

Facilitating Reflective Practice in Teacher Education: An Analysis of Student Teachers' Level of Reflection during Teacher Clinical Experience

Wong Yeou Min¹, Rosnidar Mansor² and Syakirah Samsudin³

^{1&2} Faculty of Education and Human Development, Sultan Idris Education University,
Tanjong Malim, Perak Darul Ridzuan 35900, Malaysia.

³ Faculty of Science and Mathematics, Sultan Idris Education University,
Tanjong Malim, Perak Darul Ridzuan 35900, Malaysia.

DOI: 10.6007/IJARBSS/v7-i3/2762 URL: <http://dx.doi.org/10.6007/IJARBSS/v7-i3/2762>

Abstract

Reflection and the promotion of reflective practice have been extensively emphasised in the teacher training and preparation programmes. In teacher education, many researchers have argued the importance of student teachers (STs) being able to develop their skills of reflection. This study was conducted to investigate the STs' level of reflection during teacher clinical experience (TCE) (or variously known as the teaching practicum). It sought to analyse the level of reflection among STs from the Sultan Idris Education University (UPSI) in the current practice of reflective writing and after given exposure to the critical reflection manual (CRM) during TCE. The present study employed Van Manen's (1977) three-stage model (technical, practical and critical) to determine the level of reflection based on STs' self-reflection notes in their daily lesson plan books (for the current practice of reflective writing) and weekly reflective journal writings (for STs who were given exposure to the CRM). The research participants consisted of seven STs who were undergoing TCE from February to June 2014 (for the current practice of reflective writing) and eleven STs who were undergoing TCE from July to October 2015 (for STs who were given exposure to the CRM). Results of the analyses showed that STs were barely reflective, demonstrating very low level of reflection for the current practice of reflective writing while STs exhibited practical and critical levels of reflection after given exposure to the CRM. Interpretations of the results are presented and recommendations are discussed within the context of the study.

Keywords: Level of Reflection; Reflective Writing; Student Teachers; Teacher Clinical Experience.

Introduction

The promotion of reflective practice sparked off by Schön's (1983, 1987) model of the 'reflective practitioner' has been viewed as the most famous issues in the field of teacher education (Copeland et al., 1993). Some studies have documented the effect of reflection in changing and improving teaching practices (for example, Saemah, Khartijah, & Arbain, 2000;

Etscheidt, Curran, & Sawyer, 2012; Nagendralingan, Aminah, & Othman, 2014; Wong, Rosnidar, & Syakirah, 2015a, 2015b). Others, however, have reported the integration and promotion of reflection in teacher education programmes (for example, Hatton & Smith, 1995; Bain et al., 1999; Boon & Wee, 2005; Etscheidt, Curran, & Sawyer, 2012; Nagendralingan, Aminah, & Othman, 2014; Wong, Rosnidar, & Syakirah, 2016). There are also many calls for the need of reflective teacher education (Bain et al., 1999; Hanipah, 2004; National Institute of Education [NIE], 2010). Yet, it appears that concrete evidence to support the assumptions about its efficacy in practice is relatively little (Toh, 2001). In the Malaysian context, teacher education has transformed into school-based model that focuses on an inquiry-oriented reflective teacher clinical experience (TCE) and the incorporation of effective elements of mentoring and coaching into the clinical supervision approach (Toh, 2001; Nagendralingan, Aminah, & Othman, 2014). These changes are resulted from the changing needs in Malaysia's education system and the increasing influence of global trends in teacher education (Rahil et al., 2004).

All of this points to the need to understand the teacher education institutions' efforts to foster reflection in the teacher education programmes as central for preparing reflective practitioners. It also suggests the need to examine shifts in the student teachers' (STs) level of reflection during their teacher education programmes typically the TCE, as well as the development of strategies for grappling with the issues of low reflectivity among STs. TCE is one of the programmes in which the development of habits and skills of reflection may be seen (Hanipah, 2004). Teacher educators, teachers and policy makers often regard the TCE as being the most critical component of teacher education programmes as it plays important role in the transition of STs from preparation for teaching to full-time teaching (Wong et al., 2014).

