

Purposeful Video Reflection – A Program-Wide Swivl Adoption

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Introduction

Video technology provides an opportunity for advanced training practices and feedback platforms for preservice teacher preparation (Bueno de Mesquita, Dean, & Young, 2010). To align with Council for the Accreditation of Educator Preparation (CAEP) Standard 2 and “include technology-enhanced learning opportunities” (CAEP Standard 2.3, 2013), Oklahoma State University (OSU) agricultural education teacher preparation program adopted and integrated Swivl video reflection throughout the core agricultural education courses and clinical teaching experience. Additionally, Swivl technology supports the Praxis Performance Assessment for Teachers (PPAT) Task 4 requirements regarding video evidence for teacher certification in Oklahoma.

Swivl technology consists of a robot and marker system. The marker is worn by the presenter and serves as a microphone for audio recording. The robot is a rotating platform supporting a video recording device (smartphone or tablet) which follows the marker as the presenter moves about the room. Swivl video integration not only provides a platform for self-reflection but also an opportunity for effective feedback (Swivl, 2020). The feedback is provided by peers, instructors, graduate teaching assistants, and faculty. Reinforcement of the knowledge, skills, and dispositions highlighted throughout the program at OSU, aligns with recommendations for nurtured feedback as reported by Borko et al. (1992). The use of video technology integration reflects the American Association for Agricultural Education’s Research Priority 5: Efficient and Effective Agricultural Education Programs (Roberts, Harder, & Brashears, 2016). The agricultural education teacher preparation program at OSU provides opportunity for students to participate in purposeful pre-clinical and clinical reflections using Swivl technology.

How It Works

Pre-Clinical Integration

The process begins during the first semester in the agricultural education program as students learn the four parts of a lesson plan (i.e. introduction, presentation, application, and review/closure) in their foundations and philosophies of agricultural education course. Students develop a micro-teaching lesson plan to present to their peers during a lab. The presentations are 15 to 20 minutes and are recorded using Swivl devices. Videos are then uploaded to the Swivl cloud and the student reflects on the experience. Peers and teaching assistants also provide time stamped comments.

During the teaching methods course, students are charged with teaching four complete lessons using specified teaching strategies i.e., modified lecture, simulation/demonstration, case study, and STEM. Each lesson is taught to agriculture students in a secondary classroom and recorded using Swivl technology. The complete lesson videos are uploaded to the Swivl cloud with lesson plans and PowerPoint presentations for review by the student, peers, and course instructors. These learning activities prepare pre-service teachers to complete the fourth task associated with the PPAT. In both pre-clinical experiences, students receive feedback prior to future teaching experiences, providing an opportunity for personal reflection and student growth.

Clinical Integration

The final piece of Swivl integration occurs during the clinical teaching internship when pre-service teachers conduct weekly reflection videos using the Swivl app and upload the videos to the Swivl cloud for viewing and feedback by university supervisors and peers. The weekly reflection videos are approximately five minutes in length and are intended to reflect on the previous week using the lens of the three-component model of agricultural education. Again, student teachers receive feedback from peers and OSU personnel.

Results to Date

Students' who have participated in Swivl video reflection during their pre-clinical and clinical experiences have benefitted from the personal, peer, and faculty feedback. Pre-clinical experiences featured an opportunity for personal growth outside of class time through video observation and reflection. Pre-service teachers report the video reflections provide an opportunity to reflect weekly on their clinical teaching experience, while having the ability to virtually connect with peers, helped develop an extended sense of community. Student adoption of the new technology has been seamless, as today's students utilize technology regularly and find it to be a dominant force in their lives (Giovannelli, 2003). A key to the seamless transition is also attributed to the training provided to the students on Swivl technology and the repetition of use throughout the program. Although students are quick to pick up the technology, there have been issues with the management of the technology, i.e., keeping the Swivl robots and iPads updated, along with maximizing available storage on the devices for video recordings.

Future Plans

The agricultural education teacher preparation program at OSU plans to continue to implement purposeful video reflection throughout the pre-clinical and clinical teaching experiences for pre-service teachers. Further development of guided reflections will help to continue to improve the overall value of the reflective process. The agricultural education department plans to purchase additional Swivl robots to increase the availability of robots for use not only for the opportunities discussed above but also for video observation of pre-service teachers during their 15-week clinical teaching experience. The faculty at OSU intend to find ways to integrate reflective video technology aligning with CAEP and accreditation standards into the remaining agricultural education courses offered to enhance the program-wide adoption.

Costs/Resources Needed

Materials needed for the complete program Swivl integration include the purchase of multiple robots which provide improved audio and movement tracking during the recording of the lessons. Additionally, the purchase of iPads or tablets to use as the actual recording devices as needed. Otherwise students utilize their own device i.e., tablet or smartphone. The base price for the robot is \$600. Quantity needed depends on the size of program and intended integration. The teacher preparation program at OSU currently utilizes 10 Swivl robots and seven iPads. The final cost is associated with the use of the Swivl cloud for video storage with feedback and in-video reflective availability, again depending on the size of program and intended use of the application platform. The program at OSU provides each student with a two-year Swivl account for use during the program. Course fees are utilized to cover the \$100 cost.

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