Recruitment Strategies Used by School-Based Agricultural Educators in Michigan

Abstract

There are many benefits to being involved in a school-based agricultural education program (SBAE). Engagement of students in SBAE programs provides students with a milieu of opportunities; as such, it is imperative to determine strategies for recruitment and retention that are impactful. Research surrounding the recruitment and retention of SBAE students is sparse. This study explored the ways SBAE teachers are recruiting students and the perceived efficacy of those recruitment strategies to pinpoint which strategies teachers are using and perceived success of different recruitment strategies. Hands-on learning and learning outdoors are the two strategies teachers are using most commonly in their programs and perceive to be most effective. The results of this study are compared to scholarship within the discipline on student recruitment, as well as the recruitment theory.

Keywords: experiential learning; hands-on learning; recruitment strategies; retention strategies

Introduction

Engagement in school-based agricultural education (SBAE) provides learners with opportunities to develop a blend of skills and knowledge in leadership and agricultural systems. While not inclusive of all the benefits of SBAE engagement, recent research highlights students engaging in SBAE earn more money in their careers and are more likely to graduate high school than their non-SBAE peers (McKim et al., 2018). Findings from the same longitudinal dataset, however, suggest the percentage of Black and Hispanic students participating in SBAE falls below their representation in schools offering SBAE (Velez et al., 2018). The underrepresentation of Black and Hispanic students implies research into the recruitment strategies used by SBAE educators is critical to identifying opportunities to make recruitment strategies more inclusive. In addition to informing recruitment of underrepresented groups, research into the recruitment strategies utilized within SBAE supports educators seeking to fill their program rosters with interested and engaged students, an outcome especially salient given the elective status of many SBAE courses within the secondary school setting. To support inclusive and successful recruitment across SBAE programs, we explored SBAE teacher utilization and perceived effectiveness of various potential recruitment strategies in Michigan.

Review of Literature

In SBAE, there exists a dearth of research about recruitment. Myers et al. (2003, p. 96) recognize "[t]here has been a scattering of research that identified what has worked, or failed to work, in particular instances." The lack of scholarship limits the ability of educators to "stabilize the variation in student enrollment" (Myers et al., 2003, p. 94). This statement emphasizes the criticality of research behind recruitment and retention methods in SBAE programs. Extending the importance of this topic, Dyer and Breja (2003) found recruitment of quality students has been a persistent problem in both secondary and postsecondary agricultural education programs.

It is possible the dearth of research surrounding recruitment and retention in SBAE exists due to the difficulty of tracking the number of students coming to recruitment events and calculating retention afterward. Gates et al. (2020, p. 223) found that "although universities can easily measure the frequency with which recruitment events occur and the number of students attended, measuring the

success of a recruitment event or strategy can be a unique challenge." The same challenge is likely to present itself in secondary settings, as the decision to engage in SBAE is often complex, making it challenging to pinpoint a singular cause.

Before joining an SBAE program, students may ask, "What's in it for me?" Students' perceived benefits from SBAE programming incentivize them to get involved, and when those perceived benefits are realized, students remain engaged. When these benefits are not realized, students may not stay enrolled (Talbert & Balschweid, 2004). Thus, there is an increasing importance being placed upon tangible student benefits. Providing an array of activities that provide for the needs of students may motivate them to join SBAE programs (Russell, 2016). Acknowledging this is crucial for success in any recruitment and retention actions (Elliott & Healey, 2001). Additionally, more diversity is being reflected in public school systems (LaVergne et al., 2012). If SBAE programs wish to include students with diverse characteristics, this diversity must be accounted for in recruitment and retention strategies.

