



## The use of critical reflection manual in writing reflective journal: A case study of Malaysian student teachers' perceptions

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### Abstract

Reflective journal writing is a common tool for reflection to engage student teachers (STs) in reflective practice during teacher clinical experience (TCE) or teaching practicum. However, studies have shown that STs who have undergone the TCE often demonstrated low levels of reflection in their reflective writings. Therefore, the purpose of this paper was to discuss the effectiveness of critical reflection manual (CRM) in promoting critical reflection among STs during TCE based on the STs' perceptions. The CRM is developed through a systematic review of literature on various models of reflection, tools for reflection and approaches to developing a manual. It is developed specifically to guide STs to engage in critical reflection in their reflective writings during TCE. Primary data were collected from in-depth interviews and analysed by using content analysis technique. Eight STs from Sultan Idris Education University (UPSI) who were given exposure to the CRM during TCE were purposely selected to be interviewed. The findings indicated that the use of CRM by the STs had an overall positive impact. In addition, most STs gave positive perceptions of the CRM and provided several suggestions for improving the effectiveness of this CRM.

**Keywords:** critical reflection, critical reflection manual, reflective journal writing, reflective writings, student teachers, teacher clinical experience

### Introduction

Reflection has been famous in teacher education programmes as a practice that is able to raise the motivation of teachers to carry out the process of improving self and teaching performances (Brookfield, 1995; Henderson, 2000; Nor Hasniza Ibrahim et al., 2008). It is considered as a trigger for more effective self-change (Ghaye, 2005) and capable to make teachers actively express their ideas and figure out various solutions to the conflicts faced (Gelter, 2003). The rapid progress of globalisation era into the world of education is also one of the factors that lead to the necessity of fostering the practice of reflection among teachers (Corcoran & Leahy, 2003). This is because the practice of reflection has been earmarked as one of the approaches that are able to enhance the quality of a teacher and the level of professional competence (Hanipah Hussin, 2004).

Viewing reflection as a critical element in teachers' professional learning (Calderhead & Gates, 1993), student teachers (STs) are repeatedly asked to reflect during their teacher preparation programmes (Calderhead & Gates, 1993; Rodgers, 2002; Korthagen & Vasalos, 2005; Erlandson, 2006; Callens & Elen, 2011). Thus, efforts to develop STs as reflective practitioners have been focused and emphasised in teacher education programmes (Williams & Grudnoff, 2011). According to Hanipah Hussin (2004), one of the programmes in which reflection skills can be developed is the teacher clinical experience (TCE). TCE is especially significant given that many STs and teacher educators often regarded it as the most

important component of teacher education programmes (Wong et al., 2014). It is a time for STs to prepare themselves for teaching in a school setting (Wong et al., 2014), as well as to engage in reflection in a real context (Hanipah Hussin, 2004).

According to Hatton and Smith (1995), the work of John Dewey (1933) on reflection in the early nineteenth century is very important. Dewey, who is one of the most influential philosophers in the area of reflection has defined reflection as the “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (1933:9). His concept of reflection as a special form of rational problem solving and thinking is used as the basic idea for teaching STs to practice reflection (Hanipah Hussin, 2004). The rationale for this is that STs need assistance and guidance to practice reflection. With proper guidance, they are able to face problems and work towards overcoming them. Therefore, reflection and promoting reflection are increasingly featured in teacher education programmes for these reasons.

Furthermore, particularly in teacher education in Malaysia, the development of critically reflective STs has been a cornerstone of teacher education programmes (Hanipah Hussin, 2004). The rationale is that STs are able to view the ends and means of teaching, as well as the surrounding contexts as problematic when they are engaging in critical reflection. Very often, they have to work towards solving dilemmas and problems in teaching based on their critical analysis and use of ethical and moral criteria which they have developed. Watts and Lawson also asserted that STs normally reflect critically “to actively improve current practice through a process which involves systematically evaluating a range of complex factors resulting in a judgment or decision about a course of action or future response” (2009:610). In addition, STs who are critically reflective can incorporate criteria like moral and ethical values into their considerations for any practical action being taken in teaching (Zeichner & Liston, 1987).

