

Getting Creative When the World Shuts Down: Moving Experiential Learning Online

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September 3rd, 2021

Introduction

Education is a fundamental part of our world and comes in many forms which ranges in both depth and breadth (Halpern & Hakel, 2002). In agricultural education, experiential learning is common approach and has been widely embraced as a true learning methodology (Clark et al. 2010). While it's been noted that John Dewey is arguably the father of experiential learning (Roberts, 2006), many agricultural educators use Kolb's Experiential Learning Theory (ELT) as a framework for their teaching. Kolb's (1984) ELT provides a cyclical approach that helps take learning to a deeper level. Baker and Robinson (2016) concluded that experiential learning provided better scores in creativity, practical knowledge, and richer learning experiences.

In agricultural education, many implement the strategy of learning by "doing." However, one of the greatest challenges for today's teachers and students of agriculture is to move beyond the "doing" and ensure that all learning is connected to thinking and knowledge that will be easily remembered and applied later in life (Knobloch, 2003). Experiential learning provides a cycle for a deeper, richer learning to take place (Baker & Robinson, 2018). Ideally, experiential learning takes place in a practical setting such as a classroom or laboratory. Students get to practice and experiment applying their knowledge in a real-world way. It is critical that students then take this knowledge with them into the future. What happens when the ideal experiential learning environment now moves into a virtual, stagnant location?

In the world of COVID, lives and roles changed. Everything we knew to be true started to be questioned. In a pandemic, you must adjust, you must expand your thinking and ultimately, you must find a way to survive. This did not affect just the students, teachers with children and responsibilities at home were also impacted (McKim & Sorensen, 2020).

Imagine a college student, not much older than the students they are observing, walking into a high school classroom for the first time in two years. Imagine that student nervously watching the experienced teacher craftily work their way around a room making sure each student is engaged in the lesson. Students are laughing, intrigued and learning about agriculture. Now, imagine that in a virtual world. Classrooms sat empty, offices closed, and bedrooms became the place that learners now studied, worked out and slept.

How it works

In the fall of 2020, students in COURSE at a UNIVERSITY would have normally been observing in-person classes at a local high school agricultural classroom. Students are required to learn through observations, reflections, teaching, interviews and other experiential learning opportunities. However, due to COVID, those experiences were moved online. Students were now required to complete experiential learning through a computer screen. This component of the teacher education prep program is critical in helping future educators gain meaningful experiences in the high school classroom. Typically each student would manage their own learning. This would take place at one school, and they would submit a portfolio of materials at the end of the semester. Moving into a virtual format, a need to adjust the structure of the course was quickly discovered. How would the requirements and objectives of the course be met all online?

Many new strategies and methods were created and implemented into the fall 2020 and into spring 2021 course. The first virtual ELT strategy came via the requirement for pre-service teachers to complete teacher observational hours. This normally is a time for pre-service teachers to get a glimpse into a high school classroom to see teacher movement, watch student interactions, record questions of higher order thinking and observe classroom management practices. Instead of observing only one classroom at one school, pre-service teachers were now able to view multiple classrooms. School-based agricultural education (SBAE) teachers from around the state volunteered to allow pre-service teachers to observe their classroom and laboratories virtually and see their live teachings which entailed multiple teacher demonstrations, group presentations, peer learning, team-based learning, and many other rich learning

experiences. These classes took place for the high school students both in-person and online. Additionally, teachers and current student-teachers submitted recordings of themselves teaching lessons for students to observe.

The next virtual ELT strategy came by students expressing the desire to learn from each other's observations and experiences. To facilitate this, three virtual meetings were offered for students to share observations, ask questions, and provide resources to each other. These sessions created a space for students to develop meaning in their observations. They were also able to present challenges to each other and discuss potential solutions.

Results

It is understood that active learning through the use of multisensory techniques can also help with retention of learning (Vaughan et al., 2017). Students were presented with a challenge out of their control. Their learning environment was completely changed. Although the learning was different, these future educators are well-equipped to be successful in the future.

The changes implemented for fall 2020 and spring 2021 provided students with an opportunity to learn and grow. Instead of observing one classroom, students were able to learn from multiple teachers and see various teaching and learning styles. They also got to connect with teachers from across the state; instead of just those in close proximity to campus. Learning how to be persistent, flexible, and creative are also unique characteristics and skills they might not have practiced had it not been for these changes.

Ultimately, the semester was a success. Evaluations showed that students were happy with the experience they were given. While not ideal, there was a lot of upside to the new model. We saw students adapt and overcome and get creative to gain the experiences needed to be ready to lead in their own classroom. Since incorporating virtual ELT strategies and methods, it may lead to a hybrid model in the future.

Future Plans

While it is expected to return to in-person observations for fall 2021, the flexibility provided by online observations cannot be dismissed. Students were able to observe multiple teaching methods and connect with schools beyond a reasonable driving distance to campus. The hope is that most observations will return to in-person but some hours could be completed virtually. Additionally, the class meetings, where students could learn from each other and share their stories, will be kept. Students will also be encouraged to interview a current agriculture teacher more than 50 miles from campus. This will force the students to get creative in setting up their interviews, likely virtual, but will allow them to expand their reach beyond the usual teachers we are able to interact with.

According the four principles of Andragogy (Knowles, 1984) suggest involving the students in the planning and evaluation of the course. Based on Knowles principles, my advice to others would be to allow students to present their own ideas and become more involved in ways to meet the objectives of the course. When we listen to the students, we are better connected to what is important to them and understand their style of learning. Future educators are creative, and we should model and cultivate a space for pre-service teachers to have the opportunity to continue the transformation from dependent learning to self-directed learning (Knowles, 1984).

Resources

No financial resources were needed for these innovative changes. The biggest resources needed were time and support. Teachers volunteered in various capacities to support these new ideas. They provided videos, moved technology around their classrooms and spent time supporting future educators. Technology was an additional resource. Online storage was needed for recordings and video capability, like zoom, was necessary for students to interview agriculture teachers and to view classrooms live.

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