Roles of a School-Based Agriculture Education Teacher: Changes in Perceptions of Preservice Teachers

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Introduction and Theoretical Framework

The school-based agricultural education (SBAE) preservice teacher population is largely drawn from secondary students active in their local SBAE programs (Ingram et al., 2018). This experience may form preconceived notions related to important roles of a SBAE teacher (Smalley & Rank, 2019). Teacher educators need to be aware of these preconceived notions and create meaningful learning experiences to allow students to assimilate or accommodate new knowledge (Hilton & McCleary, 2019).

The learning theory of constructivism was used as the theoretical foundation of this study. Constructivism is used to create knowledge through experiential activities and interactions with others (McLeod, 2019). Constructivism is based on learners' comprehension of new knowledge and incorporating prior knowledge and experiences (McLeod, 2019). Teacher educators are tasked with a responsibility to provide problem-solving opportunities allowing preservice teachers to be active participants within their own learning (McLeod, 2019). As stated by Burris and Keller (2008), "Agriculture teachers require a unique set of competencies" (p. 119). Research has identified competencies in instruction, program planning, FFA, SAE, and professional growth and management (Burris & Keller, 2008; Roberts & Dyer, 2004). The purpose of this study was to examine changes in preservice teachers' value of SBAE teacher roles over the semester in a foundations and philosophy class. The research objective sought to assess perceptions of important roles in the beginning and end of the semester.

Methodology

Preservice teachers enrolled in AGED 3103 Foundations and Philosophies of Teaching Agricultural Education during the Fall 2020 at Oklahoma State University (OSU) were the population of interest for this study ($N = 47$). Data were collected at two points during the semester through Google Forms. Initial data were collected during Week 3 ($n = 46$) and final data were collected in Week 11 ($n = 39$). All data collection occurred during class. A quick response (QR) code was presented for participants to access the instrument from their own electronic devices. Preservice teachers were asked to identify three roles from a list of 21 they felt were most important for a SBAE teacher. Directions clearly stated participants need not rank importance of roles, only to indicate the three they believed to be most important. The roles listed on the instrument were collected from literature (Burris & Keller, 2018; Roberts & Dyer, 2004; Smalley & Rank, 2019) and checked for face and content validity by SBAE experts. Once data were collected, frequency counts were calculated for all roles. Those counts and the percentage of preservice teachers reporting those roles were used for analysis.

Findings

Table 1 displays the preservice teachers' perceptions of most important roles of a SBAE teacher in both data collections. *Classroom teacher* was the most frequent role identified in the top three most important roles for both initial and final data collections but were reported by a greater percentage of preservice teachers during Week 11. *Youth organization advisor* experienced a decreased frequency and percentage from the initial collection. The role of *life-long learner* stayed mostly constant over the data collection times. *Community leader* was reported by more preservice teachers in a smaller sample size during the final data collection compared to the initial collection. *Leadership consultant* experienced a sharp drop from beginning to end of the semester. *Agricultural consultant* stayed steady in frequency count with a slight increase in percentage over the semester. The *coach* role increased slightly in the number of preservice teachers ranking it into the top three most important SBAE teacher roles. All other reported roles were identified by less than 20% of the preservice teachers in this study. Roles of *finance*

director, *researcher*, and *volunteer coordinator* were included in the instrument but not identified by any participant during either data collection.

Table 1

Preservice Teachers' Perceptions of Most Important Roles of a SBAE Teacher

Initial Collection (n = 46)			Final Collection (n = 39)		
Role	Count	%	Role	Count	%
Classroom teacher	30	62.21	Classroom teacher	28	71.79
Youth organization advisor	20	43.48	Life-long learner	16	41.03
Life-long learner	17	36.96	Community leader	15	38.46
Community leader	13	28.26	Agriculture consultant	11	28.21
Leadership consultant	11	23.91	Coach	11	28.21
Agriculture consultant	10	21.74	Youth organization advisor	11	28.21
Project supervisor	9	19.57	Program administrator	6	15.38
Coach	7	15.22	Counselor/therapist	3	7.69
Program administrator	7	15.22	Laboratory instructor	3	7.69
Laboratory instructor	4	8.70	Leadership consultant	3	7.69
Student recruiter	4	8.70	Project supervisor	3	7.69
Counselor/therapist	3	6.52	Adult educator	2	5.13
Facilities manager	2	4.35	Event planner	2	5.13
Travel agent	2	4.35	PR representative	1	2.56
Adult educator	1	2.17	Student recruiter	1	2.56
Professional society member	1	2.17	Travel agent	1	2.56

Conclusions and Recommendations

Even with attrition accounting for seven less responses during Week 11, five attributes were repeated among the six most commonly identified roles of a SBAE teacher in both the initial and final collection. AGED 3103 students consider *classroom teacher* to be role the most important role of school-based agricultural education teachers. Prominence of this role could be due to the course's emphasis on classroom instruction. Participants completed early field observations of classroom instruction and developed lesson plans including anticipatory sets, direct instruction, learning activities, and formative assessments. Perceptions about teachers' roles as y*outh organization leader* and *leadership consultant* changed the most during the course. Possible reasoning for this drop in frequency could be focus of the course on agricultural education teaching methods. These roles, while remaining important to some preservice teachers, could have been viewed as extraneous to the role of classroom teacher.

A longitudinal study following preservice teachers throughout their preparation and into the first years of their teaching career would shed light on the influence of constructivism on the perceptions of important roles of an SBAE teacher. Preservice agricultural education programs should administer the instrument at the beginning and end of each semester for professional education courses. Programs could then evaluate student responses on a collective or individual basis to track overall fluctuation of responses and tailor instruction to further develop understanding. Future research could also utilize this instrument to investigate the individual roles SBAE teachers identify within themselves at incremental points within their career. Cross examining perceptions between preservice and certified agricultural educator roles could assist teacher educator programs enforce the importance of the different roles within certain points of curricula. Qualitative methods would provide context and further explain the role of constructivism in changing perceptions. This research could also be used by state SBAE staff for recruiting high school students who may be motivated by the various roles of SBAE teachers.

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