A number of theorists, researchers or teacher educators have extensively debated what it means to critically reflect. According to Dewey (1933), critical reflection is defined as problem solving or investigation caused by a moment of thought. Mezirow (1990) argued that there was more to reflection than merely thinking about experiences and suggested that critical reflection involves a critique of the presuppositions on which one’s beliefs and values have developed. In a similar vein to Mezirow, Brookfield (1995) indicated that reflection by itself is not enough, and more latterly Kelchtermans (2009), added that a reflection is only considered as critical reflection once it involves moral (justice, humanity and equity) and political aspects in the work context, and shifts beyond the level of action to the level of underlying knowledge, beliefs, ideas and goals. In addition, Fook (2002) argued that critical reflection involves thinking about one’s own practice and critically deconstructing the facts of how these responses and skills are developed, with a view to developing new theories for future practice.

Notwithstanding the popularity of the notion of reflection and critical reflection, there is no consensus and consistency among social theorists, philosophers, researchers, therapists and educators as to its precise definition or application (Parsons & Stephenson, 2005; Dimova & Loughran, 2009; Black & Plowright, 2010; Hickson, 2011). With the diversity of meanings and frameworks for reflection and critical reflection, nevertheless, there are common themes and various ways to go about with the practice of reflection (Hickson, 2011). Based on the research literature, there are a myriad of tools, methods, techniques, frameworks and approaches for the practice of reflection, such as reflective journal writing, blogs, portfolio, peer observation and video-recording, to name just a few. These can be carried out and used either individually, in pair, in a group, or through online.

Despite various means to promote reflection, there are still many problems exist in implementing the practice of reflection even though it has been embarked into the world of teacher education for so long. Among the problems that exist are the low level of reflection exhibited by STs in their reflective writings (Hatton & Smith, 1995; Hanipah Hussin, 2000; Adibah Ismail et al., 2002; Wong et al., 2015) and the issues being reflected are very common (Zemba-Saul, Blumenfeld, & Krajcik, 2000; Nor Hasniza Ibrahim et al., 2005). Drawing from the research literature, one of the factors that cause these problems to occur is that STs are probably lacked of structured opportunities or approaches to reflect (Boon, 2002; Boon & Wee, 2005). Therefore, this paper aimed to identify STs’ perceptions on the developed critical reflection manual (CRM), which is capable of promoting critical reflection among them during TCE.

With this CRM, hopefully STs are able to practice structured and systematic reflection in order to be critically reflective in their reflective writings during TCE.

### **Development of critical reflection manual**

The CRM was developed based on the study of various models of reflection, tools for reflection and approaches to developing a manual, and also consideration of the prior research on the issues of low level of reflection among STs during TCE. The purpose of idea exploration conducted on the literature review was to find reliable and extensive data, and at the same time able to identify a framework that was needed for the process of developing a CRM that is able to promote critical reflection among STs during TCE. There were two main themes emphasised during the process of reviewing the literature, namely 'reflection' and 'approaches to developing a manual'. Among the terms that were used to search for the theme of 'reflection' were 'critical reflection', 'reflective practice', 'reflective thinking', 'reflective practitioner', 'models of reflection' and 'tools for reflection'. On the other hand, the terms used to find the theme of 'approaches to developing a manual' were 'manual development', 'how to create a user manual', 'instructional approach' and 'manual writing'. The central or reliable sources used in the literature review searching process were the leading journals, such as *Reflective Practice*, *Jurnal Teknologi*, *Teaching and Teacher Education*, *Teachers and Teaching*, *Asia-Pacific Journal of Teacher Education*, *Training and Technology Journal* and many more. In addition, the books related to reflection and instructional approaches were also used as sources of search. From the results of data exploration through literature review, a thorough analysis was conducted to establish the framework for developing the required CRM.

