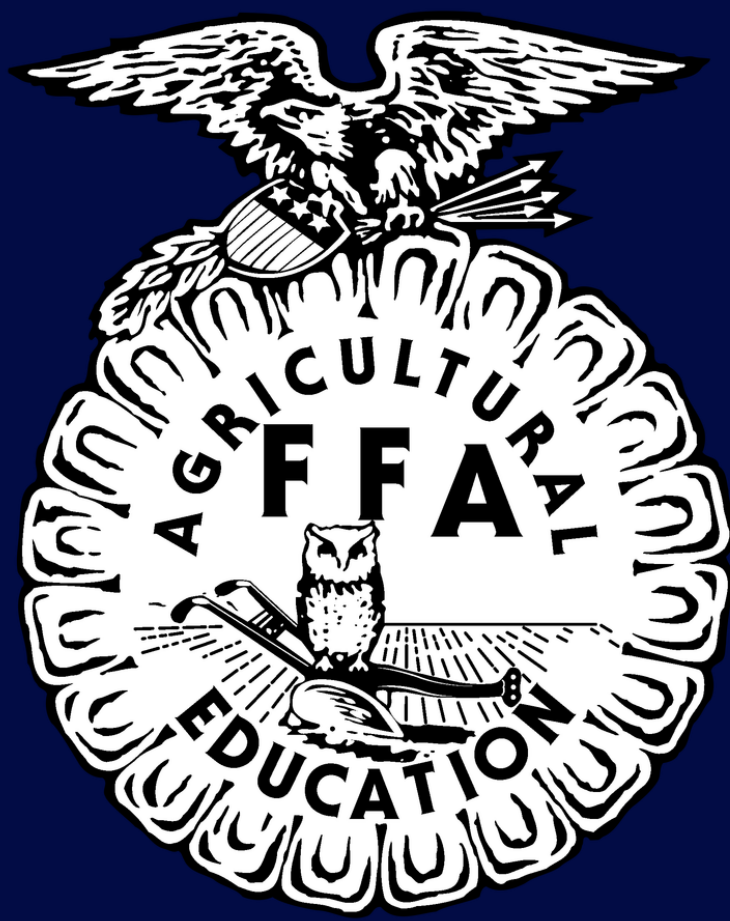




Examining Early Career Ag Teachers' Knowledge and Beliefs of Key SAE for All Principles

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SAE
— FOR —
ALL

INTRODUCTION

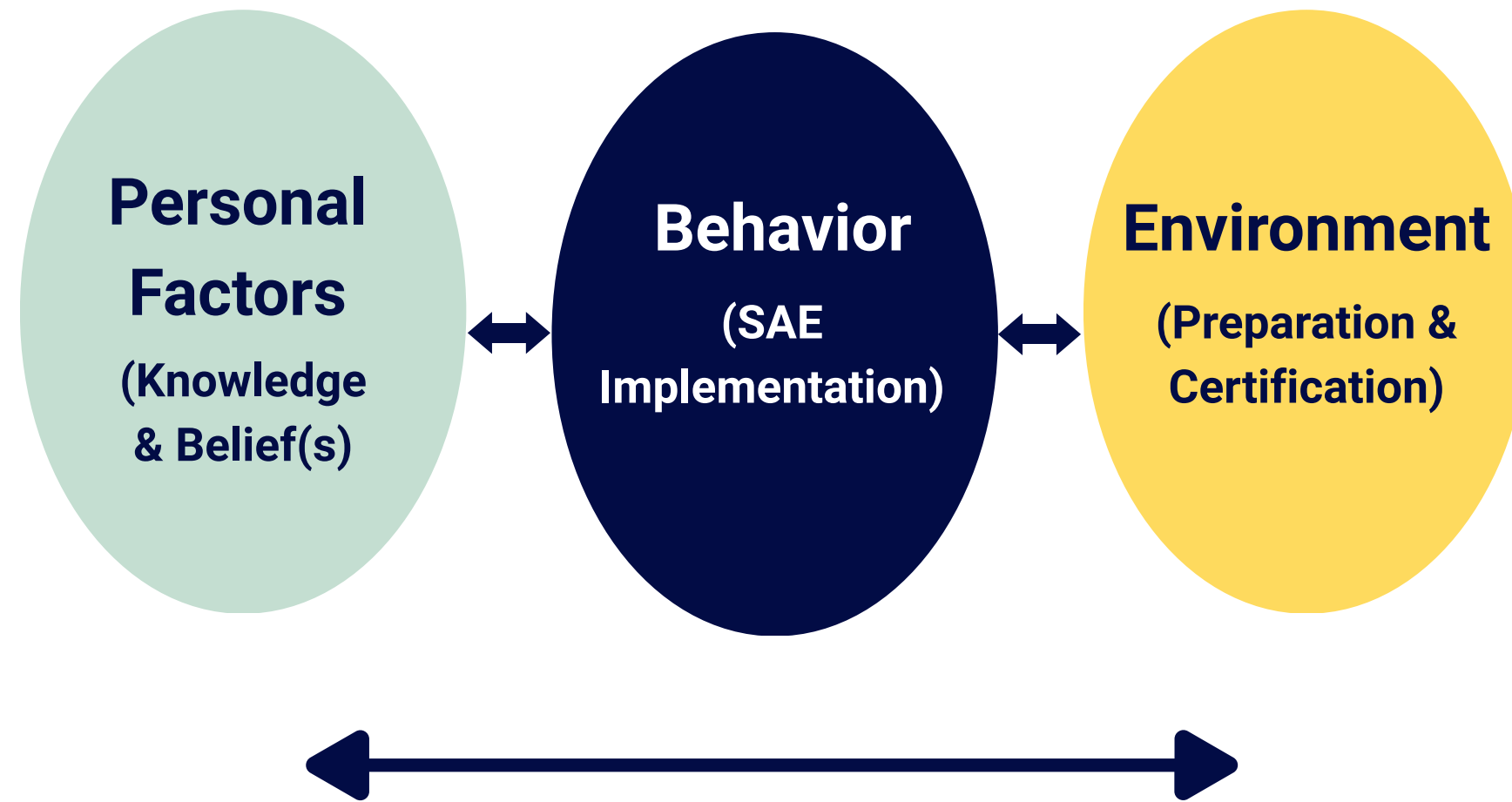
- SAE is an integral component of school-based agricultural education and provides students opportunities to apply classroom learning through career-focused experiences.
- SAE for All expanded the traditional approach to SAE by emphasizing Foundational SAE experiences for all agricultural education students.
- As SAE expectations have evolved, understanding early-career teachers' knowledge of key SAE for All principles can help identify areas where additional preparation and professional development may be needed.

