

The use of video-based reflection to facilitate pre-service English teachers' self-reflection¹

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Abstract

As self-reflection is crucial for improving the professional identity of pre-service teachers, it is paramount to discover ways that may assist them to reflect more effectively. This study investigates how self-reflection may be enhanced by the use of video recording as compared to that which is facilitated only by students' memories. Employing a descriptive qualitative analysis method, the research uses reflection journals and interviews from pre-service English teachers of two available microteaching classes of an English language education program in an Indonesian private university in Central Java. While the students in one class used video recording to help them reflect, those in the other class relied on memory. The findings showed that the reflections supported by video recording were more specific and more analytical, focusing more attention on management-related issues of the teaching. Those from the memory-based group, on the other hand, tended to be general and descriptive with more accounts on personal feelings.

Keywords: EFL pre-service teacher, microteaching, video-based reflection, memory-based reflection

Introduction

Microteaching is an indispensable part of teacher training. Not only does microteaching provide more room for pre-service teachers to apply their teaching theory, but it also develops their ability and skills through practicing, experiencing and reflecting upon their experiences and prior knowledge in teaching (Ramesh, 2013). Central to the success of microteaching is reflection, which determines the growth of pre-service teachers by enabling them to explore teaching practice critically (Wallace, 1998). As one medium to support reflection, video recording has often been

identified as a powerful tool to assist students teachers (Brophy, 2004; Bloomberg G., et al, 2013; Krammer et al, 2006; Ostrosky M. M., et al.,2013; Rosaen et al, 2008, Tripp & Rich, 2012). The use of video recording can document rich and complex data in details, provide an essential context to observe, and serve as a flexible instrument for reflection on teaching because they allow repeated viewing, pausing, annotating, editing, and reorganizing (van Es & Sherin, 2002; Wang & Hartley, 2003). Furthermore, Rosaen et al. (2008) also found that video usage also led to more specific reflections with more focus on instructions and the children taught rather than on classroom management. In spite of this, research on the actual impact of video usage on pre-service teachers' reflection is still limited and none seems to have examined it in the context of microteaching. Therefore, while the tool has been found to be very potential, there is still relatively little information on the features of reflections based on video evaluation. With this in mind, this present study aims to compare the characteristics of video-supported reflection with those of memory in EFL pre-service teachers' microteaching in which the subjects teach their peers. The reflections will be evaluated in terms of their specificity, emerging themes, and types of reflection drawing on Cowan's (2006) typology (analytical, evaluative, and critical). The findings of the research will hopefully shed more light on the nature of reflections facilitated by video recording compared to that supported by memory. It is also hoped that this will, in turn, assist teacher educators/trainers in designing the reflection tasks to better enhance their students' reflective experience.

Literature Review

Microteaching

The role of microteaching in teacher training cannot be overstated. Not only does microteaching provide more room for pre-service teachers to apply their teaching theory, but it also develops their ability and skills through practicing, experiencing and reflecting upon their experiences and prior knowledge in teaching (Ramesh, 2013). Reflection, as a part of microteaching, is crucial for pre-service teachers for two main reasons. First, reflecting on the action can develop professional identities (Wallace, 1991). Second, reflective practice also supports professional development because it enables pre-service teachers to explore teaching practices critically (Wallace, 1998). In line with this, Duffy (2007) says that in reflection, individuals are challenged and enabled to deal with the self-inquiry process as an active process of examining oneself critically. Further, pre-service teachers' reflective skills help them to see teaching and its complex nature

better (Loughran, 2006), give a positive impact on their personal development by developing practical theories (Korkko et al., 2016), and improve students' educational outcomes as they act effectively and positively in classroom context based on their reflection (Sellars, 2012). However, for a reflection to be valid, it needs to be free from any influence from teachers or students (Boud, D., et al., 1985, 2013). In this way, they will be able to take their own decision based on their self-reflection. Considering the prominence of microteaching and reflection in teacher training, it is, therefore, paramount to research reflection in microteaching to find the most effective ways to do it to assist pre-service teachers in promoting their skills.

The use of video-based recording reflection in teacher education

Video has been used in education since the 1960s, and across its various uses, one goal has remained the same, that is to provide teachers with access to classroom interactions that are impossible to access during the teaching itself (van Es & Sherin, 2005). According to Sachratz (1992), video recording enables teachers to confront themselves with an objective point of view on what is going on in class. The long term availability of the recorded actions allows teachers to watch their teachings again and again as they reflect on what actually happens in class in their attempts to evaluate teaching and learning. This will help teachers to discuss details from a certain details and help them critically evaluate their performance. Hence, as Rosaen et al. (2008) point out, video recording facilitates explicit noticing, which is more specific and detailed.

