

Examining Video Self-reflection for Teaching Practice

Jasmine Jain*

*¹School of Education, Taylor's University,
Lakeside Campus, No.1, Jalan Taylor's,
47500 Subang Jaya, Selangor, Malaysia.
Jasminejain.soed@gmail.com*

**Corresponding Author*

Received Date : 9 April 2017

Accepted Date: 27 May 2017

ABSTRACT

There have been numerous studies looking at the use of video in recording teaching and subsequently for the video to be used for the teacher to view and reflect on. However, it was found that the framework to guide such practice for implementation is lacking and most model only resort to the traditional triad model of assessment in teaching practice. This paper acknowledge the need for pre-service teachers to be reflective in their practice and hence review the work done by other studies, specifically on the dimension of collaborative reflection, structures of reflection, length of video as well as the frequency of reflection. The review of the aforementioned dimensions subsequently led to a proposed model, namely the pentagonal model of assessment in teaching practice. With the proposed framework place in context, the discussion of how it can be implemented follows.

Keywords: video, self-reflection, teaching practice

INTRODUCTION

The practice of classroom observation or clinical supervision is a conventional and most popular way of assessing the competence of pre-service teachers in teaching. However, the extent in which it improves the practice of the pre-service teacher being observed is highly questionable. Of late, many researchers have argued against this method citing that it is hard

to capture the competence of the pre-service teachers due to the dynamic and unique nature of each classroom (Richards & Farrell, 2011), unless it is done in a regular manner. However, the frequent visits by an observer, which normally is the supervisor of the pre-service teacher, is not feasible due to logistic reasons (Welsch & Devlin, 2012). This paper explores the alternative design to such assessment, which focuses on pre-service teachers' professional development and how technology can be used as an enabler for such alternative framework for clinical supervision to happen.

BACKGROUND

Teaching practice is a form of work-integrated practice where pre-service teachers are placed in a work environment, namely schools as teacher for them to be able to relate theory into practice (Kiggundu & Nayimuli, 2009). The current teacher education which the author is based in is undergoing a revision of structure to the teaching practice, and the author is intrigued to look for a framework to guide the assessment of teaching practice, not just for the sake of grading the pre-service teachers, but also serve as a guiding framework which allow the pre-service teachers to be reflective in their practice, and enhance their professional development as they are prepared to be future teachers. In the existing framework for supervision, it follows the traditional trait model where the pre service teacher will be evaluated by only the supervisor from the university and mentor who is the experienced teacher in school.

The intention of preparing reflective teachers in teaching is consistent with the learning outcomes for the module Theory into Practice, which is a module on teaching practice in the university where the author is affiliated with. In this module, pre-service teachers are placed in host schools for three months and are given the opportunity to learn from experienced teachers and develop practical skills, particularly in the areas of planning, teaching, classroom management, and the organization of learning activities for pupils. The learning outcomes of the module are:

1. Plan theory-informed lessons to promote and support student learning consistent with the requirements of the curriculum

2. Develop theory-informed practice to promote and support student learning in own practice and in assisting teachers
3. Develop the capacities for reflective thinking for professional growth and development.

The author understand that having a supervisor for visitation is not apt enough to mold a teacher who is reflective in practice, as the visits which are typical once or twice are not regular enough to be involved in important decisions which the pre-service teachers make in developing pedagogical skills (Veal & Rikard, 1998). As the pre-service teachers' teaching experience has been noted as one of the most important and influential factors in preparing them to be beginning teachers (Clark, Smith, Newby, & Cook, 1985; Koehler, 1988; Lemma, 1993), there is a need to look deeper at an alternative of how teaching practice can be approached with regard to assessing the pre-service teachers.

Reflection in Teaching Practice: Theoretical Framework

There are many definitions of reflection but in teaching, reflection can be defined as an “active, persistent, and careful consideration of belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it ends” (Dewey, 1933, p.9). The definition in the recent century does not deviate much from what Dewey has defined in 1933 where Norton (1994) encapsulates reflection as “the capacity of a teacher to think creatively, imaginatively and critically about classroom practice. Teacher’s ability to reflect critically on their teaching has been touted as a critical aspect for teacher professional development (Schön, 1983) as such ability is presumed to make them more effective as teachers (Black, 2001).

