## Promoting School-Based Agricultural Education as a Career: Teacher Perceptions and Behaviors

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### Abstract

The purpose of this study was to assess the self-career promotion perceptions and behaviors of School-Based Agricultural Education teachers in New Mexico (N=99). Sixty-eight teachers participated in the study with over 80% identifying the secondary agriculture teacher as the most responsible for promoting SBAE teaching as a career. Teachers were most likely to promote teaching through student involvement in the curriculum and by modeling appropriate teaching behaviors. It was recommended that teachers be provided opportunities to learn how to incorporate career promotion activities in their classrooms and programs to encourage students to become SBAE teachers. It was further recommended that teacher educators model effective career promotion behaviors to provide a context for exposing preservice teachers to effective career promotion behaviors.

### **Introduction/Theoretical Framework**

Simply put, there are not enough School-Based Agricultural Education (SBAE) teachers to go around. Of the 3,136 SBAE positions filled with teachers new to the profession since 2015, less than 60% were filled with newly licensed graduates. This has forced school districts to hire individuals from a variety of backgrounds, which included 393 unlicensed teachers (Foster et al., 2015; Smith et al., 2016; Smith et al., 2017). These researchers found, over that same time period, students enrolled in agricultural education at over 200 programs began a school year without an SBAE teacher. However, beginning the school year without a teacher was not the worst of it; due in part to the teacher shortage, 167 SBAE programs were shut down (Foster et al., 2015; Smith et al., 2016; Smith et al., 2017). These findings have led to calls by researchers to identify effective recruiting practices to ensure an adequate supply of agricultural education practitioners (Stripling & Ricketts, 2016).

To better meet the needs of the teaching profession, agricultural education stakeholders have made calls to recruit students. The National Association of Agricultural Educators (NAAE) promotes teaching as a career opportunity through its *National Teach Ag Campaign* (NAAE, n.d.) which provides activities, lessons, games, videos, posters, and handouts along with information regarding teaching agriculture, and promising practices designed to expose students to the opportunities which exist in the profession. Furthermore, Marx et al.(2014) identified

participation in FFA activities within the SBAE program, including participation in career and leadership development events, state and National FFA Conventions and conferences, leadership workshops, and serving as an FFA officer possessed a moderated influence on students' career decisions. Even though program participation, FFA experiences, and the SBAE teacher do have an influence on students' choice to teach, researchers have also noted that teachers often fail to encourage students to teach (Arnett-Hartwick, 2015; Frisbee et al., 2000).

Researchers have indicated SBAE teachers positively influence students' decisions to teach (Ball & Torres, 2010; Lawver & Torres, 2012; Park & Rudd, 2005; Wildman & Torres, 2001). Park and Rudd (2005) found teachers who serve as role models, built quality programs, and refrained from negative remarks and attitudes toward the profession encourage students. These researchers also identified five constructs for recruitment of future teachers and include, encouragement, modeling, career counseling and awareness, program quality, and teacher effectiveness. While this study provided insight into promising career promotion practices of SBAE teachers, it was limited to the practices and attitudes of teachers who had prolifically produced post-secondary agricultural education students. Outside of agricultural education, Arnett-Hartwick (2015) found family and consumer sciences teachers were most likely to promote teaching as a career through course discussions in career lessons, encouragement, modeling, and involving students in the curriculum.

As a means to understand SBAE teachers' self-career promotion attitudes and behaviors, this study was grounded in Ajzen and Madden's (1986) Theory of Planned Behavior. "This theory hypothesizes that one's behavior is determined directly by one's intention to perform the behavior" (Myers & Washburn, 2008, p. 28). Ajzen (1991) further noted that intention is influenced by attitudes and perceived behavioral control. In regard to the present study, we operationalized attitudes as teacher beliefs about who is most responsible for promoting SBAE teaching as a career to students. Perceived behavioral control was operationalized by the actual self-career promotion behaviors exhibited by the teachers. The assumption of the research is that teacher attitudes toward who is most responsible for promoting SBAE teaching to students would have an impact on their self-career promotion behaviors.

