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English Teachers' and Lecturers' Perceptions of Reflective Practice through Video Recording at the Teacher Certification Program

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Abstract

Considering the long-recognized contribution of reflective practice on teachers' continuous professional development, this article casts new light in reporting English teachers' and lecturers' perceptions on the needs to implement reflective practice through video recording during peer teaching in the Indonesian Teacher Certification Program. This needs analysis is conducted as the preliminary step of the Research and Development (R&D) project and the data will be taken as the basis for the development of reflective practice model with video recording in peer teaching. The perceptions of the needs were collected through a closed and open-ended questionnaire distributed to two groups of respondents. The first group consisted of pre- and in-service English teachers who participated in the PPG (Pendidikan Profesi Guru) Program, or Teacher Certification Program, during the course of 2018 and 2019; and are now teaching secondary school students within the provinces of West and North Sumatra, Aceh, Jambi, and Riau. The second group was lecturers at the English Language Education Program (ELEP) of Universitas Negeri Padang teaching at the PPG Program. The findings show that most teachers believed that reflective practice using video recording enabled them to see their teaching strengths and weaknesses and, in return, would be able to improve students' learning outcomes. Similarly, all lecturers also believed that the needs of reflective practice assisted by digital

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technologies are highly important. In general, the perceptions of these two groups of respondents demonstrate the crucial needs of implementing reflective practice with video recording during peer teaching in the PPG Program.

Keywords: reflective practice, perceptions, English teachers and lecturers, video recording, peer-teaching, teacher certification program.

1. INTRODUCTION

No matter how long teachers have conducted their teaching practices, they are encouraged to develop their teaching professionalism continuously. One of the ways is by doing reflective practice. Research results (i.e., Rozimela & Tiarina, 2018; Sunra et al., 2020) demonstrate that reflective practice enables teachers to see their strengths and weaknesses. This may potentially lead to an improvement in their teaching and learning quality. This outcome of reflective practice is aligned with the claim expressed by Ashwin et al. (2015), stating that the purpose of reflective practice is to re-evaluate teacher's teaching experiences to improve future teaching practices. The very first idea about the reflective practice was coined by Dewey (1910) more than a century ago. Dewey believed that reflective practice gives teachers awareness, and this awareness opens opportunities to develop teacher professionalism. Since Dewey's time, the concept of reflective practice has developed well spreading out in many sectors of life. Schön (1987) and Jay and Johnson (2002) are some of the experts developing the praxis of reflective practice. In the area of teaching English as a second language, Jack C. Richards and Thomas S.C. Farrell have excessively and deeply explored reflective practice through a significant number of studies.

Despite study results revealing positive implications of doing reflective practice on teaching and learning, it is still crucial to know teachers' needs of reflective practice, particularly in incorporating technology. Acknowledging the need for technologically proficient teachers, teacher educators across the nation now infuse some degree of technological competency into the preparation of their pre-service teachers (Bird & Rosaen, 2005; Cohen & Tally, 2004; Rosaen et al., 2003). This can be seen from the significant overall effect of selecting performance tasks by integrating technology in reflective practice (see, for example, Kimmons et al., 2015; Ruggiero & Mong, 2015). However, teacher educators face several obstacles in implementing technology into teacher preparation (Gunter, 2001; Johnson & Howell, 2005).

By knowing the needs of reflective practice that utilize technological tools, designing the model could be more feasible and accurate. While it is very common to find research on exploring the concept of reflective practice whether using descriptive, experimental design or case study in English language teaching (for example, Cirocki & Widodo, 2019; Mann & Walsh, 2017), this study adopted Research and Development (R&D) to design and develop a learning model for peer teaching activity in the Indonesian Teacher Certification Program (or *Program Pendidikan Profesi Guru*, or abbreviated as the PPG Program), that would implement the concept of reflective practice has not yet been found, particularly in the Indonesian context. Thus, this research may fill in the gap and contributes to existing literature. The research focused on English teachers' needs to do reflective practice assisted by technological

devices that can record peer teaching through audiovisual instruments. It specifically seeks to answer the following research questions:

1. What are teachers' perceptions on the needs of reflective practice with video recording to be implemented in the PPG Program?
2. What are lecturers' perceptions on the needs of reflective practice with video recording to be implemented in the PPG Program?

