PASAA
Volume 62
July - December 2021

Reflective Practice in Teacher Education: Issues, Challenges, and Considerations

Ponsawan Suphasri
Faculty of Applied Arts, King Mongkut's University of Technology North
Email: ponsawan.s@arts.kmutnb.ac.th
Sumalee Chinokul
Faculty of Education, Chulalongkorn University, Thailand
Email: sumalee.c@chula.ac.th

Abstract

Reflective practice has become a buzzword in teacher education as a mark of professional competence. Although the significance of reflective practice has long been acknowledged, a mutual agreement has still not been reached on how it should be defined or what processes should be initiated in teacher education programs. This article explores how the paradigm and process of reflective practice change over time, along with a review of how reflective practice is employed in teacher education. Furthermore, the challenges stemming from the literature review and recommendations on how to resolve them are explored. Considerations of how technology can enhance teachers' reflective practice are also examined. Finally, the impact of reflective practice on pre-service teachers' professional life is highlighted.

Keywords: reflective practice, teacher education, issues of reflective practice, challenges of reflective practice

Introduction

Reflective practice is usually considered a form of cyclical and systematic inquiry where teachers carefully collect evidence about their teaching practice in order to analyze, interpret, and evaluate their experiences with the intention to improve their future teaching (Farrell, 2016a; Mathew & Peechattu, 2017). It is also a meaning-making process that enables teachers to grow (Rodgers, 2002). Reflective teachers not only aim at gaining better solutions; they also attempt to deepen their understanding of themselves as well as how the solutions they have discovered connect to other experiences and ideas. Indeed, the value of reflective practice has repeatedly been confirmed (Loughran, 2002; Yalcin Arslan, 2019). As the literature suggests, reflective practice is a key factor that brings change to two main areas of teachers' professional life, namely, teacher identity and teacher quality.

Teacher identity is a term that is used to refer to the way in which teachers understand themselves as teachers (Mockler, 2011). The term entails both the personal and professional aspects of a teacher. For pre-service teachers in particular, they need to build a strong understanding of their selves and of themselves within the outside context as these influence their teaching quality. Reflective practice is a key to promote this understanding (Beauchamp & Thomas, 2009). In other words, reflective practice provides teachers with an opportunity for their emotions, beliefs, and personal philosophies of teaching to be challenged and refined (Walkington, 2005). For example, Slade et al. (2019) investigated a change in a teacher candidate's viewpoint of her students' learning performance after keeping a reflective journal for about approximately one semester and found that once the teacher realized that her students were struggling with their poverty, which led to their low learning outcomes and classroom misbehaviors, she became more compassionate toward them. This study aligns with Korthagen's (2017) assertion that reflective practice assists beginning teachers in identifying what is going on inside their minds. For this reason, the new insights gained from reflection can lead to new and effective behaviors in the classroom (Korthagen, 2017).

Secondly, reflective practice also contributes to the enhancement of teacher quality. One aspect of teacher quality that is impacted by reflective practice is his or her professional development, which is often defined as how a teacher learns particular knowledge and a set of skills within a specific context of situation (Koellner & Jacobs, 2015). When teachers reflect on their teaching practices, their awareness of their teaching increases, and they can then unlearn the ineffective teaching methods which may have undesirable effects on students' learning experience (Ciampa & Gallagher, 2015). Meierdirk (2017) has stated that pre-service teachers usually use reflection in order to improve their teaching in areas of classroom activities, lesson planning, behavioral management, and performance indicators. Alger (2006) gives an example of how reflective practice impacts pre-service teachers' classroom teaching and enhances the repertoire of their strategies when dealing with problems. After engaging in reflective practice, pre-service teachers in Alger's study were able to move away from a teacher-centered classroom to a more student-centered one. In addition, evidence from their reflection helped them gain control of the classroom through punishment at the beginning of the first semester before switching to a relationship-building strategy toward the end of the second semester. Generally, reflective practice allows pre-service and in-service teachers to stop for a moment to take a good look into their past teaching experiences. Through the means of self-observation, self-analysis, and self-evaluation, they can explore their experiences, discover "the truth" about themselves, and improve their professional life.

This article is written with the interest of reflective practice in teacher education in mind; it aims to explore how the process of reflective practice in teacher education can be developed over time. In the beginning, the common practices of how reflective practice is implemented in teacher education are examined. In a later section, challenges faced by teachers who try to use reflective practice are discussed and recommendations on how to tackle them are given.

Finally, consideration of how technology can enhance reflective practice is reviewed, and the impact of reflective practice on teacher identity and teacher quality is highlighted.

1. Issues of Reflective Practice in Teacher Education

According to a literature review, reflective practice is a notion that has developed over time. The first part of its evolution elicited from the review is the changes in the reflective practice paradigm, and the second part of its evolution concerns the process of reflective practice. Moreover, the literature review suggests that caution be used when teachers employ reflective practice in teaching practicums.

1.1 Evolution of the Reflective Practice Paradigm

When addressing the term "reflective practice," two of the most influential theorists, Dewey (1933) and Schön (1983), have provided some basic ideas for a common understanding of the term. Dewey sees reflective practice as a systematic thinking task where teachers use evidence obtained from past experience and their knowledge or beliefs to make sensible decisions about their teaching instead of reaching poor decisions based on routine. In other words, reflective practice and problem-solving tasks are similar in Dewey's view. Building on Dewey's work, Schön (1983) extends the concept of reflective practice to account for the continuity of the thinking process by introducing the aspect of timeframes in which reflection takes place. Reflection occurs not only after gaining a teaching experience (reflection-on-action), but it can also take place during the process of teaching (reflection-in-action). According to Schön, teachers make decisions about their future teaching experience based on their understanding of their previous experiences. These two notions have been a foundation for research on reflective practice for a long time; however, they are too restricted and are unable to provide an understanding of the life of teachers as a whole. Teachers investigate what they have experienced during their teaching with the idea of "fixing" the errors that they have made (or reflection-as-repair as termed by Freeman, 2016). Therefore, the end result of Dewey's and Schön's concepts of reflective practice is too dominating in terms of teaching techniques or classroom behaviors while it ignores one of the most important aspects in teaching; that is, the teacher as a person. By overlooking their personal core qualities, such as emotion, trust, courage, sensitivity, flexibility, decisiveness, spontaneity, and commitment while reflecting on their past experiences, teachers increase the risk of delivering superficial and ineffective solutions in the next lesson (Korthagen, 2017).