Research demonstrates that video recording is an effective tool to facilitate teachers/pre-service teachers to reflect on their performance (Sachratz, 1992; Davies & Fiona, 2004; Fukkink, Trienekens, & Kramer, 2011; Rosaen et al, 2008; Susoy, 2015, Kourieus, 2016). A powerful instrument to record details, video recording may help teachers/pre-service teachers to increase their awareness of various issues such as the use of L2 and the effect of mood on teaching (Susoy, 2015) as well as a means to direct their own improvement in specific interpersonal skills as they reflect on their interactions during the practice of teaching (Davies & Fiona, 2004; Fukkink, Trienekens, & Kramer, 2011; Orlova, 2009). According to Orlova (2009), the latter advantage is very valuable for non-native pre-service EFL teachers because through watching their teaching videos, they can evaluate their communication skills. In Orlova's research, this was achieved by using self-evaluating questions, such as whether or not they gave clear and simple instructions, rephrased instructions as needed, confirmed the right answers, and praised the students and how they corrected wrong answers.

Other benefits of the use of video recording in teacher education are reported in other research. Trip and Rich (2012), for instance, reported that their participants believed that the use of video recording promoted their self-growth. Having been engaged in semester-long video-reflection groups, they reported that video encouraged change because it helped them: (1) focus their analysis, (2) see their teaching from a new point of view, (3) trust the feedback they received, (4) feel accountable to change their practice, (5) remember to implement changes, and (6) monitor their progress (Tripp & Rich, 2012). In line with these researchers, Harford et al. (2010) argue that the use of video recording can assist pre-service teachers to focus more on the thorough analysis of the underlying theory of teaching than on technical issues in their practice. Such a reflection will help student teachers to gain more insights into their teaching, which will provide a more solid base for them to improve their practice.

The view that video recording may boost self-improvement was also shared by primary language student teachers in Kourieus' study (2016). Kourieus employed video recording in the two stages of his research. In the first stage, the student teachers were asked to teach their peers and complete a self-reflection form directly after the session prior to watching the video recording of their teaching. The following week, the students were involved in the second stage where they watched the video recording and did a self-reflection focusing on the same issues with the one in the self-reflection form. Comparing the self-reflection in stage one and two, the researcher reported that the use of technology gave a positive impact on student teachers' awareness of relevant theories and aspects of primary school language teaching through focused observation and reflective feedback.

With all of the aforementioned advantages, it was no surprise that Rosaen et al (2008) found that video recording was superior to memory in facilitating teachers' reflection. This study examined the self-reflections of three elementary interns (each teaching a different subject: writing, literature, and science) written in two ways, one based on their memory written immediately after the teaching session and the other video-supported. Dividing the data into two major themes (instruction and management), the research found that video recording usage led to more specific reflections with more focus on instructions and the children taught rather than on classroom management. Furthermore, it was shown that the video condition had significantly increased the number of interns' comments on their instruction, with more focused and specific insights on children. These comments on children were concerned with student achievement and listening. Overall, this research suggested that video recording assisted its teacher participants to provide a shred of more grounded and specific evidence for their self-reflection. The significance of video recording in

enhancing self-reflection was also confirmed in Rich and Hannafin's study (2009). According to these researchers, the use of the facility serves as verifiable evidence for self-reflection and a medium to investigate teachers' development over time.

In spite of its benefits, scholars point out that the use of video recordings for teacher education also has its limits. Linman (1980), for instance, argued that the use of video recording might have a superficial effect on student teachers. His research suggested that students doing their microteaching would behave unnaturally because they would pay attention more to their appearances such as outfits and hairstyles than on their teaching performance or strategy. Furthermore, examining Post Graduate Certificate in Education (PGCE) students practicing teaching at schools, Lofthouse and Birmingham (2010, p.14) found the use of video recording could increase a teacher's anxiety and make less competent students more "vulnerable" as they saw their poor performance on video. Although these pitfalls were only reported by less than 10% of the researchers' participants, such issues need to be further investigated to discover the best ways to facilitate pre-service teachers' reflection.

Research Methodology

This research was conducted in the English Language Education Program (ELEP) of a private university in Central Java. It is a descriptive qualitative study. It employed both qualitative and quantitative primary data obtained from the participants' reflective journals and interview transcriptions to answer the research question: "What are the characteristics of video-based group reflection and memory-based group reflection based on their reflective journals?". This study is significant to find out about the relative *extent* of the advantages of the video-based method over the memory-based one. The more specific research queries pursued in this study are as follows:

- a. How specific or general are the microteaching students' reflections?
- b. What topics are stated and how frequently are the topics stated in both journals? (e.g., classroom management, instruction, classroom activities)
- c. Are the reflections analytical, evaluative or descriptive towards the teaching experience?