2. LITERATURE REVIEW

2.1 Teacher Certification Program in Indonesia and Overview of Its Effectiveness on Academic Performances

Teacher Certification Program or *Profesi Pendidikan Guru* (PPG) Program is a certification program designed by the Indonesian government to improve pre- and in-service teachers' professionalism. This program is conducted based on the Government's Regulation No. 74/2008 about Teachers (President of Republic of Indonesia, 2008). The regulation explains that teachers are considered professional educators whose main responsibilities are educating, teaching, guiding, directing, preparing, assessing, and evaluating students in pre-school, primary, and formal secondary education. The PPG Program provides pre-service and in-service training programs. Pre-service training program targets teacher candidates with education or non-education Bachelor's Degree who will work as professional teachers. In-service training program targets in-service teachers including civil servants and full-time teachers who have been teaching in government and private schools and have already had an individual contract of employment or a collective agreement. The teachers participating in this program are those who teach at all levels of education, from pre to secondary schools.

Since 2018, in-service teachers' selection procedure has been undertaken through the coordination between the Indonesian Ministry of Research, Technology and Higher Education (*Kementerian Riset dan Teknologi / Badan Riset dan Inovasi Nasional Republik Indonesia*, or abbreviated as *Ristekdikti*) and the appointed Teacher and Education Personnel Institute (or *Lembaga Pendidikan Tenaga Kependidikan*, abbreviated as LPTK). The very first stage of the process is an academic and administrative selection. When the candidates pass this selection, they are called PPG students. The PPG students passing this selection can proceed to online learning for 12 weeks. Upon completing online learning, the selected students are required to participate in an offline workshop held by the appointed LPTK for five weeks. The PPG students have to develop a learning set and perform peer teaching. In developing the learning set (consisting of the lesson plan, media, materials, task, and assessment), the PPG students present the learning tools they discuss and design in groups. In the peer teaching activity, they take turns practicing teaching in which other PPG students act as students. In the final stage of the selection, PPG students then undergo a teaching practicum (or *Praktek Lapangan Kependidikan*, abbreviated as PLK) at partner schools over a period of three weeks. However, since 2019, the workshops and teaching practicum portion has then been respectively reduced to only three weeks. At the end of the program, the PPG students are later required to pass the Performance

Test (or *Uji Kinerja*) and Knowledge Test (or *Uji Pengetahuan*) to be certified as professional teachers.

However, there are still disagreements and varied conclusions in determining the effectiveness of teacher certification programs. Several studies in the USA have revealed diverse outcomes of teacher certification programs on teachers' and students' performances (Goe & Stickler, 2008; Greenwald et al., 1996; Kane et al., 2008; Rice, 2003). Some studies reported that teacher certification program possesses a significantly good correlation with students' learning outcomes (e.g., Greenwald et al., 1996) and showed good impacts on the better students' accomplishment on mathematics subject (Rice, 2003). On the other hand, Goe and Stickler (2008) discovered that the certification title on teachers only contributed little to students' academic performances in most American schools. Kane et al. (2008) also discovered that, in general, whether teachers are certified or not has zero effect on students' academic achievements.

The disputes on scientific findings of the effectiveness of teacher certification programs also occurred in Indonesia. The study conducted by Fuad (2017) discovered that the certified and uncertified teachers' performances are essentially similar; both of them only make trivial impacts on students' academic accomplishments. On the contrary, the studies conducted by Brotosedjati (2012) and Dewanto et al. (2016) revealed that teacher's certification program positively contributes to the quality of students' learning process and outcomes in all levels of education. The teachers' certification program was also proven to provide notable impacts on teachers' quality (Sutopo, 2017) and the welfare of teachers from the additional professional allowance entitled to teacher certification (Nurhattati et al., 2020). Regardless of the scholarly debates, the teacher certification program in Indonesia is still of great importance. It serves as a benchmark of the professional training program (Jalal et al., 2009) and as a learning and self-improvement opportunity for both pre-service and in-service teachers to accelerate their professionalism and expertise as teachers.

2.2 Reflective Practice: A Component of Teacher Professional Development

To embrace challenges, needs, and progressing changes in the education of the 21st century, teachers, as professional educators, need to continuously accelerate their skills, attitudes, competencies, and understanding toward the subject they teach and their teaching methods and practices. It means that teachers, as lifelong learners, need to be continually involved in the on-going process of professional learning and development (Borko, 2004). This constant and on-going teacher's acceleration effort is called Teacher Professional Development. Richards and Farrell (2005) described teacher professional development as the continuation of teachers' learning and exploration in understanding themselves and their teaching professions and bringing their professional knowledge and skills up to the current teaching trends and curriculum. In Indonesia, carrying out teacher continuing professional development is every educator's right and obligation throughout their teaching careers (President of Republic of Indonesia, 2008). Furthermore, Richards and Farrell (2005) suggested that teacher professional development has several types of activities that teachers can engage in, such as making teaching portfolios, self-monitoring or reflective practice, and keeping a teaching journal.

