Leadership and Entrepreneurship Education Through a Collaborative, Flipped Classroom

Introduction

Flipped classrooms have become a buzzword in education. Recently, there have been multiple studies conducted specifically within agricultural education on its viability as a learning tool, with various researchers focusing on student perceptions of the method (Conner, et al., 2014; Conner, Stripling, Blythe, Roberts, & Stedman, 2014; McCubbins, Paulsen, & Anderson, 2018). Flipped classrooms have become a great contextual application for team- and project-based learning (McCubbins et al., 2018; Nguyen, 2018). Flipped classrooms present information in online media formats, converting class time into an opportunity for application (Conner, et al., 2014). This model works effectively with team-based learning by ensuring students are meeting with teams and completing projects or assignments productively (Nguyen, 2018).

While flipped classroom approaches are used in a range of content areas, the application in discussion focuses on a flipped classroom design to facilitate student’s application of leadership principles through innovation and entrepreneurship strategies. The novelty of this idea is not necessarily in the use of a flipped classroom or a collaborative learning environment, but rather in the application to the content area and the unique setting of the Innovation Collaboratory (Toker, 2019). The course of focus is designed to foster innovative entrepreneurial ventures intended to solve community-, education-, and/or market-based problems (Mars, 2015). In the context of agriculture, examples of problems approached by students have included food insecurity, cost efficiency in crop production, and access to clean water. Students are immersed into the course structure of flipped classroom/team-based learning and are motivated to engage in the course concepts through projects directly associated with their own passions and interests.

How it Works

Focusing on solving problems through entrepreneurial leadership and innovation creates a unique opportunity for students to demonstrate team interaction and leadership in realistic situations. This application of a flipped classroom is occurring within a novel learning space, the Innovation Collaboratory (Toker, 2019), which is specifically designed to create a naturally collaborative working environment. The Innovation Collaboratory is structured in such a way to facilitate a fluid, supportive environment for idea generation and implementation. At the beginning of each semester, expectations are established in terms of the flipped classroom application and how class time is to be used productively. Students are divided into teams to complete a semester project. The project is an accumulation of tasks that result in a comprehensive entrepreneurial leadership strategy. In addition to the team project, students also individually engage in the flipped classroom model through online video lectures and quizzes—structured with one lecture and one quiz due at the beginning of each week.

Following each lecture, class time is spent in teams working on a project component that aligns with the content covered in that week’s lecture. For example, in the context of developing an entrepreneurial venture, considering industry benchmarks allows students to distinguish the value proposition of their proposed innovation relevant to competing solutions. This type of engagement in a semester long project allows students the opportunity to focus on more
challenging content and in doing so develop a richer understanding of the complexities of agricultural problems and solutions. The structure of content is flexible to attend to any student difficulties throughout the process. As with any team dynamic, the tensions rise and fall, with the professor serving as a facilitator to assist the team in overcoming challenges and maximizing opportunities. This facilitation exists not only in the form of conflict resolution, but in content clarification and empowerment.

Results and Implications

To date, flipped classrooms have been shown to increase students confidence by providing them the opportunity to apply and model the concepts they are learning in real-time (Conner, et al., 2014). Likewise, studies of team-based learning have shown that students generally respond positively to a team structure (Nguyen, 2018; McCubbins, et al., 2018). Coupling these two methods is likely to engage students in a way that they might not have ever experienced before beginning a career. However, both methods pose mild challenges because of their unconventional structure. For example, the transition of authority between student and instructor can cause students discomfort (McCubbins, et al., 2018). The freedom and discomfort students face in this application is an intentional approach to help them be comfortable with being uncomfortable—a feature of the innovative process (Toker, 2019).

The lead instructor reports that the class content itself has shown to develop leadership abilities across students of various disciplines. The intended impact of the learning experience is to enhance the capacities of students to apply the entrepreneurial and leadership skills acquired in the context of a flipped collaborative learning space to much broader areas of their lives. This real-life application is what will truly invoke innovative change.

Future Plans and Advice

Advice for moving forward this type of implementation lies in the instructor’s role. My primary advice is to empower students by 1) allowing creativity, 2) providing flexibility, and 3) fostering a classroom environment that supports both. With flipped classrooms, students can often feel that lectures are sufficient in providing them with knowledge that class time becomes pointless depending on the application (Conner, et al., 2014). Knowing student’s perceptions of flipped classroom lectures makes it especially important to focus on realistic, meaningful engagement opportunities, as innovation and entrepreneurial leadership does, to pose more “worth” to students. This reinforces the novelty of the class content to be one that provides these opportunities to students in a way that has not happened conventionally.

Cost and Resources

On the front line, there are no costs associated with this application. However, having a space available that is indicative of collaborative work and some of the technologies to facilitate that process may be of consideration. Examples of equipment and technology that was available to students in this specific context to enable the team-based learning included multi-display monitors, conference-like desk space, and moveable whiteboards for storing ideas, in addition to accessing online cloud sharing, such as a shared Google Drive.
References