For practical reasons, two available parallel microteaching classes consisting of 11 students in each class were selected on a convenience basis to participate in this research. The students were at the end of their third year of their undergraduate study in an English Language Education Program in

Central Java, Indonesia. The first class was a video-based group and the second one was a memory-based group, but both used the same learning materials. These classes were not set up for the purpose of this research. Students from the video-based group were recorded when they were doing their mini teaching. In contrast, students from the memory-based group did their mini teaching without video recording.

A total of 22 reflective journals were obtained from all the participants for the data analysis. This type of instrument was selected because reflective journals are written self-evaluation that can be used as a valid assessment tool to examine students' achievement (Wong et al, 1995, cited in Chirema 2003). The journals used in this research captured fresh data because students wrote down their description and evaluation after experiencing their mini teaching. In addition, six students from both groups were shortly interviewed to gain more information on what they had done in reflecting and how they had done the reflection. The participants interviewed were chosen mainly because their reflective journals needed further explanation or clarification. The interviews were used to make the data more valid and reliable.

After each mini teaching session, the students were required to make a reflective journal consisting of a description and evaluation of their mini teaching. The students in the video-based group were asked to write reflective journals based on the video and those in the other group were asked to make ones based on their memory. At the end of the course, one out of three journals into which each student was thought to have put a maximum effort was collected and analyzed. After analyzing and comparing the journals, some students were interviewed to gain more information and clarification.

The data of both video-based and memory-based reflective journals were analyzed by being subdivided into chunks and segments. As explained by van Es (2008), a chunk is a text's section that shares the same theme, such as 'classroom activity' and 'weakness in teaching'. Segments, on the other hand, are more specific parts that comprise a chunk, which can be 'specific', 'general', or 'unfocused'. The number of chunks was later divided by the total number of segments in both the video-based and the memory-based journals to get the theme or coding frequency. This coding frequency served as a basis of comparison for the characteristics of the two types of journals (video-based and memory-based). Further, to corroborate the data from the journals, the interviews were transcribed and analyzed qualitatively. During the data analysis, common themes that emerged among interviewees were examined. Finally, these data were reviewed to see if they matched the data from the written journals.

Findings and Discussions

Following the research questions of this study, the analysis will be divided into three sections, each highlighting an area of difference between the video-based journal reflections and the memory-based ones. The data from this study indicated that students' journals significantly improved with the assistance of video recording. The video-based journal was far more specific, focused on classroom management and reflective. The discussion of the three aspects will be presented through figures and percentages to make the differences clearer.

Types of segments (Specific versus General)

For the purpose of analysis, all segments in both types of journals were divided into three categories, which are "specific", "general" and "unfocused" segments. Sentences explaining, representing and containing further information of a general idea are categorized as specific segments. Sometimes, they also refer to a certain moment or particular theory and action. For example, it was written in video-based journal 1 "The thing that I need to improve [is] my pronunciation." In contrast, general segments are sentences containing broad ideas that need further explanation or description such as in memory-based journal 7, "Looking [at] my first mini teaching, [I found] there were many weaknesses in it." The last category, unfocused, means that the segment is unclear, vague or irrelevant to the mini teaching. For instance, one written in memory-based journal 1 was "I will start this reflection by showing my gratitude that I can join this micro-teaching class."

It was shown that the video-based journals contained more specific segments than the memory-based ones. Figure 1 and 2 demonstrate the results of the data analysis illustrating the frequencies on how specific the reflection was in both groups.

Figure 1 shows that the memory-based reflections tended to be more general because they contained many general segments, which did not represent the chunk they belonged to – a section of prose that shares the same theme (cf. Figure 2). Only 50.74% were specific segments, while the rest were either general (28.31%) or unfocused (20.59%). The following is an example of segments which are too general to specify or explain the main idea in a certain section from memory-based journal 1:

Furthermore, I cannot denied [sic] that I still have weaknesses in my first mini teaching. I agree with [the] feedback from my group mates and Mrs. [A]. All my group mates [...] said several things that I should work on again.

The three sentences above belong to one chunk, but the second and the third segments do not directly and specifically represent the chunk which is about 'weaknesses'. When interviewed, three respondents from the memory-based class said that it was difficult for them to explain and describe their mini-lesson in a detailed or specific way due to restricted memories. In this context, students' ability in recalling a past event has become one factor that has led students to write more general than specific statements because they could not remember the details of their teaching practice.

In contrast to the memory-based journals, the reflections in the video-based group contained far more specific segments (79.83%). One student from the video group, for instance, wrote:

I also didn't [feel] so much [sic] nervous, [sic] just in the beginning I felt so nervous. The recording also [seemed] well, [sic] loud and clear enough. (Student 1)

Here, the first and the second segments of the example may be considered to be specific segments because of the first segment mention about a particular moment ("in the beginning"), while the second one gives further explanation about the recording which is clearly and directly related with the mini teaching. All the six students interviewed said that using video as a medium for reflection gave them access to the detailed process of their mini teaching, and this assisted them to reflect more specifically. Their opinion is in line with Sachratz (1992), who believes that video recording is a tool that gives students a real view on what is going on in the teaching process. On the other hand, all the students interviewed said that when they depended only upon their memory, it was difficult to reflect on their mini teaching specifically since sometimes they forgot the process and only remembered a fraction of their mini teaching.