Pre-service teachers bring with them their prior experiences revolving on how they were taught and their lens of the ideal way of teaching, which influence the way they carry out assessment, view learning and children (Howard, 2003). From the constructivist view on learning, these schemes build upon their educational experiences can become deeply ingrained schemas which are difficult to alter (Piaget & Inhelder, 1972). With in-depth reflective thinking during teaching practice, it is claimed that newly

practicing teacher are able to accommodate and assimilate new information, serving to refine pedagogical thinking (van Driel, Beijaard & Verloop, 2001). Many researches has then been conducted and the positive outcomes of using reflection in teaching practice promoted reform-based beliefs that reflection has the potential to interpret and resolve dilemmas occurring in their own classrooms (Korthagen, 2001; Loughran, 2002).

Video for Self-reflection

The advancement of mobile phones in capturing video and the availability of camera to common people allow many researchers and practitioners alike to explore the usage of video by self-recording their teaching and reflecting on their teaching. Given the various benefits of including reflection in teaching practice, many research papers have indicated that using video is an effective way to encourage reflective practice among pre-service teachers (Bryan & Recesso, 2006; Dawson, Dawson & Forness, 2001; Tripp, 2011; Miller, 2009). A work worth highlighting is by Martin-Reynolds (1980) who reported that the comparison of pre and post test scores in their study indicated that their participants' responses shifted from themselves to their learners after participating in the video reflection activities. Despite the fact that video has been claimed as a means of encouraging teacher reflection for decades, research reporting teacher experiences self-reflection using videos are only recently making a headway in the teacher education literature (Tripp, 2011).

A few dimensions on using video as self-reflection will be discussed and considered in the following sections. The dimensions are:

1. Collaborative reflections
2. Structures of reflections
3. Frequency of reflections
4. Length of videos for reflections

Reviewing the few dimensions done by other researchers will inform the author better on the framework of using video in the current context of teaching practice used in the university she is affiliated with.

Collaborative Reflections

In the work by Miller & Carney (2008), as well as by Wright (2008), it was found that reflection using video is more in-depth compared to reflection that is done based on the teacher's memory after the teaching. The participants in their study were asked to record their teaching, and upon finished teaching, the teachers were asked to complete written reflections. The participants indicated that they are able to recognize few things that they did now when they reflected from memory, such as teacher-student interactions which they are able to perceive at slower pace (Miller & Carney, 2008). This shows that viewing video of their teaching is able to place them in the shoes of their students and provide them with the strengths and weakness of their lessons. However, there are studies that promote collaborative reflection than individual reflection as it was found that teachers appreciate discussing and having input about their performance in teaching from their friends than to just reflecting based on how they valued their own teaching (Halter, 2006; Welsch & Delvin, 2004). Their friends were able to see the mistakes which they failed to spot when they are reflecting themselves, resulting in a more rigor and in-depth reflection about their practice (Tripp, 2011). Other than that, having their peers to view and discuss about the videos allowed them to know that their peer also have the same struggles, providing them a sense of belonging to the teaching group.

Brawdy and Byra (1994) also suggested that supervisor could be a suitable person to discuss the video with, as they found that the improvement rate for the teachers who discuss their videos with their supervisor was higher compared to those who reflected on their video in solitary. For example, teachers felt that video-based discussion with their supervisor is more useful than evaluations without video feedback because video becomes a frame for reference which the discussion is based (Wang & Hartley, 2003). Overall, the self-evaluation done with the input of peers, colleagues or supervisors are more beneficial than done alone.

Structures of Reflection

The literature about the structure of reflection while viewing video is rather inconclusive (Tripp, 2011). There are two views which are prevalent in the literature, which suggest that a guiding framework on reflections

should be provided to the teachers, or none at all which would allow teacher to reflect on any areas of concerned to him or her.

