

Using iPad Video to Mentor Student Teacher Candidates

Cindy S. York, Northern Illinois University
Lisa Chinn, Richmond Intermediate School

ABSTRACT: This case reports on the use of iPad video while mentoring a student teacher. iPads offer a less intrusive way for video recording student teachers, specifically when in a one-to-one iPad school setting. The ability of mentor teachers and student teacher candidates to immediately reflect on and discuss the video without downloading and/or transferring it to another device is an advantage of using the tool. The video software is free and comes with all iPads. The portability of the iPad allows student teachers the ability to reflect on their practice in the classroom or at home with ease. Advantages and disadvantages of iPad video use are described, and the reflective questions and prompts given to the student teacher as a part of the video observation process are shared.

NAPDS Essentials Addressed: #4/A shared commitment to innovative and reflective practice by all participants; #5/Engagement in and public sharing of the results of deliberate investigations of practice by respective participants; #8/Work by college university faculty and P-12 faculty in formal roles across institutional settings

Introduction

Although iPads are increasingly being integrated into PK-12 schools, little research has reported on successful strategies for using iPads while mentoring student teacher candidates. The following is a description of one mentor teacher's experience utilizing the iPad with a student teacher for whom she served as a mentor. This strategy resulted in positive outcomes that might be appreciated by others involved in mentoring contexts in Professional Development School (PDS) settings.

Northern Illinois University (NIU) partners with Richmond Intermediate School, which is a one-to-one iPad school. Richmond is part of the Professional Development Schools (PDS) partnership with NIU. This

partnership not only involves having NIU students perform their student teaching experiences at Richmond, but also being situated in the school district for all of their university courses during their first professional semester at the university. One of these university courses is ETT401a, "Teaching & Learning with Technology," a technology integration course during which university students learn how to utilize iPads in education. The two authors of this article, Lisa Chinn, a third grade teacher at Richmond, and NIU professor Cindy York, who teaches the technology integration course, have partnered to attempt to improve the university students' pedagogical uses of iPads in education.

The authors have attempted a number of activities to incorporate iPads into their teaching and teacher education efforts, such as having panels of teachers visit the university classroom to discuss authentic uses of technology in their classrooms and bringing the university students into the third grade classroom to work one-on-one with the third graders and the iPads. These activities are all oriented around the goal of better preparing the university students for technology integration. Because the teacher candidate Lisa was mentoring was student teaching in 2012, she had not learned about the iPad in her ETT401a course, as her enrollment in the course occurred prior to the iPad release. This meant the student teacher had to learn how to utilize and incorporate the iPad via Lisa's mentoring and not in a formal classroom.

The iPad Experiment

Student teachers are typically so wrapped up in learning to teach that they cannot see all of the aspects of the interactions between themselves and their new PK-12 students (Sherin, 2003). And research has documented how student teachers typically lack well-developed observation skills (Star & Strickland, 2008). Lisa identified a unique method for communicating with the student teacher she was mentoring and helping the student teacher become more observant, through some unique uses of the student teacher's iPad. In Lisa's own words:

I began to use the iPad's video feature because I needed to share my thinking with my student teacher through the lens of a coach. My student teacher was somewhat "consumed," as all student teachers are, with not making a mistake during the lesson she had carefully planned. What she did not understand was the idea of assumption, the dynamics of a classroom, and that she needed a toolbox (a

collection of "plan b" ideas) and when to use that toolbox. So often, student teachers come into a school situation with preconceived ideas of the students' abilities. They assume that all students can handle a task that is given to them and forget to look at the students' multi-faceted abilities within a typical classroom.

The first activity Lisa incorporated was to have the student teacher video record Lisa teaching a lesson as a model. Having a teacher model expert teaching is typical of a student teaching experience (Sherin, 2003). Video recording the teacher modeling experience provides the student teacher with a rich resource to which she or he can refer to repeatedly, in her or his own time. And seeing what an expert does becomes more valuable when you can ask that teacher *why* she did it in the way that she did (Rowley & Hart, 1993). According to Lisa:

When I think about best practice, I provide "exemplars" for my students and wanted to use the same strategy with my student teacher. I had her videotape me and I asked her to write down things she noticed (what went well, what could have gone better, etc.). We then spent some time looking at the recording of the lesson and evaluating the practices, the children, and how I handled certain situations.