Reflective practice, by definition, is a practice where teachers critically reflect upon their teaching performances and their pupils' learning experiences through the evidence they have collected and make fact-based decisions and solutions to improve their teaching quality (Farrell, 2013). Richards and Lockhart (2007) noted that during the reflection stage, teachers need to look upon the facts they find from the existing evidence (i.e., journals, reports, audio-recording, and video-recording, etc.) to identify the particular facet of their teaching that needs to be improved, describe the issues they are working on, plan some modifying strategies and interventions, and examine any future consequences and changes from the strategies and interventions that have been planned. It then leads to teachers' deeper, factual and long-term understanding and consciousness of their own teaching, and avoids what Farrell (2013) described as teachers' assumptions and impulsive thoughts on how their teaching might be.

In its term, reflective practice has long sparked different interpretations in explicating a precise conceptual construct of 'reflective practice' and explaining the process of reflection (Carlgren et al., 1994). Dewey (1933) pioneered the reflective practice by formulating reflection as a complex, rigorous, and systematic mode of thinking (similar to the model of inquiry) which can bring in positive changes and future improvement for practitioners. Farrell (2012) noted that this description echoes the concept of 'reflection on action' which was later initiated by Schön in 1983. This outline by Dewey (1933) makes possible of subsequent various distinctions in defining the concepts of reflective practice.

One major example, Schön (1987) extended Dewey's early notion of reflection by drawing a distinction between the practice of 'reflection in action' (reflection during the event) and 'reflection on action' (reflection after the event/activity in order to strive for future improvements). Another major example, Jay and Johnson (2002) detailed Schön's work by formulating three types of reflection in the context of education, namely 'descriptive reflection' (the first phase of reflection where teachers describe the problems or what is happening), 'comparative reflection' (the second phase of reflection where teachers reflect through different scenarios and other people's perspectives), and 'critical reflection' (the culminating phase of reflection where teachers evaluate and consider all scenarios and alternatives as well as bringing together all the findings and existing information to arrive at desired changes and 'a renewed perspective' (Jay & Johnson, 2002, p. 77). Several years later, Farrel (2012, 2013) explained that Schön's 'legacy of reflection in action' and 'reflection on action' has further enriched our understanding into another type of reflection, which is the 'reflection for action' (reflecting teachers' present, past, and future actions in order to predict the same issues which might have happened in the next teaching period and to set up future interventions/efforts to improve on what are currently lacking).

2.3 Integrating ICT in English Language Teaching

ICT (Information, Communication, and Technology) is an umbrella terminology referring to all technologies and services for data processing and communication (Kingsley, 2017). In general terms, ICT is every kind of technology and system to capture, create, store, process, and manipulate information to produce, transfer, and exchange information (Ghasemi & Hashemi, 2011; Hoque & Alam, 2010). The integration of ICT in education plays a major role in facilitating teachers (Philipp, 2013) to introduce, communicate, and imprint valuable goals and values to students

(Kingsley, 2017), enabling teachers and students to effectively attain desired learning outcomes (Tri & Nguyen, 2015), promoting innovations and changes in education (Kingsley, 2017) and thus elevating the quality of education (Bindu, 2016, as cited in Hermawan et al., 2018).

In the 2013 Curriculum, all subjects, including English, are demanded to be taught in ICT-based learning environments (Ministry of Education and Culture of Republic of Indonesia, 2014a; 2014b). It can be clearly seen that the 2013 Curriculum stresses the use of technology in the classrooms (Hermawan et al., 2018). Thus, ICT integration plays a vital role in maximizing the final output of language teaching and learning processes. Furthermore, the significant benefits of using ICT in English language teaching have been widely felt among many teachers and students. Laptop (notebook), projector, and internet are the three most commonly used ICT tools in English classrooms. In addition, digital cameras and camera phones are usually used by teachers to document their teaching and learning process in the classroom for the purposes of evaluation and reflection.

3. METHODS

3.1 Research Participants and Location

The research site was at the English Language Education Program (ELEP) of Universitas Negeri Padang (UNP), Indonesia. A number of 82 out of 120 pre- and in-service secondary school English teachers participating in the PPG program during the years of 2018-2019 at UNP returned the questionnaire (further elaborated in 3.2). When the questionnaire was distributed, the teachers had have gone back to their own schools. Thus, as mentioned above, the questionnaire was spread out using Google Forms, of which the link was sent through several WhatsApp groups. Meanwhile, five ELEP lecturers were participating in filling in the questionnaire. Lecturers' involvement was expected to provide the perceptions of the importance of the reflective practice with video recording seen from a different point of view. The same procedure was applied to this participant group, although initially, the lecturers would be interviewed. However, due to their overlapped commitment with their teaching activities and interaction constraint during the Covid-19 pandemic, it was finally decided that they were given a questionnaire with some open-ended questions.