Recruitment and retention may be more successful in some states (Dyer & Breja, 2003), suggesting that reviewing strategies used in those states could illuminate pathways to improved recruitment and retention elsewhere. To offer a path forward, Myers et al. (2003) ranked recruitment strategies used in SBAE from most effective to least: (a) middle school feeder program, (b) agriculture teacher and student contact, (c) FFA chapter events, (d) publications, (e) curriculum, (f) social support, and (g) recruitment events. Additional research supports the efficacy of identified recruitment strategies. Facilitating communication has consistently been identified as an effective approach (Hoover & Scanlon, 1991). Building relationships between the current agricultural educator, program alumni, and upcoming students may provide a sense of familial connection while also providing a network, building incentive to stay within the program. Furthermore, facilitating a program in alignment with the three-circle model has been found to be essential (Croom, 2008; Myers et al., 2003; Rubenstein & Thoron, 2014). Having efficient implementation and execution of supervised agricultural experiences (SAEs) can influence retention. "Practicing agriculture teachers should examine their current SAE instructional practices to ensure that SAE programs [are] based on learners' interest and provide support for a learner's personal, academic, and career goals" (Rubenstein & Thoron, 2014, p. 162). By implementing successful SAE programs, students could be incentivized to remain within the program.

Other influences behind student enrollment in agricultural education include strong curriculum, family influence, and the agriculture teacher (National Association of Agricultural Educators, n.d.). Myers et al. (2003) discovered having a strong curriculum and sharing it with students and those surrounding students (i.e., families, friends, etc.) should improve enrollment.

Ultimately, there are a variety of different recruitment and retention strategies being employed by SBAE teachers. Evaluating the efficacy of these strategies is important to ensure the vitality of SBAE programs. Given the last known study on recruitment efficacy was conducted by Myers et al. in 2003, the most effective strategies for recruitment may have shifted. As student demographics change, the top recruitment strategies may change with them and their interests.

Theoretical Framework

Our research is grounded in the recruitment theory (Winston, 2001). Recruitment theory is "associated with the identification of individuals who are likely to be successful and to contribute as leaders in organizations and professions" (Winston, 2001, p. 20). Originally developed for professional careers, the recruitment theory offers useful insight to our research by identifying the factors, and their

relative importance, that motivate individuals to engage in a particular system, like an agricultural education program. Winston (2001) organized existing literature from a range of disciplines on organizational recruitment to identify four salient recruitment factors (see Table 1).

Table 1

Factors Influencing Recruitment and their Operationalization

Recruitment Factors	Description	Operationalization
Social Encouragement	Family members, peers, teachers, and role models encouraging the individual.	Program spotlight through presentations; informal recruitment; and administration education.
Relevant Experiences	Past experiences which imbue confidence in a positive experience.	Program spotlight through immersion.
Expected Benefits	Valuing perceived outcomes like salary, benefits, and the ability to make a contribution.	Programmatic features and programmatic culture.
Personal Characteristics	Individual's personal interests as well as demographic characteristics.	Given the ubiquitous nature, personal characteristics were viewed as impacting each categorization.

In addition to identifying factors influencing recruitment, the theory identifies the relative importance of specific activities across the four factors. Research suggests interactions with teachers (i.e., activity within social encouragement), interesting academic courses and internships (i.e., activities within relevant experiences), and the ability to contribute (i.e., activity within expected benefit) are the most effective recruitment elements for engaging individuals within organizations (Winston, 2001).

Purpose and Research Objectives

The purpose of this research was to explore the reported use and perceived effectiveness of recruitment strategies used by SBAE teachers in Michigan. The knowledge gained from this work will inform educators seeking to engage more students within their programs. To achieve our purpose, two research objectives were identified:
1. Identify SBAE teacher use of different recruitment strategies.
2. Identify the effectiveness of different recruitment strategies perceived by SBAE teachers.

Methods

The current analysis was completed using a mixed method approach with an exploratory sequential mixed methods design (Creswell, 2017). In this approach the first strand (i.e., qualitative focus group) led to the development of our second strand (i.e., survey).

Data Collection

All SBAE teachers in Michigan during the 2020-2021 school year served as the population (*N* = 138). For the first strand, a purposive sample of five SBAE teachers was selected to ensure the voices included in the focus group represented teachers at different stages in their careers as well as teachers working in different types of programs. A focus group was selected to allow teachers to build upon the ideas shared by fellow teachers during the discussion, minimized redundant suggestions, and provided a context for elaboration of ideas. During the 45-minute focus group, participants discussed recruitment strategies they found successful within their programs as well as recruitment strategies they were aware other SBAE teachers in Michigan utilized successfully. The goal of the focus group, conducted in November 2020, was to create a robust list of recruitment strategies used in SBAE.

