

Agriculture Teachers' Sensemaking of Social Science Research After Graduate Coursework

Introduction

As school-based agricultural education (SBAE) continues to emphasize inquiry, critical thinking, and student-centered learning, teachers are increasingly encouraged to integrate research-informed practices that extend beyond traditional agriscience content (Roberts & Ball, 2009; McHugh et al., 2024). Social science research concepts offer valuable tools for understanding student experiences, program effectiveness, and community contexts; however, their use in agriculture classrooms remains limited. While professional learning opportunities such as graduate coursework introduce teachers to these concepts, less is known about how teachers make sense of social science research and evaluate its fit within their teaching philosophies and classroom realities. Understanding this sensemaking process is essential for supporting meaningful and sustained instructional change.

The purpose of this qualitative study was to explore how SBAE teachers described the behavioral beliefs that influenced their intentions to use social science research concepts following graduate coursework. Our inquiry was guided by the research question, *In what ways do SBAE teachers describe the behavioral beliefs that influence their intentions to use social science research concepts?* This sought to deepen understanding of how teachers make sense of the relevance, usefulness, and alignment of social science research within their contexts.

Theoretical Perspective

This qualitative study was informed by the Theory of Planned Behavior (TPB; Ajzen, 1991), with particular attention to behavioral beliefs, or teachers' attitudes toward using social science research concepts. Behavioral beliefs are shaped by perceptions of usefulness, relevance, and alignment with professional identity, making them especially important for understanding instructional adoption (Pajares, 1992). A constructivist perspective guided the inquiry, positioning meaning as co-constructed through participants' lived experiences and reflections.

Methods

This qualitative study was conducted as part of a larger investigation examining SBAE teachers' beliefs and intentions related to the use of social science research concepts following graduate coursework. Guided by a constructivist qualitative approach, the study recognized meaning as co-constructed through participants' experiences and reflections (Lincoln & Guba, 1985). Participants ($n = 5$) were SBAE teachers who completed a graduate-level foundations of agricultural education research course and volunteered for follow-up interviews. Semi-structured interviews explored teachers' perceptions of the relevance, usefulness, and fit of social science research concepts within their teaching contexts. Interviews were audio recorded, transcribed verbatim, and analyzed using a multi-cycle coding process, including In Vivo and pattern coding, to support inductive theme development (Saldaña, 2021).

Trustworthiness was addressed through strategies consistent with qualitative research standards. Credibility was supported through analyst triangulation and iterative team discussions (Lincoln & Guba, 1985). Dependability and confirmability were enhanced through audit trails and reflexive memoing (Creswell & Poth, 2018), while thick description supported transferability by grounding interpretations in participants' articulated experiences (Merriam & Tisdell, 2016).

Findings

Two themes emerged describing how agriculture teachers made sense of social science research concepts following graduate coursework: *Functionality* and *Tension of Alignment*. Each theme included two subthemes that further explained teachers' behavioral beliefs and intentions.

Functionality

This theme captured teachers' perceptions that social science research concepts were meaningful and usable in practice. This theme included the subthemes *Relevance* and *Utility*. *Relevance* reflected the extent to which teachers perceived social science research as aligned with their professional purpose and student needs. One teacher explained that the concepts mattered because they "help students think more critically about real problems." *Utility* described how teachers valued the concepts when they could envision practical classroom application, with another participant noting the ideas were useful because they could "take it back to the classroom and actually use it with students."

Tension of Alignment

The second theme described how teachers negotiated the fit of social science research within agriscience norms and classroom realities. This theme included the subthemes *Congruence* and *Incongruence*. *Congruence* emerged when teachers perceived research concepts as reinforcing student-centered, inquiry-based instruction, as one teacher shared, "I'm doing a lot less talking and putting the learning more in students' hands." *Incongruence* reflected uncertainty about fit or student engagement, with a participant noting, "I see the value, but I still wonder how excited my students would be about it." Rather than rejecting the content, teachers described adapting and reframing concepts to improve alignment, indicating an ongoing process of reflective sensemaking.

Conclusions, Implications, and Recommendations

Findings suggest that SBAE teachers' intentions to use social science research concepts are shaped through an active sensemaking process grounded in behavioral beliefs. Teachers evaluated social science research based on perceived relevance, utility, and alignment with professional identity, reinforcing the central role of behavioral beliefs in shaping intention (Ajzen, 1991; Pajares, 1992).

The theme of *Functionality* highlights the importance of professional learning that connects research concepts directly to instructional goals. Teachers were more receptive when social science research supported critical thinking and real-world problem solving, aligning with prior research emphasizing practical, contextually grounded professional development (McHugh et al., 2024; Smalley, 2024). The *Tension of Alignment* illustrates that intention is not linear, as teachers navigated congruence and incongruence when considering fit within agriscience norms and student engagement expectations. Rather than rejecting the content, moments of misalignment prompted reflection and adaptation, suggesting professional learning should support negotiation of fit.

Practically, teacher educators should model how social science research can be embedded within existing SBAE structures using classroom-ready examples. Future research should examine how teachers' beliefs evolve and how student engagement influences sustained integration.

References

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