High Participation, Low Impact: The Challenge for Teacher Professional Development in Indonesia

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ARTICLE INFO	ABSTRACT
	Teacher professional development (TPD) has been adopted by the government as a mechanism to improve the quality of education. As such, teachers are doing their best to participate in as many of TPD programmes as possible. This study investigates the TPD experiences of three different schools in regional Indonesia to establish the current outlook for the TPD programmes and to gauge teachers' perceptions of TPD. A case study design was adopted, and a questionnaire and semi-structured interview were administered to collect data about the professional development experiences of teachers, focusing on their participation and perceived impacts of TPD on their instructional practices. The collected data were quantitatively and qualitatively analysed to observe the trends and patterns of TPD practices. High TPD participation is often reported to be an indicator of the success of the programmes; however, this does not always mean any improvement or change in terms of teachers' teaching quality. Ideas from TPD are likely to be implemented in teachers' day-to-day practices if they perceive that the structure, process and content of TPD programmes are effective. Various practical recommendations that are likely to help teachers to translate TPD ideas into their day-to-day practices are discussed and proposed.

1. INTRODUCTION

With the recognition of teachers' central role in the education system, TPD has been increasingly gaining prominence in all educational improvement reforms or initiatives. Wei, Andree, and Darling-Hammond (2009) claim that "[a]ll around the world, nations seeking to improve their education systems are investing in teacher learning as a major engine for academic success" (p.28). There are at least two fundamental reasons which underpin this conviction.

The first and foremost reason relates to students' learning and performance. The business of education has never been as demanding and complex, as cohorts of students come from more diverse socioeconomic and ethnic backgrounds, and have varying abilities (Chu Chang et al., 2014; Fullan, 2007). Demands for students to learn more varied and new knowledge and skills, such as digital literacy, problem solving abilities or higher order thinking skills, are mounting (OECD, 2019). All these pressures and demands call for more effective teaching methods and strategies, together with more individualised and varied approaches, meaning that teachers are required to teach students in a way that they were not taught about or prepared for (Hargreaves, 2003). One legitimate solution for teachers to develop such qualities is to continuously develop their expertise; Hendriks, Luyten, Scheerens, Sleegers, and Steen (2010) contend that:

> In this context, even initial teacher education of the highest quality cannot provide teachers with the knowledge and skills necessary for a lifetime of teaching. Teachers are called upon not only to acquire new knowledge and skills but also to develop them continuously (p.12).

The second reason relates to overall educational improvement reform. In an effort to improve education, all nations have embarked on numerous strategies or programmes, such as distributing textbooks, introducing new curricula, setting educational standards or integrating information and communication technology into teaching and learning, amongst many others. However, none of the above initiatives will be beneficial or effective without teachers who have suitable knowledge and skills to use or implement them in their schools and classes. In the Indonesian context, the competence of many teachers is still lower than that required by the national

standards, as measured by the teacher competency test (UKG). For example, the average score or percentage of correct answers of primary school teachers in the UKG was only 38 percent, while for secondary school teachers the average score across 12 subjects was only 45 percent (World Bank, 2010). This situation emphasises that teachers need to continuously develop their teaching qualities. In this landscape, TPD becomes the epicentre of the overall or larger educational reform initiatives. Villegas-Reimers (2003) claims that:

> [T]he professional development of teachers is a key factor in ensuring that reforms at any level are effective. Successful professional development opportunities for teachers have a significant positive effect on students' performance and learning. Thus, when the goal is to increase students' learning and to improve their performance, the professional development of teachers should be considered a key factor, and the same time must feature as an element in a larger reform (p.29).