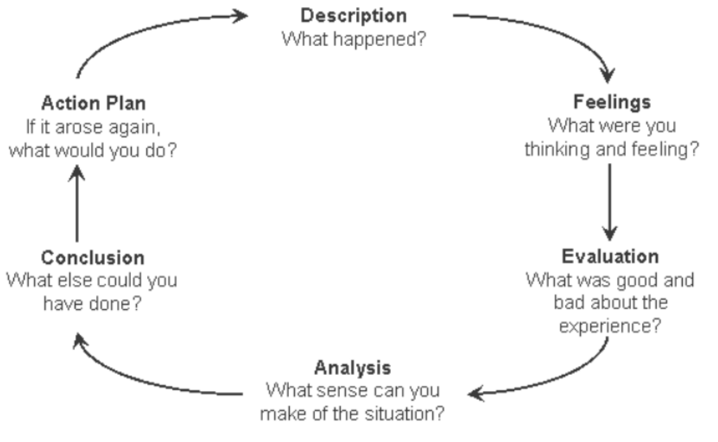
Taking the previous issue into account, more holistic approaches of reflective practice have recently been introduced by researchers in the field of teacher education, such as Korthagen's ALACT model (2017) and Farrell's framework for reflecting on practice (2019). Wright (2010) also emphasizes that reflective practice should focus not only on correction of teaching behaviors but also strategies for making reflection more meaningful to the teachers. Therefore, these recent frameworks attempt to shift the focus of reflection from action-oriented reflection to meaning-oriented reflection. Korthagen (2017) agrees that asking teachers to reflect on their personal core qualities along with their teaching competencies allows them to gain deeper awareness of their essence of the classroom problems. In other words, reflecting on teaching competencies requires teachers to explore the situations from the outside while they can examine themselves from inside out when reflecting on their feelings, beliefs, and other core qualities. This notion supports the concept of "mindfulness practice" introduced by Mortari (2012) which asserts that teachers should be aware of their inner lives first before solving their classroom problems or responding to the students' needs because teachers' self-understanding has a strong influence on their professional roles and behaviors.

1.2 Evolution of the Reflective Practice Process

When it comes to executing reflective practice, pre-service teachers may have an unclear picture of how to reflect. Three frameworks that can be used to guide and "scaffold" the reflective process in teacher education are introduced in this section. The first framework was first introduced by Gibb (1988) and is arranged in a cycle as illustrated in Figure 1.

Figure 1

Gibb's Reflective Cycle (1988)



This six-stage framework shows the continuous development of pre-service teachers' reflective thinking. The six stages are described in the following order:

Stage 1: Description – This stage asks pre-service teachers to revisit the puzzling incident that made them curious or wish to understand better. They then describe the details of the situation. It is important for pre-service teachers not to make any judgements or draw any conclusions about the incident.

Stage 2: Feelings – Here pre-service teachers explore the thoughts or feelings that they were having when the incident occurred. They should not make any analysis or judgements, but they have to be aware of how their thoughts and feelings were impacted by the incident.

Stage3: Evaluation – Pre-service teachers can evaluate what was good or bad about the incident, and this also includes what others did well or did not do well. Pre-service teachers should consider both, although the incident may seem totally negative.

Stage 4: Analysis – Pre-service teachers can justify or critique their actions based on their existing knowledge, on the relevant academic literature, or outside perspectives.

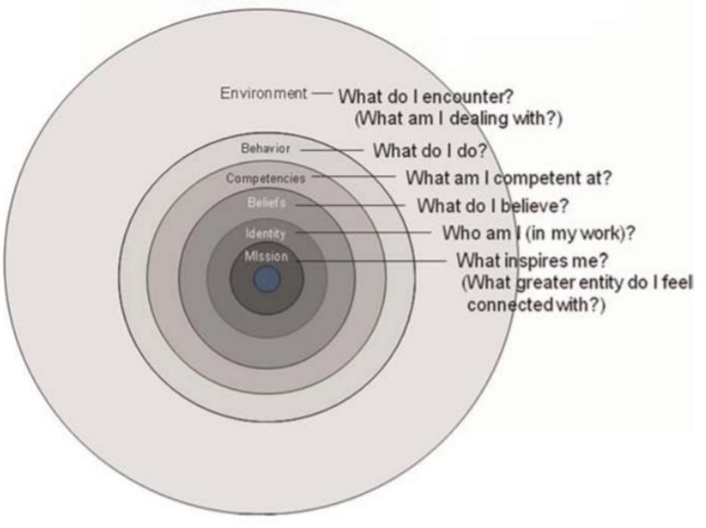
Stage 5: Conclusion – Pre-service teachers bring together what they have reflected on previously in order to draw logical conclusions about what they have learned or what they could have done differently.

Stage 6: Action plan – Considering the previous stages of the cycle, pre-service teachers suggest a plan for improvement in a similar situation.

The second framework in Figure 2 was developed by Korthagen and Vasalos (2005) who believe that teachers can understand the true meaning of a situation only when their reflection touches them personally and gives them opportunities to explore themselves as teachers. In this model, Korthagen and Vasalos use the analogy of an onion to represent pre-service teachers' reflection at different levels, moving from the outside to the inside. The first layer allows pre-service teachers to explore the challenges that they face; the second layer refers to how pre-service teachers cope with the challenges mentioned in the first layer; and in the third layer, pre-service teachers reflect on what they can actually do to solve the challenges. They explore what their assumptions or beliefs are toward their challenges during the fourth layer. Their assumptions about themselves are reflected in the fifth layer. Lastly, pre-service teachers explore what inspires and gives meaning to their lives or their profession.