PURPOSE

The purpose of this study was to examine early-career agriculture teachers' knowledge of key SAE for All principles and compare knowledge based on teacher certification pathway.

THEORY / FRAMEWORK

Social Cognitive Theory (Bandura)



SCT provided a framework for considering how teachers' knowledge and preparation experiences may influence their understanding and implementation of SAE.

HOW WELL DO EARLY-CAREER TEACHERS KNOW SAE FOR ALL?

+1 Correct | 0 Don't Know | -1 Incorrect

ALL EARLY-CAREER TEACHERS
n = 49
Score Range: -49 to +49

✓ STRONGEST KNOWLEDGE	SCORE
1 Every student should have an SAE.	43
2 SAE does not have to occur off campus / outside the school day.	42
3 More than one student can use a school-based business as their SAE	38
4 SAE does not have to occur in a production agriculture setting.	34
5 Students are exempt from labor standards because SAE is educational.	31

⚠ GREATEST KNOWLEDGE GAPS	SCORE
1 SAE supervision does not have to occur onsite.	-16
2 Foundational SAE lasts throughout the student's ag program.	-13
3 A project conducted at school is not automatically a School-Based SAE.	-8
4 Not every student needs an Immersion SAE.	-7
5 Service Learning is not the same as community service and cannot be an SAE.	3

TRADITIONALLY CERTIFIED
n = 29
Score Range: -29 to +29

✓ STRONGEST KNOWLEDGE	SCORE
1 SAE does not have to occur off campus / (outside the school day).	26
2 More than one student can use a school-based business as their SAE.	26
3 Every student should have an SAE.	24
4 SAE does not have to occur in a production agriculture setting.	20
5 Students are not exempt from labor standards because SAE is educational.	20

⚠ GREATEST KNOWLEDGE GAPS	SCORE
1 Foundational SAE lasts throughout the student's ag program.	-13
2 SAE supervision does not have to occur onsite.	-10
3 Not every student needs an Immersion SAE.	-1
4 A project conducted at school is not automatically a School-Based SAE.	3
5 Service Learning is not the same as community service and cannot be an SAE.	7

ALTERNATIVE / NOT YET CERTIFIED
n = 20
Score Range: -20 to +20

✓ STRONGEST KNOWLEDGE	SCORE
1 Every student should have an SAE.	19
2 SAE does not have to occur off campus / outside the school day.	16
3 SAE does not have to occur in a production agriculture setting.	14
4 Students need to select a new Foundational SAE every year.	13
5 In order to have a Research SAE, the student must compete in Agriscience Fair.	13

⚠ GREATEST KNOWLEDGE GAPS	SCORE
1 A project conducted at school is not automatically a School-Based SAE.	-11
2 Not every student needs an Immersion SAE.	-6
3 SAE supervision does not have to occur onsite.	-6
4 Service Learning is not the same as community service and cannot be an SAE.	-4
5 Foundational SAE lasts throughout the student's ag program.	0

Higher scores indicate greater understanding: negative scores indicate more incorrect answers than correct responses.

A COMMON PATTERN EMERGED

The same five concepts appeared among the greatest knowledge gaps for both certification groups.