# **Purpose/Objectives**

The purpose of this study was to determine teacher attitudes toward the responsibility of promoting teaching as a career and to describe the self-career promotion behaviors of SBAE teachers. The study was guided by the following objectives:

- 1. Identify whom New Mexico SBAE teachers believe is most responsible for promoting SBAE teaching as a career to students.
- 2. Describe the methods New Mexico SBAE teachers use to promote SBAE teaching as a career to students.

# Methods

We selected a mixed-method design to examine the phenomenon in detail and allow the respondents to describe the situations in their own words (Ary et al., 2006). The questionnaire was developed based upon the instrument used by Arnett-Hartwick (2015) who conducted a similar study with family and consumer sciences teachers. As part of a larger study, the section of the instrument devoted to the current study included two questions, in addition to demographic questions. The first question asked the teachers to identify whom they believed was most responsible for promoting SBAE teaching as a career to students. The teachers were provided a list of individuals from which to choose and included, secondary agriculture education teacher, state/national FFA representatives, university agricultural education faculty, parents, guidance counselor, and other. The second question was open-ended asked the teachers to describe how they promoted SBAE teaching to their students. Quantitative data analysis techniques were used to analyze the data collected from Question 1. Data were summarized and examined using frequencies and percentages. Regarding Question 2, data analysis was divided into three stages (Ary et al., 2006). In stage one, we transcribed the data, established response categories, and placed responses into categories. In stage two, the questionnaire, coding rubric, and final results of the coding were independently reviewed by an expert panel and recorded to establish reliability and validity. Data were then summarized and interpreted in stage three.

All SBAE teachers (*N*=99) in New Mexico employed during the spring of 2018 comprised the study population. The New Mexico FFA Association provided teacher contact information, and permission to conduct the study was granted by [UNIVERSITY] Human Subject Committee. Data was collected using Qualtrics® following procedures outlined by Dillman et al. (2009) and included five points of contact. As recommended by Lindner et al. (2001), nonresponse error was controlled by comparing early and late responders and no significant differences were found. Thirty-seven (54.4%) of the 68 teachers (69% response rate) who completed the survey were male. The average teacher was 37 years old and had taught for 10.5 years. Fifty-eight teachers (85.3%) were former FFA members and 55 (80.8%) graduated from a traditional teacher preparation program.

# **Results/Findings**

As found in Table 1, a majority of the teachers indicated the secondary agricultural education teacher (82.3%) was most responsible for promoting teaching as a career followed by New Mexico/National FFA representatives (7.4%), university Agricultural Education faculty (5.9%), parents (2.9%), and guidance counselors (1.5%).

Table 1

Responsibility for Promoting Agriculture Teaching as a Career

Statement	N	%
Secondary Agriculture Education Teacher	56	82.3
NM FFA/National FFA Representatives	5	7.4
University Agricultural Education Faculty	4	5.9
Parents	2	2.9
Guidance Counselor	1	1.5

Regarding objective two, when asked how SBAE teaching was promoted as a career to students, the most common theme that emerged was involving students in the curriculum (n=20, 29.4%). Involvement included facilitating agriculture literacy programs with elementary and middle school students, participating in FFA programs, events, activities, and supervised agricultural experience programs (SAEs). One respondent explained, "Actively engaging students in all areas of the 3-circle model, including letting them teach class, is the best way to promote the career. That's how I got hooked."

Modeling teaching behavior as a method to promote the career was identified by 25% (n=17) of the teachers. One teacher indicated, "I promote my profession by providing engaging and fun lessons. By making my lessons engaging and informative I show the students you can learn while having fun! I also teach them that if you love your job you will never work a day in your life and I love my job!" A similar comment included, "By example. I share my personal life story and the choices I made and always show my career in a positive light."

Twenty-five percent of the teachers indicated they did not promote SBAE teaching as a career option to their students. One respondent noted, "I do not. It is a dead career and the whole idea needs to be changed. If ag and FFA do not get into the 21<sup>st</sup> century they will disappear." Another teacher indicated the responsibilities of the job were barriers to promoting SBAE teaching and noted, "With all the hats, mandatory State and District paperwork, plus all the jobs that must be accomplished by the teacher, who has time to recruit students?"