In a similar vein, teachers in Indonesia are expected to play a strategic role and function in generating well-educated citizens for the future development of Indonesian society, nation and state and, as a consequence, the teaching profession need to be continuously developed (Kementerian Pendidikan Nasional, 2010). During the last two decades, the status and quality of teachers have attracted notable attention in Indonesia's education system. In the current educational reform, law no. 14 year 2005 on Teachers and Lectures (Kementerian Sekretariat Negara RI, 2005), teachers enjoy a status, position and income that they have never experienced before. Teaching is deemed to be a "profession", with a set of professional qualifications or requirements, thus entitling teachers to a "professional allowance" (as certified teachers). The base-salary for certified teachers has doubled, or in some cases tripled, compared to their salary prior to 2005. In terms of developing the quality of teachers, this law no. 14 mandates that all levels of the education system in Indonesia, central, provincial, and district (municipality/regency), together with the government and schools, are obliged to provide TPD programmes or opportunities for teachers. This reflects the Indonesian government's strong belief in the pivotal role of teachers, and its firm commitment to ensuring that teachers progressively develop their profession.

This study takes place in an Indonesian teacher professional development context. In general, the most typical TPD activities are one-off seminars, in-service short courses or workshop training (from one-day up to 15-day in-service training), which are conducted in cascade fashion. That is, upon returning to their schools/districts, teachers who have been trained at regional and/or national levels have the responsibility to cascade their newly-gained knowledge and skills through a series of learning activities in their districts and schools in order to reach as many local teachers as possible (Adey, Hewitt, Hewitt, & Landau, 2004; Supriatna, 2011; Thair & Treagust, 1997). Such in-service training is run by the government, with teachers' participation in such TPD activities mandated and linked to their performance evaluation, such as promotion and certification (World Bank, 2010).

With around 3.3 million teachers from all types and levels of education, the task of improving and developing teachers' quality in Indonesia is daunting. The challenge is not only to provide enough TPD opportunities for teachers to develop themselves but, most importantly, to ensure the available opportunities bring about improvement to teacher quality and tinstructional practices (Dwi, Nasir, & Maryani, 2016; Raihani & Sumintono, 2010). TPD, usually known as in-service teacher training in Indonesia, consists of a variety of activities, such as qualification upgrading through attending courses in teacher training universities, including distance learning at the Open University (Universitas Terbuka); training courses run by the National Center for Teacher and Education (P4TK) or the regional Educational Quality Assurance Agency (LPMP); as well as workshops or seminars conducted by local educational authorities (Dinas) and teacher networks (KKG or MGMP). However, D. Evans, Tate, Navarro, and Nicolls (2009) report that teachers have been trained in a particular teaching strategy (e.g. active learning), so little has changed in the ways teachers actually teach in their classrooms. Even for certified teachers, no strong evidence has been found of the effectiveness of certified teachers in their teaching performance and student learning outcomes (Kusumawardhani, 2017). Therefore, efforts to investigate the current nature of TPD activities and their perceived impacts on teachers' quality teaching are deemed to be vital. The main research questions guiding this study are; a) what is the contemporary nature of TPD activities in the three case-study schools?; and b) to what extent has TPD impacted on teachers' instructional practices?

2. METHOD

The study employed a holistic multiple-case study design (Yin, 2003). In this type of case study design, a "socially constructed nature of reality" (Denzin & Lincoln, 2003, p. 10) is holistically investigated and explored

through more than one single case within the same study. Teachers' TPD practices resulting from their experiences are a social reality or phenomenon that is situated in particular contexts and conditions, such as countries, regions, districts and schools. Therefore, each group of teachers in one school may experience and practise different TPD. Investigating one particular phenomenon such as TPD practices in more than one case (e.g. a school) is more likely to capture rich and deep meaning of the nature of reality.

Teachers from three secondary public schools (referenced to as Mak, Par, and Wap Schools) in three different regions of the province of Sulawesi Selatan, Indonesia were purposively chosen as research participants. Mak is an urban school located in the southern part of kota (city) Makassar, the capital city of the province of Sulawesi Selatan. Par School is a semi-urban school located in the inner city of kota Parepare, about 150 kilometres to the north of kota Makassar on the southwest coast of Sulawesi Selatan. Wap is a village school located in a subdistrict of kabupaten (district) Wajo. Kabupaten Wajo is situated in the northern inland part of Sulawesi Selatan, over 200 kilometres from kota Makassar.