Based on the analysis and synthesis of findings from the literature review, a CRM was developed. To develop the CRM, various tools for reflection in TCE were identified; reflective components in each reflective tool that are required to promote critical reflection among STs in TCE were identified; and the level of reflection among STs during TCE was analysed. In addition, several approaches, for instance, the ADDIE model and ASSURE model were also identified and modified during the process of developing the CRM. These models describe the steps to be taken in order to create an effective CRM by taking consideration of some important elements. In this study, the researchers tried to apply and modify some components in both models and also improve the models by adding new but appropriate components in order to ensure the effectiveness of CRM development. Eventually, the researchers created a new model, namely AIDIEI model, which was adapted from the ADDIE model and ASSURE model to develop the CRM (see Figure 1). The following are the components in the AIDIEI model: (1) analyse and identify problems; (2) development; (3) implementation; (4) evaluation; and (5) improvement process.

The CRM comprises a combination of components, namely reflective practices and TCE guiding principles. It is divided into six sections, which are Section A, B, C, D, E and F. Section A consists of a flowchart to give an overview on how to use the CRM. Section B contains York-Barr et al.'s 4-Step Reflection Process framework (2006) which is used to guide STs in reflecting their experiences and write their reflective journal writings during TCE. The 4-step reflection process encompasses four steps, namely "What happened?", "Why?", "So what?" and "Now what?". Section C is mainly about the dimensions of descriptors (Values, Skills and Knowledge) of the TCE guiding principles where STs are asked to incorporate it in their reflective journal writings. Section D comprises five reflective components (for instance, professional attributes; lesson preparation; lesson implementation; feedback and assessment; and classroom management) for STs to choose which is significant for them to reflect in their reflective journal writings. Each component is followed by several prompt questions to stimulate STs' reflective thinking. Section E discusses about the characteristics of good reflective statements. Lastly, Section F gives the format of structured reflective journal writing and also includes a sample of reflective journal with the theme of 'Lesson Preparation' component.

In conclusion, this CRM requires STs to follow the format of structured reflective journal writing to write their reflective journals. As such, STs are able to engage in systematic or guided reflection during TCE. Many research suggested that systematic or guided reflection is essential to facilitate reflective

practice among STs (Hatton & Smith, 1995; Hanipah Hussin, 2000; Shulman & Shulman, 2004; Boon & Wee, 2005; Korthagen & Vasalos, 2005). By having this CRM, it is expected to help in overcoming the problem of low level of reflection among STs and at the same time promoting critical reflection among STs during TCE. However, the extents to which this CRM can meet the needs and understanding of STs is still remain as a question. To further refine the CRM, in-depth interviews were conducted.