Lisa then asked the student teacher if Lisa could video record her for a specific amount of time while the student teacher was presenting a lesson and interacting with the students. This led to the student teacher implementing a lesson while Lisa recorded it on her iPad. Video recording during student teaching is a well-known activity (Catelli, 2010). Student teachers video recording lessons and then reflecting, either for self-study or for interaction analysis, are widely

used feedback processes in teacher education (Catelli, 2010).

Because everyone in Lisa's class had an iPad, this was an inconspicuous way of videotaping the student teacher without her feeling stressed about being recorded in this way. In a one-to-one iPad class, video recording can be an invisible action. By contrast, in a traditional classroom, setting up a video camera and tripod gives everyone a heightened awareness that they are being recorded—students and teachers alike.

Lisa recorded the student teacher multiple times depending on the need of the student teacher at that time. The recordings were anywhere from 10 to 45 minutes in length and occurred at different times during the student teacher's teaching. Both during and after video recording the student teacher and Lisa viewed the video alone and wrote down questions (see Appendix) regarding the specifics of the lesson, actions of the students, and the student teacher's understanding of the content. Lisa then sent the iPad (with video) home with the student teacher with reflective questions for the student teacher to consider. This strategy allowed the student teacher to see herself teaching and to reflect at the same time (Sherin, 2003).

The next day the student teacher returned to school and she and Lisa viewed the video together for about 45 minutes and discussed the reflection questions and what the student teacher saw in the video. The primary questions Lisa attempted to have the student teacher consider were "How can you see that the students are learning" and "How do you know that the students understood the lesson being taught?" After Lisa and the student teacher viewed the tape and discussed it, the student teacher was able to examine her practice through a more critical perspective. According to Lisa:

We talked a great deal about assumptions. Prior to the lesson, she thought she knew what the kids would do and how they would react, when the

reality of the situation was quite different. After viewing the lesson on video, she realized she should have done something different to understand exactly the students' knowledge base before making the assumption about what they would do and how they would react. Had I simply said that to her, without her viewing it herself, I don't think the message would have been received in the same manner.

Throughout these iterative processes, Lisa and the student teacher continued to focus on the guiding question "How do you know that the students understood the lesson?" They discussed different ways the student teacher could have formatively assessed the students. These conversations led to discussions of how to support students who were struggling. These reflections also expanded into conversations about differentiating instruction.

An overarching question arose from these video and conversation cycles: How did this intervention affect the student teacher's behavior? According to Lisa:

My student teacher was shocked at what she observed on the video of herself teaching. I had her take notes on what she saw as far as what the students were doing, how the students were interacting with her, and how they were interacting with each other. From this video, she recognized some weak aspects to her classroom management. This led to a conversation about how to modify her classroom management procedures. Additionally, we had a significant conversation about curriculum, differentiation, and modifications. Again, the ability to stop and start a video made our conversation authentic and meaningful. The student teacher recognized that this was not a finger pointing session but rather a reflective oppor-

tunity to refine and cultivate her practice.

Finally, Lisa asked the student teacher for her perspective on this intervention. The student teacher stated that the taping helped her a great deal. She recognized that she often did not realize what was happening behind her back while she was teaching. The student teacher also said that she liked watching the video and answering the questions that Lisa had drafted for her, noting how this process had allowed her to reflect more deeply on her lesson. She unequivocally stated that she would recommend this activity be utilized in all student teaching experiences. In a final reflection, after this pilot implementation of the iPad video mentoring cycle, Lisa said, "Taping the lesson was one of the most powerful ways that I could have communicated with my student teacher. The conversation helped her in cultivating and changing her practice in a positive way."

Conclusions

There are a number of advantages of videotaping student teachers with an iPad as part of a mentoring and reflection cycle. One such advantage is that the iPad helps to facilitate conversations that might have been more difficult to initiate if a student teacher cannot see the concerns to address for herself. Being able to actually *see* actions almost immediately after they are taken can offer student teachers an opportunity to reflect upon his/her practice through a non-evaluative process, thus reducing the stress of being evaluated formally. iPad videotaping also allows for a portable, non-intrusive method for video recording and viewing the video recording. As all iPads are equipped with video recording/viewing software, no additional software purchase is required.

