused some confusion for teachers, was designed to help teachers improve their pedagogical and professional competence through one single training workshop, which reduced costs for the government.

On another note, the instructors and LEA employees raised concerns about how PKB and the national teacher competence test were conducted. They shared that PKB assumes teachers with more knowledge about teaching will score higher on the competence test and, in turn, become more effective instructors—which is not always the case:

> I think what our teachers need is to improve the quality of their teaching. But the test and the remedial training go in different directions. They train teachers to study for the test. [INS 2, YK]

Workshop follow-up

Post-training follow-ups that encourage and support changes in teaching practices are almost non-existent in most TPD programs. In an FGD, a participant mentioned that "perhaps, it would be beneficial for participants like me if the training organizer could provide some sort of continuous assistance on how I should implement what I learned from the training. I have been teaching for over ten years, and I cannot recall any training that included continuous mentoring in my classroom" [FGD TE1, KB]. This component was included in PKG during the 1980s but disappeared in subsequent reforms. A PKB instructor admitted that even the instructors themselves could not guarantee that there would be changes in teaching practice when teachers return to school, as it is only a short training with limited class hours.

In PKB, there is no continuous support system that serves to monitor or evaluate the impact of the training to improve teaching practices. School principals, who should be supporting teacher learning through providing feedback on teacher instructional quality during the PKB on-the-job training sessions, were found to only provide teachers with legal documents as part of PKB requirements. The school supervisor only carried out regular supervision, which meant filling out paper forms.

We did not observe widespread improvement in teachers' instructional practices after completing PKB. This does not appear to stem from a lack of effort on the part of teachers. Many teachers in our research sites mentioned that they tried to incorporate what they learned in PKB into their lessons immediately upon completion of PKB training. However, various factors, including students' level of learning, curriculum demands and limited school facilities and support, caused teachers to resort to traditional teaching practices. Some teachers expressed disappointment after attending the training because they did not have access to a post-training learning community that would help them implement what they gained during the training or advise them on how to use the knowledge they acquired to improve:

> When I returned to my classroom, I tried to adapt something from the training into my teaching. But it was not always working the way I was told [it would work]. Besides, I was the only one who attended the training from my school. When I need someone to discuss it with, I must reach out to participants from different schools, which is not always easy to do. [INT TE 5, GT]

Underlying reasons for ineffective teacher professional development reform

The information presented above suggests that the problems of TPD in Indonesia are rooted in the multiple elements of the education system level rather than its design alone. In this section, we discuss how these factors could explain why TPD in Indonesia has stagnated over the past 4 decades. Our findings indicate that, on paper, TPD initiatives have included some of the positive features of TPD highlighted in the literature. However, these factors have not been consistently included in the reforms rolled out in recent decades. Our analysis of the evolution of Indonesian approaches to professional development reveals that the less desirable features of those reforms have endured.

One issue that has impeded attempts to improve the quality of TPD relates to the objectives that guide reform. Over time, MoEC (as reflected in the Regulation of the Minister of National Education No. 16/2007 on academic qualification standards and teacher competency) has not conveyed clear expectations to teachers in terms of the skills they should master or the methods they should use to facilitate effective learning. Evaluations of teachers emphasize their compliance with bureaucratic processes rather than on their instructional effectiveness or ability to augment student learning (Ministry of Education, 2010).

The absence of clear performance standards that teachers must meet undermines the relevance of teacher professionalization. Goe *et al.* (2012) suggest that developing clear and high-quality teaching standards is the first important step to creating a comprehensive teacher evaluation system that can be effectively used for professional development. Those standards form the basis for developing different measures of teacher performance as well as standards and tools for effective training. They can offer a set of criteria to help principals and others identify areas in which teachers are successful and areas for improvement. Education officials in Indonesia have not developed or communicated a clear and cohesive set of standards to teachers, as Goe *et al.* (2012) endorse. Indonesian teachers are presented with a rigid set of bureaucratic guidelines, but those guidelines lack information about instructional practice. They need to be amended to set more measurable and comprehensible standards regarding professional competence. Such standards can be valuable to guide the establishment of continuous professional development programs that can facilitate teacher learning more effectively. Nevertheless, as highlighted by previous studies, such standards should be flexible and allow teachers to be responsive educators (Adoniou and Gallagher, 2017; Ryan and Bourke, 2013). Furthermore, in the Indonesian case, standards should not constitute another document that “represents teachers as cogs in the bureaucratic machine, who need to be told what to do, what to know” (Ryan and Bourke, 2013, p. 420).