Therefore, the purpose of the present study was to investigate STs' level of reflection during TCE. To be more specific, this study aimed to analyse the level of reflection among STs in the current practice of reflective writing and after given exposure to the critical reflection manual (CRM) during TCE. As such, the results of the study are expected to provide an insight into the effectiveness of the provided reflective opportunities and the ability of STs to reflect upon their experiences and practices in school during TCE. Furthermore, it is also hoped that this input can provide essential theoretical foundation necessary for the teacher education programmes to deliberately incorporate reflective practice into TCE and help teacher educators in guiding the reflection of STs.

Literature Review

In teacher training, the term "reflection" has become one of the most important and popular vocabulary words (Hatton & Smith, 1995). It is viewed as an essential component in the professional development of teachers (Zeichner, 1992; Calderhead & Gates, 1993) and a key to successful lifelong learning for teachers (Aizan et al., 2014). Indeed, Aizan et al. (2014) contended that a good teacher must require the ability to reflect on their behaviours and

surroundings and to adapt, develop and improve his or her professional development and practices in relation to the context of lifelong learning.

Given the perceived importance of reflection for STs has been extensively confirmed (Etscheidt, Curran, & Sawyer, 2012), it is not surprising that the promotion of reflective practice for STs is widely recognised as an established mission and crucial component of the teacher education programme (Ostorga, 2006; Grossman, 2008; Wong, Rosnidar, & Syakirah, 2016). While promoting reflection has been continuously advocated by many teacher education programmes as an aim in teacher education, the term “reflection” is fraught with various definitions and embraces a broad range of concepts, techniques and approaches (Hatton & Smith, 1995). It is not surprising, therefore, that there is no common consensus and consistency among philosophers, social theorists, researchers and educators regarding the precise meaning, concept, nature, technique and approach for reflection, although the discourse on these issues continue to emerge in the literature for the past decades.

Despite the popularity of the importance and notion of reflection, much of the studies have noted that STs reflect at a superficial level (for example, Hatton & Smith, 1995; Saemah, Khartijah, & Arbain, 2000; Toh, 2001; Boon & Wee, 2005; Nor Hasniza, 2006; Aizan et al., 2014; Wong, Rosnidar, & Syakirah, 2015a, 2015b). A review of sixteen studies on the effectiveness of programmes in promoting STs’ reflection have shown that STs’ reflection was mainly technical or practical reflection though there was some substantive reflection (Hatton & Smith, 1995). In a recent study conducted to gauge reflectivity among seven STs during TCE, Wong, Rosnidar and Syakirah (2015a, 2015b) found that the level of reflection which most STs engaged in was typically at the most basic level (technical level) though there was little evidence of practical reflection. As such, with regard to the issues of low level of reflectivity, studies of Boon and Wee (2005) and Wong, Rosnidar and Syakirah (2015b, 2016) emphasised the need to provide structured opportunities and guidance for STs to reflect at higher levels of reflection and to use reflective journal writing as a tool for continuous professional development. Pragmatically, Wong, Rosnidar and Syakirah (2015b, 2016) suggested a CRM as a guideline which is structured in nature to provide practical guide for STs to systematically reflect on their practices and experiences in order to attain a higher level of reflection to fully benefit from their TCE.

According to Munby and Russell (1989), Schön’s (1983, 1987) framework of reflection-in-action (in which it develops an awareness of decisions in practices) and reflection-on-action (in which it develops an interpretive critique of practice) involve the idea of professional practice based upon knowledge-in-action and knowing-in-action derived through the constructed and reconstructed professional experience. In a similar vein to Schön, Van Manen (1977) has developed a framework to understand the development of reflectivity. The Van Manen’s (1977) three-stage model served as the framework to determine the different types of reflectivity. According to Van Manen (1977), three major hierarchical levels of reflection are proposed, such as technical reflection, practical reflection and critical reflection. The first level, technical reflection focuses on the teacher and what works in the classroom, based on his/her

success or failure in the classroom (NIE, 2010; Aizan et al., 2014). The second level is practical reflection which focuses on the student and what students are learning, whereas the third level, critical reflection focuses on the context and what knowledge is of value and to whom (NIE, 2010; Aizan et al., 2014).

