UWGLive: Providing Simulated Classroom Experiences to Pre-Education Majors

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Author Biographies
Dr. Willox is an Associate Professor and the Chair of the Educational Technology & Foundations department in the College of Education at the University of West Georgia. Her department strives to prepare educators and designers to lead in authentic, technology-rich learning spaces within schools and beyond. The department houses the innovations lab, mobile innovations lab, and simulations lab.

Terri Ponder directs our simulations lab which includes UWGLive. Terri is a leader in instructional technology within the state of Georgia, coming to UWG from a long career in the public school system.

Introduction
Providing diverse, authentic classroom experiences for future teachers has been a vexing challenge for universities because it is difficult to get students the variety of experiences they need to become highly-skilled. The challenge is especially true at the freshman and sophomore level when we hope to attract students into education, as state rules do not allow students to enter existing classrooms without a pre-service certificate issued in their junior year. We have implemented an innovative approach to this challenge, using UWGLive Simulations. This immersive simulation allows students to experience their future professions in unprecedented ways. UWGLive is integrated into the nine-hour EDUC sequence, taken prior to officially entering our teacher preparation program.

Goal of Activity
The goal of UWGLive is to provide a risk-free environment for future educators to practice their craft while receiving immediate feedback from the instructor. For example, participants and/or instructors can pause the simulation at any point and receive feedback that they can immediately incorporate into the session.

This level of coaching would not be possible in a classroom with real students. Additionally, faculty members have the opportunity to design scenarios wherein the avatars can respond in very intentional ways to help ensure specific skill development. The simulator, therefore, allows students to hone their skills in all aspects of teaching, from behavior management to high-level questioning. It helps students build cultural proficiency, as well, because the avatars are of varied races, ethnicities, and abilities.

Description of the Activity
UWGLive uses state-of-the-art technology to create immersive, mixed-reality environments for participants (COE students) to practice and master teaching techniques prior to entering teaching. UWGLive Simulations include several different virtual classroom environments: an upper elementary classroom and a middle school classroom with five students ("avatars") each, and an inclusion classroom that features a student with learning and/or behavior disabilities. Adult simulations are also available allowing participants to interact with a parent, teacher, principal, or other professional.

Each session is unique and personal because the avatars do not remember past sessions. Because of this design, the participant's skills and techniques can be practiced in the simulator multiple times, which is not possible in an actual classroom.

There are a variety of avatars available to help depict classroom scenarios. Each of the ten upper elementary and middle school avatars has thier own distinct personality and background profile. The avatars' personalities and backgrounds remain consistent across each session. For example, Ethan (a middle school avatar) is an Atlanta United fan and he loves to play the video game *Fortnite*. Each time a participant interacts with Ethan, the same personality and preferences are encountered. It is the participant's responsibility to get to know and learn about the avatars, just as they would with real-life students. Below are some images of the different environments UWGLive supports.
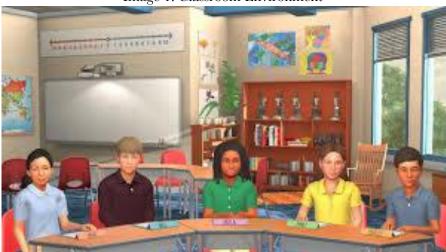
Image 1: Classroom Environment

Image 2: Parent Conference

Although the avatars' characteristics are consistent, they do not give "canned" responses. During a simulation, the avatars are able to see and hear the participants as they present, allowing the avatars to react in real time. This encourages the suspension of disbelief, allowing participants to become fully engaged in the simulation. When first time participants interact with the avatars, they are shocked at the authenticity of the mixed-reality environment and sometimes have a hard time staying composed. Because of this, we schedule UWGLive sessions at least twice for each EDUC course.

Reflection

Each of the EDUC courses has a specific focus: EDUC 2110 Investigating Critical and Contemporary Issues in Education, EDUC 2120 Exploring Sociocultural Perspectives on Diverse Education, and EDUC 2130 Exploring Learning and Teaching. Faculty teaching these courses met to design specific UWGLive simulations that would enhance course content and facilitate student growth. Since the nine-hour sequence is not taken in a particular order, we cannot predict what experiences students may have had with UWGLive previously. Typically, in the first session, students are in disbelief that the avatars can respond to them in real time and can "see" them as they are engaging with them. As a result, each course begins with students getting to know the avatars and building a level of comfort with using the simulation.

In the first UWGLive session, EDUC 2110 students meet the middle school avatars and ask them questions about their educational experiences and their use of technology in the classroom, EDUC 2120 has students ask the elementary school avatars about their cultural backgrounds and celebrations, and EDUC 2130 has students ask the elementary or middle school avatars about their personal interests and hobbies.

Each of the EDUC courses has a second UWGLive experience more focused on the content of the courses. In EDUC 2110, students lead group discussions to the middle school avatars on internet safety and the appropriate use of technology in the classroom. In EDUC 2120, students observe an instructor/teacher interact with the elementary school avatars while recognizing unconscious biases/assumptions that are being made during the lesson. Students actually have three simulations in EDUC 2130 because this course is heavily focused on teaching skills and strategies. In one of these simulations, students observe a master teacher teach a lesson to the elementary school avatars while recognizing specific teaching skills and strategies.

While the experiences engaging in the simulation are valuable, it is the reflection and facilitation that promotes the most growth. Follow-up activities and assignments provide students the opportunity to delve deeper and consider these simulated interactions in relation to their future career choice. UWGLive supports the development of a growth mindset because it allows future educators to experience the iterative cycle of learning (Dweck, 2017). During a simulation, students can try a teaching technique, fail at implementation, receive immediate feedback, and try again. This facilitates a growth mindset because it allows pre-service teachers to experience failure in a risk-free environment and through re-correction promotes persistence and the acceptance of critical feedback. This is not easily achieved in a college classroom nor in the field. By controlling the environment in the simulation we can target specific skills and behaviors and then deconstruct and reconstruct those with the students. The follow-up reflections and in-class debriefing further support the development of a growth mindset.

For more information about UWGLive: https://www.westga.edu/academics/education/uwg-live.php

References

Dweck, C. (2017). The journey to children's mindsets–and beyond. *Child Development
    Perspectives, 11 (2)*: 139-144.