3.2 Data Collection and Instrument

The data were collected through two sets of questionnaires distributed to the teacher and lecturer participants. As teacher participants were located in many regions of five provinces (West Sumatra, North Sumatra, Aceh, Jambi, and Riau), Google Forms were selected as the most effective way of distributing the questionnaire. This is because they are easy to deliver through the link provided; besides, it is also convenient for research respondents to fill in the forms simply using their mobile phones. Both questionnaires contained closed and open-ended questions, but the closed ones were more dominant than the open ones. The questions were formulated based on the concept of needs analysis, reflective practice, and ICT integration in

language teaching. Before being distributed, questionnaire reliability was measured using SPSS and then validated by an expert.

The closed-ended questions asked teacher and lecturer participants about the importance of implementing the reflective practice method by utilizing ICT in peer teaching activities. The open-ended questions requested the participants' opinions of reflective practice and suggestions about implementing the reflective practice.

3.3 Data Analysis

The data obtained were in two forms; consequently, the analysis was conducted in two ways. First, closed-ended responses were analyzed quantitatively by getting the percentage of each question over the participants' response degree and by calculating the Mean (M) and Standard Deviation (SD). Meanwhile, to compare teachers' and lecturers' perceptions, Mann Whitney U test was calculated using SPSS 26. Second, open-ended answers were categorized by using a checklist matrix suggested by Miles et al. (2014, p. 110), which is "a format for analyzing field data on a major variable or general domain of interest". In discussing the responses from the participants in the section of Results and Discussion below, teacher participants are addressed as TP and lecturer participants as LP; both of them are given numbers accordingly.

4. RESULTS AND DISCUSSION

The results of this study, interspersed with the discussion for each, are classified into two broad categories:

1) teachers' perceptions about the needs of reflective practice utilizing video recording during peer teaching, and
2) lecturers' perceptions of the same needs. Each category is further divided into two sections:
   a) description, analysis, and discussion of teacher and lecturer participants' responses to closed-ended questions, and
   b) description, analysis, and discussion of teacher and lecturer participants' responses to open-ended questions.

4.1 English Teachers' Perceptions on the Needs of Implementing Reflective Practice through Video Recording during Peer Teaching

4.1.1 English teachers' perceptions through closed-ended questions

In general, nearly all teachers (80 or 97.68%) perceived that the implementation of reflective practice using video recording during peer teaching activity is very important (34 or 41.83%) and important (46 or 55.85%). Of the 10 statements, four of them (statements No. 3, 6, 9, and 10) obtained the highest number of positive responses in which no participant (0%) thought that those activities were less important or not important. This positive pattern, hence, indicates a strong link among these four most desirable statements. A detailed explanation and discussion about the relationship between the four statements with the high rate of participants' perceived needs are presented in Table 1.

Table 1. English teachers' responses to closed-ended questions.

No.	Statements	Response degree*				M**	SD***
		Very important	Important	Less important	Not important		
1.	Teachers record their entire teaching performances during peer-teaching activity into a video for the purposes of self-reflection.	37.80% (31)	59.76% (49)	1.22% (1)	1.22% (1)	3.34	2.85
2.	Teachers watch or observe the full video of their teaching performances to identify the strengths and weaknesses of their teaching.	57.32% (47)	40.24% (33)	2.44% (2)	0.00% (0)	3.55	3.06
3.	Each teacher has his/her own reflective journal where they write about the strengths and weaknesses of their teaching.	51.22% (42)	48.78% (40)	0.00% (0)	0.00% (0)	3.51	3.01
4.	Teachers write down and report all of their observation and reflection results after watching the video of their teaching in this reflective journal.	40.24% (33)	57.32% (47)	2.44% (2)	0.00% (0)	3.38	2.88
5.	During their observations, teachers write down and describe the strengths of their teaching.	24.39% (20)	64.63% (53)	1.22% (1)	9.76% (8)	3.12	2.65
6.	During their observations, teachers write down and describe the weaknesses, challenges, and difficulties that they have in their teaching.	46.34% (38)	53.66% (44)	0.00% (0)	0.00% (0)	3.46	2.96
7.	During their observations, teachers write down and describe the contributing factors and reasons for the difficulties that they have to have a clearer understanding of their teaching performances.	39.02% (32)	59.76% (49)	1.22% (1)	0.00% (0)	3.38	2.88
8.	Teachers write down and share their evaluations/ thoughts/comments/ critiques about their own teaching performances.	30.49% (25)	65.85% (54)	3.66% (3)	0.00% (0)	3.27	2.77
9.	Teachers include and combine all the critiques/ suggestions from the instructors, other peer-teacher participants, and the teachers themselves in order to draw a conclusion and find out solutions.	43.90% (36)	56.10% (46)	0.00% (0)	0.00% (0)	3.44	2.94

