THE IMPACT OF ONLINE TEACHER PROFESSIONAL DEVELOPMENT PROGRAM
(A CASE STUDY OF IN-SERVICE ENGLISH TEACHERS JOINING TEACHER CERTIFICATION PROGRAM 2019)

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Abstract
This study explored the impact of online professional development program of in-service English teachers joining Teacher Certification Program 2019. Teacher professional development is often seen as the indicator to powerful education improvement. Therefore, teachers are required to encounter continuous professional development to keep informed with the endless change taking place in the education routines. Challenges arose when teachers had to be enrolled in online professional development program which was regarded as compulsory program conducted by the government as a requirement to get standardized license in teaching. This study took the form of a qualitative study employing two instruments: questionnaires and interview. The findings revealed that after joining the online program, teachers confirmed that the impact mainly covered on teachers’ knowledge, teachers’ practice, student learning outcomes, and teacher efficacy.

Keywords: online teacher professional development program, teacher certification program, impact

Introduction
Teacher professional development is teachers’ activity of learning, that is how they learn to learn and how they implement their knowledge in practice to support students’ learning. It is about teachers’ process of obtaining experience and transforming their understanding into practice for the benefit of their students’ growth (Avalos, 2011). OECD defines it as activity that promotes an individual’s skills, ability, knowledge, proficiency and other characteristics as a teacher (OECD, 2009).

TPD can serve some objectives (OECD, 1999), including: to update teachers’ knowledge of a subject in light of new progress in the area, to update techers’ skills, ability, perception, and approaches in light of the development of new teaching techniques and methods, new circumstances and new educational research, to enable individuals to implement development made to curricula or other aspects of teaching practice, to enable schools to improve and implement new methods concerning the curriculum and other aspects of teaching practice, to exchange
information and proficiency among teachers, and to help weaker teachers become more demanding.

Teacher professional development (hereafter TPD) can be provided in various ways, ranging from the formal to the informal. TPD is both an intellectual and personal attempt which needs not only involvement with new and different ideas about education, applying new activities and developing classroom practice, but also an emotional response since personal beliefs are challenged (Girvan, Conneely, & Tangney, 2016). The activities in TPD can range from formal, structured topic-specific seminars given on in-service days, to everyday, informal discussions with other teachers about instruction techniques, embedded in teachers’ everyday work lives (Desimone, 2009).

Professional development for teachers can take many forms, including university courses, local and national conferences, workshops, and specialized institutions. OECD mentioned that TPD could be courses, workshops or formal qualification programmes, through collaboration between schools or teachers across schools (e.g. observational visits to other schools or teacher networks) or within the schools in which teachers work (OECD, 2009). According to Little, TPD may cover activities such as workshops, local and national conferences, college courses, special institutes, and centers (Little, 1993). Those activities can be conducted face to face and or online.

Online TPD is an important and proliferating part of teachers’ continuing growth evolving technologies allowing for novel and different forms of professional development (Parsons et al., 2019). In online courses using information and communication technology (ICT), there is no face-to-face relationship between the lecturer and the trainees (teachers) or between members of the trainee group (Wasserman & Migdal, 2019). Online PD can be synchronous, where learning happens in real time, asynchronous, where teachers engage in their learning on their own time, or a hybrid of both synchronous and asynchronous (Elliott, 2017).

In recent years, researchers studied on online TPD for teachers. Parsons et al., 2019 studied US teachers’ perceptions of online PD. They found that teachers would participate in different online PD activities. Teachers who had more positive involvement indicated they were more likely to involve in an online community of practice compared to teachers who identified online PD moderately, slightly, or not advantageous.

There are many other studies researching how teachers’ beliefs and attitudes of online PD. However, there are very few researches focusing on how the impact of the online TPD program toward teachers. To fulfill this gap, this recent study analyzes the impact of online TPD program in which EFL in-service teachers join as requirement to get certification. The research questions of this study are as follows:

1. How is the impact of online TPD program on teachers’ knowledge?
2. How is the impact of online TPD program on teachers’ practice?
3. How is the impact of online TPD program on student learning outcomes?
4. How is the impact of online TPD program on teacher efficacy?
Online Teacher Professional Development

