Assessing the Prioritization of Major Coursework in Undergraduate Agricultural Education Students – An Exploratory Study

Christopher J. Eck
Oklahoma State University
458 Agricultural Hall
Stillwater, OK 74078
239-340-8533
Chris.Eck@okstate.edu

Jon W. Ramsey
Oklahoma State University
466 Agricultural Hall
Stillwater, OK 74078
Jon.Rasmey@okstate.edu

Introduction

"During their college years, students make the pivotal decision to focus their energy and attention on a major program that will shape their future. In turn, these programs provide direction and requirements intended to help students achieve their academic goals." (Kohn, Cooper, Long, Posey, & Sawtelle, 2018, p. 1). For this discourse to be effective, students must engage in the learning environment, "which incorporates behavioral, emotional, and cognitive aspects" (Marx, Simonsen, Kitchel, 2016, p. 213). A pivotal point in this process, is that student engagement results in interest development, ultimately leading to increased academic effort put forth by the students (Miller, Rycek, & Fritson, 2011). Developing a better understanding of students' attitudes and beliefs toward their courses and goals will help to better prepare them for the challenges of the 21st century (Stripling & Ricketts, 2016). The purpose of this study was to determine undergraduate students' priorities, intentions, and behaviors as they relate to agricultural education major coursework. Four research questions guided this study: (1) Describe the population of agricultural education students, (2) Identify student's prioritization of major coursework in agricultural education, (3) Determine students' intent as it relates to engagement in coursework, and (4) Determine and explain students' perceived outcomes based on intentions and behavior.

Theoretical Frame

Ajzen (1991) identified "a central factor in the theory of planned behavior [to be] the individual's intention to perform a given behavior" (p. 181). Determining a student's intention as it relates to prioritization of agricultural education major coursework allows researchers to identify how students conceptualize the coursework, leading to their behavior i.e., studying, reading, and creating. Intentions are key factors in motivating the eventual behavior or action (Ajzen, 1991). Although we can identify the student's intentions, determining the behavioral control is more difficult. Using Ajzen's (1991) model of planned behavior, researchers considered three controls i.e., perceived behavioral control, subjective norms, and attitude toward behavior.

Methodology

For this exploratory, descriptive study (Privitera, 2017), the population of interest was undergraduate agricultural education students enrolled in the teaching methods course at Oklahoma State University (OSU) (*N =20).* Sixteen (80.0 % of the population) of the students participated in the study. The researchers utilized Qualtrics, an online survey data instrument. Students were asked to rank their current courses based on their priorities from one (highest priority) up to six (lowest priority). Further, the students reported the total number of enrolled semester hours and the time spent working on class related assignments outside of class for each of the courses. Anticipated end of the semester grades were also self-reported by the students. The study was based on observations of agricultural education faculty members at OSU, related to students' intentions and behaviors in undergraduate agricultural education coursework. The participants were also asked to identify intend to enter a career as a school-based agricultural education teacher after graduation, along with demographic information i.e., gender, state of residence, path to OSU and anticipated graduation year.

Results/Findings

The first objective aimed to describe the population of students, which included 11 females and five males (n = 16). Eleven students were in-state residents and five were out of state,

representing three additional states. Four students transferred into the program with an associate degree, two transferred without an associate degree, and 10 enrolled as freshman. Enrollment ranged from 12 to 19 credit hours for the fall semester, with an average of 15 hours. The second objective focused on student's prioritization of coursework, finding sixty-nine percent of the students ranked their agricultural education teaching methods course as their top priority (n = 11), averaging six hours spent outside of class time to complete necessary assignments and prepare for class and tests associated with that course. Nineteen percent of the students (n = 3) assigned teaching methods as the second priority in their current course load, finding horticulture, chemistry, and special education to be more of a priority, although they spent an average of seven hours per week working on and preparing for teaching methods. One student ranked teaching methods third, claiming to spend no-time outside of class on the course and placed a communications and leadership course higher. The lowest priority teaching methods received was fourth, by one student, who ranked horticulture, soil science, and agricultural mechanics courses above teaching methods, even though they accounted for spending more than four hours a week on teaching methods outside of class, which was more time than they dedicated to any other course. Eight of the students anticipated earning an "A" in teaching methods and the other eight expected to earn a "B". Across all semester coursework only one student anticipated earning lower than a "B" in any course, as they expected a "C" in a food science course. All 16 students are expecting to graduate with a Bachelor of Science degree in Ag Sciences and Natural Resources with their Oklahoma teaching credentials in the Spring of 2019, 87.5% of which (n = 14), plan to pursue a career as a school-based agricultural education teacher after graduation.

Conclusions

Although not all students currently in teaching methods find the course as their top priority, all of the students deem it necessary to spend more time, on average, each week outside of class to prepare for and complete assignments associated with that course. Therefore, they have the intention to complete the coursework required for teaching methods and spend time preparing for class each week. Based on the students' course priorities, their behaviors, and intentions, they perceive themselves to be on track to be successful in the course with an overall grade of an "A" or "B". Although our interest focused on the specific engagement and intentions of the students in teaching methods, the majority of the coursework they were enrolled in is related to their agricultural education major, aligning with the findings of Marx et al. (2016), finding the reduction of most degree plans to 120 credit hours, has streamlined coursework to reflect at least 50% of coursework to be major required.

Implications/Recommendations

Initially, this exploratory study was for internal evaluation of students' priorities as related to major coursework, however the results provide implications that could be beneficial outside the department. Considering students priorities related to teacher preparation coursework per Azjen's (1991) theory, can serve as a valuable asset in preparing and planning for instruction, especially in the context of major coursework. It is recommended that further research be conducted on the topic, investigating all students in the agricultural education program and not just seniors currently enrolled in the agricultural education teaching methods course. Future findings could help to make departmental recommendations on course sequencing and course pairings for students majoring in agricultural education.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Process. 50*(2), 179-211. Retrieved from https://doi.org.argo.library.okstate.edu/10.1016/0749-5978(91)90020-T

Kohn, K., Cooper, M. M., Long, T., Posey, L., & Sawtelle, V. (2018). *Connecting Chemistry and Biology: Exploring Students' Perceptions of College Courses,* ProQuest Dissertations and Theses.

Marx, A. A., Simonsen, J. C., & Kitchel, T. (2016). Undergraduate student course engagement and the influence of student, contextual, and teacher variables. *Journal of Agricultural Education, 57*(1), 212-228. doi:10.5032/jae.2016.01212

Miller, R. L., Rycek, R. F., & Fritson, K. (2011). The effects of high impact learning experiences on student engagement. *Procedia Social and Behavioral Sciences, 15*(2011), 53-59. doi:10.1016/j.sbspro.2011.03.050.

Privitera, G. J. (2017). *Statistics for the Behavioral Sciences*. Thousand Oaks, CA: Sage Publishing.

Stripling, C. T., & Ricketts, J. C. (2016). Research priority 3: Sufficient scientific and professional workforce that addresses the challenges of the 21st century. In Roberts, T. G., Harder, A., & Brashears, M. T. (Eds), *American Association for Agricultural Education national research agenda: 2016-2020* (pp. 29-35). Gainesville, FL: Department of Agricultural Education and Communication