Table 1 continued…

10.	Teachers write down and scheme some solutions and self-corrective actions for the improvement of their future teaching performances.	47.56% (39)	52.44% (43)	0.00% (0)	0.00% (0)	3.48	2.98
	Mean of frequency of response degree	41.83% (34.3)	55.85% (45.8)	2.07% (1.7)	0.24% (0.2)		
	Overall mean					3.39	2.90

[*] The response degrees are presented in percentages and frequencies (in brackets)
[**] M = Mean
[***] SD = Standard Deviation

Statement number 3 was selected with very important answers by more than half of teachers (42 or 51.22%) and important answers by nearly half (40 or 48.78%). This statement comes first as the most preferred one, indicating that all teachers agreed that the availability of reflective journals was substantially needed during peer teaching activity. These data may be interpreted that all teachers have already possessed the reflective journal or would like to have one. Implicitly, the high needs upon reflective journal are derived from the following possibilities. First, it confirms Farrell's (2013) view of journal writing, pointing that writing journal entries allow teachers to practice self-reflection at their own preferred pace. Second, journal writing can benefit student teachers in going deeper into their teaching practices leading to their increased understanding of their teaching skills, as reported by Tiarina and Rozimela (2017).

For statement number 6, 44 teacher participants (53.66%) perceived the importance of writing down their weaknesses, problems, and difficulties they experience or encounter during the teaching and learning process, while 38 teacher participants (46.34%) believed that this activity was very important. This statement relates favorably to number 3, and thus, there is a link between these two data. If they thought they needed to have a reflective journal to record their strengths and weaknesses during the teaching and learning process, they must have needed to jot down all problems and difficulties they find during teaching practices. For statement number 10, 39 teacher participants (47.56%) sensed the high importance of finding solutions and doing self-correction in their teaching. This figure is slightly lower than those (43 or 52.44%) who thought it important. Following this, statement number 9 is considered important by the highest number of teacher participants (46 or 56.10%) and very important by fewer others (36 or 43.90%).

To put all these findings together, three following indicators are considered as the most essential items by all teacher participants to be included in their reflective journals: they are (1) teachers' weaknesses, challenges, and difficulties of their teaching, (2) the combination of critiques and suggestions coming from the instructors, other peer-teacher participants, and the teachers themselves, and (3) solutions and self-corrective actions designed by teachers in order to improve their future teaching performances. All findings revealed earlier correspond to the framework of reflection for action which Farrell (2013) defines as teachers' reflection on their past teaching experiences to investigate any issues they face. It further implies that all student teachers might expect that reflective practice using video recording in peer teaching would equip them to be independent problem-solvers (Rozimela & Tiarina, 2018;

Tiarina & Rozimela, 2017) and independent decision makers (Cirocki & Widodo, 2019).

In contrast, six other statements (numbers 1, 2, 4, 5, 7, and 8) received negative responses from a small number of teacher participants. Statement number 7 is considered less important by only one teacher participant (1.22%), whereas for statements numbers 2 and 4, only two teacher participants (2.44%) think similarly. On the other hand, statement number 1 gets less important from only one teacher participant (1.22%) and not important from another one. Statement number 5 (with 8 or 9.76% participants answering less important and another one answering not important) is the least favorable statement among the 10 statements. These nine teacher participants may think that writing down their teaching strengths is not as crucial as their weaknesses. These indicate that not all teachers are prepared to identify their own strengths during reflection. Guiding teachers to realize their potentials and strengths is required because, as also noted by Farrell (2013), being overly critical of own problems will only make the practice of reflection becomes troublesome and uncomfortable while focusing on "what we do well" can help cope with this situation (p. 34).

All the above-explained findings can be concluded as follows. The total rate of disapproval responses on average is only less than 5% (M=2.31%), compared to the average rate of approval responses which, in total, is around fortyfold higher (M=97.68%). These data demonstrate that the majority of teacher participants address that the implementation of reflective practice using video recording in peer teaching is, by all means, necessary.