For the second strand, a census of SBAE teachers in Michigan was attempted. Data were collected via an online Qualtrics survey. Potential respondents were contacted up to five times via email between December 2020 and January 2021. In total, 71 responses were received, a 51.45% response rate. Reported use and perceived effectiveness items were compared between on-time respondents and late respondents. The lack of statistical differences between the two groups when using the Bonferroni correction (Armstrong, 2014) indicates an absence of non-response bias (Lindner et al., 2001; Miller & Smith, 1983).

Instrumentation

Focus group data informed the development of the survey utilized in the second phase of this exploratory design. The focus group discussion yielded a list of 40 recruitment strategies. For each recruitment strategy, respondents in the second phase rated their use on a five-point scale from 1 (*Never*) to 5 (*Every Time*). In addition, respondents indicated perceived effectiveness for each item on a five-point scale from 1 (*Extremely Ineffective*) to 5 (*Extremely Effective*) with an "Unable to Rate" option also available. The research team concatenated the 40 recruitment strategies into six categories, introduced in the "Operationalization" column of Table 1. A panel of experts, including four faculty in SBAE and one undergraduate researcher, reviewed the instrument for face and content validity. Feedback from the panel indicated the survey was a clear and comprehensive tool for achieving the established research objectives.

Data Analysis

For research objectives one and two, an average reported use and perceived effectiveness was calculated. While the recruitment strategies were placed in categories by the research team to organize responses in alignment with our theoretical framework, the categories are not conceptualized as constructs; therefore, results are reported for individual items and not for thematic collections of recruitment strategies.

Description of Respondents

Respondents included 58.1% (*n* = 36) who taught within a comprehensive public high school and 41.9% (*n* = 26) who taught within a vocational/career center. A total of 59.4% (*n* = 38) of respondents completed a traditional agriculture teacher education program. The average years of SBAE teaching experience was 12.72 years; the average years of teaching experience at their most recent school was 9.77 years.

Findings

To increase readability, findings from objectives one and two are combined as the six recruitment categories are presented.

The first recruitment category, program spotlight through immersion, included immersive opportunities for students before they enroll in the program (see Table 2). Within this category, program tours ($M = 3.62$) was the most commonly used strategy. The recruitment strategy perceived most effective was also program tours ($M = 4.29$).

Table 2

Program Spotlight Through Immersion

Recruitment Strategy	Reported Use		Perceived Effectiveness	
	M	SD	M	SD
Program Tours	3.62	1.21	4.29	0.75
Open House	3.49	1.48	3.83	0.89
Student Orientation	3.20	1.48	3.66	0.82
Course Observations	2.59	1.29	3.95	0.94
Freshmen Orientation	2.35	1.70	3.77	0.88
Summer Camp within Program	1.84	1.21	3.48	0.73
"Meet the Advisor" Night	1.77	1.30	3.55	0.91

Note. Reported use measured on a five-point scale from 1 (*Never*) to 5 (*Every Time*). Perceived effectiveness measured on a five-point scale from 1 (*Extremely Ineffective*) to 5 (*Extremely Effective*). To decrease repetition, this note is only provided on Table 2; however, it applies to Tables 3-7 as well.

The second recruitment category, program spotlight through presentation. included verbal presentations about the program to potential students (see Table 3). The most used strategy was current SBAE students presenting to younger students ($M = 3.97$); the strategy with the highest perceived effectiveness was teacher one-on-one conversations with potential students ($M = 4.40$).

