Examining Student Teacher Reflection Using Video-based, Structured Reflection Procedures

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Abstract: *This study was designed to investigate the implementation of a video-based reflection requirement in a teacher education program designed to support social studies student teachers' growth as teachers. The data included videos from twelve undergraduate preservice teachers earning a teaching license in secondary social studies. In total 37 videos were uploaded to an online system and analyzed. A rubric, designed by university faculty, was used for coding. Lecture format was the most commonly used instructional strategy with only five of the videos showcasing a different, primary instructional strategy. Student teachers also most commonly recorded the beginning portion of class which tended to show the end of a warm-up/bell ringer and the transition into lecture. Because videos showed similar instructional styles and portions of class, evidence of growth was limited. However, those student teachers who took the video reflections seriously did show growth and were able to learn from and adjust their instruction by reflecting on their previous recordings.*

Key Words: Video, reflection, preservice teachers, social studies, student teaching, field experience

INTRODUCTION

Teacher education programs around the world have turned to the use of video as a strategy for training current and future teachers (Christ, Arya, & Chiu, 2017; Gaudin & Chaliès, 2015). Teacher educators sometimes use video to support teacher noticing, defined as skill in identifying particular aspects of classroom interactions (van Es & Sherin, 2002). There is also evidence that professional vision, defined broadly, can be improved through training in teacher preparation programs (Barhart & Sherin, 2015; Benedict-Chambers & Aram, 2017; Stockero, Rupnow, & Pascoe, 2017; Yeh & Santagata, 2015). Additionally, research shows the potential benefits of video-based training for preservice teachers, even when they have no authentic classroom teaching experiences (Stürmer, Seidel, & Schäfer, 2013). While video has been shown to be a powerful tool in teacher preparation, field-based experiences are even more important. Preservice teachers that have real-world teaching experiences that match what they will be doing as in-service teachers are better prepared (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009). Because of this, student

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teaching has become a key aspect in many teacher education programs and provides preservice teachers an extended opportunity to gain real-world teaching experiences under the guidance and mentorship of site-based and university supervisors.

Through student teaching and the use of video training methods teacher education programs aim to prepare pre-service teachers to be effective teachers-of-records who utilize sound research based instructional strategies. This is especially of importance in the social studies classroom considering the prevalence of lecture-style instruction that continues to be utilized by even veteran teachers despite research indicating that lectures and other passive learning styles are less effective and more disliked by students than active learning (Russell III & Waters, 2010; Leming, Ellington, & Schug, 2006). In addition, considering the adoption of the Common Core State Standards, which places emphasis on critical thinking, and that thinking like a historian does not come naturally with specific skills needing to be taught and practiced, lectures fall short in preparing students to meet these rigorous standards (Wineburg, 2001). Instead, research shows that cooperative learning, including Project Based Learning, in social studies has greater student achievement than passive learning (Chadziqoh, 2018; Scruggs, Mastropieri, & Gratz, 2010; Nagel, 2008; Hwang, Lui, & Tong, 2005). Further, reading and writing are essential for students to understand and master complex social studies skills in which teachers support student learning by providing scaffolded activities and facilitating student learning (Schneifer, 2014; Wineburg & Martin, 2004). Lastly, to help students gain a deeper understanding of the complexities of historical thinking research shows that teachers should model conceptualized thinking, thinking-aloud so as to model the cognitive process to students (Reisman & Wineburg, 2008). Research supports the need for social studies teachers to end the long-standing tradition of lecturing to students and embrace a more student-centered approach.

Therefore, this study was designed to investigate the implementation of a video-based reflection requirement in a teacher education program designed to support social studies student teachers' growth as teachers. The purpose of this research was to answer the following questions:

1. What can we learn from watching the videos of social studies student teachers?

2. Do social studies student teachers grow in their reflections or teaching practices over the course of a semester?

Examining these research questions will help to support program enhancement to support preservice teacher development.

METHODS

This study was conducted in the Teacher Education program of a large university in the southwest, during preservice teachers' semester of student teaching. Due to the research showing positive results of video reflection, the Teacher Education Program requires that each preservice teacher, during student teaching, record a minimum of four lessons, reflect on these lessons by responding to a series of prompts, and submit both video and reflections to an online system. Three videos were to be short clips, between three and five minutes in length, and one video was to be between twelve and fifteen minutes in length; all student teachers had the ability to choose which lessons and snapshots of their teaching to record and submit for review. Supervising instructors graded the submissions via established rubrics, and could offer mentoring and advice to their student teachers, including comments attached to a specific moment in the video. This study focuses on videos submitted by student teachers in secondary social studies classrooms.

SAMPLE

The data included videos of twelve undergraduate preservice teachers earning a teaching license in secondary social studies during the fall and spring semesters of 2018 (N=3) and 2019 (N=9). Originally 17 preservice teachers were to be included but only twelve submitted videos to an online system. Of the twelve teachers, five were female and seven were male. There were seven Caucasians, two Asian/Pacific Islanders, two Latinx and one African American.

