We're All in this Together: Examining How Alternatively Certified Teachers Participate in Agricultural Education Community of Practice

Kellie Claflin¹ Josh Stewart² Haley Q. Traini³

Abstract

Utilizing Wenger's (1998) work of Communities of Practice and hermeneutic phenomenology, the purpose of this study was to examine the phenomenon of participation among alternatively certified agriculture teachers in the agriculture teacher community of practice. Two themes emerged as we interpreted the findings: (1) we're all in this together, and (2) belonging. The findings illustrate the advantages and challenges alternatively certified agriculture teachers identify as they take part in the agriculture teacher community through interactions and support. State leaders in SBAE should use the findings and recommendations as they welcome alternatively certified agriculture teachers into the profession and seek to provide support.

Introduction and Literature Review

The certification of agriculture teachers through alternative routes continues to persist as school districts and policymakers facing a shortage of qualified teachers seek to ensure an adequate number of classroom teachers (Foster et al., 2020; Ingersoll & Smith, 2003). Traditionally in school-based agricultural education (SBAE), agriculture teachers are certified through teacher education programs at universities focusing on agricultural education (Flowers & Martin, 2010). However, alternative routes to certification include programs that reflect traditional teacher preparation programs, licensure for those with industry experience in the subject area, and emergency certification subject to state policy. Alternative certification of agriculture teachers dates to at least the 1970s and 1980s (Bowling & Ball, 2018; Flowers & Martin, 2010; Moore, 1976) and continues with 16.5% percent of new agriculture teachers in the United States certified through an alternate during the 2019 school year (Foster et al., 2020). Agriculture teachers holding an alternative certification may have industry experience, a degree in agriculture, or certified to teach in another content area (Flowers & Martin, 2010) and often decide to teach after earning an undergraduate degree (Claflin et al., 2020). For this study, we defined an alternatively certified agriculture teacher as any individual who did not become licensed to teach through a traditional teacher preparation program in agricultural education and/or holds a provisional teaching license in agricultural education.

¹ Kellie Claflin is an Assistant Professor of Agriscience Education in the Department of Agricultural Communication, Education, and Leadership at The Ohio State University, Columbus, Ohio, 43210, claflin.11@osu.edu, ORCID#0000-0001-8499-1742

² Josh Stewart is an Assistant Professor of Agricultural Education in the Department of Agricultural Education and Agricultural Sciences at Oregon State University, Corvallis, Oregon, 97331, josh.stewart@oregonstate.edu, ORCID#0000-0003-1863-6288

³ Haley Q. Traini is an Assistant Professor in the Department of Agricultural Education and Agricultural Sciences at Oregon State University, Corvallis, Oregon, 97331, haley.traini@oregonstate.edu, ORCID#0000-0002-9275-3231

Researchers have taken various approaches to understand if alternatively certified agriculture teachers are effective and identify the support they need. Overall, alternatively certified teachers are noted to be less effective in the classroom (Doerfert, 1989; Moore, 1976; Robinson & Edwards, 2012). Although students did not perceive a difference between industry-prepared and traditionally prepared teachers (Moore, 1976), and alternatively certified teachers could explain effective teaching even though they were not demonstrating those same techniques (Robinson, 2010). State supervisors of agricultural education believe alternatively certified agriculture teachers have high expectations for the classroom but are not competent in teaching strategies or understanding the expectations for FFA and supervised agricultural experiences (SAE; Rice, 2012). Granted, alternatively certified agriculture teachers recognize they have a basic understanding of SAEs (Robinson & Haynes, 2012) and feel capable of advising an FFA chapter. However, they admit there is more to learn and look to support from state staff (Kinney, 2011).