The fourth most common response category was to encourage students who show interest to pursue an SBAE teaching career (11.8%, n=8). One teacher commented, "I really try to encourage those students who demonstrate leadership skills in the classroom and in the organization. Talking to them about career options and if teaching is one that they had considered before." Another teacher encouraged students due to their concerns about the profession and noted, "I continue to see the quality of Ag Teachers declining as a whole and the reason is probably low pay and additional factors. However, I stress the importance and the demand, and encourage those with potential to look into it as an option."

The last category that emerged was discussions in careers lessons/units (8.8%, *n*=6). Teachers made specific note of incorporating the NAAE's *National Teach Ag Campaign* (NAAE, n.d.) and programs promoted by the National FFA Organization into their careers units. For example, one teacher noted, "On TAGGED day - I present to each class the ag teacher info - including requirements, job description, pay and benefits, etc." Another teacher reported, "We use the FFA career exploration program, after answering the questions on the career interest inventory provided by FFA.org. After they get their career they create career boards that talk about all careers including Agriculture Education." A summary of the categories of self-career promotion behaviors is displayed in Table 2.

Table 2
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New Mexico SDAE Teachers Agricultural Education Career T	romotion Denuvic	// 3
Career Promotion Behavior	N	%
Student involvement in the curriculum	20	29.4
Modeling teacher behavior	17	25.0
No promotion	17	25.0
General encouragement for students who show interest	8	11.8
Discussion during careers lessons/units	6	8.8

New Mexico SBAE Teachers Agricultural Education Career Promotion Behaviors

# Conclusions/Recommendations/Implications

The objectives of this research study were to identify whom New Mexico SBAE teachers believed was most responsible for promoting SBAE teaching and to describe the methods these teachers used to promote the career. Based upon the findings, a majority of New Mexico teachers believed that the secondary agriculture education teacher was most responsible for promoting teaching as a career option. While little research exists describing career promotion beliefs of SBAE teachers, this does support previous findings that agriculture teachers are the best suppliers of future teachers (Lawver & Torres, 2012).

Involving students in the curriculum and modeling teaching behavior were the most common methods employed by SBAE teachers to promote this career option to their students. Furthermore, while not the most common methods, teachers also noted they promote the career through career awareness lessons and encourage students who show an interest to pursue SBAE teaching as a career. These methods are consistent with findings from Park and Rudd (2005) who identified encouragement, modeling, and career awareness as constructs for recruitment of future teachers.

In combination, however, the findings yield more questions than answers. If over 80% of the teachers indicated the secondary agriculture teacher was most responsible for promoting teaching as a career option, why did 25% of the teachers indicate they did not engage in activities that promoted SBAE teaching as a career? Marx et al. (2014) noted that engaging students in the FFA components of an SBAE program influence student career decisions. Do these teaches not recognize that their behaviors inherently promote the career? Park and Rudd (2005) indicated positive teaching behaviors promoted the career while negative attitudes and behaviors tend to discourage students from teaching. In light of this, we recommend that inservice teachers are provided access to research data which illustrates how their behaviors influence their students' career decisions in a meaningful and practical format to maximize its impact.

Career awareness is a foundation of agricultural education. In order to mitigate the teacher shortage plaguing the profession, we implore that SBAE teachers not lose sight of their role in sustaining agricultural education. To do this, we recommend that the resources available through programs like the NAAE's *National Teach Ag Campaign* and programs supported by the National FFA Organization continue to be made accessible and promoted to teachers so that they may be used to recruit future teachers. However, simply making these resources available may not be enough. Therefore, we further recommend that professional development opportunities are made available so that teachers may be taught how to incorporate those resources into their programs and existing curriculum.