Figure 2

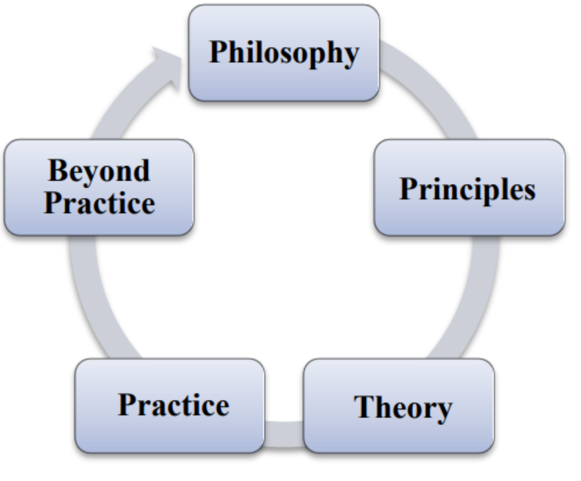
The Onion Model (Korthagen & Vasalos, 2005)



The last framework, shown in Figure 3 below, was proposed by Farell (2015) with the purpose to develop a holistic framework that combines all aspects of reflection, such as the intellectual and cognitive aspects of teaching practice, and the non-cognitive aspects of pre-service teachers' inner life. The framework consists of five levels: philosophy, principles, theory, practice, and beyond practice.

Figure 3

Framework for Reflecting on Practice (Farrell, 2015)



Stage 1: Philosophy – The purpose of this stage is for pre-service teachers to reflect on their background and previous life experiences. They gain a more in-depth picture of who they are while collecting information about their past experiences.

Stage 2: Principles – Pre-service teachers reflect on their assumptions, beliefs, and conceptions of teaching and learning. By doing this, they begin to realize whether these principles are transferred to the real classroom practice or not.

Stage 3: Theory – This stage requires pre-service teachers to examine the plans, teaching activities, and teaching methods that they choose to see if they can be translated in the classroom or not.

Stage 4: Practice – Here pre-service teachers examine the observable actions of both themselves and of their students. By observing their practice, pre-service teachers can investigate if their actions in the actual classroom are consistent with their reflection in the principles and theory stages.

Stage 5: Beyond practice – At this stage, pre-service teachers are encouraged to explore and examine the moral, political, and social issues that influence their practice both inside and outside their teaching context.

The purpose of this article reviewing these frameworks is not to select the best approach, but to explore the different dimensions of reflection emphasized within each one. In this way, teacher educators or supervisors can decide which framework is appropriate for a particular context, as well as the needs and ability of their pre-service teachers to reflect. Finlay (2008) asserts that pre-service teachers should not be presented with just one reflective practice framework. Instead, they need to be made aware that different frameworks can stimulate different levels of reflection, so each framework should be used selectively and appropriately.

Among the three frameworks mentioned, Gibb's framework is appropriate for pre-service teachers that are inexperienced reflective practitioners. This is because it provides step-by-step guidance for them to hold onto. Gibb begins with a simple task, asking pre-service teachers to revisit and describe the issues that they have had in class before proceeding to more complicated ones. This contrasts with the frameworks proposed by Korthagen and Vasalos and Farrell, which are more complex and suit pre-service teachers who are more familiar with reflective practice. Consistent with this idea, Hobbs (2007) agrees that pre-service teachers may feel more comfortable being introduced to a simpler and more descriptive framework in which they can safely practice their reflection. As their confidence grows, they can then experiment on reflective practice frameworks that demand a more complex analysis.

1.3 Caution in Implementing Reflective Practice in the Teaching Practicum

The teaching practicum, or as it is sometimes called teaching practice, field experience, or internship, has become one of the most critical aspects of teacher education programs today (Zeichner, 2002). It serves as a bridge connecting the gap between theory and practice because it allows pre-service teachers to apply the theoretical knowledge and teaching techniques that they acquired in their coursework in the real classroom setting. As a result, pre-service teachers gain a better understanding of teaching in the real-world context, recognize the students' needs, and acknowledge the difficulties in teaching that they may face in the future (Smith & Lev-Ari, 2005). However, the teaching practicum is also recognized as one of the most stressful times in a pre-service teacher's life since it is his or her first formal attempt at teaching. The pre-service teachers in Jusoh's study (2013) mentioned a long list of problems that they experienced during the teaching practicum, such as their inability to apply the theory learned into practice and lack of professional support. As such, pre-service teachers are usually overwhelmed by stress and fear, including fear of failure and fear of uncertainty (Harscher et al., 2004). Such struggles may be shared among pre-service teachers from different cultures (e.g., Chinokul, 2012; Nguyen & Baldauf, 2010). Due to the problems and struggles pre-service teachers encounter, it is obvious that the teaching practicum is the ideal place to develop reflective practice, as reflection usually begins when there is a problem that pre-service teachers cannot solve or when there is a problem that they wish to reconsider. According to Loughran (2002), a problem or a puzzling situation can provoke pre-service teachers' curiosity. If pre-service teachers pay genuine attention to the nature of the problem, it can lead them to new understanding and development of their professional knowledge.

Reflective practice has proven to help pre-service teachers develop their repertoire of teaching and to help them survive the beginning year of teaching. Past studies have shown that reflective practice can support pre-service teachers' ability to overcome their fear of performing in a real classroom setting, become more resilient in handling the reality shock (Slade et al., 2019), and become more adaptive in addressing the challenging issues in the classroom (Wlodarsky & Walters, 2010). For example, Ragawanti (2015) has reported on how reflective practice helped pre-service teachers improve their classroom management skills. One of the study participants struggled with dealing with a noisy class. In response to the problem, the participant chose different methods to keep her students silent, such as warning, scolding, and giving direct orders; however, she failed. After reflecting on and evaluating the methods that she used regarding this issue for a while, she realized that keeping herself calm and patient was a more effective strategy.

Even though pre-service teachers see reflective practice as being very important and should be integrated in teacher education and teaching practicums, reflective practice is not without any negative elements (Jindal-Snape & Holmes, 2009). Being cricially self-aware is a skill that comes with experiene, and it requires a depth of understanding to explore or examine one's personal theories of teaching and learning, something which most pre-service teachers have not yet had. Their tight teaching schedules and workload may make pre-service teachers view reflective practice as a time-consuming process; therefore, some of them choose not to put much effort into their reflection (Finlay, 2008). Moreover, reflective practice can become counter-productive if pre-service teachers are forced to do so in order to meet the requirements of the teaching practicum. According to

Hobbs (2007), the use of reflective practice for assessment purposes puts pressure on pre-service teachers in terms of displaying their reflection simply to please their supervisor. Although pre-service teachers may reflect on their experiences as required, some tend to do it in a strategic manner. For instance, some may include classroom evidence in their reflection as they know this would ensure better marks, while others may even fake their reflection in order to get approval from their supervisors. When reflective practice becomes a "recipe-following" activity (Boud, 2010), it is operated at the surface level where no real evidence of pre-service teachers' engagement is included (Mann & Walsh, 2013).