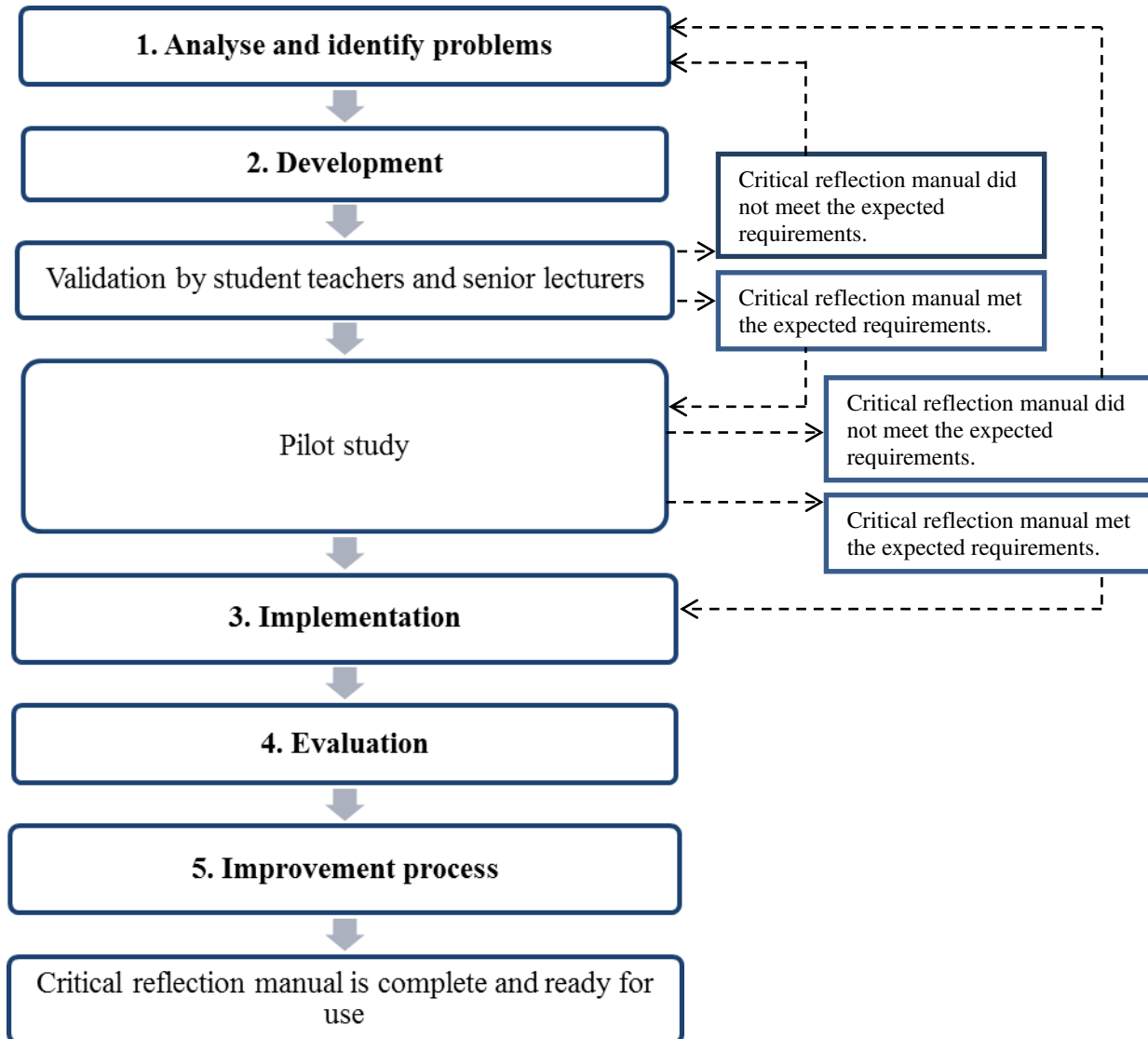


Figure 1. AIDIEI model for critical reflection manual development

## Methodology

For the realisation of this study, a qualitative approach was used. The researchers have conducted in-depth interviews with STs enrolled in undergraduate programmes from UPSI who had been given exposure to the CRM during TCE from July to November 2014. To maintain the nature of qualitative approach, eight STs of eighth semester from the four years full time bachelor degree programmes were selected purposely to be interviewed. Five of the eight STs were specialised in Bachelor of Education with honours in Teaching English as a Second Language (TESL), two were specialised in Bachelor of Science

(Mathematics) with Education and one was specialised in Bachelor of Education with honours (Physical Education). The sampling selection in this study fits the description of Merriam (2007) about the common criteria for sampling selection in qualitative research was “non-random, purposeful and small” (Merriam, 2007:8).

In this study, pseudonyms were used and they were known as Aqilah, Norakma, Fauzee, Kee, Ruzana, Shirley, Hasyimah and Faiz. The individual interviews were conducted by using semi-structured questions on November 25<sup>th</sup> and November 27<sup>th</sup>, 2014 in the UPSI Education Research Laboratory (UERL), Tanjung Malim, Perak. The main purpose of the in-depth interviews was to get feedback, comments, suggestions and criticisms from STs on the CRM. All comments received will be taken into consideration by the researchers in the process of refining and improving the CRM. It is important for the purpose of improving the components in the CRM, as well as enhancing the effectiveness of reflective practice among STs during TCE.

The interview process was conducted after obtaining a solid framework through a systematic review of research literature. It was carried out with five major purposes: (1) to gain insights and constructive criticisms of the language used in the CRM as a whole, as well as the contents of the CRM; (2) to identify the effectiveness of CRM in guiding STs to write reflections; (3) to identify the advantages of using the CRM; (4) to identify the disadvantages of using the CRM; and (5) to identify the effectiveness of CRM in promoting critical reflection among STs during TCE.