Teacher questionnaires and semi-structured interviews were used to collect the data. The study adopted a teacher questionnaire from the Teaching and Learning International Survey (TALIS) developed by the Organisation for Economic Co-operation and Development (OECD, 2009), which comprised two parts. In part one, teachers were asked about their background and personal details, such as gender, status, qualifications, number of schools they taught at, number of hours of instructional activities a week, and length of service. Part two collected data about the teachers' professional development learning activities (formal and informal) that they had participated in during the 18 months before completing the questionnaire. It included the types and forms of learning activities and the associated degrees of impact on instruction as perceived by the teachers; the number of hours spent on learning activities; and the personal costs incurred. Data collected from the questionnaire were mainly ordinal or categorical, with some "other" options/space provided if the participants had issues or topics other than the provided ones they wanted to write about. Some items required participants to specify a value number. Out of the 150 copies sent out to teachers, 128 were successfully completed and collected.

The questions in semi-structured interviews were developed from the literature and the researcher's theoretical presuppositions (Flick, 2006) about TPD pertinent to the research questions. Certain criteria were applied to select the interview participants from those who returned the questionnaires. First, they needed to complete all the items/questions in the questionnaire because teachers with complete responses were more likely to have sufficient information regarding the phenomenon under study. Second, the participants were purposively chosen to represent gender, age, length of tenure/experience, and qualifications. Finally, some teachers responded to "other" options in the questionnaire with critical comments; a representative group of the teachers from this category was chosen to explore their comments. Principals were only selected as interview participants because of their position. All the above information was taken from the collected questionnaires. Due the researcher's capability and resources, three teachers from each school and their principals (12 interviewees in total) who satisfactorily met the criteria described above were selected as the interview participants, as detailed in Table 1.

Table 1. Interview participants

| School | Teacher | | | Experience | |
	Pseudonym	Gender	Qualification	Years	Age
	Malan	M	Master's	11-15	30-39
Mak	Muzan	F	Undergraduate	>20	40-49
	Manton	M	Undergraduate	>20	50-59
	Parrick	M	Master's	16-20	40-49
Par	Pachel	F	Undergraduate	11-15	30-39
	Pini	F	Undergraduate	3-5	25-29
	Waul	M	Undergraduate	6-10	40-49
Wap	Windy	F	Undergraduate	>20	40-49
	Wudolf	M	Undergraduate	6-10	40-49
	Principals				
Mak	Mr. M	M	Master's	>20	50-59
Par	Mrs. P	F	Master's	16-20	40-49
Wap	Mr. W	M	Master's	>20	40-49

Each interview participant was interviewed twice. The focus of the first interview was on teachers' professional development lives and their perspectives on their TPD. Interesting viewpoints from the questionnaires were also discussed. At this stage, the interview was transcribed and issues, problems or topics related to teachers' TPD experiences were roughly content analysed. Two important documents were also created for use in the second interview. The first document was an interview transcription for each participant, and the second comprised 'topic ideas' extracted from all the participants. Following the qualitative inquiry tradition, topic ideas can be seen as the first stage of analysis or interpretation of research participants' voices, mostly generated through an *in vivo* coding process (Saldana, 2009).

A few weeks after the initial interview, the second was conducted. In this interview, the participants were presented with a transcribed copy of their first interview. They were asked to recall the first interview and check if their viewpoints were correctly represented in the transcript; they could reformulate, eliminate, or replace any point with a more appropriate statement if necessary. This was member checking or 'respondent validation', in which participants' communicative validation of their statements was sought (Flick, 2006; Maxwell, 2005). The topic ideas identified in the first interview corpus were used to further explore the teachers' experiences, perceptions or ideas pertinent to the research questions. All the interviews were conducted at the participants' schools, with different durations for the first and second interviews, ranging from a minimum of 45 up to 90 minutes.