Online TPD is an important and proliferating part of teachers’ continuing growth evolving technologies allowing for novel and different forms of professional development (Parsons et al., 2019). In online studies using information and communication technology (ICT), there is no face-to-face session between the instructor and the teachers or between members of the trainee association (Wasserman & Migdal, 2019). Online PD can be existing at the same time or it is called synchronous, where learning occurs in real time, asynchronous, where teachers undertake their learning on their own time, or a hybrid of both synchronous and asynchronous (Elliott, 2017). From those definitions, it can be synthesized that online TPD is any synchronous, asynchronous, both synchronous and asynchronous activity of teacher professional development which uses information and communication technology (ICT) which improves teachers’ skill, knowledge, and competence which then should trigger advance in teachers’ practice that contribute to better student learning result.

Experts have agreed that online PD has unique and valuable potential to reach teachers around the world (Dede, Ketelhut, Whitehouse, Breit, & McCloskey, 2009). Furthermore, online TPD is believed to be able to allow teachers to engage in discussions that challenge their perceptions, beliefs, and or practices and also create new experience and understandings.

The present study focuses on online TPD program as a requirement to get teaching license and or certification. This program is an initial stage from those some other stages in the in-service teachers certification program (hereafter called Pendidikan Profesi Guru Dalam Jabatan dalam jaringan - PPG Daljab daring). It was conducted for about 2,5 months by online, meaning that the teachers must accomplish some materials and modules by submitting the given tasks. The materials is divided in two main categories, pedagogical and professional materials. Each material must be mastered by the teachers joining PPG Daljab daring.

Impact of PPG Daljab Daring

To scrutinize the impact of PPG Daljab daring, the researcher employed the framework proposed by Ingvarson et al. to analyze the impact of a TPD program. It includes impact on teachers’ knowledge, teachers’ practice, student learning, and teachers’ efficacy (Ingvarson, Meiers, & Beavis, 1998). Teachers reported their answers to the some statement based their condition consisting of strongly agree, agree, disagree, and strongly disagree.

Impact on Teachers’ Knowledge

Teachers’ knowledge in PPG Daljab daring here means that the teachers’ cognition of pedagogical and professional aspect. These covers : the subject matter, methods and strategies which are suitable with the materials the teachers deliver, how students study the materials, different knowledge of the students and how to deal with their specific needs, how to connect evaluation into teaching learning process, classroom management, information and learning resources available in the area of teaching.

Impact on Teachers’ Practice

Teachers’ practice means that their attitude, habit, and daily practice. The indicators are that they:
• make clearer connection between teaching purposes and teaching learning activities;
• conduct classroom management and activities more effectively;
• employ more active teaching and learning techniques and strategies suitable to the subject matter;
• employ more dynamic teaching and learning methods suitable to the classroom situation;
• make use of teaching and learning strategies that are more demanding and interesting;
• are able to satisfy the students’ specific learning needs;
• connect evaluation into the teaching and learning activities more completely;
• give more practical recommendation to their students to help their learning;
• involve students in activities which are higher order thinking;
• make use of materials and learning resources more effectively.

**Impact on Student Learning Outcomes**

Teachers are questioned whether as a result of the PPG Daljab daring program, their students now:

• have fewer difficulties in comprehending the lesson taught;
• are studying more intentionally;
• are more actively involved in learning activities;
• exhibit improved result in learning;
• make use of materials and resources more effectively.

**Impact on Teachers’ Efficacy**

Teachers are questioned as a result of the PPG Daljab daring program:

• My capacity to satisfy the learning target of my students has been developed;
• My tenacity as a teacher has improved.

**Previous Studies**

In 2019, Parsons et al. conducted a survey study entitled ‘US teachers’ perceptions of online professional development’. The participant of the study were 258 US teachers. There were three findings of this method. The first was showed that content area learning was the most common experience in online PD, many teachers reported participating in online PD because it was more convenient than other forms of PD, and most teachers found some benefit to their experience. The second finding was that they likely participate in different online PD activities mostly about access to a video library. The last finding showed teachers who had more positive experiences indicated they were more likely to engage in an online community of practice compared to teachers who found online PD moderately, slightly, or not beneficial.