The literature suggests that few studies on the reflective process come from quantitative research and many studies have attended to this variable from a qualitative perspective typically ethnographic research (Toh, 2001). Indeed, plenty of notable efforts to measure reflectivity through qualitative research can be found in the extensive literature (for example, Hatton & Smith, 1995; Boon, 2002; Boon & Wee, 2005; Nor Hasniza, 2006; Aizan et al., 2014; Wong, Rosnidar, & Syakirah, 2015a, 2015b). In fact, a number of studies that attempted to identify, examine and categorise reflectivity or level of reflection have employed various criteria for the purpose. For instance, Wong, Rosnidar and Syakirah (2015a, 2015b) used STs' self-reflection notes in their daily lesson plan books to assess their level of reflection based upon a list of criteria that categorised the self-reflection note entries into Van Manen's (1977) three major hierarchical levels. Boon and Wee (2005) and Aizan et al. (2014) assessed STs' level of reflection by analysing the STs' journals using a list of descriptive criteria that reflects Van Manen's (1977) categorisation of levels of reflection. Other attempts to assess reflectivity are those of Hatton and Smith (1995) who developed a list of criteria for recognising evidence for different categories of reflection ranging from descriptive writing, descriptive reflection, dialogic reflection and critical reflection, and Toh (2001) who used revised version of the Reflective Pedagogical Thinking Scale (Sparks-Langer et al., 1990) to measure reflectivity through STs' TCE journals.

Undoubtedly, it is obvious that intensive and extensive efforts have gone into measuring STs' reflective thinking and developing assessment criteria for determining the level of reflection among STs. However, growing evidence suggested that most studies (for example, Boon, 2002; Boon & Wee, 2005; Aizan et al., 2014; Wong, Rosnidar, & Syakirah, 2015a, 2015b) have attempted to understand and investigate the STs' level of reflection by using Van Manen's (1977) framework. Hence, consistence with most previous studies, the present study employed Van Manen's (1977) three-stage model in analysing STs' level of reflection through their self-reflection notes in their daily lesson plan books and weekly reflective journal writings during TCE.

Methodology

This study was conducted by using a qualitative approach other than basic statistics. According to Cohen, Manion and Morrison (2004), a qualitative research seeks to understand in detail and in-depth about a situation or phenomenon being investigated. This study used case study design that allowed researchers to investigate STs' level of reflection in the real situation during TCE. For the purposes of this study, the participants came from two different cohorts of STs from the Sultan Idris Education University (UPSI), who were pursuing Bachelor of Education

with honours in Teaching English as a Second Language (TESL) and who were in their seventh semester of study and were undergoing 16 weeks of their TCE. One cohort of STs consisted of seven participants who went through the current practice of reflective writing during TCE from February to June 2014 whereas another group of STs consisted of eleven participants who were given exposure to the CRM during TCE from July to October 2015.

In this study, all TESL STs who had undergone the TCE from February to June 2014 and who had been given exposure to the CRM during TCE from July to October 2015 were respectively invited to be part of the study. The sample comprised the first eighteen STs who responded to this invitation. The sampling selection conformed to Merriam's (2007) description of the norm for qualitative research, namely that it was "non-random, purposeful and small" (p. 8). Informed consent was obtained from all the participants prior to undertaking the study. Participants were given assurance that all efforts would be taken to respect their privacy and that their identity as the participants in the study would not be exposed in any form of written publications or reports as pseudonyms would be used in reporting the results of the study.

For the realisation of this study, the study was divided into two situations. In the first situation, the researchers collected the reflective writings of STs' self-reflection notes in their daily lesson plan books in order to examine the level of reflection among STs in the current practice of reflective writing. Meanwhile, in another situation, the researchers guide the STs in using the CRM to apply the reflective thinking and practice in a more orderly and meticulous manner. After being briefed on the use of CRM, STs were asked to carry out the reflective thinking and practice according to the guidelines as given in the CRM. Data in this phase were collected through the reflective writings in STs' weekly reflective journals.