The collected data were quantitatively, mainly descriptively, and qualitatively analysed. The quantitative data from the questionnaires were tabulated to find trends or a general picture of the investigated phenomenon. The qualitative data analysis procedures were based on Yin's (2011) five-phase cycle of qualitative data analysis. The cycles consist of preparing, organising, examining, tabulating, categorising/developing themes, and interpreting qualitative data to address the research questions. The overall analysis of the quantitative and qualitative data was interactive and iterative, meaning that the results of the analysis from each data set informed each other and shaped the general analysis orientation. It also did not take place in a sequential manner, but rather as a back-and-forth investigation. The analysis of the full data corpus used "variable oriented" and "pattern clarification" strategies (Miles & Huberman, 1994).

3.   FINDINGS AND DISCUSSION

This section presents the findings from the analysis of the teacher questionnaires and interviews with the participating teachers and the principals. It is important to note here that the teacher questionnaire asked teachers about various TPD learning activities, ranging from more organised and structured (formal) ones, to more informal and self-directed learning. Formal TPD refers to learning activities provided by externals, which mostly ran off-site schools, while informal TPD refers to learning activities initiated and provided by the schools or teachers and which were conducted on-site.

Teachers at the three schools had a generally high level of TPD participation during the 18-month period prior to completing the questionnaire. Overall, the levels of participation were measured in terms of teacher participation rates in both formal and informal TPD. As shown in Figure 1, 78%, 83% and 87.5% of teachers at Mak, Par and Mak schools reported to have participated in formal TPD activities, respectively, while 94%, 77% and 82% of teachers at Mak, Par and Mak schools reported to have participated in informal ones.
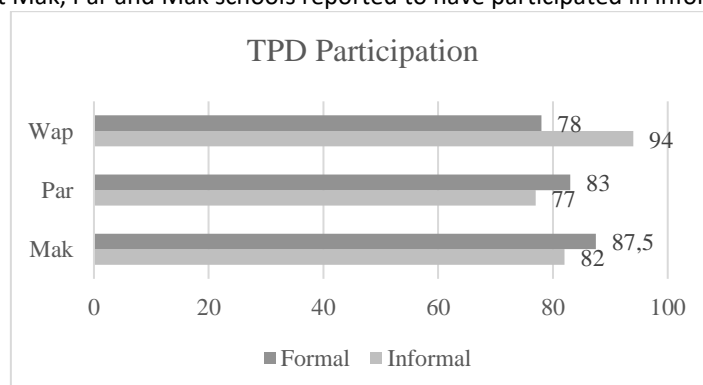

Figure 1. Level of participation in formal and informal TPD

The high level of TPD participation may indicate that the majority of teachers at the three schools were undertaking it as an essential part of their teaching profession and that TPD has been widely adopted by the

government and school managers as a school improvement strategy. When asked his opinion about TPD opportunities available for teachers, Parrick stated: "I think, what the government has done for teachers is enormous.…We've got lots of training invitations coming to school" For Mr. M, it is very important that all teachers at his school have the same opportunity to participate in TPD activities; he stated:

> So, for the last six months I have only invited school supervisors once to give presentations [training] about assessment, lesson plans, and the like. And because not all my teachers were covered, I plan to conduct another training… We would do that [the training] during the next school holidays, so every teacher who missed the previous training would be trained on that occasion.

Mr. W disclosed the common TPD practices at Wap School:

> Thus, to improve students' competency, I make Fridays a development day. I use this development day to provide guidance and assistance to help teachers improve their competencies. Fridays are our school forum to talk about our problems: teaching, assessment, students and other things.