Another study was conducted by Yurkofsky, Blum-smith, & Brennan in 2019 which was entitled ‘expanding outcomes: exploring varied conceptions of teacher learning in an online professional development experience’. It involved 15 full time teachers to be interviewed to answer the research question. The finding showed that the teachers found the online learning was valuable since the outcomes gave the exposure to new idea, rethinking classroom practices, and new relationship with surrounding world.
The last study was conducted by De Vries, S. Van de Grift in 2012 which was entitled ‘teachers’ beliefs and continuing professional development’. This was a survey study investigating 260 Dutch secondary school teachers. This research emphasized two belief dimensions (student and subject matter orientation) and three types of CPD activities (updating, reflective, and collaborative). The finding showed that student-oriented beliefs related positively to teachers’ participation in CPD: the more student-oriented teachers were, the more they participated in CPD. No relationship emerged between subject matter–oriented beliefs and CPD.

Method
The writer employed case study for the research topic. Case study research is an empirical inquiry that investigate a contemporary phenomenon (the case) in depth and within its real-world context (Yin, 2018). In this investigation, the researcher explored the impact of PPG Daljab daring program on teachers’ knowledge, teachers’ practice, student learning, and teachers’ efficacy. There are three types of case study, categorized to their main purpose: exploratory, descriptive, and explanatory. The type of case study used in this research is descriptive case study. A descriptive case study presents a complete description of phenomena within its context. In this case, the phenomena were online TPD programs and its impact on teachers’ knowledge, practice, student learning, and teachers’ efficacy. The participants of the study are 15 in–service EFL teachers who joined PPG Daljab daring. They teach in primary and secondary high schools in Indonesia. They have been teaching English for about one year up to more than ten years.

The data of this research are collected using questionnaire and interview. The questionnaire was developed based on the framework in the review paper written by Ingvarson et al (1998). In this questionnaire, the participants were asked to report their responses related to the impact of PPG Daljab daring on a four-point scale from strongly agree to strongly disagree. The questionnaire consisted of 25 questions. Questions number 1 – 8 refer to area of knowledge, number 9 – 18 refer to the area of practice, number 19 – 23 refer to the area of student learning outcomes, and number 24 – 25 refer to area of teachers’ efficacy. Interview was then conducted to confirm the answers and to investigate the unrevealed things in the questionnaire. The questions in interview were open – ended ones aiming at observing how the impact of PPG Daljab daring is on each aspect.

The data of this study were analyzed using interactive models. There are four steps in interactive model i.e. data collection, data reduction, data display, and conclusions. The steps are presented in following figure:

![Figure 1. The interactive model of qualitative data analysis](Miles, Huberman, & Saldana, 2014)
Findings and Discussion

This section presents findings providing answers to the four research questions under separated heading below:

1. The impact of online TPD program on teachers’ knowledge

In general, the participants confirmed that PPG Daljab daring contributed a vigorous impact on their teaching knowledge especially on the subject matter, teaching and learning strategies appropriate to the content they teach, how students learn the content, individual differences amongst students, how to cater for students need and how to link assessment into the teaching and learning cycle, materials or resources available in their area of teaching.

The participants reported that PPG Daljab daring gave a medium impact on teachers’ knowledge on how to link assessment into classroom organisation.

Table 1. Participants’ viewpoint about the impact of PPG Daljab daring on teachers’ knowledge (in percent)

<table>
<thead>
<tr>
<th>No</th>
<th>Aspect of teachers’ knowledge: PPG Daljab daring gives impact on</th>
<th>sd</th>
<th>d</th>
<th>a</th>
<th>sa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>the subject matter</td>
<td>20</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>teaching and learning strategies appropriate to the content I teach</td>
<td>33,3</td>
<td>66,7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>how students study the materials</td>
<td>33,3</td>
<td>66,7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>individual differences amongst students</td>
<td>53,3</td>
<td>46,7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>how to cater for students’ needs</td>
<td>6,7</td>
<td>40</td>
<td>53,3</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>how to connect evaluation into the teaching and learning process</td>
<td>40</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>how to connect evaluation into classroom organisation and management</td>
<td>13,3</td>
<td>60</td>
<td>26,7</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>how to link assessment into materials and resources available in their area of teaching</td>
<td>20</td>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This view was evidenced by the result of the individual interview.

Teacher S: “After accomplishing daring session, I felt that the program gave a strong influence on my teaching knowledge especially related to the content, strategy in teaching, and assessment or evaluation.”