On the conclusion of the TCE, a total of 428 self-reflection notes written by seven participants after every session of teaching and learning for only English lesson were collected in the first situation. Whereas, for another situation, a total of 155 (88%) weekly reflective journal writings were collected from eleven participants upon completion of their TCE. The remaining journal writings were not received by the researchers due to two of the eleven participants failed to complete the whole 16-week reflective journal writings. Both the self-reflection notes in STs' daily lesson plan books and weekly reflective journal writings were analysed based on the categorisation of levels of reflection proposed by Van Manen (1977) in order to determine the level of reflection among STs in the current practice of reflective writing and after given exposure to the CRM during TCE. The self-reflection notes were coded by using the code SRN/P1/1/2, in which the SRN represented the type of document (self-reflection note); P1 represented the first participant; 1 represented the note number; and 2 represented the page number. On the other hand, the weekly reflective journal writings were coded by using the code RJW5/P8/64-66/4, in which the RJW represented the type of document (weekly reflective journal writing); 5 represented the fifth week reflective journal writing; P8 represented the eighth participant; 64-66 represented the excerpt number; and 4 represented the page number.

Results and Discussion

The level of reflection among STs was analysed and assessed based on the categorisation of Van Manen's (1977) levels of reflection through document analysis of their reflective writings in the self-reflection notes (for the current practice of reflective writing) and weekly reflective journal writings (for STs who were given exposure to the CRM). Table 1 shows the frequencies and percentages of self-reflection note entries based on the Van Manen's (1977) levels of reflection for the total of 428 self-reflection notes collected from seven participants who went through the current practice of reflective writing during TCE from February to June 2014.

Table 1: Frequencies and Percentages of Self-Reflection Note Entries Based on the Van Manen's (1977) Levels of Reflection

Van Manen's (1977) Levels of Reflection	Technical	Practical	Critical
Participant (P)			
P1	35	10	0
P2	45	0	0
P3	59	0	0
P4	74	1	0
P5	62	0	0
P6	56	13	0
P7	73	0	0
Total and the (%) of Frequency for each Level	404 (94.4)	24 (5.6)	0 (0.0)

The data from Table 1 reveals that 94.4% of participants' self-reflection notes were only at the technical level, while 5.6% were at the practical level, but there was none that attain the critical level of reflection. In other words, the vast majority of STs reflected at a routine and technical level, rather than the critical level, though there was a few demonstrated practical reflection. This represents a very low level of reflection was found among STs in the current practice of reflective writing during TCE. This finding resonates with most previous studies as noted earlier. This may be due to the fact that STs are more concerned with the failure and success of their lessons, their self-doubts, disappointments and goal achievement (Hoover, 1994; Boon and Wee, 2005). Additionally, Boon (2002), Boon and Wee (2005), as well as Wong, Rosnidar and Syakirah (2015a, 2015b) argued that STs could not reflect at a higher level of reflection because of the lack of structured opportunities or approaches to reflect.

The following are some examples of the reflective writings of the participants' self-reflection notes in their daily lesson plan books that are interpreted as the technical level. At this level, STs considered only the application of knowledge for the purposes of achieving instrumental outcomes and the analysis of actions taken on the basis of their success or failure in the classroom (NIE, 2010; Aizan et al., 2014).

"Class finished early as the lesson time was changed because school had 'Kejohanan Merentas Desa'. Students finished with their brainstorming of their topics and proceed with mapping their thought by using graphic organiser for the next class" (SRN/P2/2/9).

"The students were very cooperative and also responsive. Always give good feedback. The only flaw that I had detected was the time management where I had taken more time than what I intended to. The activity during production stage is not suitable to be carry out in a single period lesson. It will be carry out during the next class" (SRN/P3/3/8).

"Lesson cannot be carried out due to the teachers and co-curriculum meeting. Lesson will be carried out next week on Monday" (SRN/P4/2/4).

Meanwhile, among the examples of the reflective writings of the participants' self-reflection notes that are illustrative of the practical reflection are as follows. In practical reflection, STs concerned about the students' learning experiences, the goals and means, the underlying assumptions and predispositions of classroom practice behind them, and the actual outcomes, not merely focus on the technical-rationality (NIE, 2010; Aizan et al., 2014).