Prior studies in the literature indicated that providing teachers with a guiding framework for their reflection provide the teachers a lens to look at the different aspects of their teaching clearly (Zeichner & Tabachnick, 1991). They were able to look at their lesson in different phases and are more informed at how they can improve their teaching in the future. There are studies too which compared the quality of reflection with and without a guiding framework and found that the quality of reflection by the teachers are significantly enhanced when they have a guiding framework to work with (Fox, Brantley-Dias & Calandra, 2007). This is because the questions in guiding reflection allowed focus and resulted in more in-depth reflections by addressing questions asked of them.

On a flipped side, Calandra, Gurvitch & Lund (2008) showed that providing guided structure to the teachers made their reflection too focused, resulting in a lack of flexibility to reflect on aspects beyond what was provided in the guiding framework for reflection. In their study, it was found that teachers were able to focus more on the technical aspects of their teaching and less on the conceptual understanding of their students when no guiding framework is given for their reflection. A study by Nicol and Crespo (2004) corroborated this findings as they reported that the participants of their study valued freedom to choose their own reflection focus rather than adhering on what needs to be focused on by the guiding framework. This review of literature suggests that teachers should be allowed to select their own focus of reflection, and then get their supervisor to review to help them narrow their focus for a more quality reflection process.

Frequency of Reflections

Most research looking at reflection in teaching did not measure the number of reflections needed to be done on one video which they have recorded, while other studies quoted that they asked teachers to reflect on a video one to three times, where three times being the most common. Although the number given were not justified, Tripp and Rich [as cited in Tripp, 2011] reported that teachers reached the “saturation effect”, which means they feel that their performance in teaching is good enough after

focusing on the same video three to four times. On the other hand, Storeygard and Fox (1995) indicated that the frequency of reflection should not be a determinant variable, but the time of which the reflection is happening is more important. The participants in their study mentioned that it is more valuable to reflect on the video before and after a conference with a peer or a supervisor (Storeygard & Fox (1995). While the minimum threshold for reflection on a video was not reported in any study which looked at video self-reflection, this suggests that three times is a good number to begin with.

Length of Video for Reflections

The length of video for reflections are lacking as there are no studies conducted to purposefully study this variable for quality reflection. Looking at the length of videos in past studies, it was found that the length of videos varied from a 3-minute clip of lesson to an entire teaching session of a teacher. However, there are data reported in a study that the participants felt that they could have reflected with more depth when the length of videos exceed three minutes so that they are able to get more content and context to reflect on (Sharpe et al., 2003). However, Pailliotet (1995) indicated that viewing the entire teaching session could be quite taxing, resulting in shallow reflection which is rushed to be finished.

Although video is increasingly used for reflection in the betterment of quality in teacher education, there is no framework available (Tripp, 2011) for those who wish to use video to design a video self-reflection for teaching practice.

The Proposed Pentagonal Framework

Given the review of literature and the purpose statement in the previous sections, this paper presents a framework of how the teaching practice using video reflection can take place. The elements of collaborative reflection, coupled with the structure and the length of video as well as the frequency of reflections are being considered and embedded in the framework.

As opposed to the traditional triad model, the proposed pentagonal model include more angles to the discourse of feedback and feed forward, which believed are helpful for pre-service teachers in understanding where

they stand in their current performance. Leveraging on the use of video recording, the proposed framework include two additional angles of peer and self-evaluations. Although the pre-service teacher and self-evaluation is represented by the same person, this framework advocates the theory of self-regulation and metacognition, and recognize that viewing the video of teaching offers a third-party observation, but with the understanding of what motivates any actions made during the teaching (Muraven & Baumeister, 2000).