In order to help pre-service teachers acquire the ability to reflect and overcome the problematic issues previously mentioned, it is important that they are well supported when they engage in reflection during the teaching practicum (Finlay, 2008). Edge (2002) asserts that reflection should not occur in isolation, but in discussion with another person. The reflective practice, therefore, should be considered as a cooperative process that involves a "speaker" and an "understander." In agreement with this, Maksimovic and Osmanovic (2018) suggest that pre-service teachers should share experiences with their peers as others can serve the role of "critical mirrors" that can reflect their actions. Discussions with peers contribute to the reexamination of pre-service teachers' own practice, enable them to develop new ideas about their teaching, make them able to analyze important aspects of teaching from different angles, etc. Therefore, reflective practice, which is usually treated as a descriptive task by pre-service teachers, now becomes an analytical task in which pre-service teachers can justify their practice that can eventually result in further improvement (Parsons & Stephenson, 2005).

2. Challenges of Reflective Practice in Teacher Education

When engaging in the process of reflective practice, pre-service teachers can encounter a number of challenges, which are presented as four major questions with the answers provided as follows.

2.1 How to Foster Pre-service Teachers' Reflection

There are various tools that pre-service teachers can employ in order to reflect on their teaching, such as reflective journals, collaborative learning, recording of lessons, peer observation, etc. However, reflective journals are discussed here as they are widely used in the field of teacher education (Jaeger, 2013). Writing reflective journals are beneficial to pre-service teachers in different ways. First and foremost, reflective journal writing promotes pre-service teachers' self-awareness. Writing, according to Farrell (2016b), is a method of reflection that allows the writers to stop and think about what they want to say, then they "see" what has been written, and finally they can reflect on their "written" thoughts in order to gain greater insight into their professional life. Goker (2016) conducted a study with 16 pre-service teachers in Turkey and asked the participants to write reflective journals on their teaching experiences for a semester. At the end of the semester, all of the participants were interviewed and were asked about their perceptions of journal writing. It was found that writing reflective journals helped the participants increase their awareness of their teaching practice and its evaluation.

Reflective journal writing constructs and expands pre-service teachers' personal understanding of their teaching. Reflective journals serve as a personal space for pre-service teachers to clarify their own thinking process and to create a connection between their theoretical knowledge and the real classroom (Lee, 2008). The pre-service teachers in a study carried out by Abednia et al. (2013) stated that writing journals helped them go beyond their current understanding of issues and generate more ideas; moreover, the writing process encouraged them to make a meaningful connection between their real-life experience and the theoretical knowledge previously learned. As a result, they could construct their own understanding of the issues encountered in light of their personal teaching experiences rather than borrowing ideas from others in a passive manner. Likewise, many studies have reported the increase in pre-service teachers' level of reflection as a result of journal writing. For example, Lee (2008) found that the pre-service teachers in her study improved their reasoning skills when reflecting on the given issues. Instead of merely responding to reflection prompts, they referred to additional perspectives apart from their own, which led to greater depth of understanding.

2.2 How to Pursue a Higher Level of Reflection

Despite many benefits reflective journals offer, a process of writing reflective journals is not always flawless. In the studies undertaken by Bell et al. (2012) and McGarr and Moody (2010), one issue of concern is when pre-service teachers focus on the quantity of the written journals rather than the quality. They keep writing long, simple descriptions of classroom routines without producing deep reflection. In fact, reflective journals that are filled with descriptions of classroom routines are considered unproductive and are not congruent with the attributes of reflective journals, which should be a thought-provoking tool. In order to address this concern, there is a need to take into account both the breadth and depth of the reflection process (Tiainen et al., 2018). Breadth here refers to the content of the reflection where various aspects related to personal experiences, emotions, classroom teaching, and social contexts are discussed, while depth suggests the interpretation and analysis of the breadth (Thompson & Pascal, 2011). In order to become a reflective practitioner, pre-service teachers must learn to look beneath the surface of a situation with a more critical lens. Therefore, questions on how to address the depth of the reflection need to be addressed. The literature has suggested a number of frameworks that provide some indicators of key behaviors, attitudes, and practices that can be adopted by teacher educators and supervisors in order to guide the reflection of their pre-service teachers.

The first framework was proposed by Hatton and Smith (1995), where the four levels of reflection include descriptive writing, descriptive reflection, dialogic reflection, and critical reflection, as explained below.

Level 1: Descriptive writing – This is a description of a situation or a report of the literature. There is no discussion or attempt to provide reasons or justifications for the situations.

Level 2: Descriptive reflection – Here there is some evidence of deeper consideration of the situations; however, it is written in descriptive language. The consideration is mostly done based on a personal perspective rather than on alternative viewpoints.

Level 3: Dialogic reflection – Here there is a "stepping back" from the situation, which leads to different levels of discussion. In this type of writing, pre-service teachers provide evidence of dialogue with themselves and an exploration of their role in the situation. They also use different points of view to write their reflections.

Level 4: Critical reflection - Here the writing takes into account the perspectives of others and considers them against the perspectives of the writer. The writing also demonstrates pre-service teachers' awareness that the situation can be explained based on multiple perspectives and is influenced by multiple, socio-political contexts.

The second framework was proposed by Ward and McCotter (2004). They also categorize reflection according to four levels: routine, technical reflection, dialogic reflection, and transformative reflection. The meaning of each level is explained below.

Level 1: Routine – Here the focus is on self-centered concerns. Pre-service teachers cannot identify problems and usually place blame on others.

Level 2: Technical reflection – Here the focus is on specific teaching tasks, but the connections among teaching issues are not considered. Pre-service teachers use assessments and observations to mark their success or failure without evaluating the student's learning for formative purposes.

Level 3: Dialogic reflection – Here the focus is on the students; pre-service teachers use assessment and interactions with students to interpret how they are learning in order to help them.