Besides using many general segments, the memory-based group's written journal reflections contained more unfocused segments than the video-based group. For example, it was written in the memory-based journal 7:

When I was in Junior High School, I had [never] thought [of becoming] a teacher because my teacher[s] always asked or told [their] students to do this and that. I just thought that being a teacher was really easy because he/she only read the books and then shared it to [them with] their students.

These two segments are not directly related to describing or reflecting upon the mini teaching process and are therefore unfocused rather than general or specific. Here, the students' limited access to memory recall

also seems to have led them to write more unfocused segments than those from the other group.

Figure 1

Types of segments in memory-based reflections

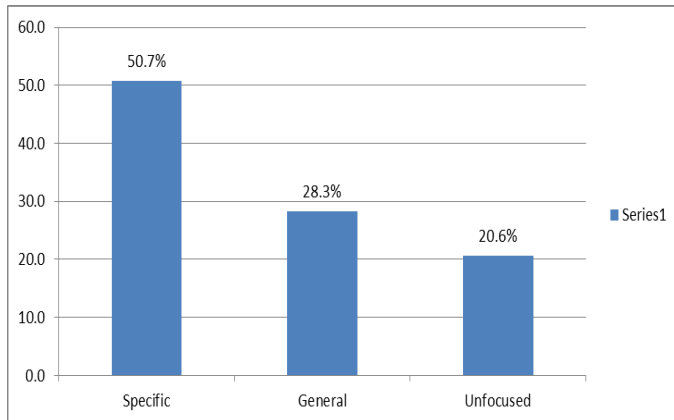
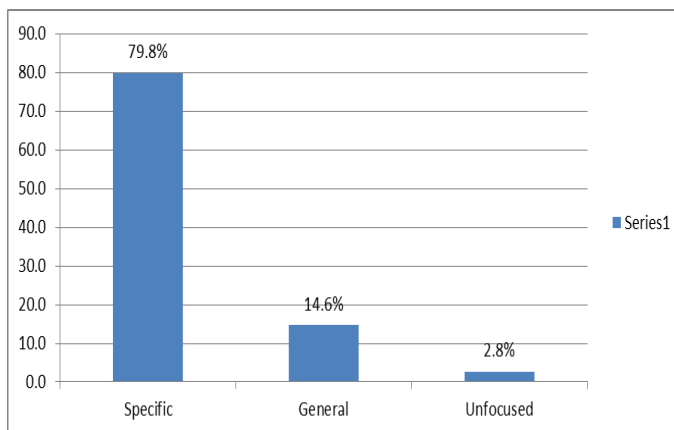


Figure 2

Types of segments in video-based reflections



Emerging themes

The topics arising in the video-based group’s journal reflections were more on classroom management and classroom activity rather than personal feelings such as in the memory-based group’s journal reflection. Respondent 2, for instance, wrote as follows:

So to [achieve] my teaching purpose I tried to develop some activities which I thought [were] interesting for the students

and appropriate with the teaching aim. There were three main activities that I had which were predicting the content of a story by using clues, matching the meaning of some word[s] used in a story, and completing a written version of the story by listening to the audio version of the story (memory-based journal 2).

Other themes that emerged from the video-based journals' analysis were:

- a. Personal feeling, which focuses on what pre-service teachers felt when they were involved in the teaching process or their related experiences such as, "I was nervous doing this mini teaching especially when the time seemed to run fast (memory-based journal 3)."
- b. Classroom management, which focuses on how the pre-service teachers managed the students and class situations such as, "My lesson was overtime and it shows that I'm still bad in time management (video-based journal 11)."
- c. Classroom activity, which describes how the pre-service teachers set and managed the exercises or games for students. For example, one student wrote "The first activity was brainstorming about bullying" (Video-based journal 10).
- d. Preparation, which describes pre-service teachers' preparation before class, for example, "I also have to admit that I did not prepare well the day before because many other assignments [were lining to get done] as well (memory-based journal 1)."
- e. Instruction, which focuses on how pre-service teachers instruct or explain how students should do something such as, "Fourth, I asked them to guess again what information might appear in the second paragraph from the title and the first paragraph that we have discussed before (video-based journal 3)."
- f. The last theme, teaching support, focuses on teaching aids and properties used by pre-service teachers such as videos, PowerPoints, pictures, etc. For instance, the student who wrote video-based journal 4 said, "Then I played the recording, and I was a little bit surprised because the recording was too fast [,] which I did not recognize[...] earlier when I was at home."

