How do secondary agricultural educators influence their students to become teachers?

Elissa G. Hendren, University of Missouri
John D. Tummons, University of Missouri

121 Gentry Hall
Columbia, MO 65211
573-882-7451
eghnq6@mail.missouri.edu

Introduction/need for research

Agriculture teachers are an important student success variable in secondary Agricultural Education programs. There is currently a nationwide shortage of certified agriculture teachers to fill positions (Foster, Lawver, & Smith, 2014). A large proportion of current agriculture teachers were involved in high school Agricultural Education programs as students (Saucier, Tummons, Terry, & Schumacher, 2010); the local agriculture teacher can provide a powerful model (Rice, 2015) and may influence a future teachers' decision to teach agriculture (Rice & Kitchel, 2015). For preservice agriculture teachers, the sub-constructs of "fallback career", "working with adolescents", "intrinsic career value", and "job security" were significant predictors of students' intentions to teach agriculture (Lawver & Torres, 2011). However, little is known about how and to what extent a secondary agriculture teacher's decision to teach was influenced by their high school agriculture teacher(s). The purpose of this inquiry was to generate a model illustrating the processes and experiences by which high school agriculture teacher(s) influenced current and preservice agriculture teachers' intent to teach.

Conceptual/Theoretical Framework and Methodology

Researchers were guided by the theoretical framework of teacher FIT-Choice (Watt & Richardson, 2007), as modified for Agricultural Education audiences by Lawver and Torres (2011). Researchers employed a qualitative, grounded theory methodology (Creswell, 2007) to answer the central question "How has your high school agriculture teacher influenced your decision to teach?" To answer this question, the study focused on pre-service and in-service current agriculture teachers in Missouri. A focus group invitation was extended to all sophomore and junior agricultural education teaching emphasis undergraduates at a Midwest Land-Grant institution. Focus groups were also done with current agriculture teachers within that state. Researchers conducted four focus group discussions with 25 unique individuals, ranging in length from 34-90 minutes. All participants were enrolled in high school agriculture programs as youth. The focus groups were recorded, transcribed, and analyzed to identify key themes.

Researchers utilized a multi-step, zig-zag coding process (Creswell, 2007). Within the four initial sub-constructs identified by Lawver and Torres (2011), researchers conducted axial coding by seeking to understand causal conditions, strategies, intervening conditions, and consequences regarding the influence of local agriculture teacher(s) (Corbin & Strauss, 1990). After the first two focus groups, researchers utilized axial coding to generate a model around the core phenomenon of agriculture teacher/program influence on attitude toward teaching as a career. We conducted two more focus groups, then selectively coded to develop our propositions. Researchers used memoing throughout the process to develop a substantive-level theory. Researchers bracketed their experiences when coding and analyzing data: one researcher was active in agricultural education for nine years as a junior high, high school, and undergraduate student, FFA officer, and livestock showing. The second researcher was active in Agricultural Education/FFA for four years as a student, nine years as a secondary agriculture teacher, and 7 years working in a university as a teacher educator.

Results/findings

Each participant reported their high school agriculture teacher had a substantial impact on their decision to become an agriculture teacher. Although most participants reported the impact of their teacher and FFA program contributed positively to their choice, a few participants were motivated to teach because of a negative experience. Among the four factors identified by

Lawver and Torres (2011), our participants were directly influenced by their agriculture teacher in two areas, working with adolescents and intrinsic value (see Figure 1).