"Today lesson, the students learned some literary devices for the poem. At the beginning, I can see that the students having some problems in order to identify the metaphor, personification and simile. They were confused with these three literary devices due to their quite similar meaning. However, after some examples and exercises, the students can start to understand it..." (SRN/P1/6/14).

"Students were too weak to perform the task given. It was out of my expectation and I should reduce my lesson activities so that they can focus to one learning task. I extended the time so that all students were able to practice speaking task before going back. Generally, they can read the text and few of them were too weak to spell words. Therefore, they needed the help of teacher to read and they followed after the teacher. In my next lesson, I would give them repetition or drilling exercise in terms of speaking" (SRN/P6/6/11).

On the other hand, data on the level of reflection among STs after given exposure to the CRM during TCE reveals that the level of reflection which most STs engaged in was primarily at the highest level of reflection, that is the critical level based on Van Manen's (1977) categorisation of levels of reflection. Table 2 shows the frequencies and percentages of weekly reflective journal entries based on the Van Manen's (1977) levels of reflection for the total of

155 weekly reflective journal writings collected from eleven participants who were given exposure to the CRM during TCE from July to October 2015.

Table 2: Frequencies and Percentages of Weekly Reflective Journal Entries Based on the Van Manen's (1977) Levels of Reflection

Van Manen's (1977) Levels of Reflection	Technical	Practical	Critical
Participant (P)			
P8	0	3	13
P9	0	0	16
P10	0	3	13
P11	0	10	6
P12	0	0	16
P13	0	0	16
P14	0	3	5
P15	0	8	8
P16	0	2	14
P17	0	0	16
P18	0	0	3
Total and the (%) of Frequency for each Level	0 (0.0)	29 (18.7)	126 (81.3)

From Table 2, it is obviously shown that 81.3% of the participants' weekly reflective journal writings were at the critical level, while 18.7% were at the practical level, but none of the participants' 155 weekly reflective journal writings were at the basic technical level. In other words, most STs attained the highest level of reflection, that is the critical reflection and only a few exhibited practical reflection after given exposure to the CRM during TCE. This means that many STs who had been given exposure to the CRM managed to develop and describe their own beliefs and assumptions, as well as to analyse and make judgements about their actions and practices, particularly in relation to the moral and ethical issues. This finding is consistent with the point made by Boon and Wee (2005) who suggested that STs would exhibit critical reflection rather than technical reflection when they are more committed to the teaching profession, proactive and able to combine rationality, intuitive and objectivity in their reflection, as well as to demonstrate an open-minded approach to their practices and experiences. Similarly, Van Manen (1977) also stated that "...teachers who reflect critically tries to incorporate the moral, ethical and professional action criteria" (p. 277).

For instance, the examples of the reflective writings of the participants' weekly reflective journals that are interpreted as the critical reflection are as follows. In the critical reflection stage, STs reflected upon the wider context of education and question their actions

or practices critically by taking into account the moral, social, cultural, political and/or ethical criteria (NIE, 2010; Aizan et al., 2014).

"...next year, is the year that English is a compulsory subject to pass for SPM takers, it is indeed a good move due to the importance of English proficiency in the working scene. I fully trust that the students in 4KM1 are capable students, if, they put that slightly more of an effort to read and to study. Thus, I shall be the one who will help them with that..." (RJW1/P10/59-63/2-3).

"...as we are moving towards Vision 2020, I believe it's important for us to produce future generations that have good command in both national language and also global language. Even though class Form 1 Aktif is in advanced level, I believe there is always a room for improvement. As a conclusion, I'll try to improve my teaching by experimenting myself and my students with new teaching technique. I do try out new teaching method in my teaching just to discover which one suits my students the best. I do see the strength and weakness in my teaching. With my hard work and determination, I believe I will succeed" (RJW7/P9/51-59/3).