While levels of participation are generally high, its intensity is low and differs greatly between schools. The teacher questionnaire measured the intensity of participation in terms of the number of hours of TPD learning activities undertaken by teachers during the 18-month period prior to completing the questionnaire. Figure 2 shows this intensity. Teachers' average number of TPD hours in the three schools ranged from 56 to 120 –an average of just under seven hours per month for the last 18 months. Quantitative analysis of this variable also reveals that the difference between the teachers with the lowest and highest intensity of TPD participation was very wide (lowest = 2 hours, highest = 386 hours). These two statistical findings suggest that TPD opportunities are unequally distributed among teachers. The interviews revealed a possible cause of the unequally distributed TPD opportunities. Malan, for example, expressed his disappointment at the discriminative practice of district authorities: "For some reasons, the district only chooses [invites] particular schools or teachers over and over again [to participate in training]". Windy pointed out other reasons why teachers at Wap School did not get the chance to be involved in formal TPD, particularly government programmes: "What happens here is that only teachers around Sengkang [the district capital city] or who have connections [with district authorities] will be invited". Malan's and Windy's accounts suggest that the "favouritism" practised by the government authorities overseeing programmes means that TPD opportunities are only available or accessible for particular schools or teachers. Therefore, it may be the case that teachers with privileges are repeatedly invited to TPD programmes and have very intensive or longer hours of participation than those who do not.
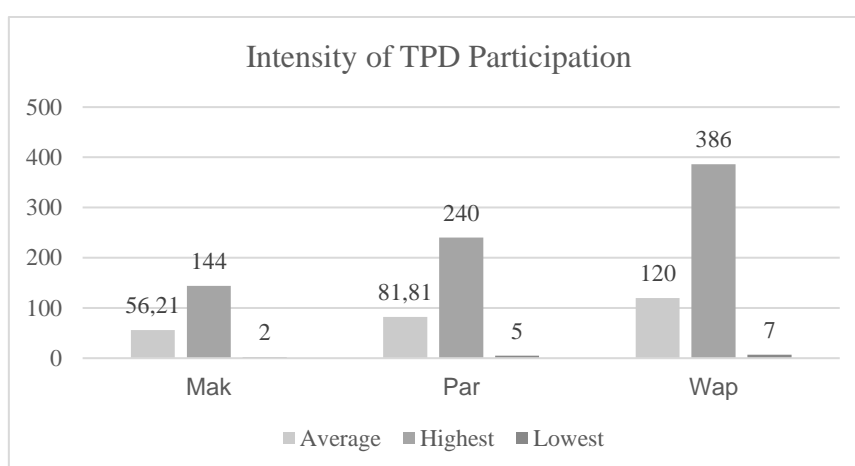

Figure 2. Intensity of Participation in Formal TPD Activities (in Hours)

The questionnaire asked teachers about the various forms of TPD learning activities, ranging from formal to informal types. Provided with a list of several alternative forms of formal TPD and informal learning activities,

teachers were asked to indicate the impact of each particular type on the improvement or development of their instructional practices. As can be seen from Figure 3, 59%, 58% and 58% of teachers rated dialogue/discussion, teacher networks and reading respectively as having a high impact on their teaching. Training or workshops, which are the most common form of TPD activities in government-mandated TPD programmes, are only perceived by 53% of teachers to have a high impact on their instructional practices.