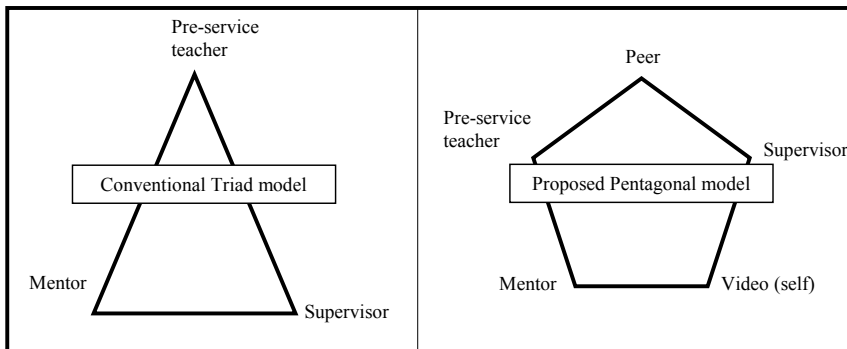


Figure 1: Pentagonal Models

The Structure of Assessment for The Pentagonal Model

The current placement structure requires pre-service teachers to be in school for three months, where they will spend their first week on orientation activities, such as observation of lessons, acquainting themselves with the school systems, curriculum, pupils as well as their mentor. Week two and three is on assistantship, where they immerse in the classroom activities with increasing degree of presence through means such as assisting to prepare class materials, marking student work, teaching small group of pupils and so on. With more confidence as they are placed in classroom and school, it is expected that they take up full duty teaching and gain more dominance in classroom lessons with the help and guidance of their mentor teacher.

The inclusion of video here is to support this model, by getting the pre-service teachers to record parts of their classroom teaching. The parts of lesson to be recorded are based on the three-phase lesson of effective

instruction (Curriculum Planning and Development Division, 2012), namely Readiness, Engagement and Mastery (REM). The three phases are described as follow:

1. Readiness: In this readiness phase of learning, teacher prepares pupils so that they are ready to learn. This requires consideration of prior knowledge, motivating contexts and learning environment.
2. Engagement: This is the main part of learning where teacher use a repertoire of pedagogies to engage students in learning new concepts and skills.
3. Mastery: this is the last phase of learning where teachers help students consolidate and extend their learning.

(Curriculum Planning and Development Division, 2012)

The context of REM components are placed as a reference so that the pre-service teachers record lesson which is long enough for them to based their reflection on, and able to re-record only the part which they can improve further on. The recording should not be less than 3 minutes, or more than 20 minutes for the reflection to be meaningfully take place, as suggested by the literature (Sharpe et al., 2003).

The entire process involve a pre-observation conference where the student teacher will discuss with their mentor on the lesson plan, and if necessary, suggest modifications or supplementary materials that can be included. The main purpose is to help the pre service teacher prepare and plan lesson that is to be taught. Then, when the lesson plan is executed, the lesson should be recorded in three parts- readiness, engagement and mastery. The post-observation conference can take place with the mentor as soon as after the lesson, or preferably done on the same day. The feedback conference between the mentor and pre-service teacher should examine those aspects of teaching that has been jointly agreed upon as observational focus during the pre-observation conference.

With the lesson recorded, three angles of feedback can then be sought after from peers, supervisor and self. The inquiry should be guided, especially in the collaborative reflections with peers and in self-reflection.

The focus of the analysis should be on student learning – and the ways in which the teaching facilitated or impeded that learning. For self-reflection, it is advocated that a guided framework for reflection should be provided, and the Gibb's Reflection cycle is given to allow for deeper reflection in aiding the pre-service teachers to be more reflective in their practice (Appendix 1).

Data collected during lesson observations, when analyzed, will show the student teacher's strengths as well as the areas that need improvement. Repeated observations are expected to provide a sound, cumulative description of the student teacher's teaching development over time, and serve as a progressive record of teaching for the pre-service teacher.

CONCLUSION

Although the use of video is something new planned to be implemented, the practice of being reflective is not. This paper is written to view how video can be integrated into the practice and at the same time, bring in another two angles of how teaching by the pre-service teachers can be viewed. A study on the effectiveness of using video in a pentagonal reflective model is viewed as a worthy endeavor to ensure that the learning outcomes of teaching practice, particularly in this context are achieved.

REFERENCES

- Bryan, L. A. & Recesso, A. (2006). Promoting reflection with a web-based video analysis tool. *Journal of Computing in Teacher Education*, 23, 1, 31–39.
- Clark, D. C., Smith, R. B., Newby, T. J., & Cook, V. A. (1985). Origins of teaching behaviors. *Journal of Teacher Education*, 36(6), 49–54.
- Curriculum Planning and Development Division. (2012). *Mathematics Syllabus Primary One to Five*. Singapore: Ministry of Education.
- Dawson, P. J., Dawson, K. E. & Forness, S. R. (2001). Effect of video feedback on teacher behavior. *Journal of Educational Research*, 68(5), 197–201.