Another possible explanation for this persistent issue is that MoEC has limited resources to oversee the million teachers’ actual behavior in the classroom. With limited resources, the government opted to adopt guidelines that can be implemented with minimal monitoring—which correspond with the bureaucratic checklist mechanism. The resource allocation system in Indonesian teacher management has also impeded attempts to improve the quality of TPD, which may eventually affect the inclusion of effective features in any TPD program. In Indonesia, TPD has historically been underfunded. In addition, teachers who earn certification receive large salary increases, regardless of their performance in the classroom (De Ree *et al.*, 2018). Due to the significant salary increases provided to certified teachers, the government has had to reduce the budget for teacher development programs.

This situation contributes to the ineffectiveness of TPD programs. Due to resource constraints, any TPD reform must be designed to accommodate a given budget and to train teachers as efficiently (and inexpensively) as possible. The emphasis on cost over quality has resulted in the prevalence of workshops that are easy to manage but fail to help teachers improve their pedagogical practices. This helps to explain why the MoEC continues to rely on cascade training models, delivered in the form of short-term skills training workshops, which research indicates are not as effective as inquiry models that lead to the development of

professional learning communities, making newly acquired skills relevant to participants' teaching experiences and school contexts (Hart *et al.*, 2011; Borko *et al.*, 2010). Thus, although recent scholarship highlights the benefits of school-based or inquiry-based models of TPD, the lack of financial support makes these kinds of TPD rare in Indonesia.

Finally, our analysis reveals another critical condition often overlooked in education reform research: policy incoherence. In an incoherent system, reforms and additional funding are unlikely to be successful (Pritchett, 2015). The data we collected underscore the critical role of inter-factor relations rather than any single condition that accounts for the ineffectiveness of TPD policies over time. MoEC has not instilled in teachers an awareness of the relevance of improving their quality through participating in meaningful TPD activities. Instructors have been given conflicting messages about what they are expected to do in training workshops and their classrooms. There is also the question of why most participating teachers who have been certified, labeled as experienced "professional teachers" and receive unconditional double salaries (Kusumawardhani, 2017; De Ree *et al.*, 2018), are assigned to a TPD that serves as a remedial program. It is difficult to expect those teachers to be interested in re-learning basic content or pedagogical topics when the government has already labeled them as professional educators and increased their salaries substantially. In the Indonesian public school system, outcomes for schools and teachers are the same, whether or not teachers and students perform well. If teachers do not participate in TPD or participate in TPD but do not show any signs of improvement, there are no consequences. Teachers and school principals retain their existing titles and salaries. This incoherence in policy design is responsible for the repeated failure to improve teacher quality more than any single factor.

Conclusion

Our research indicates that the long-term issues of ineffectiveness of TPD in Indonesia are driven by the incoherence of elements of the education system. This extends beyond the technical and operational elements of the TPD. The absence of a clear vision of the purposes of teacher development has created confusion and uncertainty among teachers. This finding suggests that teachers need to be motivated to continuously improve their skills through effective TPD. In addition, TPD programs should be shaped to fit the specific motivations and capabilities of teachers. Participating teachers should develop a sense of independence and confidence in their teaching abilities. However, this would conflict with the norms that have governed the Indonesian government system for decades (Bjork, 2006). This finding points out the insufficiency of merely improving technical matters of TPD in any future reform. The issues involved in providing effective TPD are more broadly than a matter of replacing the "old" with the "new"; the change requires the construction of new foundations.

To reorient the system to produce high-quality teachers, it is therefore essential to develop teacher policies that adopt a multi-layered approach suggested by previous research on TPD (Popova *et al.*, 2022; Darling-Hammond *et al.*, 2017; Borko *et al.*, 2010). Any TPD program needs to be relevant, job-embedded, supportive, sustained, collaborative and actively involve teachers. Any proposed solution to TPD implementation in Indonesia therefore needs to overcome the shortcomings of the cascade model, such as advocating for programs carried out within schools, engaging teachers actively alongside their colleagues, and done on a continuous basis (Bett, 2016).

Notwithstanding, it is implausible for an incoherent system to achieve the ideal features of TPD. Consequently, reform policies should aim for fundamental changes that lead to a more coherence practice. It is important to set more measurable and comprehensible standards for teacher competence. Also, articulating different expectations for graduate, novice and experienced teachers is necessary. The existence of such standards can lead to the

establishment of continuous professional development programs that can facilitate teacher learning more effectively. The government should also implement performance-based systems for schools and teachers. This aims to motivate school leaders and teachers to continuously improve the quality of education delivery. There should be a formal mechanism to involve school principals and school supervisors in teacher professional development more substantially. As Darling-Hammond *et al.* (2017) emphasize, to ensure a coherent system that supports teachers across the entire professional continuum, and it should also "bridge to leadership opportunities to ensure a comprehensive system focused on the growth and development of teachers" (p. 24).

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