According to Boyce and Neale (2006), in-depth interview is a qualitative research technique that is useful when researchers want to explore the perspectives of research participants on a particular idea, programme, issue, or phenomenon. It involves carrying out intensive individual interviews with a small number of research participants. Therefore, instead of using focus group, in-depth interviews are relevant to be used in this study to explore STs’ perceptions of the developed CRM especially when they may not be comfortable talking openly in a group (Boyce & Neale, 2006). In addition, in-depth interviews allow researchers to distinguish individual views or opinions of the developed CRM as opposed to group. The conversation during the interview sessions was recorded, transcribed and later analysed by using content analysis technique (Graneheim & Lundman, 2004). This technique requires researchers to examine each sentence from interview transcripts and categorise it according to the purposes of interviews conducted. Patterns that have been identified were arranged and connected to each other to give a more comprehensive overview.

## Findings and discussion

Based on the document analysis that were conducted, it was found that five major themes were discussed during the in-depth interviews, such as STs’ perceptions of the developed CRM; effectiveness of CRM in guiding STs to write reflections; advantages of using the CRM; disadvantages of using the CRM; and effectiveness of CRM in promoting critical reflection among STs during TCE. In addition, STs also gave suggestions and comments for the improvement of CRM, which was developed through more research literature on various models of reflection, tools for reflection and approaches to developing a manual.

### *Student teachers’ perceptions of the developed critical reflection manual*

There are two major aspects given by the STs while expressing their perception of the CRM, such as overall views of the language used and contents of the CRM.

#### a. Overall views of the language used in the critical reflection manual

Almost all the STs, excluding Norakma expressed the view that the language used in the CRM is clear and concise, as well as very easy to understand. They also felt that the English language used in the CRM

is very friendly and practical for them to understand its contents in order to write their reflections. Some excerpts from the interview transcripts are as follows.

*“Yes, I can understand the language.”* (Aqilah)

*“Yes, the language in the manual is easy for a layman like me.”* (Fauzee)

*“Yes, the English is simple...and friendly for me to understand the guidelines in the manual...so I can use to write my reflections.”* (Shirley)

*“Yes, the English is very clear and easy to understand.”* (Ruzana)

According to Van Daele (1995), to write training manuals that are easy to read, one need to use short, easy to understand and layman terms in providing appropriate information and details. It is best to avoid highly advance language in favour of clear, simple and concise explanations. For this purpose, the CRM uses layman English that strive to provide clear, concise and explicit guidelines that are easy to read and understand by STs. The clarity of guidelines is very important for STs to understand in order to apply it in their reflective writings during TCE.

In addition, the process of developing the CRM has adapted some of the suggestions given by Van Daele (1995) on effective writing of training manuals, such as (1) write for your audience; (2) organise your material; (3) rewrite, revise and edit your material; (4) use charts and illustrations to support your message; (5) use clear, short, familiar words; (6) eliminate unnecessary words; (7) keep sentences short and simple; (8) use the active voice; (9) use the imperative mood; (10) use notes; (11) use emphasis; (12) use ordering techniques; and (13) use point form.

#### b. Overall views of the contents of the critical reflection manual

Out of the eight STs being interviewed, seven said that they can understand well the contents of the CRM. They felt that the contents of the CRM were very interesting and easy for them to understand and study. They also pointed out that the guidelines and instructions given in the CRM were properly arranged and organised. In contrast, Kee commented that she can understand moderately about the contents of the CRM and if guidance or further explanation was provided, she will be able to understand better. The following are some of the interview transcripts being done.

*“Yes, I can understand the contents of manual.”* (Norakma)

*“Yes...the guidelines are properly structured and I am really interested with the guidelines given...”* (Hasyimah)

*“Yes, I can understand...I also felt that the instructions given are clear and well organised.”* (Faiz)

According to Minnick (1989), the effectiveness of an instructional material, for instance module or manual is very dependent on the contents of the instructional material, in other words, the information or materials that are included in the instructional material. The materials that may be included in any instructional material are classified as follows: (1) need to know; (2) nice to know; (3) less nice to know; (4) barely relevant; and (5) might be used someday (Minnick, 1989). However, for training and guiding purposes, the materials should be limited to the “need to know” information that is vital and important. Furthermore, the contents should be well organised for clarity. Reddout (1987) also noted that the structure of a manual is almost as important as its content. The materials in the manual should be organised from simple to complex. Diagrams, pictures and other illustrations that may help to clarify the information presented should also be included.