Perceived Impact of Types of TPD

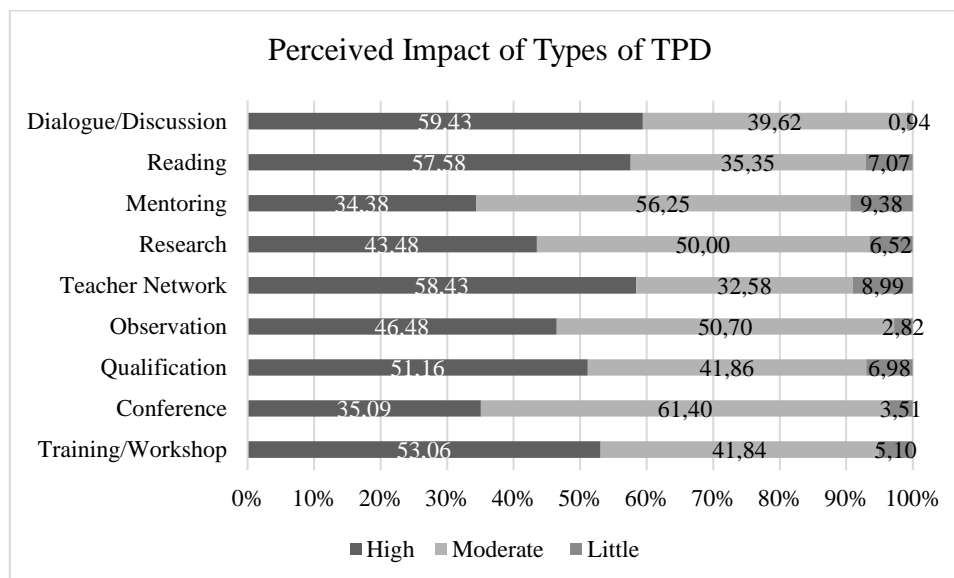|	High	Moderate	Little
Dialogue/Discussion	59.43	39,62	0,94
Reading	57.58	35,35	7,07
Mentoring	34.38	56,25	9,38
Research	43.48	50,00	6,52
Teacher Network	58.43	32,58	8,99
Observation	46.48	50,70	2,82
Qualification	51.16	41,86	6,98
Conference	35.09	61,40	3,51
Training/Workshop	53.06	41,84	5,10

Figure 3. Teachers' Perception of TPD Impact on Instructional Practices

The perceived impact is highly influenced by the structure, process and content of TPD activities. Although with particular reference to teacher networks such as *Musyawarah Guru Mata Pelajaran* (MGMP), the interviewed teachers perceived TPD to be instrumental, task-focused and less centred on "learning". Manton, for example, described the process of MGMP:

> Now the activity in MGMP is more like a "task distribution", where teachers will be grouped and each will be assigned to a particular task; say each group is developing a syllabus for chosen topics to be covered for one semester. So, the objective is how to get the task done.

Other interviewed teachers pointed out the problems related to the structure of TPD activities. Pini explained that "From time to time, we have training [invitations] but spaces are limited. You know, there are many teachers here but only a few get chosen to represent the school". In the same manner, Waul mentioned that "Personally, I am not satisfied with what the government has provided. I mean, one to two [TPD opportunities] in a very long time is not enough"

With regard to the content of TPD activities, Muzan complained that:

> What teachers really need is not there [not covered in MGMP]. Because MGMP heavily focuses on the preparing of teaching documents such as syllabuses, lesson plans or student worksheets, but in fact we also need other materials [TPD contents] such as teaching methods or approaches."

The above accounts point out some shortcomings of TPD that can hamper teachers in learning about TPD ideas and to further practise and implement these in their classes.

An important indicator of the success of TPD is whether or not teachers implement ideas learned from TPD in their practice. It seems to be the case for most teachers that they have participated in numerous TPD activities, but what they have learned from these is not evident in their actual teaching. Pini gave a reason for why TPD ideas are not transferred into practice: "The barriers [for implementing TPD ideas] are that teachers are given too many materials to learn, too many targets or expectations to meet, with too little time for trials or

experimentation". Mr. W, the principal of Wap school, highlighted the problem in relation to teachers' implementation of ideas from TPD:

> [Government-TPD programmes] lack follow-up. I mean, there isn't any assistance after teachers complete training. Ideally, teachers who completed a particular training course should be provided with assistance. At certain times, providers need to come to schools to observe and evaluate the implementation of ideas gained from teacher training programmes at schools and provide necessary help if needed.