Video recording has been utilized for many years as a means for student teacher candidates to reflect on their teaching (Catelli, 2010;

Sherin, 2003). Recordings can also focus on students' interaction with the student teacher, concentrate on "frequencies and the duration of teacher-student behaviors," provide a way to analyze "[teachers' and student teachers'] instructional actions in relation to their stated learning goals for students," and help "document changes and the effects of teacher-student actions over time" (Catelli, 2010, pp. 88-89). Many features of an iPad are superior to a traditional video camera for these mentoring activities. The immediacy of the iPad video recording/playback feature, the portability of an iPad, the invisibility of recording with an iPad, and not having to take the time to take a videotape and transfer it to some other software to play back allow the iPad to play a more efficient and effective role in the communication and feedback between a mentor teacher and a student teacher candidate.

Of course, there are also disadvantages to iPad use in such activities that should be considered. A primary one is access: not all classroom teachers have access to an iPad. If the teacher is the only one with an iPad in the room, or the only one using it to record, the iPad can be seen as a novelty and thus lose its invisibility. In addition, not all teacher candidates will feel comfortable being video recorded if such an activity is not a required professional task. Furthermore, measures should be put in place so that the content of the video remain confidential.

In conclusion, based on the results of our pilot implementation of iPad use as a mentoring tool, we recommend that other mentor teachers, coaches, and university faculty consider incorporating elements of the informal video recording and reflection cycle discussed above. The earlier student teachers become comfortable with being video recorded, the easier such processes will become. In addition, demonstrating how to reflect on one's teaching can also benefit the student teacher in that many of them are asked to reflect on their new instructional practices but

not provided the prompts or structures that enable them to reflect effectively. Future endeavors by the authors include the creation of a qualitative study around this practice in order to better examine how to incorporate iPad video and reflection into the student teaching experience.

With iPads becoming more common in classrooms and schools, even if a mentor teacher does not own a dedicated device, devices can often be checked out from the library or borrowed. With a PDS relationship, many universities have the finances to loan or supply an iPad for the purposes of mentoring student teachers. Mentor teachers should always inquire if their PDS partnership allows the borrowing of iPads or even an iPod touch with video capabilities to use to video record student teachers.

In addition to recording and reflecting with student teachers, iPads can be used in a

number of ways in a PDS context. Video recording for the purposes of classroom management is an easy way to show what the students are doing when a teacher is present but busy with other activities. So while the student teacher is engrossed in her own teaching, she might be missing some valuable learning experiences by not seeing what all the students are doing. Another use for iPads in PDS contexts, but not necessarily student teaching, would be to allow pre-service teachers to video record themselves and their interactions while in clinical experiences, and bring those back to their university classrooms where they can discuss and reflect on not only their own practices, but also their classmates' teacher efforts. Such activities allow for a more diverse reflection experiences for university students and extend the lessons we have learned through our first implementation of iPad video mentoring. ^{SUP}

Appendix

Some of the reflective questions and prompts Lisa provided her student teacher

- What did you see the students doing?
 - What was the classroom environment like?
 - Were there any transitions? Tell me about some transitions.
 - What did you do to differentiate the lesson?
 - What does the engagement piece look like?
 - What did you do or say to engage the students?
 - What did you do if/when the students were not engaged?
 - How do you know that the students "got it" (understood the lesson concept)?
 - What did you notice about the lesson that went well?
 - I noticed. . . . How else might this have been done?
 - Is there anything you would change if you taught the lesson again?
 - What type of 21st century skills did you embed in the lesson?
 - How was the iPad used as a tool for instruction?
 - How did you collect data? Was your data quantitative or qualitative?
 - How will this help your practice?
 - What have you learned about yourself as a teacher?
 - What would you do similarly/differently in the future?
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Cindy S. York is an Assistant Professor in the Instructional Technology program within the department of Educational Technology, Research & Assessment at Northern Illinois University.

Lisa Chinn has been teaching for the past 22 years in various teaching experiences ranging from seventh grade language arts to first grade. She currently teaches at Richmond Intermediate School.