

Perspectives of Agricultural Educators on Workforce Development: Consensus on Skill Acquisition Through Supervised Agricultural Experiences (SAE)

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Introduction

SAEs have been widely considered an effective experiential teaching method for agricultural educators when engaging students in developing relevant career skills and applying knowledge learned in the classroom to real-world settings (Hughes & Barrick, 1993; Rank & Retallick, 2016). Despite the advantages of SAE when it comes to skill development, it continues to be the least utilized component of the Three-Circle Model of Agricultural Education (Croom, 2008; Dyer & Osborne, 1995; Eck & Davis, 2024; Rank & Retallick, 2016; Thiel et al., 2025). Although there is a repository of SAE for All resources, agricultural educators have expressed the need for practical resources that are more adaptable to unique program and student needs and current resources as requiring time and skill to be able to be utilized within their programs (Ford & Lambert, 2025). This warrants the need for research that yields actionable recommendations in resource development is warranted. This research sought to address the following research objectives (1) determine the workforce development skills that agricultural educators perceive students to develop during SAEs and (2) identify the skills that achieve consensus among agricultural educators as the most important for students to develop through SAEs.

Conceptual Framework

This study utilized the SAE for Model as a conceptual framework and was included as part of the development of the survey instrument and contributed significantly to the data analysis process (SAE for All, 2026a; The Council, 2023). SAE for All was an effort on behalf of The Council (2023) to improve the work-based learning focus of SAEs and encourage 100% student involvement. The components of foundational SAEs were used as categories to sort skills which reached consensus. These foundational components should continue to be incorporated as student SAEs become more immersive (SAE for All, 2026a).

Methods

The Delphi technique is used when looking to gain expert consensus on a specific, real-world issue, especially when there is a need to address what is not known about a topic (Hsu & Sandford, 2007; Warner, 2020). An expert panel of ten Florida agricultural educators was developed based on their expertise and involvement in SAEs in their program. Using suggestions from University of Florida agricultural education faculty, as well as a snowball method for gaining additional participants who met the criteria for the study, which were: (1) have at least five years of agricultural education teaching experience, (2) have students who are involved in foundational and immersion SAEs, with at least three categories of immersion SAEs being represented, (3) are either traditionally certified through an agricultural education teacher preparation program or alternatively certified and have a degree in an agriculture related field. During round one of the Delphi, participants were asked the open-ended question of: “*What workforce skills do your students develop through their participation in an SAE?*”. For rounds two and three, participants were asked to rate each item based on their perceived level of importance, and skills which had at least 70% of participants rating it at a four or five were considered as meeting consensus (*1-not important, 2-low importance, 3-moderately important, 4-very important, 5-extremely important*). Skills from round one which were broad in nature and

needed further clarification were posed as open-ended questions which allowed participants to provide further detail on the ambiguity of the skill.

Results

After completion of round one of the Delphi, all responses were compiled and like items were consolidated and 111 unique items generated. Of those, 66 were classified as technical skills and 35 were soft skills. An additional ten items were nuanced in nature and were sent back to participants during round two as open-ended questions. Of those responses generated during the second round of the Delphi, an additional 79 items were included in the third round of the Delphi, along with the 77 skills which reached consensus in round two. Twenty-four skills did not reach consensus and were discarded, with 23 technical skills and one soft skill. Finally, round three had 146 items which reached consensus, with 42 items having 100% consensus. Four skills were classified as technical skills and 38 were considered soft skills. There were four items which not only reached 100% consensus but also were rated as extremely important by all participants ($M = 5$, $SD = 0$), and included time management, proactive effort/initiative, responsibility and accountability. There were ten items which did not reach consensus and were eliminated from the final list of 146 skills, four soft and six technical skills.

Conclusions

The high number of skills which were generated and reached consensus underscores the significance of student workforce skill development through involvement in SAEs. A sixth theme of personal and professional identity development skills emerged. All skills in this category were categorized as soft skills, further highlighting the ability for SAE to not only contribute to students' college and career plans, but also in helping students develop themselves individually. The consensus on the high number of soft skills further emphasizes the role that SAEs play in developing relevant skills needed to be successful in life, and the focus on these transferable skills specifically highlights a key motivating factor for gaining increased SAE involvement amongst students, especially those interested in careers outside the agriculture industry (Swenson et al., 2021). Both the technical and soft skills reaching consensus by the panel aligned with historical perspectives on the benefits of SAEs when it comes to skill development (Dyer & Osborne, 1997).

Implications/Recommendations/ Impact on Profession

This research is the beginning of a larger conversation about workforce skill development through SAEs and gaining a better understanding of the specific skills that agricultural educators view as being important to students. Due to the limited scope of this research, results cannot be generalized, and it is suggested that additional studies be conducted using similar methods to understand the nuances of skill development across different states and regions, and to find commonalities which can contribute to the construction of more applicable resources by the National FFA Organization and/or The Council. This can also assist in planning professional development opportunities for teachers which focus on the workforce development aspects of SAE for All. University faculty responsible for agricultural education teacher preparation can also use this research to guide conversations about effectively planning for SAE instruction. Additional studies should also be considered which address the stakeholder perspectives and whether the perspectives of agricultural educators and the skills which they view as most important for students to develop through SAEs is in alignment with industry expectations.

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