- Fox, D. L., Brantley-Dias, L. & Calandra, B. (2007, November). *Promoting preservice teachers' reflective practice through digital video and critical incident analysis in secondary English education*. Paper presented at the 57th National Reading Conference, Austin, TX.
- Halter, C. P. (2006). The reflective lens: the effects of video analysis on preservice teacher development. *Dissertation Abstracts International*, 67, 3. (UMI No. 3211280).
- Howard, T. C. (2003). Culturally relevant pedagogy: ingredients for critical teacher reflection. *Theory into Practice*, 42(3), 195-202.
- Koehler, V. R. (1988). Barriers to effective supervision of student teaching: A field study. *Journal of Teacher Education*, 39(2), 28-34.
- Korthagen, F. (2001). *Linking practice and theory: The pedagogy of realistic teacher education*. Mahwah, NJ: Lawrence Erlbaum.
- Lemma, P. (1993). The cooperating teacher as supervisor: A case study. *Journal of Curriculum and Supervision*, 8, 329-342.
- Loughran, J. J. (2002). Effective reflective practice: In search of meaning in learning about teaching. *Journal of Teacher Education*, 53, 33-43.
- Martin-Reynolds, J. (1980). The effects of a self-evaluation model on the focus reaction of student-teachers during split-screen video-tape feedback. *Journal of Educational Research*, 73, 6, 360-364.
- Miller, M. & Carney, J. (2008). Using video annotation software to enhance the mentoring and professional development of teacher candidates. *Journal for Research, Leadership, and Practice*, 2, 16-32.
- Miller, M. J. (2009). Talking about our troubles: using video-based dialogue to build preservice teachers' professional knowledge. *The Teacher Educator*, 44(3), 143-163.

- Muraven, M. & Baumeister, R.(2000). *Self-Regulation and Depletion of Limited Resources: Does Self-Control Resemble a Muscle?*. American Psychological Association. doi:10.1037/0033-2909.126.2.24.
- Pailliotet, A.W. (1995). I never saw that before: a deeper view of video analysis in teacher education. *Teacher Educator*, 31(2), 138–156.
- Piaget, J. & Inhelder, B. (1972). *The psychology of the child*. London: Basic Books. ISBN-13: 978-0465095001.
- Richards, J. & Farrell, T. (2011). *Practice teaching: a reflective approach*. New York: Cambridge University Press.
- Schon, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books, Inc.
- Sharpe, L., Hu, C., Crawford, L., Gopinathan, S., Khine, M. S., Moo, S. N. et al. (2003). Enhancing multipoint desktop video conferencing (MDVC) with lesson video clips: recent developments in pre-service teaching practice in Singapore. *Teaching and Teacher Education*, 19, 529–541.
- Tripp, T. & Rich, P. (2011). Using video to analyze one's own teaching. *British Journal of Educational Technology*. doi: 10.1111/j.1467-8535.2011.01234.x
- Van Driel, J. H., Beijaard, D., & Verloop, N. (2001). Professional development and reform in science education: The role of teacher's practical knowledge. *Journal of Research in Science Teaching*, 38(2), 137-158.
- Veal, M., & Rikard, L. (1998). Cooperating teachers' perspectives on the students teaching triad. *Journal of Teacher Education*, 49(2), 109–119.
- Wang, J. & Hartley, K. (2003). Video technology as a support for teacher education reform. *Journal of Technology and Teacher Education*, 11(1), 105–138.

- Welsch, R. G. & Devlin, P. A. (2004). Developing preservice teachers' reflection: Examining the use of video. *Action in Teacher Education*, 12(4) 491–509.
- Wright, G. A. (2008). *How does video analysis impact teacher reflection-for-action?* Unpublished doctoral dissertation.
- Zeichner, K. & Tabachnick, B. R. (1991). Reflections on reflective thinking. In Tabachnick, B. & Zeichner, K. (Eds), *Issues and practices in inquiry-oriented teacher education* (pp. 1–21). Bristol, PA: The Falmer Press.