Level 4: Transformative reflection – Here the focus is on personal involvement with socio-political concerns and how these lead to a change in teaching practices.

The last framework was proposed by Larrivee (2008). It includes four levels of reflection.

Level 1: Pre-reflection – This represents the zero level of reflection where the pre-service teachers respond to students and classroom situations automatically without conscious consideration.

Level 2: Surface reflection – Here the focus is on the teaching techniques, activities, or strategies used to reach the lesson goals.

Level 3: Pedagogical reflection – Here pre-service teachers reflect on educational goals and their underlying theories or priciples, as well as examine the connections among those principles and practices.

Level 4: Critical reflection – Here pre-service teachers reflect on the moral and ethical implications for their students and the consequences of their classroom practices.

The three frameworks presented above provide interesting insights regarding what reflection involves, which may help teacher educators, supervisors, and pre-service teachers understand different levels of the goals that need to be achieved.

2.3 How to Engage Pre-Service Teachers in Reflective Practice

One of the main challenges when using reflective practice in teacher education is that reflection is a concept that can be "too big, too vague, and too general for everyday application" (Korthagen & Wubbels, 1995). This is why asking pre-service teachers to reflect without careful guidance may prevent them from actually engaging in reflection.

Although the concept of reflective practice is usually presented as an individual matter, it is not necessarily carried out in isolation. The literature suggests that sharing individual reflection with a supervisor or peer enables pre-service teachers to establish new understanding about their teaching. Specifically, their peers can ask reflective questions, help scaffold underlying values and thoughts, voice alternative perspectives, and challenge the assumptions of everyday practice (Karnieli-Miller, 2020). The findings reported by Goen

(2016) indicate the positive influence of reflective practice on pre-service teachers' ability to reflect after participating in a peer coaching reflective practice where they took turns observing their peers' classrooms and worked together to identify problems and solutions. The results revealed that the participants' ability to reflect increased at the end of the study; they focused more on the meaning behind their actions, began to challenge their assumptions about teaching and learning, and looked for alternative ways to respond to classroom challenges. Similarly, the results of Smith's study (2002) also revealed that supportive comments from supervisors and peers helped pre-service teachers in the study develop concrete ideas. However, Beauchamp (2015) argues that those that are involved in supporting pre-service teachers' reflection should learn an appropriate way to do so. If the questions or prompts are overly leading or repetitive, pre-service teachers may opt for the strategic reflection mentioned by Hobbs (2007).

2.4 How to Nurture Pre-Service Teachers' Reflection in Emergency Remote Teacher Education

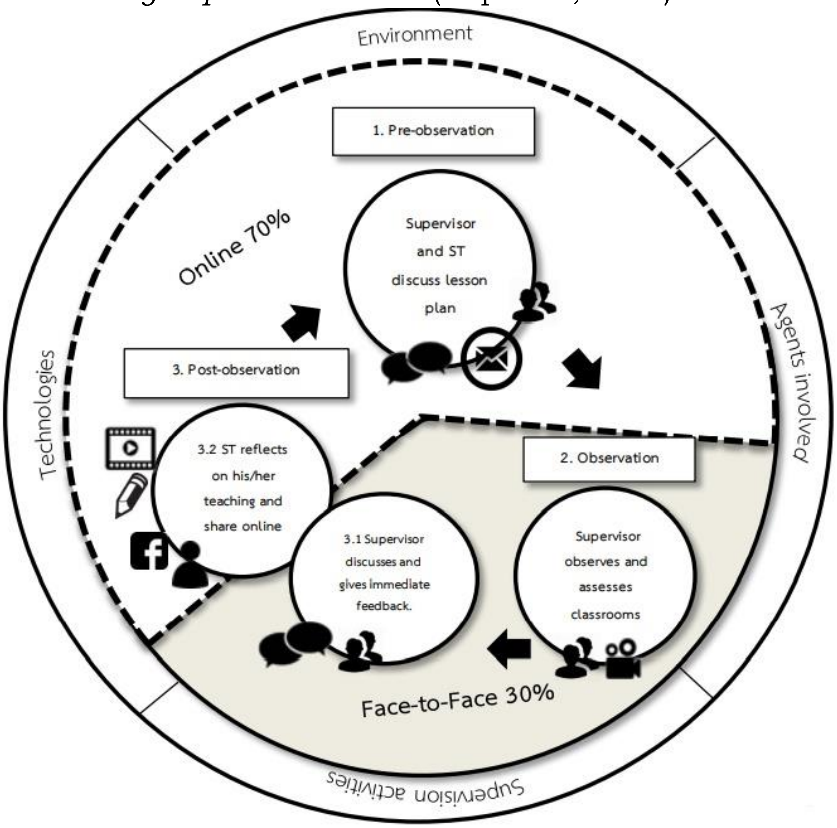
The COVID-19 outbreak has impacted education and teacher education. This global crisis has forced an unexpected transition from face-to-face to remote teaching as many schools and universities are closed at the time of this writing, and teacher education is no exception. There is a need to provide a more systematic approach to teacher education that facilitates remote teaching and learning experiences.

Although teaching practicum may vary from one teaching education program to another, supervision, classroom observation, and reflective practice are considered common practices shared among most programs. During the practicum, pre-service teachers are assigned to teach in real classrooms under the observation and supervision of a supervisor. Classroom observation is usually divided into three stages: pre-lesson observation, observation, and post-observation which require pre-service teachers and the teacher supervisor to meet face-to-face and in a one-to-one manner. To exemplify, pre-service teachers and the supervisor meet in the university setting for a specific meeting where they discuss lesson plans. Later on, the supervisor observes pre-service teachers' teaching in an actual class. After the class is dismissed, they meet face-to-face to discuss the strengths and weaknesses of the lesson observed in order to elicit a better solution. In this scenario, the opportunity for reflective practice is hindered because of several obstacles, such as time and travel constraints (Hixon & So, 2009). To deal with this concern, various technologies have been introduced in order to offer pre-service teachers more opportunities to reflect.