Less than 6% of the teachers indicated teacher educators were the most responsible for promoting the career to agricultural education students. However, we believe there exists an opportunity for university faculty to wield significant influence in addressing the teacher shortage issue. We recommend that teacher educators model the most influential constructs identified by Park and Rudd (2005) – encouragement and program quality – in their own programs. By encouraging preservice teachers and maintaining quality programs, teacher educators will, in effect, be modeling behaviors which have been identified as the most influential behaviors which encourage students to become teachers.

## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human* Decision Processes, 50, 179-211.
- Ajzen, I., & Madden, T. J. (1986). Predictions of goal-directed behavior: Attitudes, perceptions, and perceived behavioral control. *Journal of Experimental Social Psychology*, 4(22), 453-474.
- Arnett-Hartwick, S. (2015). Self-career promotion behaviors of family and consumer sciences teachers. Online Journal for Workforce Education and Development, 8(1), 14-21. Retrieved from opensiuc.lib.siu.edu/ojwed/vol8/iss1/3/
- Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. (2006). *Introduction to research in education* (7th ed.). Belmont, CA: Thomson Wadsworth.
- Ball, A. L. & Torres, R. M. (2010). Recruiting and retaining highly qualified teachers of agriculture. In R. M. Torres, T. Kitchel, and A. L. Ball (Eds.), *Preparing and Advancing Teachers in Agricultural Education*, (268-282). Curriculum Materials Service: The Ohio State University.
- Dillman, D., Smyth, & Christian, L. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method*, New York: Wiley.
- Foster, D., Lawver, R., & Smith, A. (2015). National agricultural education supply & demand study: 2015 executive summary. A report from the American Association for Agricultural Education. Retrieved from: http://aaaeonline.org/resources/Documents/NSD %20Summary 2015.pdf
- Frisbee, R., Belcher, G., & Sanders, R. (2000). Recruitment techniques that influence students to attend four-year automotive programs. Journal of Vocational Education Research, 25(2), 104-125.
- Lawver, R., & Torres, R. (2011). Determinants of pre-service students' choice to teach secondary agricultural education. *Journal of Agricultural Education*, *52*(1), 61-71.
- Lawver, R., & Torres, R. (2012). An analysis of post-secondary agricultural education students' choice to teach. *Journal of Agricultural Education*, 53(2), 28-42.
- Lindner, J., Murphy, T., Briers, G. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education*, 42(4), 43-53.
- Marx, A., Simonsen, J., & Kitchel, T. (2014). Secondary agricultural education program and human influences on career decision self-efficacy. *Journal of Agricultural Education*, 55(2), 214-229.
- Myers, B., & Washburn, S. (2008). Integrating science in the agriculture curriculum: agriculture teacher perceptions of the opportunities, barriers, and impact on student enrollment. *Journal of Agricultural Education, 49*(2), 27-37.

- National Association of Agricultural Educators. (n.d.). National teach ag campaign. Retrieved from https://www.naae.org/teachag/
- Park, T., & Rudd, R. (2005). A description of the characteristics attributed to students' decisions to teach agriscience. *Journal of Agricultural Education*, 46(3), 82-94.
- Smith, A., Lawver, R., & Foster, D. (2017). National agricultural education supply & demand study: 2017 executive summary. A report from the American Association for Agricultural Education. Retrieved from: http://aaaeonline.org/resources/Documents/ NSD2017Summary.pdf
- Smith, A., Lawver, R., & Foster, D. (2016). National agricultural education supply & demand study: 201 executive summary. A report from the American Association for Agricultural Education. Retrieved from: http://aaaeonline.org/resources/Documents/ NSD2016Summary.pdf
- Stripling, C. T., & Ricketts, J. C. (2016). Research priority 3: Sufficient scientific and professional workforce that addresses the challenges of the 21st century. In T. G. Roberts, A. Harder, M. T. Brashears (Eds.), *American Association for Agricultural Education national research agenda: 2016-2020* (pp. 29-36). Gainesville, FL: Department of Agricultural Education and Communication.
- Wildman, M., & Torres, R. (2001). Factors identified when selecting a major in agriculture. Journal of Agricultural Education, 42(2), 46-55.