4.1.2 English teachers' perceptions through open-ended questions

English teachers' responses to open-ended questions regarding their needs of implementing reflective practice with video recording for peer teaching activity have revealed several important points.

a. Reflective practice using video recording in peer teaching is highly important and useful to improve teaching practices

The majority of free-form responses written by teacher participants highlight the importance and benefits of implementing reflective practice using video recording in peer teaching. Most of them believed that this method opened an opportunity for teachers to analyze their strengths and weaknesses, as evidenced by the following excerpts.

I1 Reflective practice method is really needed, and it is recommended for in-service teachers participating in the PPG program to improve their future teaching performance. (TP24)

I2 ...in my opinion, reflective practice is an excellent method to improve teachers' competencies and creativity in their teaching and learning process. (TP39)

As exemplified by I1 and I2, teacher participants believed that there is a potential of conducting reflective practice to improve the quality of teacher's future teaching practices. Substantially, the teacher participants also perceived that through self-evaluation, teachers would be able to become more competent and creative. These data are in accordance with Rozimela and Tiarina's (2018) findings which also discovered

that reflective practice allowed teachers to appreciate and understand their teaching strengths and weaknesses, promoting confidence and curiosities to learn and improve continuously. This eventually turns their teaching journey into what Jay and Johnson (2012, as cited in Farrell, 2013, p. 27) signify as a "personally meaningful" journey.

b. Reflective practice by teachers using video recording in peer teaching provides a positive effect on students' learning

Some teacher participants even provided more critical responses in terms of the broader effect of reflective practice, as shown in I3.

I3 My suggestion is that the reflective practice method should be implemented more seriously, as through this method, the teacher can motivate students to learn. (TP7)

Teachers' quoted responses above show that they are aware of the significance of implementing reflective practice; not only to improve their own teaching quality but also the learning outcomes that their students will achieve. This significantly supports the claims made by Farrell (2013) and Cirocki and Widodo (2019). They argue that reflective practice aid teachers to be well-informed and more conscious of the consequences of their teaching practices and strategies towards their students' learning.

c. Instruction and guidance sessions for introducing the model of reflective practice are needed

Before implementing reflective practice using video recording in peer teaching, several teacher participants suggested that some instructions and guidance sessions should be provided to get familiarized with the method. The following excerpts show the suggestions.

I4 Before PPG begins, it will be much better if the PPG students are provided with some instruction or information about the method of reflective practice. (TP23)

I5 We need an additional session for teacher training related to the implementation of reflective practice. (TP58)

The responses above show teachers' slight anxiety about the implementation of the new method despite their positive attitudes in general. This can be completely understood as the implementation of reflective practice may seem challenging for them. This 'challenging' view is consistent with the findings obtained by Sunra et al. (2020), highlighting teachers' difficulties in performing an effective reflection are due to their lack of understanding about reflective practice.

d. The implementation of reflective practice needs to be clear (indicators, models, examples, and modules should be provided)

Besides the instruction and training, other teacher participants also emphasize the aspect of clarity in implementing reflective practice in peer teaching. This clarity is related to the explicit indicators, specific models and examples, and modules for

PPG students to learn, understand, and compare their teaching performances with the lecturers' ideal representations. It can be seen in the following excerpt.

I6 I think that the PPG students need a video example that demonstrates an ideal learning process where the teacher serving as a role-model in the video carries out a near-perfect teaching performance. (TP16)

This suggestion shows that they are eager to conduct the to-be-implemented method. This reminds us, the researchers, to carefully design and develop the model equipped with its instruments and indicators. Perhaps, three (writing reflective journals/diaries, peer observation of teaching, reflecting with digital technologies) out of five formats implemented by Cirocki and Widodo (2019) in their reflective practice workshop with Indonesian teachers can be taken as parts of the guidelines in outlining the learning model.

4.2 English Lecturers' Perceptions on the Needs of Implementing Reflective Practice through Video Recording by English Teachers for Peer Teaching Activity

4.2.1 English lecturers' perceptions through closed-ended questions

To obtain data from the lecturers who became the PPG instructors during the PPG program, the same questionnaire was also distributed to them. Similar to the analysis of teachers' responses, lecturers' responses are also analyzed by using two techniques to calculate the percentage of response degrees to closed-ended and themes for answers to open-ended questions.

However, unlike the teachers' responses that range from very important to not important, lecturers' responses are only found in two categories: very important and important. None of them selected the other two categories (less important and not important). Table 2 shows that all lecturers (100%) agree that the implementation of reflective practice using video recording in peer teaching is very important (M=60%) and important (M=40%). None of them considered less important or not important upon all ten statements. Another striking feature is that the number of very important answers (60%) is higher than that of the number of important answers (40%). These trends then imply that overall, according to the lecturers, teachers' needs to implement reflective practice using video recording in peer teaching is absolutely important. This is in line with Philipp (2013), who asserted that technology is essential to be used in education as an instrument to support learning, collaboration, curriculum development and staff development.