Adding to Pini's and Mr. W's views on the issue of TPD implementation, Manton, a veteran teacher at Mak school, explained that:

> [TPD] must be sustainable, evaluated and followed up…What has been happening so far is that lots of [TPD] activities or programmes are unsustainable; many of them are disconnected from each other. There is an indication for teachers to link particular TPD programs with particular projects; you know, this project and that project… It is true that once a project is completed and all [TPD] activities are actually finished, there is no follow up [to school]. At school there is no such monitoring or evaluation of whatsoever.

Ideas from TPD are more likely to be implemented if teachers perceive the structure, process and content of the activities to be effective. According to the teachers, effective TPD activities are those that: 1) involve active participation; 2) generate practical and applicable solutions or innovations; 3) provide an evaluation and follow-up assistance to schools; and 4) are continuous. According to Malan, effective TPD activities would be "[The ones] that we, teachers, are directly involved in to create, role-play or review topics… so that we get the sense of their real application…to get things that can be directly used". Malan's view is echoed by Muzan: "Effective TPD is that in which teachers are guided to generate creative and innovative teaching and learning strategies and activities. This means that teachers can learn how to create enjoyable classroom learning strategies for students". Waul contended that "… one to two [TPD opportunities] in a very long time is not enough". In other words, Waul maintained that TPD activities would be effective if they were made available on a regular basis and of an adequate duration.

Pitsoe and Maila (2012) argue that "teacher professional development activities have adopted a positivist approach…[which] flows from the theoretical frameworks of a mechanistic world-view" (p. 320). TPD programmes that are organised and managed around this worldview critically influence the practice of TPD in several ways. First, such programmes are driven by the logic of accumulation. Based on this, the government has invested billions into TPD programmes and mandates teachers to participate in more and more of them. In terms of TPD participation, this study has found that teachers across the three case study schools generally have high levels of participation in formal TPD. This high participation is often reported as a indicator of the success of TPD programmes, and the attainment of a certain percentage of teachers' TPD participation has been assumed to lead to qualitative change: an improvement in teachers' instructional practices. However, despite billions of TPD investment, little evidence exists to demonstrate that such investment has effectively improved teacher competences, as shown in the poor UKG results (World Bank, 2010) or in student achievement, as shown in the low scores of Indonesian students in the Programme for International Student Assessment (PISA) (Kementerian Pendidikan Kebudayaan, 2015; OECD, 2019).

It is very simplistic to assume that high TPD participation by teachers will automatically lead to quality improvement. In other words, high participation does not always mean learning will take place or that there will be improvements in terms of teachers' instructional quality. Mrs. P, the principal of Par school, expressed her disappointment in teachers who had participated in numerous TPD opportunities, but did not seem to put into practice the expected changes or improvements. As she explained, "I have lots of teachers that, although they have been trained up to the national level, when they return to the school they are still what they used to be". This implies that while teachers may participate in TPD, they may rarely use their learning experiences. Therefore, this study believes that teachers' TPD participation is only one of the many dimensions of learning. Participation at the very least can be seen as a prerequisite for learning, but not the learning itself. Teachers need to engage, experiment and reflect on TPD ideas for meaningful learning to occur, and enact the expected changes or improvements accordingly (Dwi et al., 2016; Kusumawardhani, 2017; Raihani & Sumintono, 2010). Therefore,

follow-up or after-training assistance, in which teachers are given chances to experiment with TPD ideas with sufficient guidance and support from training facilitators is crucial for teacher learning and changes to occur.

