Mobile Learning With Swivl

An Asynchronous Model With a Robotic Sidekick

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In the words of the philosopher and mathematician Rene Descartes, "Cogito, ergo sum," (I think; therefore, I am). Descartes concluded that although many aspects of our reality are illusions; what is certain is that one's thoughts indicate one's existence. Understanding the mechanics of our reality is fundamental to scientists and philosophers, as well as educators. The ability to accurately understand one's reality directly impacts one's ability to reflect and improve practice. Nonetheless, how does one know if one's perspective is accurate? This article will explore Swivl, a robotic device that adds a perspective that students may use for reflective practice and mobile learning.

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Mobile learning occurs "across multiple contexts, through social and content interactions, using personal electronic devices" (Crompton, 2017). Mobile learning connects the student and the instructor through a personal electronic device during formal and spontaneous learning environments. Mobile learning students can bring their mobile devices into any learning environment and work on their academic goals (Berg, as cited in Moore & Diehl, 2019). In distance education, students engage in mobile learning by checking class assignments, updates, and participating in discussions in app-friendly learning management systems. Students who wish to use mobile learning to engage in reflective practice may choose from several apps that support higher cognitive activity levels.

Mobile learning uses technology to scaffold learning from understanding and recall to higher levels of analysis, reflection, evaluation, and creation. Bloom's taxonomy defines multiple levels of cognitive engagement that inform the instructor's use of mobile technology in a lesson. Knowledge, comprehension, and recall are the base level involving the student's ability to memorize and repeat. Application levels demonstrate how the student understands and applies content in a new context. Analysis and synthesis are high levels of cognitive engagement that

involve the student's understanding and demonstration of how knowledge can be separated, compared, contrasted, and hypothesized using many separate pieces of information to construct new knowledge. Evaluation is the final level of cognitive engagement. The student uses all the previous levels to reflect, critique, and evaluate, which opens the door to creating new ideas (Frey, 2018). Swivl, a popular video application in education for reflective practice, may serve as a tool that mobile learning instructors can use to guide student learning through multiple cognitive development levels.

During the inception of Swivl, Vlad Tetelbaum and Brian Lamb noticed the effect of the videographer during their pitch meetings with potential investors. The combination of the videographer's reaction and facial expressions while looking through the camera created a perception of judgment, increasing the nervousness and ability of the Swivl rep to deliver the sales pitch (Swivl, n.d.). To mitigate the videographer effect, Tetelbaum and Lamb created the Swivl robot. The robot is a cylindrical device equipped with a receptor for a tablet or smartphone capable of rotating 360 degrees to film the user. The robot capability separates Swivl from other cloud-based video sharing applications allowing the users to film themselves independently. Tetelbaum and Lamb found that unlike the effect of the videographer, the Swivl robot does not become the center of attention and allows the user to relax and focus on the task.

It is crucial to mention here that the instructor's approach creates the opportunity for learning and reflective practice. Swivl is an example of one medium an instructor may use to achieve this goal. As Clark demonstrated in the media debates, what creates the learning experience is the teaching approach, not the media (Clark, 2012). Swivl is an app that allows users to record videos with multiple audio inputs and automatically upload them to a shared cloud that syncs with the student's instructor. Swivl provides functions within the app that allow users to create rubrics and provide time-stamped comments. Swivl also provides users with a robotic swivel device to insert their phones or tablets to track and record themselves. Swivl likewise provides a lanyard with a microphone and a tracker so that the Swivl robot can rotate and follow (Swivl, n.d.). The student may also place multiple external microphones in advantageous areas of the learning environment for clear audio.

The School of Education at Charleston Southern University in Charleston, South Carolina, conducted a study to evaluate Swivl's application to teacher training and preparation. Elementary and high school teachers recorded themselves and reflected on specific skills and areas of instruction. In the study, teachers shared classroom instruction videos with instructors, classmates, and, in some cases, the students in their classroom. Teachers reported how reviewing their lessons brought awareness to aspects of their teaching style, exposed issues, and informed goal setting and teaching strategies. Although some teachers found the technology challenging to navigate, others could access the multiple functions of the application and complete their reflective practice. Challenges noted in the study were Wi-Fi reliability, classroom layout obstructing the line of sight from the robot to the lanyard sensor, and difficulty sharing videos across classrooms—an opportunity for improvement that Swivl has since updated. Another vital piece of feedback teachers provided was the importance of introducing Swivl to the classroom to ease the novelty of new technology. Based on the study's results regarding teacher reflection and practice improvement, the School of Education at Charleston Southern University decided to implement Swivl officially as an integral component of professional development (Franklin et al. 2018). Teachers participating in mobile

learning may benefit from engaging in educational experiences that scaffold their learning through the higher order thinking of Bloom's Taxonomy with technology such as Swivl. In the School of Education's study at Charleston Southern University, teachers received training in classroom practice, implemented the classroom's training strategies, self-reflected, and received feedback.

Great Hearts Academy, a nonprofit public charter school organization made up of 20 schools, identified a need for professional development for its teachers. Great Hearts Academy contracted with education coaches and Swivl to provide professional development. In this mobile learning model, the coach takes on the instructor role, and the teacher takes on the student role. Teachers used the Swivl cloud to share classroom videos with their coaches and other classrooms. Great Hearts Academy benefited from the cross-classroom collaboration and the creation of a video library of best practice examples (Ashworth, 2018). Technology that supports reflective practice may also provide teachers enrolled in graduate programs with practice-based learning experiences.

The College of Education at Kansas State University created an asynchronous online program in the masters in the arts of teaching. The program created a practicum component to the degree to offer students field-based experiences in their geographic regions and to meet learning outcomes related to face-to-face instruction. The instructors used Swivl with their students to facilitate field-based learning experiences that incorporate class concepts and objectives (Larson & Vontz, 2018). Swivl may be another tool for distance educators to consider when translating face-to-face classes to online or mobile learning structures. Many learning environments, such as a classroom, are not geographically specific, and technology such as Swivl can become the uniting agent.

When instructors use Swivl to scaffold student learning in field-based settings, they take on some traits of a coach. The instructional coaching approach uses video as a fundamental tool for establishing current reality in reflective practice. The model centers around three stages—identify, learn, and improve (Knight, 2018). Swivl supports instructors in facilitating field-based learning with their students. Often, errors appear in what the student perceives is happening in the classroom and what is happening. After both the teacher and student have a clear understanding of the current reality and growth area, they may begin to set assignments and goals, implement strategies, and reflect on the effect. Given the student-directed nature of applying class knowledge into new situations, hyper content-designed instruction may be the most effective instructional design approach. The hyper content-designed instruction model presents modules and topics for students to work through in the order that makes sense to them (Simonson et al., 2019). Students in this model may benefit from the freedom of navigating the course based on the unique needs of the geographically specific field-based learning environment.

The integration of reflective practice is prevalent in education; however, there is the potential to apply this approach to other fields. For example, students majoring in data science enrolled in a course on probabilistic decision making could benefit from applying this practice in the field through a practicum. Students could use Swivl to record their presentation of data analysis and conclusions at a team meeting. Current managers in any field, who are enrolled in a leadership course, could benefit from filming their facilitation skills during team meetings and cross-department presentations. Strategic planners, architects, engineers, military leaders, and any profession that involves working with other people across multiple disciplines

could benefit from a mobile learning education model that supports an individualized reflective practice. Mobile learning with Swivl allows students to become fully untethered, bringing their learning into their professional environment.

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