Figure 3 and 4 are the results of data analysis illustrating the frequencies of different topics discussed in both types of reflections.

Figure 3
Video-based reflection themes

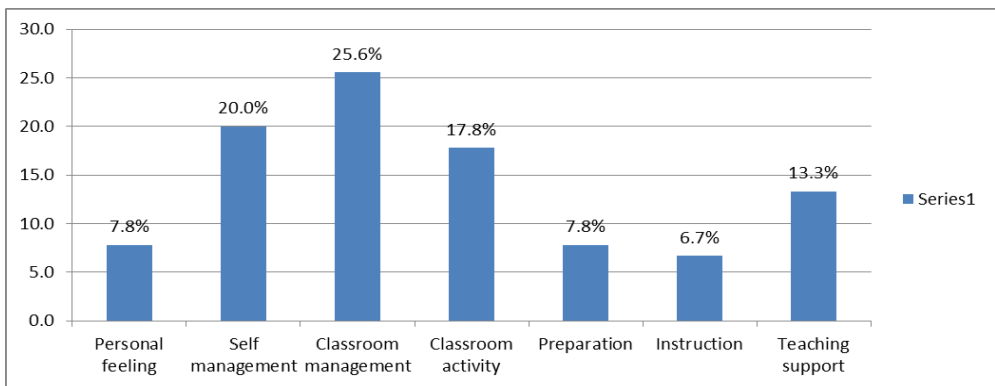


Figure 4
Memory-based reflection themes

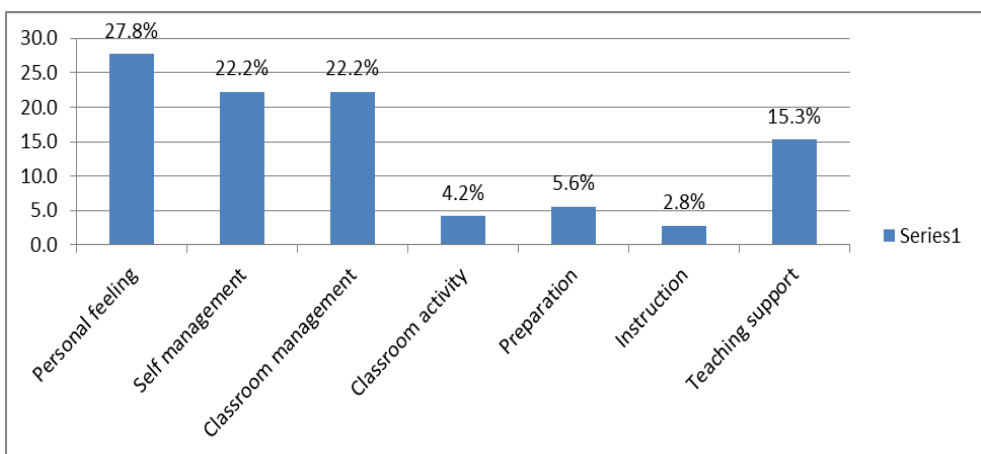


Figure 3 shows that the video-based group mostly reflected on classroom management (25.56%), self-management (20%), classroom activity (17.78%), and teaching support (13.33%). Below these are personal feelings, preparation (7.78%) and instruction (6.67%).

In Rosaen et al’s study (2008), it was demonstrated that video-based reflections assisted students to pay less attention to classroom management than instruction. However, in this study, the students within this group were more concerned with their classroom management compared to instruction. It might be because most of them did not find problems or weaknesses when they gave instructions in the video. After all their students were their peers, who could be expected to be more cooperative. There were only four

students out of eleven who reflected on instruction, and the reason was that their classmates in the microteaching class did not understand their instruction. Another possibility was, being at an earlier stage of their professional preparation compared to Rosaen et al's (2008) respondents, they had more focus on their teaching management skills.

In the memory-based reflections, self-management, classroom management, and teaching support, which were 22.22%, 22.22%, and 15.28% respectively, obtained similar percentages as those in the video-based reflection (Fig. 4). However, the memory-based group mostly reflected on personal feelings (27.28%), which even surpasses the percentage of classroom management and classroom activity in the video-based group. Further, unlike video-based reflection, classroom activity received little attention (4.17%). All these differences may have been due to the fact that while the video-based group had video as a medium for reflection, the memory-based group students did not have a tool that would give them objective information about their mini teaching performance. When interviewed, one student said that he could not remember his mini teaching process from the beginning to the end (student 3). Others said that they only remembered some parts that they thought were important and only remembered their feeling at that time (students 1, 3, and 5). This shows that the memory-based group tended to reflect more subjectively than objectively because there was no tool other than their memories to help them reflect.