In seeking to support alternatively certified agriculture teachers, teacher educators have investigated the professional development needs and efficacy of teaching and program management in their states, often comparing traditionally and alternatively prepared agriculture teachers. Findings indicate early career alternatively certified agriculture teachers are influenced by their background as they identify professional development needs, recognizing their education and potential lack of training (Roberts et al., 2020). Alternatively certified agriculture teachers and traditionally certified teachers sometimes differ in efficacy levels and professional development needs (Coleman et al., 2020; Duncan & Ricketts, 2008; Roberts & Dyer, 2004; Robinson & Edwards, 2012; Stair et al., 2019), while other studies indicating no statistical differences between traditionally and alternatively certified teachers (Rocca & Washburn, 2006; Swafford & Friedel, 2010). For those studies in which alternatively certified agriculture teachers rated a higher level of efficacy or ranked professional development needs lower, researchers posited that alternatively certified agriculture teachers may not be able to recognize their deficiencies due to a lack of knowledge (Rocca & Washburn, 2006; Roberts & Dyer, 2004; Robinson & Edwards, 2012).

Previous research on alternatively certified agriculture teachers is grounded in the idea that alternatively certified agriculture teachers need additional knowledge and training to be successful. In regard to learning, Sfard (1998) denotes this approach to learning as a metaphor of acquisition. In this metaphor, individuals are consumers as they learn by acquiring knowledge, often via a teacher or facilitator (Sfard, 1998). While seeking to understand the needs and abilities of alternatively certified agriculture teachers remains paramount, we would benefit from expanding our view of learning. Sfard presents such an option as a contrast to learning by acquisition through the participation metaphor, which recognizes learning as a process that occurs within a community. As individuals come together in a community, they influence and inform one another, with the goal of not possessing knowledge but belonging and participating (Sfard, 1998).

The participation metaphor advanced by Sfard (1998) aligns with research by DeLay and Washburn (2013) and Claflin et al. (2021), which examined how alternatively certified agriculture teachers learn in the community of agriculture teachers explore the collaboration between agriculture teachers. Both alternatively and traditionally certified. The study participants learned from other agriculture teachers as they connected through phone calls, visiting at events, and social media through various mediums, whether it was figuring out how to complete FFA paperwork, manage facilities, or sharing ideas for teaching content (Claflin et al., 2023; DeLay & Washburn,

2013). Specifically, as alternatively certified agriculture teachers engaged with other agriculture teachers, they deepened their understanding and made meaning of what it meant to be an agriculture teacher (Claflin et al., 2023). Social learning and collaboration among teachers also increased professional commitment (Johnson & Birkeland, 2003) and a willingness to stay in the profession (Hargreaves, 2001), while mitigating professional isolation (Greiman et al., 2005).

While there is a shortage of teachers, we will continue to see alternatively certified agriculture teachers enter the classroom. Prior literature on alternatively certified agriculture teachers provides insight into the population's needs and focuses on their potential effectiveness. However, alternatively certified agriculture teachers are not a homogenous group with the nuances in their industry experience, teacher preparation, academic degrees, and route to certification (Claflin et al., 2022; Claflin et al., 2020; Flowers & Martin, 2010). Many unanswered questions remain about alternative certification in school-based agricultural education (SBAE), including how alternatively certified agriculture teachers learn about and participate in school-based agricultural education (Claflin et al., 2023). Bowling and Ball (2018) proposed SBAE establish "programming that develops a community of practice within these teachers that connects them to the larger teaching community and professional culture within agricultural education, that is unique to the practice of teaching school-based agriculture" (p. 118). Given this recommendation, the importance of teacher collaboration, and the recognition that learning can occur through participation, this study seeks to understand how alternatively certified agriculture learn from and participate in the unique SBAE agriculture teacher community of practice.