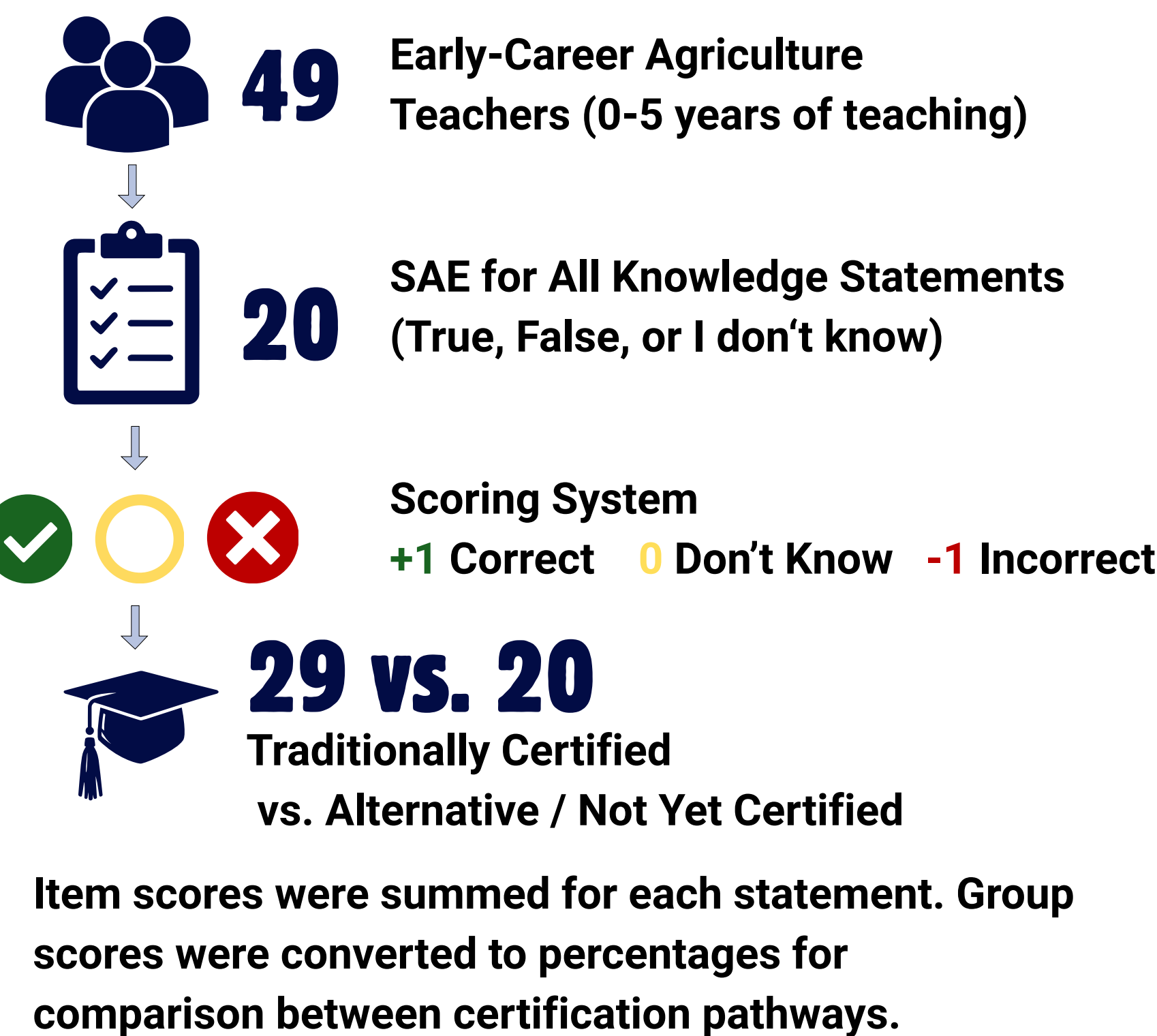
WHERE DID THE GROUPS DIFFER MOST?

Largest-certification pathway differences (percentage points)

Concept	Traditionally Certified (n=29)	Alternative / Not Yet Certified (n=20)	Difference (pp)
Foundational SAE Duration (True)	-44.82%	0.00%	44.82 pp
School-Based Classification (False)	10.34%	-55.00%	65.34 pp
Service Learning & Community Service (False)	24.14%	-20.00%	44.14 pp

Percentages calculated from raw scores (scores / n) x 100

METHODS: HOW THE STUDY WORKED



KEY FINDINGS

- Teachers demonstrated strong understanding of several broad SAE principles, including the expectation that every student should participate in SAE.
- Knowledge gaps were consistently identified in Foundational SAE duration, Immersion SAE expectations, supervision, School-Based SAE classification, and Service Learning.
- The same five knowledge areas were among the greatest gaps for both certification groups.
- Although both groups shared similar gaps, the severity of those gaps differed by certification pathway.
- The largest certification-pathway difference occurred in understanding School-Based SAE classification.

IMPLICATIONS

- Early-career teachers may benefit from targeted SAE for All professional development.
- Professional development should emphasize the five concepts where knowledge gaps were consistently identified.
- Differences by certification pathway suggests teacher preparation and PD may need to account for previous training and certification experiences.
- Greater understanding of SAE classifications and expectations may help teachers implement SAE for All more accurately with their students.