Table 2 demonstrates the response degree from the five lecturers who perceived the high importance of reflective practice utilizing video recording during PPG program peer teaching activity. Unlike teachers' responses which are quite varied, lecturers' responses are substantially uniform. In other words, all lecturers had similar perceptions on the degree of responses related to teachers' needs of reflective practice taking advantage of technology devices. These data are accordingly closely related to the Mean (M) and Standard Deviation (SD) of each statement. As seen from Table 2, the Mean and Standard Deviation for each statement are exactly similar; that is 3.60 and 3.10, respectively.

Furthermore, the calculation of Mean Rank and Test Statistics are described in Table 3 and Table 4, respectively.

Table 2. English lecturers' perceptions through the close-ended question.

No.	Statements	Response degree*				M**	SD***
		Very important	Important	Less important	Not important		
1.	Teachers record their entire teaching performances during peer-teaching activity into a video for the purposes of self-reflection.	60% (3)	40% (2)	0% (0)	0% (0)	3.60	3.10
2.	Teachers watch/observe the full video of their teaching performances in order to identify the strengths and weaknesses of their teaching,	60% (3)	40% (2)	0% (0)	0% (0)	3.60	3.10
3.	Each teacher has his/her own reflective journal in which they write about the strengths and weaknesses of their teaching.	60% (3)	40% (2)	0% (0)	0% (0)	3.60	3.10
4.	Teachers write down and report all of their observation and reflection results after watching the video of their teaching in this reflective journal.	60% (3)	40% (2)	0% (0)	0% (0)	3.60	3.10
5.	During their observations, teachers write down and describe the strengths of their teaching.	60% (3)	40% (2)	0% (0)	0% (0)	3.60	3.10
6.	During their observations, teachers write down and describe the weaknesses, challenges, and difficulties that they have in their teaching	60% (3)	40% (2)	0% (0)	0% (0)	3.60	3.10
7.	During their observations, teachers write down and describe the contributing factors and reasons for the challenges/difficulties that they have in order to have a clearer understanding of their teaching performances.	60% (3)	40% (2)	0% (0)	0% (0)	3.60	3.10
8.	Teachers write down and share their evaluations/thoughts/ comments/ critiques about their own teaching performances	60% (3)	40% (2)	0% (0)	0% (0)	3.60	3.10

Table 2 continued…

9.	Teachers include and combine all the critiques/ suggestions from the instructors, other peer-teacher participants, and the teachers themselves in order to draw a conclusion and find out solutions.	60% (3)	40% (2)	0% (0)	0% (0)	3.60	3.10
10.	Teachers write down and scheme some solutions and self-corrective actions for the improvement of their future teaching performances.	60% (3)	40% (2)	0% (0)	0% (0)	3.60	3.10
	Mean of frequency of response degree	3	60%	2	40%		
	Overall mean					3.60	3.10

[*] The response degrees are presented in percentages and frequencies (in brackets)
[**] M = Mean
[***] SD = Standard Deviation

Table 3. Mean rank of participants' responses to closed-ended questions.

	Scores
Mann-Whitney U	149.000
Wilcoxon W	3552.000
Z	-1.033
Asymp. Sig. (2-tailed)	.301

Table 4. Test statistics.

Participants	**N**	**Mean rank**	**Sum of ranks**
Lecturers	5	55.20	276.00
Teachers	82	43.32	3552.00
Total	87		

Table 4 shows that Asymp sig (.301) is higher than α (.05). This means that there is no difference between lecturers' and teachers' perceptions on the needs of reflective practice assisted by technology devices, particularly by video recording.

4.2.2 English lecturers' perceptions through open-ended questions

Given an open-ended question related to the needs of implementing reflective practice with video recording, the lecturer participants provided responses categorized in the following points.

a. The needs of some orientations and training related to video recording and journal writing

Lecturer participant 1 (LP1) argued that teacher participants needed some orientations and training on how to record videos of their own teaching and write their self-reflection reports as indicated below. This is related to the other findings of lecturer participants' perception of English teacher's pedagogical, professional, and

ICT competencies. However, the findings are not discussed in this article as they are irrelevant. Most lecturer participants perceived that many English teachers have limited ICT literacy.