A literature review on computer-supported courses has revealed important elements that contribute to effectiveness of reflective practice. In addition to providing students with access to technology, computer-supported courses have to include clear explanations, scaffolding, and effective feedback, as well as opportunities for peer interaction and collaboration. They should also equip students with strategies to work independently at home (Bond, 2020). Suphasri (2015) has proposed a model that illustrates how pre-service teachers' reflection can be assisted during the teaching practicum with the use of technology.

Figure 4

Blended-learning Supervision Model (Suphasri, 2015)



In contrast to the traditional classroom observation process mentioned earlier, different technologies implemented at each observation stage offer pre-service teachers opportunities to engage in reflection despite limitations of time and place. At the pre-observation stage, the supervisor can provide pre-service teachers with support regarding their lesson planning through e-mail or via an online chat platform. A conversation during this stage helps pre-service teachers prepare their actual teaching. At the observation stage, a video of pre-service teachers' lesson can serve as a stimulus for activating their reflection during the post-observation stage. Feedback from the supervisor is useful as it can encourage pre-service teachers to consider their teaching practice based on a perspective of an expert.

Watching the recorded video can also enable pre-service teachers to assume the third-person role when going over any teaching elements or incidents that might have gone unnoticed. Afterwards, writing a reflective journal means an opportunity for pre-service teachers to have a mental dialogue with themselves. Finally, sharing their written journal online allows them to make a useful contribution to the community and watching and giving comments to their peers' videos and reflective journals can make pre-service teachers engage in meaningful reflection as well.

3. Considerations Regarding Using Reflective Practice in Teacher Education

3.1 The Use of Technology to Enhance Reflective Practice

As our society navigates through the 21st century, technology is playing a prominent role in everyone's life. A growing number of studies have explored how technology can be employed to promote pre-service teachers' reflective practice. The benefits of using two types of technology, namely, video and social media, are explored below.

The power of using digital videos as a means to facilitate pre-service teachers' reflection has been widely accepted. Videos allow for the complexities of the classroom to be captured in real-time (Wang & Hartley, 2003). With the power of video recording, pre-service teachers can see their teaching practice from a "self-as-observer perspective" (Quigley & Nyquist, 1992). Stockero (2008) has reported that pre-service teachers who use a video case-based curriculum engage in deeper reflection. Additionally, Rosaen et al. (2008) point out that video-supported reflection, compared to memory-based reflection, enables pre-service teachers to shift the focus of their reflection on classroom management from technical issues to pedagogical issues. However, although videos do provide content that can be revisited throughout the reflection process, using only videos in the process cannot assure a high level of reflection (Gelfuso & Dennis, 2014). A combination of videos and interaction with the supervisor and peers can create a good condition for reflective practice to more effectcively develop.

Taking the benefits of technology and interaction with others into account, social media is another promising means for pre-service teachers to develop the ability to reflect. This is social medial creates a sense of community where people are encouraged to collaborate, discuss, share, and challenge ideas and beliefs (Iredale et al., 2020). Therefore, social media can be utilized as a platform where pre-service teachers share their teaching videos and their reflective journals. With the asynchronous characteristic and delayed-time messaging form of social media, pre-service teachers can reflect on their own practice as well as others' practice in their own time and at their own place. In one study, Okseon (2010) asked four pre-service teachers to write reflective journal entries and post each of entry on an online community website. They were also asked to select a journal partner to form a reflection dyad. The participants reported that this interactive online journaling facilitated their reflection as it allowed them to ask and answer in-depth questions, to offer additional ideas and suggestions, and to gain confidence from suport received in reflective practice.

3.2 Implications of Reflective Practice in Relation to Teacher Identity and Teacher Quality

Farrell (2003) has described the situation that pre-service teachers are facing during their first year as a "sink or swim" experience. This connotes the frustrations and difficulties they have to encounter during that time, which leads to two critical questions that pre-service teachers need to answer so that they can establish an identity as a teaching professional (Graham & Phelps, 2003). The first question is "Who am I?" and the second is "What do I have to do?" Obtaining answers to these two questions would help pre-service teachers gain a better understanding of the connection between their inner self and their teaching practice. Therefore, teacher education programs should strive to provide pre-service teachers with the tools that would help them investigate and understand the outer context, such as the school and classroom where they teach, and how these might interact with their own processes of becoming a teacher (Trent, 2010). Reflective practice is a key method that encourages pre-service teachers to become more in tune with their sense of self and with their understanding of the context in which they work (Beauchamp &

Thomas, 2009). Introducing pre-service teachers to different tasks that encourage them to discuss, justify, and reason with their community of practice not only helps them look back and examine their identity (e.g., beliefs, commitments, emotions, etc.) but also allows them to look ahead at future practice with the intention to improve their professional development (Conway, 2001).

Conclusion

In summary, this article highlights reflective practice as a means to assist pre-service teachers with their professional life. When undertaking reflective practice, one must be aware that the process focuses not only on fixing problems in classroom teaching, but it also pays close attention to pre-service teachers' inner lives. The article explores different reflective frameworks without any intention to judge which one is better than the others. Pre-service teachers should slowly be introduced to different frameworks as there is no "one-size-fits-all" framework. The challenges that have emerged from the literature shed light on important concerns that teacher educators should consider if they want to use reflective practice in their teaching. This article closes with an exploration of how technology might be implemented in order to enhance reflective practice in the technology-led era and highlights the implications of reflective practice in relation to pre-service teachers' identity and their quality of teaching.

Acknowledgment

This research study was funded by The Royal Golden Jubilee Ph.D. Program through scholarship No. PHD49K0066.

About the Authors

Ponsawan Suphasri holds a doctoral degree in English as an International Language, Chulalongkorn University. She is currently a lecturer in the Department of Languages at the Faculty of Applied Arts, King Mongkut's University of Technology North Bangkok, Thailand. Her research interests include reflective practice and blended learning.

