

**How do School Based Agricultural Education Teachers Perceive the SAE for All Model?**

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## Introduction, Need for Research, & Theoretical Framework

School-Based Agricultural Education (SBAE) consists of three components: Supervised Agricultural Experience (SAE), leadership development (FFA), and classroom instruction (SAE for All, n.d.). SAE is the work-based learning component (SAE for All, n.d.) and is often believed to be the least implemented of the three (Shoulders & Toland, 2017; Wilson & Moore, 2007). To address previously indicated barriers of SAE implementation (Dyer & Osborne, 1995; Retallick, 2010) and better serve all SBAE students, the National Council for Agricultural Education (NCAE) created a committee which established the SAE for All model in 2015 (NCAE, 2015). SAE for All consists of Foundational SAE, a five-component, iterative career-connection SAE and Immersion SAEs, an extension of a Foundational SAE with a focus on career preparation (NCAE, 2017). Even though SAE for All has been available for multiple school years, little is known about its diffusion among SBAE teachers. This study was framed by Rogers' (2003) diffusion of innovations theory, with a specific focus on the innovation-decision process, including the five stages SBAE teachers can experience while determining whether to adopt SAE for All in their programs. Within the persuasion stage of the innovation-decision process, factors related to five perceived characteristics of SAE for All are considered (Rogers, 2003). Part of a larger study (Ford, 2024), we investigated SBAE teachers' adoption of SAE for All and their perceptions regarding the characteristics of the model. Our research objectives include: (1) determine if SBAE teachers are choosing to adopt SAE for All and (2) determine SBAE teachers' perceptions of the characteristics of SAE for All.

## Methodology

In December 2023-January 2024, a Qualtrics survey was disseminated by state SBAE leaders to SBAE teachers in 34 states, receiving 505 usable responses from teachers in 28 states. This portion of the questionnaire asked participants to identify their current use of SAE for All and indicate their level of agreement to statements related to the perceived characteristics of SAE for All on a five-point Likert scale from (1) strongly disagree to (5) strongly agree. The average participant was female (61.6%,  $f = 311$ ), under the age of 40 (67.7%,  $f = 291$ ), with ten or less years teaching agriculture (56.8%,  $f = 282$ ), teaching in a rural community (67.1%,  $f = 339$ ), who came through a traditional agricultural education college preparation program (72.5%,  $f = 366$ ), and considers themselves the leader of SAE in their program (87.9%,  $f = 444$ ) (Ford, 2024).

## Findings

Participants varied across the five stages of the innovation-decision process (see Table 1). The decision to adopt SAE for All was made by just under half (47.0%) of participants, while a portion (14.1%) were actively rejecting the innovation.

**Table 1**

*How SBAE teachers describe their knowledge and use of SAE for All (n = 505).*

| Innovation - Decision |                                     |          |     |
|-----------------------|-------------------------------------|----------|-----|
| Process Stage         | Knowledge Levels                    | <i>f</i> | %   |
| No Knowledge          | I have no knowledge of SAE for All. | 49       | 9.7 |

|                |   |     |      |
|----------------|---|-----|------|
| Knowledge      | I am aware of SAE for All.  | 100 | 19.8 |
| Persuasion     | I am considering using SAE for All in my program.                               | 48  | 9.5  |
| Decision       | I know about SAE for All, but choose not to use it in my program.               | 71  | 14.4 |
| Implementation | I know about SAE for All and use it in my program.                              | 169 | 33.5 |
| Confirmation   | I know about SAE for All, use it in my program, and encourage others to use it. | 68  | 13.5 |

Participants recognized the relative advantage ( $GM = 3.57$ ;  $SD = 0.79$ ) and compatibility ( $GM = 3.56$ ,  $SD = 0.87$ ) of SAE for All, were neutral about trialability ( $GM = 3.46$ ;  $SD = 0.77$ ) and observability ( $GM = 3.40$ ;  $SD = 0.88$ ) but struggled with the complexity ( $GM = 3.37$ ,  $SD = 0.89$ ) of the model. We also collected specific data on each of the perceived characteristics of the SAE for All model. If accepted, full data will be shared on the poster and are not included here due to page limitations. Examples of perceived characteristic statements are shown in Table 2.

**Table 2**

*Example statements related to perceived characteristics of SAE for All.*

| Characteristic     | Example Statement   |
|--------------------|---|
| Relative Advantage | The SAE for All model increases accessibility of SAE to my students |
| Compatibility      | SAE for All supports my work as an agriculture teacher              |
| Complexity         | I can find the information I am looking for about SAE for All       |
| Trialability       | I am able to experiment with SAE for All in my program              |
| Observability      | I am aware of the benefits of SAE for All for students              |

### Conclusions, Implications, Recommendations, & Impact

Most participants were aware of SAE for All and it is being adopted (Rogers, 2003) by SBAE teachers. However, there are teachers who are choosing to reject SAE for All and others who lack enough knowledge to decide whether to adopt SAE for All (Rogers, 2003). The relative advantage and compatibility of SAE for All were recognized by participants, but the model was considered to have a high level of complexity (Rogers, 2003). To support the diffusion of SAE for All, change agents, such as state and national SBAE stakeholders, could offer concrete examples of SAE for All implementation and highlight stories of student success. Teacher educators should continue to teach the basics of SAE for All as well as provide pre-service teachers with tools to effectively implement all facets of the model in their future SBAE programs. SBAE state and national stakeholders should begin or continue to offer practical professional development to in-service teachers related to SAE for All (Ford & Lambert, 2025). Perhaps professional development focused on implementation of individual components of SAE for All could mitigate the perceived complexity of SAE for All.

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