On the Hunt:
Engaging Breakout Rooms to Teach Wildlife Career Development Event Concepts Online

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Introduction

Following the onset of COVID-19, the academic community faced a new array of challenges while adjusting to virtual learning. While the technological infrastructure for online instruction already existed via platforms like Zoom, Google Classroom, and Skype, creating an engaging and stimulating learning experience for students restricted to their homes remains a challenge for most educators (McKim & Sorensen, 2020, p. 224). The delivery of agricultural education programs can be especially challenging through online platforms, as most lessons are designed to be hands-on and interactive.

Agricultural education students have the opportunity to participate in leadership and career-related events, which are also interactive by nature. "FFA develops members' potential and helps them discover their talent through hands-on experiences, which give members the tools to achieve real-world success" (National FFA Organization, 2021, para. 2). To train hands-on applications in real-world settings, the National FFA Organization implemented Career Development Events (CDEs). However, for some educators, the shift to online instruction created a barrier to teaching interactive lessons for hands-on applications, such as CDEs. In addition, in 2020, many states canceled their CDEs and leadership development events (LDEs) as they were unable to quickly adapt to a virtual environment. While the shift to virtual or hybrid learning created many challenges as teachers and students have varying access to technology and resources at home (McKim & Sorensen, 2020), it also created an opportunity for finding innovative ways to teach agricultural education concepts.

Moving forward in the new age of technology and remote learning, agricultural educators must find ways to engage students in online spaces while mastering techniques to teach CDE concepts virtually (Edgar et al., 2016). In Kolb's experimental learning cycle, learning "involves the acquisition of abstract concepts that can be applied flexibly in a range of situations" (Baker & Robinson, 2016, p. 132). Understanding and utilizing the full functionality of a highly accessible platform, such as Zoom, allows educators to provide variety and interest during online instruction. To assist educators in maintaining a challenging, stimulating experience, the goal of this innovative idea is to develop an activity and recommendations to support instruction for teaching components of CDEs virtually, specifically through the wildlife CDE.

How It Works

We piloted the "On the Hunt" virtual wildlife teaching activity in an advanced agricultural education course at New Mexico State University. The primary objective for the wildlife CDE is to develop the ability to recognize environmental and social impacts of wildlife management. To teach the activity, students will meet via Zoom or another online delivery platform, and the instructor will start by presenting a PowerPoint with 10–15 different wildlife species. Each slide should be labeled with the common species name like "mule deer" or "Gamble's quail" and should include a clear picture of the species. Students will take notes regarding the common names as well as characteristics to help them identify the animals. After reviewing all species, the instructor will split the class into teams of 3–4 students and assign them to different breakout rooms. Breakout rooms allow instructors to split the Zoom meeting into multiple separate sections, providing smaller environments for students to collaborate and discuss (Vanderbilt University, 2020). Once in breakout rooms, students go on a "virtual hunt" to

1) identify the scientific name of the species; 2) discover the gestation period or incubation time; and 3) draw the tracks of each species. To increase student ownership, students can decide if they want to work together or complete tasks individually before returning to the main Zoom room. Instructors can interact with students by joining and leaving each breakout room to check for understanding as well as by broadcasting a message to all breakout rooms After the allotted time passes, the instructor will close the breakout rooms and students will return to the main meeting room to review concepts they discovered on the "virtual hunt." This activity is best suited for helping students work together in an interactive, collaborative space to become familiar with the basics of wildlife via distance learning. Instructors can also make the activity competitive by having groups compete for the greatest number of correct answers in an allotted time.

Results to Date

Students in the "virtual hunt" pilot provided positive feedback regarding how the activity increased engagement with their peers. Students stated this benefit made them feel like they had a better grasp of material due to investigating key concepts in a participant- or learner-driven format. Some students struggled remembering key characteristics of the animals prior to joining the breakout rooms, which reinforced the need for clear instructions. Students also suggested adding more time to complete the steps, as well as building in a formative feedback time where the instructor could move the students back to the main room after completing one investigation animal to check for understanding, prior to allowing them to work through the set of animals.

Future Plans/Advice to Others

Based on our experience in this piloted activity, we believe integrating interactive tools such as collaborative breakout rooms can reinforce key concepts needed to teach wildlife online. Because breakout rooms engage participant-driven instruction, trust and clear expectations must be set for each student regarding breakout room etiquette. These ground rules can be established at the beginning and can be reinforced through collaborative sharing spaces, such as students uploading completed animal workbooks to a shared cloud, Google Classroom, etc.

Clear communication when providing instructions is also vital. We recommend providing a summary of the instructions for the breakout rooms in multiple places. For example, we suggest instructors verbally state instructions, share them on the screen prior to joining breakout rooms, and list them in the chat so students can access them after they leave the main room. Instructors may also consider developing a Word document handout to place in the Zoom chat that students can download and use as guided notes for the "On the Hunt" activity. This activity is intended to reinforce students' ability to collaboratively work together to identify key elements of wildlife species. As a result, we recommend instructors adjust the time limit and number of animals to identify based on the students' exposure and experience with wildlife. Assigning a team captain to be in charge of each breakout room can also help manage focus and time. If instructors plan to use this activity more than once, we recommend rotating team captains, so all students have ownership and leadership in the breakout rooms.

Costs/Resources Needed

Students will need access to an online platform, such as Zoom, Google Meets, Skype, or Microsoft Teams. Students also need a device that is capable of connecting to the internet. Instructors will prepare materials using PowerPoint and rules from the National FFA Organization. Other than these resources, instructors and students have no activity costs.

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