Table 3

Program Spotlight Through Presentation

Recruitment Strategy	Reported Use		Perceived Effectiveness	
	M	SD	M	SD
Students Presenting to Younger Students	3.97	0.96	4.31	0.71
Teacher One-on-One Conversations	3.54	1.03	4.40	0.66
Teacher Presenting to Younger Students	3.37	1.17	3.84	0.77
Teacher Presenting to Parents	2.84	1.40	3.77	0.73

Programmatic features include tangible aspects of the program which may encourage participation (see Table 4). Providing academic credit had the highest reported use ($M = 4.20$). Offering middle school course(s) ranked highest in perceived effectiveness ($M = 4.47$).

Table 4

Programmatic Features

Recruitment Strategy	Reported Use		Perceived Effectiveness	
	M	SD	M	SD
Providing Academic Credit	4.20	1.13	4.26	0.75
FFA Announcements During Class	4.04	1.28	4.02	0.75
Showcase/Trophy Case in School	3.53	1.60	3.23	0.82
Reduced FFA Dues	3.49	1.78	3.81	0.88
Fun Trips with First-Year Students	3.28	1.29	4.00	0.82
FFA Announcements to School	3.26	1.53	3.70	0.77
Bulletin Board in School	2.90	1.59	3.44	0.76
Offering Middle School AFNR Course(s)	2.74	1.73	4.47	0.68
Schoolwide FFA Meeting Flyers	2.67	1.66	3.54	0.84
Recruitment Committee within Program	2.41	1.37	3.89	0.66
Alumni Visits to Program	2.37	1.17	3.50	0.64

Programmatic culture included more abstract programmatic elements which may encourage participation (see Table 5). Within this category, emphasizing hands-on learning had the highest reported use ($M = 4.72$) and the highest perceived effectiveness ($M = 4.75$).

Table 5

Programmatic Culture

Recruitment Strategy	Reported Use		Perceived Effectiveness	
	M	SD	M	SD
Emphasizing Hands-On Learning	4.72	0.57	4.75	0.47
Emphasizing Outdoor Learning	4.51	0.72	4.58	0.61
Being "Exciting" as the Teacher	4.36	0.76	4.28	0.75
Creating an Inclusive Classroom	4.36	0.87	4.22	0.66

Table Continued

Advertising College Credit	4.03	1.09	3.95	0.75
Emphasizing Leadership Contests	3.96	0.88	3.84	0.77
History of Program Success	3.29	1.21	3.92	0.76
Changing Program Name	1.94	1.09	3.44	0.80

Informal strategies are approaches commonly requiring less planning by the educator to enact (see Table 6). The most used strategy was word of mouth ($M = 4.27$), which was also perceived to be most effective ($M = 4.52$).

Table 6

Informal Recruitment

	Reported Use		Perceived Effectiveness	
Recruitment Strategy	*M*	*SD*	*M*	*SD*
Word of Mouth	4.27	0.80	4.52	0.57
Community Presence of Advisor	3.83	0.94	4.00	0.69
Teacher as "Salesperson"	3.63	0.90	3.90	0.81
FFA Member Guiding Recruitment	3.62	1.10	4.00	0.76
Parent/Family Influence	3.38	0.96	4.10	0.77
"Bring a Friend" to FFA Meetings	2.53	1.19	3.94	0.63

Administration education includes involving administration in the SBAE program to increase their knowledge (see Table 7). Sending success highlights had the highest reported use ($M = 4.06$) and the highest perceived effectiveness ($M = 4.05$) within this category.

Table 7

Administration Education

	Reported Use		Perceived Effectiveness	
Recruitment Strategy	*M*	*SD*	*M*	*SD*
Sending Highlights to Administration	4.06	0.93	4.05	0.79
Administrator on Advisory Committee	3.56	1.38	3.77	0.83
Increasing Administrator Involvement	3.46	1.03	4.00	0.85
Presentation to Guidance Counselor	3.29	1.21	3.98	0.81

Discussion

Before discussing the findings, important limitations to the study are introduced and described. First, teacher perceptions were measured as opposed to student perceptions; as students are the ones actively deciding whether to get involved in SBAE programming, teacher perceptions are limited. Second, data collected are limited to a single state and may not be representative of all states. Third, the list of recruitment strategies used may not have been exhaustive and, therefore, should be considered a limitation. Keeping these limitations in mind, the study provides valuable insights into the recruitment of students within Michigan SBAE programs.

