Student teachers' level of reflection during teacher clinical experience: A case study in a Malaysian university

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This study investigated student teachers' (ST) level of reflection during teacher clinical experience (TCE). It sought to analyse the level of reflection among STs from a Malaysian university in the current practice of reflective writing and after given exposure to the critical reflection manual (CRM) during TCE. This study used 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 participants consisted of seven STs who were undergoing TCE from February to June 2014 (for the current practice) and eleven STs who were undergoing TCE from July to October 2015 (for those given exposure to the CRM). Each participant's level of reflection was analysed based on Van Manen's (1977) categorisation of levels of reflection. 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, student teachers, teacher clinical experience, practicum

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 Ratnavadivel, Aminah Ayob, & Othman Lebar, 2014; Wong, Rosnidar Mansor, & Syakirah Samsudin, 2015). 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;

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Etscheidt et al., 2012; Nagendralingan Ratnavadivel et al., 2014; Wong, Rosnidar Mansor, & Syakirah Samsudin, 2016). There are also many calls for the need of reflective teacher education (Bain et al., 1999; Hanipah Hussin, 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) (or variously known as the teaching practicum) and the incorporation of effective elements of mentoring and coaching into the clinical supervision approach (Toh, 2001; Nagendralingan Ratnavadivel et al., 2014). These changes are resulted from the changing needs in Malaysia's education system and the increasing influence of global trends in teacher education.

Literature review

While promoting reflection has been continuously advocated by many teacher education programmes as an established goal 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 notion of reflection, much of the studies have noted that student teachers (STs) reflect at a superficial level (for example, Hatton & Smith, 1995; Saemah et al., 2000; Toh, 2001; Boon & Wee, 2005; Nor Hasniza Ibrahim, 2006; Aizan Yaacob et al., 2014; Wong et al., 2015). 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 et al. (2015) 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 et al. (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 et al. (2016) suggested a critical reflection manual (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 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. Similarly, 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 Yaacob 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 Yaacob 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 Ibrahim, 2006; Aizan Yaacob et al., 2014; Wong et al., 2015). 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 et al. (2015) used STs' selfreflection 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 three major hierarchical levels. Boon and Wee (2005) and Aizan Yaacob 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 Yaacob et al., 2014; Wong et al., 2015) have attempted to understand and investigate the STs' level of reflection by using Van Manen's (1977) framework. Hence, consistence with most previous studies, this study was conducted to investigate STs' level of reflection during TCE by employing Van Manen's (1977) three-stage model. 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 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. Also, it is 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.

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 a Malaysian university, 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 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 levels of reflection

Van Manen's 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	404	24	0
level	(94.4)	(5.6)	(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 & Wee, 2005). Additionally, Boon (2002), Boon and Wee (2005), as well as Wong et al. (2015) 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 Yaacob et al., 2014).

"Reflecting on the lesson today, I think that I should have focus on the difficult words more. I believe that, I should go by one paragraph to another when I was asking about the difficult words. I was able to control the classroom and my students also managed to complete my task" (SRN/P4/57/133).

"During this lesson, I have decided to continue from the previous lesson where the production stage that I wanted to do which was the students' presentation. The lesson went smoothly and I can notice that the students really read the drama 'Gulp and Gasp' because when I asked them for extra evidence, they could answer straightly..." (SRN/P7/15/33).

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 Yaacob et al., 2014).

"...To make the class interesting, I have drawn a picture of a car to explain the students the speech format. I can see that the students like this type of learning because it makes them remember the format better. The students told me that they prefer to remember picture rather than words. So, I will make sure to apply this method again when teaching the students any format for essay...At the end of the class, I can see that most of the students can write down the opening of speech correctly" (SRN/P1/25/58).

"The Snake & Ladder Game attracted students' attention. Students found it interesting and were quite excited to participate in answering questions. While playing the game, integration of music made the classroom atmosphere more lively and students could enjoy the music at the same time. I believe that lively atmosphere could make the students more active in learning..." (SRN/P6/63/139).

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 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 levels of reflection

Van Manen's 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	0	29	126
level	(0.0)	(18.7)	(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 openminded 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 Yaacob et al., 2014).

"...As we are gearing our education system to the international level, I believe our education system shouldn't focus only on producing students that can compete in international arena but zero in values. I believe education is a perfect platform to instil values such as teamwork, respect, patriotism and so forth. Even though I failed in my first attempt in making Form 1 Aktif to work as a team, but, in future I can make them to work together and I will make them to realize the significance of working together and helping each other can provide better learning environment" (RJW9/P9/63-69/3).

"...A teacher is not mere teacher in classroom. A teacher needs to play various roles in classroom to build a warm environment that make students feel comfortable and happy learning English. Being a caring teacher is to get to know better students from a different cultural or socio-economic background than us. So on the first day during ice breaking session, I have asked them on preferences to learn English lesson. Their responses gave me ideas for making the curriculum more relevant to their lives. I believe this is sure method for letting students know you care about them. I personally feel that if teachers can mingle with students as friends, it will make them more care about the subject because it seems that the teachers care about students they know on a different level. Thus, I believe that students will take initiative to learn the lesson" (RJW1/P14/31-40/2).

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

"...it is major problem in the class where the students are not studying and I always fail to achieve my lesson objective. They are bunking my class wandering along the corridor. This shown that I have failed in classroom management. I am just at the beginning of my practicum, identifying this problem and finding a solution for this is my priority and this will be very helpful for me to designate the type of classroom management approach suitable for my students. I have learned that students in school of each form needed different kind of approaches. To learn more about the suitable

classroom management ways and ways to approach teenage students, I have to make a small research...include studying various texts, articles, and journals on classroom management and will help me to improve as a teacher. This will definitely change my approach towards students after this..." (RJW3/P11/38-48/2).

"...Although I had tried to use interesting materials to capture the students' attention, it seems like their enthusiasm did not include the activity itself. This particular group of students are not interested in learning. They like to be noisy and it is very hard to keep them quiet and occupied. I feel that perhaps I should been more strict and enforce stricter rules regarding their actions. I should include some punishments to dissuade them from disrupting the class..." (RJW6/P15/24-29/1).

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 et al. (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 Yaacob 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 et al. (2015, 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 Wong et al.'s (2016) study 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).

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