Types of reflection

The video-based group students were more reflective in writing their journals, using judgment on how and how well something is done in teaching practice, while the memory-based group students were more descriptive, telling what had been done in their microteaching. In this analysis, the term "reflection" will be divided into two parts, analytical and evaluative. As mentioned by Cowan (2006), analytical reflection is a kind of systematic reflection on how something is done in the practice teaching session. For example, it was mentioned in video-based journal 3 how the pre-service teacher did one of her activities:

Then, I divided [the] class into four groups. First I wrote the title of the article and I asked them to find the information from the title.

On the other hand, Cowan (2006) defined evaluative reflection as a judgment towards the teaching practice which involves the reflection of how well something is done in the teaching practice. Such was written in video-based journal 6,

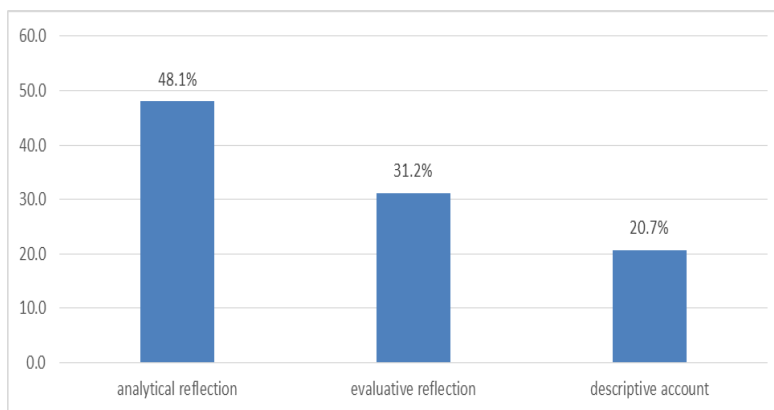
I think the thing that worked well on my teaching this Tuesday was about my activity. In the game, I could see that most students enjoyed the game.

Figure 5 illustrates the types of reflection in video-based reflection, while Figure 6 shows the percentage types of reflection in memory-based reflection.

From the journal analysis, the video-based group (VB) was more reflective in their journals than the memory-based group (MB). While, in total, the reflective segment of VB surpasses MB's reflective segment almost twofold with 79.29% in VB and only 47.42% in MB. Similarly, although both groups mostly reflected analytically, the video-based group was almost twice more analytical than the memory-based group (48.07% and 29.04% respectively). It was probably because the video tool gave students in the video-based group detailed visualization of their mini teaching. It could help them to easily reflect upon what they had done from the beginning to the end of their mini teaching. To summarize, the use of video recording far outweighs the memory-based method in helping students to be reflective and analytical in self-reflection.

Figure 5

Types of reflection in the video-based reflection

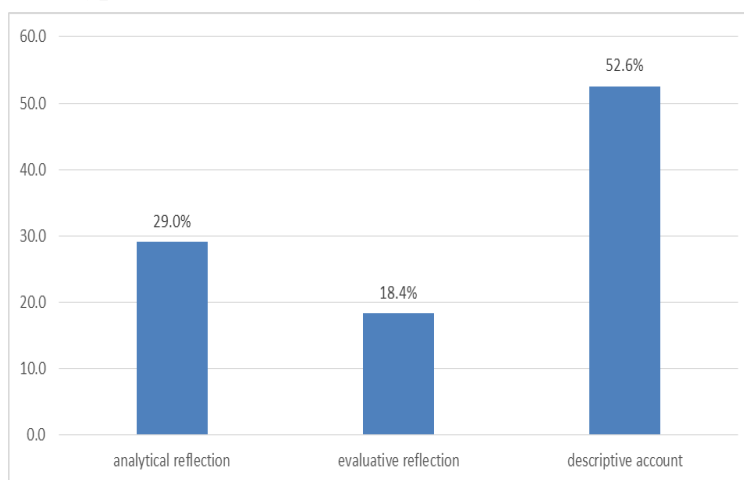


According to Wallace (1998) reflective practice is important because through reflecting critically, students will be able to develop their professional identity. By evaluating their teaching practice, students are expected to be able to improve their professional identity. This study shows that the video-based group students were able to reflect upon their practice more critically than the memory-based group students were.

At this point, by being more reflective than descriptive, the students did not only describe what they had done but also how well they did it. The judgment towards their teaching practice can be considered as a critical reflection because to be able to judge their performance, they needed to analyze and evaluate their practice, to find evidence, and use facts to clarify their assumptions on what they had done.