Therefore, the contents of the CRM have included only the “need to know” information that is essential to guide STs to be critically reflective in their reflective writings. Moreover, the contents were systematically arranged and well organised in a way that mimics the way STs think. In addition, a flowchart and diagrams were used in the CRM to support the texts as they can illustrate certain points in

the CRM better than texts, particularly in complex procedures where STs need to have visual confirmation to perform the steps correctly.

#### *Effectiveness of critical reflection manual in guiding student teachers to write reflections*

All the STs who were interviewed have stated that the CRM was very effective in guiding them to write their reflections during TCE. Through the York-Barr et al.'s 4-Step Reflection Process framework (2006) and reflective components in the CRM, STs felt that the CRM was very helpful in guiding them to reflect their experiences and to write their reflective journal writings during TCE. They also mentioned that critical reflection was being fostered and promoted when they followed the step-by-step guides for reflection in the CRM. Some of the relevant excerpts from the interview transcripts are such as:

*"...it guides me and it is very helpful in my writing of reflections..."* (Aqilah)

*"...the critical reflection manual has the reflective components which guide me to elaborate my reflection better."* (Ruzana)

*"...because able to promote critical reflection in my teaching practice."* (Shirley)

*"...as it assists me in reflecting on my lesson stage by stage..."* (Hasyimah)

*"...by giving me step by step instructions on writing my reflection."* (Faiz)

This is because the CRM has included York-Barr et al.'s 4-Step Reflection Process framework (2006) that emphasised on using the 4-step reflection process in guiding STs to reflect on their teaching and learning process and at the same time, to write their reflections during TCE. In addition, the CRM also incorporated other reflective guidelines such as dimensions of descriptors (Values, Skills and Knowledge) of the TCE guiding principles, lists of reflective components, characteristics of good reflective statements and format of structured reflective journal writing, which were very helpful to guide STs to engage in structured reflection in writing their reflections during TCE.

#### *Advantages of using the critical reflection manual*

All eight STs expressed that there were advantages in using the CRM. They commented that CRM was able to provide structured approach for them to reflect and also guide them in their reflective writings. Due to the inclusion of the dimensions of descriptors (Values, Skills and Knowledge) of the TCE guiding principles in the CRM, STs felt that they were able to identify and demonstrate the values, skills, and knowledge attributes, which are recognised as essential pre-requisites for becoming quality teachers during TCE. In addition, through the five reflective components (for instance, professional attributes; lesson preparation; lesson implementation; feedback and assessment; and classroom management) in the CRM, STs highlighted that they were able to consider the possible reflective components on various teaching and learning processes that were significant for them to reflect back in their reflective writings. Among the excerpts from interview transcripts are as follows.

*"...so that we are aware that there are more aspects to be considered in reflecting our teaching skills."* (Kee)

*"The advantage of using the critical reflection manual is that it can guide us to write a better reflection and at the same time when we read it again, it can help us to remember and understand that particular situation in order to do better in the future."* (Ruzana)

*"I am able to reflect on myself by listing out the values, knowledge and skills that I have applied in my lessons."* (Shirley)

Comments from the STs about the advantages of using the CRM may be associated to the use of structured approach to reflection, which, as the STs commented, gave them 'more structure', 'more guidance' and 'more aspects to consider about things'. York-Barr et al.'s 4-Step Reflection Process

framework (2006) and other reflective guidelines in the CRM appeared to be a structured approach to reflection, which was believed to be able to provide immediate support and guide for the STs to become more conscious about their teaching and learning process, and to actively question and critique their teaching practice during TCE. As such, these findings about the advantages of using the CRM can reinforce the effectiveness of the CRM.

#### *Disadvantages of using the critical reflection manual*

Seven out of eight STs who were interviewed commented that there were disadvantages in using the CRM. Among the disadvantages mentioned in their comments are such as time consuming and confusing due to the lengthiness and detailedness of the CRM. Only one ST, Aqilah stated that there was no disadvantage at all of using the CRM. The following are the excerpts of interview transcripts related.