There is an extensive variety of recruitment strategies being used by SBAE teachers in Michigan. The top 10 recruitment strategies that had the highest reported use were emphasizing hands-on learning ($M = 4.72$), emphasizing outdoor learning ($M = 4.51$), being "exciting" as the teacher ($M = 4.36$), creating an inclusive classroom ($M = 4.36$), word of mouth ($M = 4.27$), providing academic credit ($M = 4.20$), sending success highlights to administration ($M = 4.06$), FFA announcements during class ($M = 4.04$), advertising college credit being received ($M = 4.03$), and students presenting to younger students ($M = 3.97$). Courses that have stimulating material, like hands-on learning, are more effective by means of recruiting new students into the program (Winston, 2001). Many of the top recruitment strategies employ this methodology. Many students are drawn to SBAE classrooms because they differ from general education classrooms due to the unique opportunities offered, such as working outside or in the greenhouse or barn, learning about science in a practical and applied way, field trips, contests, and the overall course content. If SBAE programs continually expand opportunities students perceive as beneficial, the efficacy of recruitment strategies will increase.

The top 10 recruitment strategies as measured by their perceived effectiveness are emphasizing hands-on learning ($M = 4.75$), emphasizing outdoor learning ($M = 4.58$), word of mouth ($M = 4.52$), offering middle school AFNR education course(s) ($M = 4.47$), students presenting to younger students ($M = 4.31$), program tours ($M = 4.29$), being "exciting" as the teacher ($M = 4.28$), providing academic credit ($M = 4.26$), creating an inclusive classroom ($M = 4.22$), and parent and/or family influence ($M = 4.10$). While there is some overlap between the programmatic characteristics with the most use and the characteristics that are thought to be the most effective, this study suggests the most widely used means of program recruitment may not always be the most effective.

Interestingly, hands-on learning, outdoor learning, word of mouth, students presenting to younger students, being "exciting" as the teacher, providing academic credit, and creating an inclusive classroom were often used and perceived to be highly effective. This indicates these recruitment strategies should be among the more successful strategies used within an SBAE program. According to research within the recruitment theory (Winston, 2001), courses that have interesting material are most effective in recruiting students. Through our research, highlighting engaging and inclusive classroom experiences was consistently rated as most effective. Therefore, agricultural educators must acknowledge effective recruitment starts with quality learning experiences. The importance of engaging curriculum found in our research, however, diverges from research conducted by Myers et al. (2003) which highlighted curriculum as the fifth most important aspect to recruitment. The top strategy identified by Myers et al. (2003) were middle school feeder programs, which ranked fourth in effectiveness across all areas we studied. Importantly, the time between our study and research conducted by Myers et al. (2003) suggests factors motivating students to engage in SBAE may have evolved. Current students may decide to engage based more on the nature of the experience as opposed to factors motivating students in prior years.

Shifting to recommendations for research and practice, we first recommend educators start an evaluation of their recruitment strategies by considering the needs of all students within their community to ensure the strategies employed are inclusive and relevant. For those seeking to enhance their recruitment, we recommend implementing the recruitment strategies identified as most effective within this study (e.g., emphasizing hands-on learning, emphasizing outdoor learning). To do this, we recommend increasing hands-on and outdoor learning opportunities within the curriculum and emphasizing these types of experiences within communication to potential students. Additionally, agricultural educators should examine benefits their program has to offer and ensure they are being publicized. For scholarship within recruitment, we recommend research evaluating student perceptions of recruitment strategies to uncover the efficacy of strategies perceived by the individuals making the decision to engage. In addition, we recommend research exploring the impact of remote instruction, required during the COVID-19 pandemic, on recruitment strategies, SBAE enrollment, and student engagement. We also recommend scholarship exploring the inclusiveness of recruitment strategies, as we acknowledge this as an additional opportunity to enhance SBAE programming.

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