Second, a mechanistic worldview influences the widely-held notion of TPD as a knowledge transmission process, with knowledge being transmitted from one mind to another. Like other countries that have introduced large-scale educational changes, the Indonesian government has long adopted a cascade model of TPD to introduce major innovations into the system. The analysis in this study shows that in government-provided TPD, participants who represent their schools are trained to use particular ideas or innovations and are also generally obliged to cascade these down to their fellow teachers upon returning to their respective schools. Although the cascade model of TPD may be efficient in terms of time and cost for an education system with such a large population of teachers such as Indonesia, knowledge learned from TPD opportunities does not transfer to teachers' day-to-day practices at school. In investigating a cascade training program implemented in Sri Lanka, (Hayes, 2001) argued that "it is not the cascade model per se which is the problem, but the manner in which it is often implemented. A prime cause of failure is a purely transmissive mode of training at all levels" (p. 138). This transmission mode therefore often creates a culture of compliance (Hargreaves, 2003), in which teachers participate in TPD in order to fulfil obligations from the government or authorities. In other cases, it may be that teachers' TPD participation is more geared towards "functional development" than "attitudinal development" (L. Evans, 2008; Zeng & Day, 2019). That is, teacher changes focus on development in relation to producing or performing the required tasks and documents, such as in the implementation of new curricula.

According to the teachers in this study, ideas from TPD are likely to be implemented if teachers perceive that the structure, process and content of related activities are effective. The teachers believed that effective TPD activities were those that: 1) involved teachers as active learners; 2) offered practical and applicable solutions or innovations; 3) provided an evaluation and follow-up assistance to schools; and 4) were continuous.

The above features are not new, and have been widely discussed (Boyle, Lamprianou, & Boyle, 2005; Darling-Hammond & Richardson, 2009; Desimone, 2009; Garet, Porter, Desimone, Birman, & Yoon, 2001; Guskey & Yoon, 2009; Ingvarson, Meiers, & Beavis, 2005), but generally remain overlooked by TPD providers. It is important to understand that these features are interdependent and reciprocal; focusing on a single feature runs the risk of TPD activities becoming ineffective. Only by putting all these features together will teachers benefit from their TPD experiences. In other words, it is the combination of these features that makes an effective TPD activity; the features do not work independently, but come together or interrelate in enabling teacher learning and change. Equally important to note that the "features may collectively work together in different ways under different circumstances in different contexts" (Opfer & Pedder, 2011, p. 386). That is, "the same 'cause' can, in specific circumstances, produce different effects" (Urry, 2005, p. 23). Contexts such as teacher and school conditions exert significant influences on how these features interact.

4. CONCLUSION

The study has problematised the notion that once teachers participate in TPD activities, they will implement the ideas from them in their classrooms. This causal-deterministic view generally undermines TPD practices. It is important for teachers to participate in TPD, but much more important for them to practise or implement ideas learned from programmes in their instructional practices. A high level and intensity of participation as an indicator of successful TPD can be misleading and incomplete. Teachers tend to be pragmatic in the way they seek TPD activities that will give them practical or applicable ideas for their teaching. Therefore, they are more likely to take TPD ideas on board if they are in line with their perception of effective TPD activities.

The findings of the study pose a number of practical challenges to TPD in Indonesia. First, teachers do not only need more and continuous TPD activities, but also more variation in structures, processes and content to accommodate their particular needs and circumstances and those of schools. Second, TPD includes a dimension of experimentation and implementation of its ideas, so assessing tts impact based on the level of participation is simplistic. Teachers need time to discuss the ideas with their fellow teachers, experiment and or implement them at the classroom level, and time to reflect on the "good" and "bad" sides of such ideas in accordance with their conditions and circumstances. Third, in contexts where TPD activities are cascadable in nature, the co-administration of these activities with strong close follow-up assistance from the government agencies overseeing TPD, teachers and schools is more likely to be impactful, as it will bring external (government) and internal (teachers and schools) agendas together. Finally, the content needs to address local needs and issues to accommodate heterogeneous local conditions and the contexts of schools, teachers and students, as promoted by current government policies. Locally managed and administered TPD activities would also ensure equal

distribution of TPD opportunities among teachers at the local level. The empowerment of the existing educator networks, such as KKG/MGMP/KKS/MKKS/KKPS/MKPS, along with application of "effective" features of TPD can be an entry point to planning and designing more meaningful and productive TPD programmes or activities.

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