Teacher I: “PPG Daljab daring consisted of some modules that the teachers should master. After finishing the activities, I have enhanced ability in choosing the best method and technique in teaching and the way I should assess my students’ skill in listening, speaking, reading, and writing.”

Teacher N: “Well, it contributed much on the content knowledge which I think it’s the most important aspect a teacher should master. Also, it support in terms of how to link assessment into classroom organisation and management.”

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Teacher M: “The program gave impact on my knowledge about content, teaching strategy, individual differences among students, assessment, and accessing related materials.”

2. **The impact of online TPD program on teachers’ practice**

The participants stated that **PPG Daljab daring** leads a strong impact on teachers’ practice especially on how the teachers create clearer relationship between their teaching objectives and classroom activities, employ more active teaching and learning techniques and strategies appropriate to the content that they teach, employ more effective teaching and learning strategies appropriate to the classroom context, employ teaching and learning strategies that are more challenging and engaging, link assessment into the teaching and learning cycle more effectively, supply more effective feedback to their students to support learning, engage students in higher order thinking, and access materials or resources more effectively.

Meanwhile, the participants also reported that **PPG Daljab daring** gave a moderate impact on teachers’ practice, that is on how to handle classroom management and activities more completely and be able to meet the individual learning needs of their students.

### Table 2. Participants’ viewpoint about the impact of **PPG Daljab daring** on teachers’ practice (in percent)

<table>
<thead>
<tr>
<th>No</th>
<th>Aspect of teachers’ practice: <em>As a result of participation in PPG Daljab daring, I</em></th>
<th>sd</th>
<th>d</th>
<th>a</th>
<th>sa</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>make clearer connection between teaching purposes and teaching learning activities</td>
<td>46,7</td>
<td>53,3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>conduct classroom management and activities more effectively</td>
<td>13,3</td>
<td>33,3</td>
<td>53,3</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>employ more active teaching and learning techniques and strategies suitable with the materials that I deliver</td>
<td>6,7</td>
<td>33,3</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Make use of more effective teaching and learning methods suitable with the classroom situation</td>
<td>6,7</td>
<td>53,3</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>employ teaching and learning strategies that are more demanding and interesting</td>
<td>40</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>am able to satisfy the individual learning needs of my students</td>
<td>13,3</td>
<td>60</td>
<td>26,7</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>connect assessment into the teaching and learning cycle more effectively</td>
<td>46,7</td>
<td>53,3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>provide more practical feedback to my students to help my learning</td>
<td>6,7</td>
<td>53,3</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>involve students in higher order thinking activities</td>
<td>6,7</td>
<td>66,7</td>
<td>26,7</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>make use of materials and learning resources more completely</td>
<td>6,7</td>
<td>33,3</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>
This data finding was supported by the opinions stated in the interview related to teachers’ practice.

Teacher B: “It really supported me as an English teacher especially in practicing more challenging and engaging teaching strategies. Well, I guess my students also felt the influence.”

Teacher H: “PPG has given me a chance to apply materials and resources more effectively in the class.”

Teacher W: “After learning it I am confident in handling classroom management and activities more completely.”

Teacher I: “I have been applying some methods to develop my students’ higher order thinking skills. It is not a simple thing to do but after I join PPG I know to deal with that.”

3. The impact of online TPD program on student learning outcome

The participants confirmed that PPG Daljab daring program contributed an intense impact on student learning outcomes especially on the aspect that students have less obstacles in understanding what teachers are being taught, are learning more intentionaly, exhibit enhanced learning outcomes, and access and use materials and resources more effectively.

Meanwhile, the teachers also confirmed that the program gave a moderate impact on student learning outcome in terms of active engagement in learning activities.

Table 3. Participants’ viewpoint about the impact of PPG Daljab daring on student learning outcome (in percent)

<table>
<thead>
<tr>
<th>No</th>
<th>Aspect of student learning outcome: As a result of PPG Daljab daring, the students now</th>
<th>sd</th>
<th>d</th>
<th>a</th>
<th>sa</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.</td>
<td>have fewer difficulties in comprehending the lesson taught</td>
<td>6,7</td>
<td>73,3</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>are studying more intentionaly</td>
<td>40</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>are more actively engaged in learning activities</td>
<td>13,3</td>
<td>46,7</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>exhibit improved result in learning</td>
<td>6,7</td>
<td>53,3</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>make use and access materials and learning resources more effectively</td>
<td>53,3</td>
<td>46,7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This view was supported by the individual interview

Teacher A: “My students told me they now have fewer difficulties in understanding materials delivered to them.”