"...I can see my weakness as a teacher in school is that I dislike the idea of preparing students for examination. In my opinion, I strongly believe that the purpose of education is for students to benefit in future with the skills and knowledge they gained in school but not to benefit in their examination. Nevertheless, I adjusted my role to follow the instructions and policy of the school to teach the students, so that they can score in the examination despite of their low proficiency level. To handle this situation in future, I will also try to be familiar with the entire Form 4 syllabus to enable myself to plan a lesson at the last minute" (RJW3/P18/55-62/2).

Meanwhile, among the examples of the reflective writings of the participants' weekly reflective journals that are illustrative of the practical reflection are such as:

"...some of them (students) were also bullying each other during the game, especially the boys and there were even some favouritism among them. This could be normal but my concern was about the safety in the classroom. I do not want my students to get hurt. I discussed about my decision with my GP (cooperating teacher) and she also supported my decision saying that the students are competitive thus games in classroom was not a good idea. As a teacher, my students' safety is my utmost concern which is the reason for me to stop using games in classroom..." (RJW2/P11/23-28/1-2).

"...most of the students were not paying attention especially when I was explaining about nouns and how to identify them. Only a few students sitting in the front of the class were paying attention and could actually answer my questions. The group of boys at the back were especially noisy today...I could not capture their attention at all today...In the future, I should try to find a topic that is more interesting that they can relate to. Besides that, I should look into using different types of materials especially ones that are visual and colourful to stimulate their interest in the lesson. I think I should also try to do more fun and interactive activities in groups with this class so that they will be more excited and willing to participate in the lesson..." (RJW2/P15/8-48/1-2).

In the context of the study, the level of reflection exhibited among STs in the current practice of reflective writing was low. This, to some extent, may be interpreted as the current practice of reflective writing (or reflective writing without exposure to the CRM) in TCE failed to foster reflection among STs. On the other hand, the findings on the level of reflection among STs after given exposure to the CRM during TCE show that STs demonstrated a higher level of reflection typically critical reflection. This is most likely due to the fact that STs were guided by the CRM to reflect systematically on their experiences and practices during TCE. As Wong, Rosnidar and Syakirah (2016) noted, the CRM is effective in promoting critical reflection among STs by guiding them to practice systematic and structured reflection in order to be critically reflective in their reflective writings during TCE. This finding reinforces Aizan et al.'s (2014) argument that proper scaffolding or guidance is needed by STs to reach a higher level of reflection. Likewise, Boon (2002), Boon and Wee (2005), as well as Wong, Rosnidar and Syakirah (2015a, 2015b, 2016) also suggested that it is important to provide guidance and structured opportunities for STs to reflect on their practices. Therefore, a point to note here is that STs who were given exposure to the CRM during TCE, were able to reach the highest level of reflection (or critical reflection).

Conclusion

This study was merely a small-scale qualitative case study research. As such, this study is not intended to generalise its findings, but to raise issues that may be in relevance with other such research and may apply to STs in different contexts. Clearly, two conclusions can be drawn from this study. Firstly, apart from the usual limitations of the context of the study and methodology, the evidence of low level of reflection among STs in the current practice of reflective writing during TCE suggests the need for the designers of teacher education programme, particularly TCE to consider further changes in terms pre-TCE preparation and the techniques of reflective practice that may foster reflection among STs. Efforts should be made to provide structured opportunities or proper scaffolding to guide STs to engage in guided or systematic reflection during TCE. Also, teacher education programmes should prepare STs to reflect on their practices from a wider context. It should promote awareness among STs about the importance of critical reflection as a key to successful lifelong learning for STs to acknowledge, listen and

hear to their own voices. In fact, previous studies have indicated the importance and success of critical reflection for the professional growth of teachers (Kennedy, 1993; McGee, 2008).

Secondly, this study indicates the usefulness and effectiveness of the CRM in stimulating critical reflection among STs during TCE. Undoubtedly, the CRM provides an avenue in enhancing the reflective skills among STs and enabling STs to reach a higher level of reflection so as to benefit fully from their practicum experiences. This is agreement with the study of Wong, Rosnidar and Syakirah (2016) of eight STs who were given exposure to the CRM has found that seven out of the eight STs in their study unanimously commented that the CRM is effective in promoting critical reflection among them during TCE. Thus, if critical reflection is to be taken seriously, it is important to provide guidance or structured approach (in this case CRM) for STs to develop deep levels of reflection during TCE.