Figure 6

Types of reflection in the memory-based reflection



Conclusion

This study was aimed at analyzing how using video recordings may assist pre-service teachers to reflect upon their teaching practice compared to the traditional memory-based method. In general, this study's findings demonstrate that the use of video in microteaching far more significantly enhances students' reflection than the use of memory-based method. First, video recording facilitates students to be more specific, focused and evaluative in reflecting upon their teaching practice. The difference in the number of specific segments between video recording group (79.83%) and memory-based group indicated the significant contribution of video recording in improving students' self-reflection. Similarly, the use of video recording considerably facilitated a more objective reflection as students focus less on personal feelings. Also, the use of video recording outranked memory-based method almost twofold in helping students to be more evaluative in their self-reflection. These qualities show that students reflected upon their mini teaching critically. As mentioned by Wallace (1998), to reflect critically is important because students will be able to

build up their professional identity. By doing in-depth reflection through the students' teaching experience, they will have the opportunity to develop their professional identities.

Second, video recording significantly facilitates reflection to be more specific (79.83%), focused (76.67%) and evaluative (79.29%) than relying upon student memories does because it provides rich and reliable data, especially for non-native pre-service teachers to reflect upon their communication skills and allows students to refer back to the recording. When referring back to the recording, students were able to pause and replay the recording. These observations support Wang and Hartley's (2003) and McCurry's (2000) claim that video recording can provide rich data of the teaching practice process in detail, the essential context to be reflected upon, and the opportunity to gather information for analyzing and reflecting. For these reasons, all the students interviewed supported the use of video recording in their microteaching.

Finally, it is worth mentioning specifically that this research proved that the use of video recording for self-reflection is much more effective and efficient compared to the use of the memory-based method. A previous study asserted that video recording would make students behave unnaturally and be nervous when recorded. However, the study found a contrasting result. Although they were nervous during their mini teaching because of time limitations and lack of preparation, this study found that students in the video-based group behaved naturally like professional teachers.

This research reveals the importance of having effective and efficient media to support self-reflection in microteaching courses. Based on the findings, video recording is a promising tool to support microteaching courses in promoting the improvement of students' professional identities and skills. Considering the importance of video recording in enhancing students' reflection, it is suggested that teacher education institutions provide video recording facilities. In the absence of standard video recording facilities, a mobile phone can be used.

It is important to realize that the results from this research cannot be generalized to all of the microteaching classes due to the use of small scope sampling that did not apply random sampling. It is also crucial to note that the study involved two classes of two different lecturers. Therefore, the lecturer's teaching style, approach, and focus may have influenced students in reflecting upon their own teaching. Further research may explore on how the student-teachers use memory and video-based journals or other media for reflecting on their teaching in the real teaching practice at schools.

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References

- Brophy, J. (2004). (Ed). *Using video in teacher education*. Oxford: Elsevier.
- Bloomberg G., et al. (2013). Five research-based heuristics for using video in pre-service teacher education. *Journal for educational research online* 5 (2013) 1, S. 90-114. Retrieved from https://www.pedocs.de/frontdoor.php?la=de&source_opus=8021
- Boud, D., Keogh, R., & Walker, D (Eds.). (1985). *Reflection Turning Experience into Learning* (1st ed.). London: Routledge. <https://doi.org/10.4324/9781315059051>
- Boud, D., Keogh, R., & Walker, D (Eds.). (2013). *Reflection Turning Experience into Learning* (1st ed.). London: Routledge, <https://doi.org/10.4324/9781315059051>. Retrieved from <https://www.taylorfrancis.com/books/9781315059051>
- Chirema, K. D. (2003). *The use of reflective journals in the promotion of reflection and learning in post registration nursing students*. (Doctoral dissertation). Retrieved from <http://eprints.hud.ac.uk/4710/>

- Cowan, J. (2006). *On becoming an innovative university teacher: Reflection in action*. England: Open University Press.
- Davies M., & Bryer, F. (2004). *Using video feedback and interpersonal process recall to develop competencies and skills in teachers*. Retrieved from <http://www98.griffith.edu.au>
- Duffy, A. (2007). A concept analysis of reflective practices determining its values. *British Journal of Nourishing*, 16(22), 1400-1407.
- Fukkink, R.G., Trienekens, N. & Kramer, L.J.C. (2011). Video Feedback in Education and Training: Putting Learning in the Picture. *Educational Psychology Review*, 23(45). Retrieved from <https://doi.org/10.1007/s10648-010-9144-5>
- Hannafin, M., & Rich, P. J. (2009). Video Annotation Tools: Technologies to Scaffold, Structure, and Transform Teacher Reflection. *Journal of Teacher Education*, 60(1), 52-67. <https://doi.org/10.1177/0022487108328486>. Retrieved from <https://journals.sagepub.com/doi/abs/10.1177/0022487108328486>
- Harford, J., MacRuairc, G., & McCartan, D. (2010). 'Lights, camera, reflection': using peer-video to promote reflective dialect dialogue among student teachers. *An international journal of teachers' professional development*, 14(1), 57-68. <https://doi.org/10.1080/13664531003696592>. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/13664531003696592>
- Korkko, M., Kyro-Ammala, O., & Turunen, T. (2016). Professional development through reflection in teacher education. *Teaching and Teacher Education*, 55, 198-206. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0742051X16300142>
- Kourieus, S. (2016). Video-Mediated Microteaching – A Stimulus for Reflection and Teacher Growth. *Australian Journal of Teacher Education*, 41(1), 65-80.
- Krammer, K., Ratzka, N., Klieme, E., Lipowsky, F., Pauli, C., & Reusser, K. (2006). Learning with classroom videos: Conception and first results of an online teacher training program. *Zeitschrift für Didaktik der Mathematik*, 38(5), 422–432. DOI: 10.1007/BF02652803
- Linman, J. S. (1980). *Media and Methods*. NJ: CTU Press
- Lofthouse, R. and Birmingham, P. (2010) 'The camera in the classroom: video-recording as a tool for professional development of student teachers', *Teacher Education Advancement Network Journal*, 1(2) December [Online]. Available at: <http://www.audioenhancement.com/wp-content/uploads/2014/06/The-camera-in-the-classroom-video-recording-as-a-tool-for-professional.pdf>