I7 Teachers need to be trained with some tutorials on how to record a video that features the whole process of their teaching and learning and some instruction/guidance to make a reflective journal for successful implementation of this method. (LP1)

What the lecturer thought here is in accordance with that of some teacher participants' suggestion in section 4.1.2d. However, this lecturer's suggestion is more comprehensive and is actually addressed to the researchers who will make the preparation. Prior serious and careful preparation needs to be taken so that the implementation of the method can run well. The preparation covers the provision of training and guidance to the teachers participating in the PPG Program. Again, the formats of reflective practice suggested by Cirocki and Widodo (2019) can be considered as the guide to designing the learning model.

b. The needs for support from IT specialists and visual communication designers

Lecturer participant 2 (LP2) addressed the need to involve some IT specialists and visual communication designers during the implementation of reflective practice with video recording in the peer teaching section. This is demonstrated in I8.

I8 We need to incorporate or engage with an IT specialist or visual communication designer during the implementation of this method. (LP2)

LP2 seems to support the design and development of this learning model. Reflective practice to be implemented is strongly supported by IT literate that the teachers should possess, especially if we adopt the format suggested by Cirocki and Widodo (2019), which is "reflecting with digital technologies" (p. 21). Thus, the lecturer warned us to provide IT specialists or visual communication designers during the implementation of reflective practice as it will involve the world of technology. When needed, the IT specialist is always available in case any teacher lacks IT literacy. This suggestion may also imply another message. Almost all lecturer participants had the same idea about teacher's lack of IT competency in the process of teaching and learning as they had demonstrated during peer teaching activity. We assume that reality may also inspire this suggestion.

c. The good synergy between the instructors, supervising teachers, and student teachers is important

Lecturer participant 5 (LP5) is concerned about positive collaboration and teamwork between all involved parties in succeeding in implementing this method, as shown in I9.

I9 It is necessary to have a synergy collaboration between the supervising teachers, lecturers, and the teacher participants throughout the phase of preparation and implementation of this method (LP5).

What LP5 suggested is very important as there will be cross-checked among the parties involved in the implementation process. This will particularly occur if 'peer

observation' suggested by Cirocki and Widodo (2019) is selected as a component of reflective practice. PPG participants will do peer observation and then peer reflection. These activities need to be supervised by supervising teachers or lecturers. Thus, there will be a synergy collaboration among all parties, which will achieve optimal outcomes of reflective practice implementation assisted by digital technologies during peer teaching activity.

There are similarities and differences in comparing teacher participants' responses with those of lecturer participants to the open-ended question. It can be stated that both groups have similar perceptions in terms of the importance of doing reflective practice assisted by video recording despite a very small percentage of negative responses found in the teachers' answers. Both groups also perceived that prior to the reflective practice execution, a kind of training or tutorial should be provided to the teachers. Ong et al. (2020) have also noted the importance of training and familiarization of teaching tools to pre-service teachers before they enter the real world of teaching.

However, both groups are not in high agreement for one point. While teachers highlighted the benefits of reflective practice with video recording for their teaching quality and students' success, lecturers show an indication of doubtfulness about teachers' IT or technology capability in implementing the method. Thus, the lecturer participants strongly recommended the provision of training, IT specialists, and visual communication designers who can collaborate. Their long-term comprehension, ability, professionalism, appreciation and mindfulness of their own teaching is vital so that they can solve teaching and learning problems in the classroom (Farrell, 2013; Jalal et al., 2009; Richards & Lockhart, 2007).

5. CONCLUSION

Almost all research related to the implementation of reflective practice shows positive outcomes and promising improved quality of teachers' teaching method and strategy despite problems and challenges teachers encountered during its implementation. As for this current study, there is no exception. More than 90% of teacher and 100% of lecturer participants believed that there is a potential good effect of implementing reflective practice – in this case to be assisted by teachers' IT literacy and competency – on the improvement of teacher's teaching method, strategy, and innovation. Some other teacher participants even highlighted the potential impact on students' motivation and learning outcomes when they reflect on their own teaching practices. However, the lecturers recommended training and IT specialists to help the teachers implement the reflective practice with video recording. The lecturers may have thought that many teachers lack the ability to utilize IT devices when it comes to using the technology. However, the already obtained data from lecturer participants could have been more rigorous if an interview had been administered. Due to the lecturer participants' workloads and interaction constraints during the Covid-19 pandemic, the interview was finally canceled.

Nevertheless, the findings of this need analysis may not only add information to the previous and existing similar studies but may contribute to those interested in designing a teaching and learning model for a microteaching class of any other subjects. Although this needs analysis was conducted on English teachers who

participated in the PPG program, the results may also be beneficial and applicable for other subject teachers. Future researchers who may also be interested in this topic can investigate the impact of implementing reflective practice on students' motivation and learning outcomes or teachers' sustainable professional development.

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