RUBRICS AND CODING

Each video was scored using the same rubric supervising teachers used to grade the videos, which was created by the Teacher Education program. The rubric was created by a team of teacher education faculty members and based on teaching best practice and the InTASC standards (Council of Chief State School Officers, 2013). The rubric went through extensive expert review; however, this is the first study reporting results from data collected with the rubric. The rubric consisted of eight domains graded on a four point scale; a video scored a 0 if there was no evidence of the concept within the domain and scored a 3 if the video provided evidence of a deep understanding and a clear example of the concept; a score of 1 or 2 fell in between. The concepts included: 1) Using knowledge of students to inform teaching and learning, 2) Supporting students to understand and achieve learning objectives, 3) Building a conducive learning environment to support student learning, 4) Examining curriculum context, 5) Differentiating instruction for individual needs, 6) Implementing learning activities and instructional procedures to support student learning, 7) Using assessment to inform teaching, and 8) Using reflection to transform instruction. For the full rubrics, see Appendix A. A.

A graduate assistant, who had been trained by the university's field experience coordinator on the meaning of the rubric's domains and actions that would provide evidence of achieving certain scores on the rubric, watched each video several times and provided a score for each of the eight domains to each individual video submission. To account for reliability, several discussions occurred between within the research team regarding videos and scores assigned. Originally, these scores were to be cross referenced with preservice teacher reflections to the video, however, limited reflections were submitted and thus reflections were not used.

RESULTS

A total of nine student teachers submitted all four required videos; two submitted two videos and one submitted one video. One student teacher submitted four videos; however, each video was only 15 seconds in length. Thus they were excluded from any further analysis. In total 37 videos were uploaded to an online system and analyzed (M = 8:01 minutes, Min = 1:47 minutes, Max = 20:08 minutes, Median = 5:37 minutes). See Table 1 and Figure 1. Of the videos 60.5% were under 7 minutes long and these shorter videos had limited connections to the rubric, often only highlighting up to 3 of the 8 domains within the video. Videos that were longer in length highlighted more domains.

Lecture format was the most commonly used instructional strategy with only five of the videos (13.1%) showcasing a different, primary instructional strategy. Other instructional strategies or activities included the opening to a quiz, a court-case simulation, a game, learning stations, and showing an online video. In addition, student teachers chose to record a lecture even when the activities following would have highlighted a better teaching practice. For instance, one student teacher taped the explanation and expectations of the students' upcoming Socratic Seminar

as opposed to recording the facilitation of the Socratic Seminar. Lastly, student teachers also most commonly recorded the beginning portion of class which tended to show the end of a warm-up/bell ringer and the transition into lecture. Because the warm-ups asked students to review prior content learned, 89.47% (N=34) of videos had at least some evidence of using knowledge of students to inform teaching and learning.

The second research question pertains to the growth of student teachers. Growth was defined by the rubric as "using reflection to transform instruction." Only 23.68% (N=9) videos had any proof of student teacher growth (seven scored a 1 and two scored a 2). Because student teachers provided examples of the same part of class, the beginning, and showed similar or identical instructional styles in their video, there was no evidence of growth in their videos. Student teachers who provided examples of different activities and instructional styles were more likely to show growth.

DISCUSSION

Overall, there was a lack of reflections and videos. Of the 17 social studies student teachers, only 12 submitted videos and of those only 8 submitted all four required videos to Acclaim, excluding the student teacher who submitted four videos that were only 15 seconds in length. In addition, so few reflections were submitted that they could not be used within this current study. The lack of reflections and videos points to the need for improved messaging in the Teacher Education program. Despite evidence that video-based training has potential benefits for pre-service teachers, neither university supervisors nor student teachers seemed to understand the value and importance of video reflections and did not utilize the online system to full capacity thus limiting opportunities for professional growth within student teachers (Stürmer, et al., 2013). The need for improved messaging is highlighted in the fact that some preservice teachers thought of this assignment as a waste of time and one made a comment, in the submitted video, that "no one watches these anyway." The Teacher Education program needs to find ways, perhaps through additional training, to ensure that university supervisors understand the importance of video reflections and corresponding rubrics and then convey this to their student teachers; this activity needs to shift away from being thought as one more assignment to complete and, instead, have the emphasis be placed on the benefits and possible professional growth that can come from video-based reflections.

Additionally, preservice teachers tended to record the opening minutes of class and lectures. Though research has shown that more active learning, like cooperative learning and reading and writing actives, foster greater student achievement, student teachers in social studies continued to utilize the traditional lecture format for class (Chadziqoh, 2018; Schneifer, 2014; Scruggs, Mastropieri, & Gratz, 2010; Nagel, 2008; Hwang, Lui, & Tong, 2005; Wineburg & Martin, 2004). Further analysis is needed to determine why this is and if this is true of other content areas or grade levels. Did student teachers find this to be the easiest time to record? Do student teachers believe that lecturing highlights their best instructional strategies or are they limited by their site-based supervising teacher? Does the university need to revise the instructions given to student teachers regarding instructional strategies included in their videos? Or, if perhaps student teachers did grow and it was just not evident in the videos, might the rubric need adjusting? Lastly, the data provides some encouraging signs that for those student teachers who took the video reflections seriously that they did show growth and were able to learn from and adjust their

instruction by reflecting on their previous recordings, which aligns with previous video-based training research (Stürmer, et al., 2013).

CONCLUSION

This study provides a small glimpse into video-based training for pre-service social studies teachers. Although the video reflections show promise for student teacher growth for those who took the assignment seriously and spent time reflecting upon their previously recorded lessons, it also shows that the way in which supervision instructions implement use of video-based instruction can cause it to derail. Without a clear vision and implementation strategy among the university teacher education program and supervising instructors, the benefits that can be reaped from such activities will be limited.

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