- Loughran, John. (2006). *Developing a Pedagogy of Teacher Education Understanding Teaching & Learning about Teaching* (1st ed.). London: Routledge. <https://doi.org/10.4324/9780203019672>
- McCurry, D. S. (2000). Technology for critical pedagogy: Beyond self-reflection with video. *Society for Information Technology and Teacher Education International Conference 2000*. <http://www.ace.org/dl/files/SITE2000p41.pdf>
- Orlova, N. (2009). Video recording as a stimulus for reflection in pre-service EFL teacher training. *English Teaching Forum*, 47(2), 30-35.
- Ostrosky M. M., Mouzourou C., Danner N., & Zaghawan H.Y. (2013). Improving Teacher Practices Using Microteaching: Planful Video Recording and Constructive Feedback Young Exceptional Children. *SAGE journals*, 16, 16-29. DOI: 10.1177/1096250612459186. Retrieved from <https://journals.sagepub.com/doi/10.1177/1096250612459186>
- Ramesh, A. (2013). Microteaching, an efficient technique for learning effective teaching. *Journal of Research in Medical Sciences* 18(2), 158-63. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3724377/>
- Rich, P. & Hannafin, M.J. (2009). Scaffolded video self-analysis: Discrepancies between preservice teachers' perceived and actual instructional decisions, *Journal of Computing in Higher Education*, 21(2), 128-145.
- Rosaen, C. L., Lundeberg, M., Cooper, M., Fritzen, A., & Marjorie, T. (2008). Noticing: How does investigation of video records change how teachers reflect on their experiences? *Journal of Teacher Education*, 59 (4), 347–360. DOI: 10.1177/0022487108322128
- Sachratz, M. (1992). Researching while teaching: An action research in higher education. *Studies in Higher Education* 17, 1: 81-95.
- Sellars, Maura. (2012). Teachers and change: The role of reflective practice. *Procedia - Social and Behavioral Sciences*, 55, 461 – 469. Retrieved from <https://reader.elsevier.com/reader/sd/pii/S1877042812039870?token=4CEA4B18C9A5053EA78E2FB0463861B1D9A9B02B65E573ECE0CD73723EFB75BFDF5F5BEB5D6E3FC79EAB7F187A8D2FBB>
- Susoy, Z. (2015). Watch your teaching: A reflection strategy for EFL pre-service teachers through video recordings. *Procedia - Social and Behavioral Sciences*, 199, 163 – 171
- Tripp, T. R., & Rich, P. J. (2012). The influence of video analysis on the process of teacher change. *Teaching and Teacher Education*, 28, 728-739.

- van Es, E. A. (2008). *A framework for learning to notice student thinking*. Paper presented at the annual meeting of the American Educational Research Association, New York.
- van Es, E. A., & Sherin, M. G. (2002). Learning to notice: Scaffolding new teachers' interpretations of classroom interactions. *Journal of Technology and Teacher Education*, 10(4), 571–596.
- van Es, E. A., & Sherin, M. G. (2005). Using Video to Support Teacher's Ability to Notice Classroom Interactions. *Journal of Technology and Teacher Education*, 13(3), 475–491.
- Wallace, M. J. (1991). *Training foreign language teachers: A reflective approach*. Cambridge: Cambridge University Press.
- Wallace, M. J. (1998). *Action research for language teachers*. Cambridge: Cambridge University Press.
- Wang, J., & Hartley, K. (2003). Video technology as a support for teacher education reform. *Journal of Technology and Teacher Education*, 11(1), 105-138.

¹This article is a further development of the second author's undergraduate thesis.