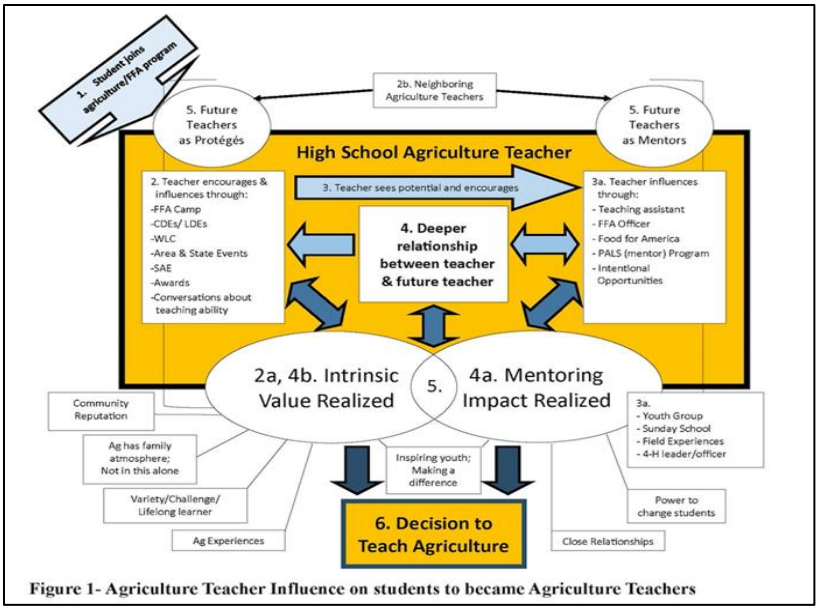

Figure 1- Agriculture Teacher Influence on students to became Agriculture Teachers

1. Student joins agriculture/FFA program.
2. Student becoming involved with different activities or events, as often encouraged by agriculture teacher (FFA camp, Contest teams, public speaking, WLC, Area & State events, SAE, awards). The student is a protégé to the teacher.
    a. Intrinsic value of agriculture and/or Agricultural Education are realized.
    b. Agriculture teachers from other schools may influence increased student involvement.
3. Student may ask, or teacher may encourage, student to take leadership/mentor positions, such as: Teaching assistant, FFA Officer, Food for America organizer/leader, mentor to students.
    a. Students may also take leadership positions outside of school, such as Sunday school leader, 4-H officer or project leader, field experiences, youth group, or volunteer.
4. Student often develops closer relationship with agriculture teacher.
    a. Student realizes they can have a positive impact on other students as a mentor.
    b. Student feels intrinsic value from youth mentoring, personal development, community improvement, sees they can make a difference and be a lifelong learner.
5. Students cycle between roles of protégé and mentor as they deepen relationship with their advisor, building intrinsic career value and value of working with adolescents.
6. Students choose a career in agricultural education.

Conclusions/Implications/Recommendations/ Impact on Profession

Although researchers followed approved protocol, conclusions should be inferred with caution. Among the four sub-constructs examined, the local agriculture teacher primarily influences students' intent to teach through intrinsic value and desire to work with adolescents. For the majority of participants, intrinsic value and adolescent development were intertwined with their own personal development and intentional opportunities to mentor or teach fellow youth (Lawver & Torres, 2011). For in-service teachers who wish to encourage their students to teach agriculture, we recommend intentionally creating student mentoring experiences, such as Food for America, tutoring, and junior officers to build intrinsic value through interaction with youth (Lawver & Torres, 2011). Since a vast majority of current teachers were active in secondary agricultural education programs (Saucier, Tummons, Terry, & Schumacher, 2010), and the teacher has the capacity to build intrinsic value and mentoring opportunities for their students, current agriculture teachers play a critical role in addressing the teacher shortage (Foster, Lawver, & Smith, 2014). What additional factors affect student motivation to teach agriculture? Do these factors affect current agriculture teachers' decision to continue teaching? Can teachers create a cycle of student mentoring to gain the realization of intrinsic value and student impact?

References

Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology,* 13(1), 3-21

Creswell, J. W. (2007). *Qualitative inquiry & research design: choosing among five approaches* (2nd ed.). Thousand Oaks: Sage.

Foster, D. D., Lawver, R. G., & Smith, A. R. (2014). *National agricultural education supply and demand study.* American Association for Agricultural Education.

Lawver, R. G., & Torres, R. M. (2011). Determinants of Pre-Service Students' Choice to Teach Secondary Agricultural Education. *Journal of Agricultural Education, 52*(1), 61-71. Doi:10.5032/jae.2001.01061

Lawver, R. G., & Torres, R. M. (2012). An Analysis of Post–Secondary Agricultural Education Students' Choice to Teach. *Journal of Agricultural Education,53*(2), 28-42. doi:10.5032/jae.2012.02028

Rice, A. M. (2015). *Shaping pedagogical content knowledge for experienced agriculture teachers in the plant sciences: a grounded theory* (Unpublished doctoral dissertation). University of Missouri, Columbia.

Saucier, P.R., Tummons, J.D., Terry, H.R., & Schumacher, L.G. (2010). Professional Development needs of Missouri Agricultural Educators. *Proceedings of the 2010 American Association for Agricultural Education National Research Conference,* Omaha, Nebraska.

Watt, H. M. G., & Richardson, P. W. (2007). Motivations factors influencing teaching as a career choice: Development of the FIT-Choice scale. *The Journal of Experimental Education, 75*(3), 167-202.