*“Taking time to understand the contents.” (Norakma)*

*“The critical reflection manual is too detail.” (Fauzee)*

*“The disadvantage of using the critical reflection manual is that it might be focusing on too many aspects at the same time and might be difficult to the practitioner to do so.” (Ruzana)*

*“The critical reflection manual is too lengthy and not direct to the points which may confuse the readers.” (Faiz)*

The data obtained about the disadvantages of using the CRM can be used as information for improving and refining the CRM. All the data obtained about the disadvantages of using the CRM will be considered and investigated in depth by the researchers. If the disadvantages like time consuming and confusing are really the weaknesses of the CRM, then these weaknesses need to be overcome during the implementation of improvement process. By then, perhaps the researchers can take further actions to revise and improve the CRM by reviewing and summarising the contents of the CRM.

#### *Effectiveness of critical reflection manual in promoting critical reflection among student teachers during teacher clinical experience*

Nearly all the STs being interviewed felt that the CRM was effective in promoting critical reflection among them during TCE, except for Faiz. They said that after using it, they were able to critically identify, analyse and solve the problems or conflicts that arise in their teaching through the application of the York-Barr et al.'s (2006) 4-step reflection process. In addition, they also stated that the CRM provided guidance for them to question and critique their teaching based on consideration from different aspects, for instance moral and ethical, in order to improve their current teaching practice and resolve the problems or dilemmas in teaching. Among the excerpts quoted from the interview transcripts are such as:

*“Yes, can promote critical reflection...because I can critique and question about my teaching by the guidance from the critical reflection manual.” (Norakma)*

*“...it can promote my critical reflection...because it gives me idea on what and how should I do to reflect critically about my teaching practice.” (Fauzee)*

*“Critical reflection can be promoted by using the critical reflection manual because I am introduced to the four steps of reflection process which enable me to identify, state and correct my problems in different aspects.” (Shirley)*

One main explanation for the STs to unanimously agreed with the effectiveness of the CRM in promoting critical reflection among them during TCE may be related to the use of York-Barr et al.'s 4-Step Reflection Process framework (2006). The 4-step reflection process, which is practical and user-friendly for STs is able to bring reflectors (in this case STs) through a sequence of thinking process, for instance, description (what?); analysis and interpretation (why?); overall meaning and application (so



what?); and implication for actions (now what?) (York-Barr et al., 2006). The STs being interviewed placed greater emphasis on having a structure with which to reflect on their teaching practice during TCE. This reinforced the argument of Shulman and Shulman (2004) that structured reflection is critical for STs to analyse their practice. Perhaps the use of York-Barr et al.'s 4-Step Reflection Process framework (2006), with its focus on both reflection-on-action and reflection-for-action, enabled the STs to reflect critically in more profound and complex ways.

## Conclusion

Based on the views, opinions, criticisms and suggestions given by the STs about the CRM, it is shown that the CRM as a whole is relevant for STs who will be undergoing TCE. It is considered to be able to stimulate critical reflection among STs by providing guidance for them to be critically reflective in their reflective writings during TCE. As noted earlier, critical reflection is essential in teacher education in particular, as it can support professional growth and development of STs, as well as help them to bridge the gap between theory and practice (Hanipah Hussin, 2004; Smith, 2011). Moreover, promoting critical reflection in TCE is clearly one of the most important strategies for strengthening TCE in teacher preparation programmes.

In addition, CRM is also expected to be able to enhance the level of reflection among STs to reach the critical level, and ultimately able to improve the self-confidence and competence of STs who will undergo TCE. This is due to it contains structured and systematic reflective guidelines that are able to provide guidance for STs to practice structured and systematic reflection in their reflective writings. However, this study only takes into account the views of eight prospective teachers (or also known as STs) who were given exposure to the CRM and who had undergone TCE for only 16 weeks in the real teaching and learning environment. Therefore, follow-up studies should be undertaken to obtain constructive views, comments and criticisms from a group of experienced teachers and lecturers who have been through a variety of teaching experiences, practicing a variety of teaching strategies and applying diverse teaching theories. This group of people certainly has different views from the prospective teachers and their views are very valuable in improving and refining this CRM.

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