Teacher I: “Many students exhibit confidence when presenting in front of the class. They also exhibit enhanced skill in speaking and writing. Those mean a lot for me.”

Teacher F: “There are some improvement I can notice related to my students performance. They now understand the intention or goal of their learning, they
study more active both in individual and in group task, and also they gain better confidence.”
Teacher B : “The students are now able to choose which materials or resources appropriate for them. They first select it, confirm to me, and then take it as learning resource. And I think it’s good start to indicate digital literacy, being literate in digital world.”

4. The impact of online TPD program on teachers’ efficacy

In general, all participants agreed that PPG Daljab daring contributed a strong impact on teachers’ efficacy, meaning that after joining the program the teachers confirmed that their capacity to satisfy the learning target of my students has been developed and their tenacity as teachers has raised.

Table 4. Participants’ viewpoint about the impact of PPG Daljab daring on teachers’ efficacy (in percent)

<table>
<thead>
<tr>
<th>No</th>
<th>Aspect of student learning outcome: As a result of PPG Daljab daring</th>
<th>sd</th>
<th>d</th>
<th>a</th>
<th>sa</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>my capacity to satisfy the learning target of my students has been developed</td>
<td>6,7</td>
<td>40</td>
<td>53,3</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>my confidence as a teacher has improved</td>
<td>26,7</td>
<td>73,3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This finding was supported by the individual interview
Teacher B : “PPG program has given me so much chance to improve my competence as an English teacher. The direct influence is that I am now confident enough in delivering some complicated materials. I am able to make use various resources other than books to support my teaching. And it works.
Teacher S : “Fulfilling my students’ learning needs is the most difficult array of my teaching journey. After accomplishing PPG Daljab daring, my ability dealing need analysis has developed. I am now confident and proud to be an English teacher.”
Teacher I : “I have encountered many obstacles when adjusting myself in various classes. I worked hard to make my students understand the materials. After finishing the program, I got several experience how to deal with those things. Now, my confidence has raised.”

After finding and analyzing the data, there were four important issues emerged to be discussed. The first is that TPD online contributed a vigorous impact on teachers’ knowledge especially on the content they teach. This is in line with the finding of the previous research written by Parsons et al in 2019 stating that content area learning was the most common experience in online PD.

The second is that the aspects of teachers’ knowledge, teachers’ practice, student learning outcome, and teachers’ efficacy proposed in this research has partial similarities with those found by previous researchers, Yurkofsky, Blum-smith, & Brennan in 2019 that are about exposure to new idea, rethinking classroom practices, and new relationship with surrounding world.

The next important issue is about the main concern of all kinds of PD program is always related to students’ learning outcomes. As proposed by Guskey that the
final purpose of teacher professional development is student improvement (2000). The finding of this study also covers the impact of online TPD on student learning outcome consisting of how to deal with obstacles in understanding lessons, how to learn more intentionally, how to engage more actively in learning activities, and how to exhibit enhanced learning outcomes.

The last discussion is related to teachers’ efficacy or confidence after accomplishing online TPD program. The impact reported from this study is that teachers’ confidence has raised after joining PPG Daljab daring. It is in line with the study conducted by Wasserman and Migdal in 2019 which examined the contrast in teachers’ character towards learning in online and traditional training studies. This study revealed that online learning environment for teachers has contributed significant influence in raising teachers’ self confidence.

Conclusion

This paper was conducted to explore the impact of online professional development program of in-service English teachers joining Teacher Certification Program 2019. To reveal the impact of online TPD, the researcher made use the framework proposed by Ingvarson et al. (1998) about impact of PD and then applied in the questions in interview and questionnaire. The result showed that the program influenced on teachers’ knowledge, teachers’ practice, student learning outcomes, and teacher efficacy. For further research, it is expected to concern not only on the impact of the program but also on the evaluation of online TPD program. Deeper investigation is really needed to evaluate certain program of teacher development. Besides, since the present study faced time constraints as limitations to the work, it is also suggested for future researches to examine the participants and phenomena in a longer time intensively. Hopefully, the results could show insight for educational authorities to accentuate teacher professional development activities.

References