Furthermore, supervising lecturers should play an important role in encouraging reflection among STs. Supervising lecturers should be trained not only in providing clinical supervision but more importantly in playing their roles well to enhance the function of supervising lecturer to foster reflection. In such a case, the CRM may be useful for the supervising lecturers as it provides scaffolding techniques for them to guide the reflection of STs during TCE. In addition, the use of reflective journal writing in the format used in this study which focuses on the reflection of aspects related to lesson preparation, lesson implementation, feedback and assessment, classroom management and professional attributes seems to be a practical and theoretically sound approach. However, without the deliberate role and encouragement of the supervising lecturers to stimulate reflection, the level of reflection among STs tends to remain at the lowest level (or technical reflection). Therefore, realistically speaking, reflective practice requires much supports from all stakeholders, much changes and much patience (Vaughan, 1990).

Acknowledgement

This study was supported by the Niche Research Grant Scheme (NRGS Code: 2014-0001-107-82-5), funded by the Ministry of Education Malaysia to UPSI for the development of a teacher education model for preparing quality teachers for the future. The contribution of all members in the research team working on the bigger project is gratefully acknowledged. We would also like to express our special thanks to UPSI for providing the official approval that enables us to conduct the research. We also want to thank all student teachers who were involved in the research for their constructive participation and cooperation.

Corresponding Author

Wong Yeou Min, Faculty of Education and Human Development, Sultan Idris Education University, Tanjong Malim, Perak Darul Ridzuan 35900, Malaysia, yeouminwong@gmail.com.

References

- Aizan, Y., Walters, L. M., Ruzlan Md. Ali, Sarimah, S. A., & Walters, T. (2014). Reflecting on Malaysian teacher trainees' journals. *Malaysian Journal of Learning and Instruction*, 11, 1-21.
- Bain, J. D., Ballantyne, R., Packer, J., & Mills, C. (1999). Using journal writing to enhance student teachers' reflectivity during field experience placements. *Teachers and Teaching: Theory and Practice*, 5(1), 51-73.
- Boon, P. Y. (2002). *Pelaksanaan kerja kursus berportfolio dalam kursus diploma perguruan Malaysia*. (Unpublished doctoral dissertation). Universiti Kebangsaan Malaysia, Bangi, Malaysia.
- Boon, P. Y., & Wee, K. L. (2005). Facilitating reflection in education studies: A case study among pre service student teachers. *Journal IPBA*, 3(2), 1-16.
- Calderhead, J., & Gates, P. (1993). Introduction. In J. Calderhead & P. Gates (Eds.), *Conceptualizing reflection in teacher development*. London, The Falmer Press.
- Cohen, L., Manion, L., & Morrison, K. (2004). *Research methods in education* (5th ed.). New York: Routledge.
- Copeland, W. D., Birmingham, C., La Cruz, E. D., & Lewin, B. (1993). The reflective practitioner in teaching: Toward a research agenda. *Teaching and Teacher Education*, 9(4), 347-359.
- Etscheidt, S., Curran, C. M., & Sawyer, C. M. (2012). Promoting reflection in teacher preparation programs: A multilevel model. *Teacher Education and Special Education*, 35(1), 7-26. doi: 10.1177/0888406411420887
- Grossman, R. (2008). Structures for facilitating student reflection. *College Teaching*, 57, 15-22.
- Hanipah, H. (2004). *Learning to be reflective from theory to practices: Malaysia experiences*. Tanjong Malim, Perak: Penerbit Universiti Pendidikan Sultan Idris.
- Hatton, N., & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching & Teacher Education*, 11, 33-49.
- Hoover, L. (1994). Reflective writing as a window on preservice teachers' thought process. *Teaching & Teacher Education*, 10(1), 83-93.
- Kennedy, J. (1993). Meeting the needs of teacher trainees on teaching practice. *ELT Journal*, 47(2), 157-165.
- McGee, A. (2008). Critical Reflections of action research used for professional development in a Middle Eastern Gulf State. *Educational Action Research*, 16(2), 253-250.
- Merriam, S. B. (2007). *Qualitative research and case study applications in education: Revised and expanded from case study research in education* (Kindle ed.). San Francisco: Jossey-Bass Inc.
- Munby, H., & Russell, T. (1989). *Metaphor in the study of teachers' professional knowledge*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Nagendralingan, R., Aminah, A., & Othman, L. (2014). Teacher internship: A critical reflection on the interface between policy and practice in Malaysian teacher education. In J. C. D. Mora & K. Wood (Eds.), *Practical knowledge in teacher education: Approaches to*