Sumalee Chinokul, Ph.D. is an Associate Professor at the Division of Curriculum and Instruction, Faculty of Education, Chulalongkorn University, Thailand. Her research interests include English language teacher education, English for specific purposes, and classroom-based assessment

References

Abednia, A., Hovassapian, A., Teimournezhad, S., & Ghanbari, N.)2013(. Reflective journal writing: Exploring in-service EFL teachers' perceptions. *System, 41*(3), 503–514. https://doi.org/10.1016/j.system.2013.05.003

Alger, C.)2006(. 'What went well, what didn't go so well': Growth of reflection in pre-service teachers. *Reflective Practice, 7*)3(, 287–301. https://doi.org/10.1080/14623940600837327

Beauchamp, C.)2015(. Reflection in teacher education: Issues emerging from a review of current literature. *Reflective Practice, 16*)1(, 123–141. https://doi.org/10.1080/14623943.2014.982525

Beauchamp, C., & Thomas, L.)2009(. Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education, 39*)2(, 175–189. https://doi.org/10.1080/03057640902902252

Bond, M.)2020(. Schools and emergency remote education during the COVID-19 pandemic: A living rapid systematic review. *Asian Journal of Distance Education, 15*)2(, 191–247. https://doi.org/10.5281/zenodo.4425683

Chinokul, S.)2012(. *Development of EFL teaching skills: Knowledge transfer from methodology course to real classroom practice.* Thailand Science Research and Innovation. https://cmudc.library.cmu.ac.th/frontend/Info/item/dc:129775

Ciampa, K., & Gallagher, T.)2015(. Blogging to enhance in-service teachers' professional learning and development during collaborative inquiry. *Educational Technology Research and Development, 63*)6(, 883–913. https://doi.org/10.1007/s11423-015-9404-7

Conway, P.)2001(. Anticipatory reflection while learning to teach: From a temporally truncated to a temporally distributed model of reflection in teacher education. *Teaching and Teacher Education, 17*)1(, 89–106. https://www.learntechlib.org/p/197902/

Farrell, T.)2003(. Learning to teach English language during the first year: Personal influences and challenges. *Teaching and Teacher Education, 19*, 95–111. http://reflectiveinquiry.ca/wp-content/uploads/2021/05/Farrell-Teaching-and-teacher-ed.pdf

Farrell, T. (2015). *Promoting teacher reflection in second language education: A framework for TESOL professionals*. New York, NY: Routledge.

Farrell, T.)2016a(. TESOL, a profession that eats its young! The importance of reflective practice in language teacher education. *Iranian Journal of Language Teaching Research, 4*)3(, 97–107. https://files.eric.ed.gov/fulltext/EJ1127348.pdf

Farrell, T.)2016b(. The practices of encouraging TESOL teachers to engage in reflective practice: An appraisal of recent research contributions. *Language Teaching Research, 20*)2(, 223–247. https://doi.org/10.1177/1362168815617335

Farrell, T.)2019(. Standing on the shoulders of giants: Interpreting reflective practice in TESOL. *Iranian Journal of Language Teaching Research, 7*)3(, 1–14. https://doi.org/10.30466/ijltr.2019.120733

Finlay, L.)2008(. Reflecting on reflective practice. *Practice-based Professional Learning Paper 52*, 1–26. The Open University. http://oro.open.ac.uk/68945/1/Finlay-%282008%29-Reflecting-on-reflective-practice-PBPL-paper-52.pdf

Freeman, D.)2016(. *Educating second language teachers.* Oxford University Press.

Goker, S.)2016(. Use of reflective journals in the development of teachers' leadership and teaching skills. *Universal Journal of Educational Research, 12A*, 63–70. https://doi.org/10.13189/ujer.2016.041309

Gonen, S.)2016(. A study on reflective reciprocal peer coaching for pre-service teachers: Change in reflectivity. *Journal of Education and Training Studies, (4)*7, 211–225. https://doi.org/10.11114/jets.v4i7.1452

Graham, A., & Phelps, R.)2003(. 'Being a teacher': Developing teacher identity and enhancing practice through metacognitive and reflective learning process. *Australian Journal of Teacher Education, 27*)2(, 1–14. http://dx.doi.org/10.14221/ajte.2002v27n2.2

Harscher, T., Cocard, Y., & Moser, P.)2004(. Forget about theory-practice is all? Student teachers' learning in practicum. *Teachers and Teaching: Theory and Practice, 10*, 623–637. https://doi.org/10.1080/1354060042000304800

Hatton, N., & Smith, D.)1995(. Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education, 11*)1(, 33–49. https://doi.org/10.1016/0742-051X(94)00012-U

Hixon, E., & So, H.-J.)2009(. Technology's role in field experiences for preservice teacher training. *Educational Technology & Society, 12*)4(, 294–304.

Hobbs, V.)2007(. Faking it or hating it: Can reflective practice be forced? *Reflective Practice, 8*)3(, 405–417. https://doi.org/10.1080/14623940701425063

Iredale, A., Stapleford, K., Tremayne, D., Farrell, L., Holbrey, C., & Sheridan-Ross, J.)2020(. A review and synthesis of the use of social media in initial teacher education. *Technology, Pedagogy and Education, 29*)1(, 1–34. https://doi.org/10.1080/1475939X.2019.1693422

Jaeger, E.)2013(. Teacher reflection: Supports, barriers, and results. *Issues in Teacher Education, 22*)1(, 89–104. https://files.eric.ed.gov/fulltext/EJ1014037.pdf

Jindal-Snape, D., & Holmes, E.)2009(. A longitudinal study exploring perspectives of participants regarding reflective practice during their transition from higher education to professional practice.

Reflective Practice, 10)2(, 219–232. https://doi.org/10.1080/14623940902786222

Jusoh, Z.)2013(. Teaching practicum: student teacher's perspectives. *Proceedings of 3rd International Conference on Foreign Language Learning and Teaching* (*FLLT 2013) conference, Bangkok,* 865-874. http://www.litu.tu.ac.th/journal/FLLTCP/Proceeding/865.pdf

Karnieli-Miller, O.)2020(. Reflective practice in the teaching of communication skills. *Patient Education and Counselling, 103*(10), 2166–2172. https://doi.org/10.1016/j.pec.2020.06.021

Koellner, K., & Jacobs, J.)2015(. Distinguishing models of professional development: The case of an adaptive model's impact on teachers' knowledge, instruction, and student achievement. *Journal of Teacher Education, 66*)1(, 51–67. https://doi.org/10.1177/0022487114549599

Korthagen, F.)2017(. Inconvenient truths about teacher learning: Towards professional development 3.0. *Teachers and Teaching, 23*)4(, 387–405. https://doi.org/10.1080/13540602.2016.1211523

Korthagen, F., & Vasalos, A.)2005(. Levels in reflection: Core reflection as a means to enhance professional growth. *Teachers and Teaching, 11*)1(, 47–71. https://doi.org/10.1080/1354060042000337093

Korthagen, F., & Wubbels, T.)1995(. Characteristics of reflective practitioners: Towards the operationalization of the concept of reflection. *Teachers and Teaching: Theory and Practice, 1*)1(, 51–72. https://doi.org/10.1080/1354060950010105

Lee, H.)2008(. Understanding and assessing preservice teachers' reflective thinking. *Teaching and Teacher Education, 21*(6), 699–715.

Loughran, J.)2002(. Effective reflective practice: In search of meaning in learning about teaching. *Journal of Teacher Education, 53*)1(, 33–43. https://doi.org/10.1177/0022487102053001004

Maksimovic, J., & Osmanovic, J.)2018(. Reflective practice as a changing factor of teaching quality. *Research in Pedagogy, 8*)2(, 172–189.

Mann, S., & Walsh, S.)2013(. RP or RIP: A critical perspective on reflective practice. *Applied Linguistics Review, 4*)2(, 291–315. https://doi.org/10.1515/applirev-2013-0013

Mathew, P., & Peechattu, P.)2017(. Reflective practices: A means to teacher development. *Asia Pacific Journal of Contemporary Education and Communication Technology, 3*)1(, 126–131. https://apiar.org.au/wp-content/uploads/2017/02/13_APJCECT_Feb_BRR798_EDU-126-131.pdf

McGarr, O., & Moody, J.)2010(. Scaffolding or stifling? The influence of journal requirements on students' engagement in reflective practice. *Reflective Practice, 11*)1(, 579–591. https://doi.org/10.1080/14623943.2010.516968

Meierdirk, C.)2017(. Reflections of the student teachers. *Reflective Practice, 18*)1(, 23–41. https://doi.org/10.1080/14623943.2016.1230054

Mockler, N.)2011(. Beyond 'what works': understanding teacher identity as a practical and political tool. *Teachers and Teaching: Theory and Practice, 17*)5(, 517–528. https://doi.org/10.1080/13540602.2011.602059

Mortari, L.)2012(. Learning thoughtful reflection in teacher education. *Teachers and Teaching, 5*, 525–545. https://doi.org/10.1080/13540602.2012.709729

Nguyen, H., & Baldauf Jr. , R.)2010(. Effective peer mentoring in EFL pre-service teacher's instructional practicum practice. *The Asian EFL Journal Quarterly, 12*(3), 40–61.

Okseon, L.)2010(. Facilitating preservice teachers' reflection through interactive online journal writing. *Physical Education, 67*)3(, 128–139. https://link.gale.com/apps/doc/A241860444/AONE?u=googlescholar&sid=bookmark-AONE&xid=a1543006

Parsons, M., & Stephenson, M.)2005(. Developing reflective practice in student teachers: Collaboration and critical partnerships. *Teachers and Teaching: Theory and Practice, 11*)1(, 95–116. https://doi.org/10.1080/1354060042000337110

Ragawanti, D.)2015(. Cultivating pre-service teachers' classroom management skill through teaching practicum: A reflective practice. *TEFLIN Journal, 25*)1(, 117–128. http://dx.doi.org/10.15639/teflinjournal.v26i1/117-128

Rodgers, C.)2002(. Defining reflection: Another look at John Dewey and reflective thinking. *Teachers College Record, 104*(4), 842–866. http://c21.mcnrc.org/wp-content/uploads/sites/8/2013/05/CarolRodgers-Article.pdf

Slade, M., Burnham, T., Catalana, S., & Waters, T.)2019(. The impact of reflective practice on teacher candidates' learning. *International Journal for the Scholarship of Teaching and Learning, 13*)2(, Article 15. https://doi.org/10.20429/ijsotl.2019.130215

Smith, K., & Lev-Ari, L.)2005(. The place of the practicum in pre-service teacher education: The voice of the students. *Asia-Pacific Journal of Teacher Education, 33*)3(, 289–302. https://doi.org/10.1080/13598660500286333

Suphasri, P. (2015). *Development of a blended learning supervision model to enhance English- majored student teachers' reflective ability and teaching performance* [Doctoral Dissertation, Chulalongkorn University] http://doi.org/10.14457/CU.the.2015.1054

Thompson, N., & Pascal, J.)2011(. Reflective practice: An existentialist perspective. *Reflective Practice: International and Multidisciplinary Perspectives, 12*(1), 15–26. https://doi.org/10.1080/14623943.2011.541089

Tiainen, O., Korkeamäki, R.-L., & Dreher, M. J.)2018(. Becoming reflective practitioners: A case study of three beginning pre-service teachers. *Scandinavian Journal of Educational Research, 62*)4(, 586–600. https://doi.org/10.1080/00313831.2016.1258673

Walkington, J.)2005(. Becoming a teacher: encourage development of teacher identity through reflective practice. *Asia-Pacific Journal of Teacher Education, 33*)1(, 53–64. https://doi.org/10.1080/1359866052000341124

Wang, J., & Hartley, K.)2003(. Video technology as a support for teacher education reform. *The Journal of Technology and Teacher Education, 11*(1), 105–138. https://www.learntechlib.org/primary/p/17791/

Ward, J. R., & McCotter, S. S.)2004(. Reflection as a visible outcome for pre-service teachers. *Teaching and Teacher Education, 20*)3(, 243–257. https://doi.org/10.1016/j.tate.2004.02.004

Wlodarsky, R., & Walters, H.)2010(. Use of the reflective judgement model as a reference tool for assessing the reflective capacity of teacher educators in a college setting. *I-Manager's Journal on Educational Psychology, 4*)1(, 13–20. https://doi.org/10.26634/jpsy.4.1.1219

Yalcin Arslan, F.)2019(. The role of lesson study in teacher learning and professional development of EFL teachers in Turkey: A case study. *TESOL Journal, 10*)2(, 1–13. https://doi.org/10.1002/tesj.409

Zeichner, K. (2002). Beyond traditional structures of student teaching. *Teacher Education Quarterly, 29*, 59–64. https://www.teqjournal.org/backvols/2002/29_2/sp02zeichner.pdf