- teacher internship programmes* (pp. 19-30). London & New York: Routledge, Taylor and Francis Group.
- National Institute of Education. (2010). *A teacher education model for the 21st century (TE21): A report by the National Institute of Education (NIE), Singapore*. Singapore: NIE, Strategic Planning and Corporate Services Department.
- Nor Hasniza, I. (2006). *Kajian pemikiran dan amalan refleksi di kalangan guru pelatih Sains Universiti Teknologi Malaysia*. (Master's thesis). Universiti Teknologi Malaysia, Skudai, Johor, Malaysia.
- Ostorga, A. N. (2006). Developing teachers who are reflective practitioners: A complex process. *Issues in Teacher Education*, 15(2), 5-20.
- Rahil, M., Zaidatol, A. L. P., Habibah, E., & Mohd Majid, K. (2004). The incorporation of thinking skills in the school curriculum. *Kajian Malaysia*, 22(2), 23-33.
- Saemah, R., Khartijah, B., & Arbain, M. (2000). Pemikiran refleksi di kalangan guru pelatih semasa menjalani praktikum. *Jurnal Penyelidikan Maktab Perguruan Islam*, 1, 1-9.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco, CA: Jossey Bass.
- Sparks-Langer, G. M., Simmons, J. M., Pasch, M., Colton, A., & Starko, A. (1990). Reflective pedagogical thinking: How can we promote it and measure it? *Journal of Teacher Education*, 41(4), 23-32.
- Toh, W. S. (2001). Measuring practicum student teachers' reflectivity: The reflective pedagogical thinking scale. *Research Journal MPBL*, 3, 18-27.
- Van Manen, M. (1977). Linking ways of knowing and ways of being practical. *Curriculum Inquiry*, 6, 205-228.
- Vaughan, J. C. (1990). Encouraging reflective practice in education. In Clift, Houston, & Pugach (Eds.), *Encouraging reflective practice in education: An analysis of issues and programs*. New York: Teachers College, Columbia University.
- Wong, Y. M., Mohd. Hassan, A., Rosnidar, M., & Syakirah, S. (2014). The analysis of UPSI teacher clinical experience in comparative perspective and suggestion for new teacher clinical experience structure. *International Journal for Innovation Education and Research*, 2(11), 14-23.
- Wong, Y. M., Rosnidar, M., & Syakirah, S. (2015a). The challenge of producing progressive teachers in Malaysia: A case study of reflective writings among UPSI student teachers. *GEOGRAFIA OnlineTM Malaysian Journal of Society and Space*, 11(7), 21-32.
- Wong, Y. M., Rosnidar, M., & Syakirah, S. (2015b). *A case study on reflective writings among UPSI student teachers undergoing teacher clinical experience*. Paper presented at Symposium Pengajian Siswazah UPSI–UPI 2015, Universitas Pendidikan Indonesia, Bandung, Indonesia, September 15, 2015.
- Wong, Y. M., Rosnidar, M., & Syakirah, S. (2016). The use of critical reflection manual in writing reflective journal: A case study of Malaysian student teachers' perceptions. *GEOGRAFIA OnlineTM Malaysian Journal of Society and Space*, 12(1), 8-18.

Zeichner, K. M. (1992). Conceptions of reflective teaching in contemporary US teacher education program reforms. In L. Valli (Ed.), *Reflective teacher education*. Albany, NY, State University of New York Press.