Theoretical Framework

In taking up Sfard's (1998) notion of learning through participation, we utilized Wenger's (1998) theory of communities of practice (COP), a social learning theory, as our theoretical framework. Wenger (1998) described COP as shared histories of learning that communities develop over time and influence how and what members learn (e.g., how members engage with each other and hold each other accountable). Communities of practice exist all around us, and we may participate in the practices, norms, and routines without recognizing them (Wenger, 1998). Examples of COPs include school organizations, families, and colleagues who engage in similar tasks. However, not all groups are a COP. Wenger noted a COP is distinct based on three characteristics: mutual engagement, joint enterprise, and shared repertoire. Mutual engagement constitutes the relationships and commitment to each other (i.e., interacting with other agriculture teachers), joint enterprise comprises the practices of the members and is mutually negotiated (i.e., the reason why they teach agriculture), and shared repertoire incorporates activities and symbols of the community (e.g., the FFA emblem and SBAE acronyms; Wenger, 1998).

As we focused on the participation of alternatively certified agriculture teachers, we grounded our work on the ideas of practice, newcomers, and community membership (Wenger, 1998). Practice is related to how we make meaning, which we negotiate through participation and reification. Participation is the "action and connection" within a COP (Wenger, 1998, p. 56), while reification occurs when an abstract object or an idea becomes concrete. For example, agriculture teachers participate in training students for FFA contests as they stay after school to facilitate practice sessions and focus on their students' winning competitions, and are often rewarded with banners and trophies, which are reified (Traini et al., 2019). Wenger (1998) described communities of practice as shared histories of learning which the communities develop over time and influence

how and what members learn (i.e., how members engage with each other, hold each other accountable, and cultivate or discard routines). Newcomers to a community of practice learn how to participate as they observe others as legitimate peripheral participants and are mentored by experienced members or brokers. Brokers are individuals within a community of practice who assist newcomers in making connections, exposing them to practices, and assisting in meaning-making (Wenger, 1998).

Regarding an individual's community membership, which may or may not be explicitly labeled, Wenger (1998) noted our "membership in a community of practice translates into an identity as a form of competence," (p. 153). Through mutuality of engagement, we understand the expectations of how we collaborate. Our perspective of the world and our choices are also informed by our accountability to an enterprise or purpose of the community of practice (Wenger, 1998). Finally, concerning community membership, as we continue to participate, we become more competent in the negotiability of the repertoire, becoming familiar with the language, terms, and stories and creating our own associations regarding the community.

For this study, we argue that alternatively certified agriculture teachers participate in a community of practice consisting of other agriculture teachers who experience similar ways of engaging with each other, identify as agriculture teachers and are committed to their purposes, and understand SBAE terms and other shared repertoires. We also acknowledge that communities of practice are constantly evolving and influenced by those who participate in the practices of the group. Using Communities of Practice (Wenger, 1998) will build on prior studies (Traini et al., 2019) while providing a new lens to understand the experiences of alternatively certified agriculture teachers.

Purpose and Research Question

The purpose of this phenomenological study was to explore the experiences of alternatively certified agriculture teachers as they participate in the agriculture teacher community of practice. This study was part of a larger research project that explored the experiences of alternatively certified agriculture teachers, grounded in the social learning perspective of Wenger's (1998) Communities of Practice. The research question for this study was how do alternatively certified agriculture teachers participate in the agriculture teacher community of practice?

Reflexivity Statement

As researchers, we must recognize our positionality. We are all former high school agriculture teachers who completed traditional university teacher preparation programs. Additionally, we are currently teacher educators within traditional teacher preparation programs with varying experiences working with alternatively certified agriculture teachers. Being reflexive throughout the research process allowed us to identify how our previous experiences, beliefs, and biases shape our interpretation. We align with the interpretive and social constructionism paradigms. We maintain the world has multiple realities shaped by interpretations (Charmaz et al., 2018; Crotty, 1998) and recognize our experiences are integrated with practice and analysis (Denzin & Lincoln, 2018). Being reflexive throughout the research process allowed us to identify how our previous experiences, beliefs, and biases shape our interpretation. To maintain reflexivity and ensure trustworthiness, we engaged in memos, journaling, and discussions to unpack our

beliefs and make sense of our understanding. The methods section lists additional strategies for maintaining rigor and trustworthiness.

Methods

This study sought to explore the lived experiences of alternatively certified agriculture teachers by employing a hermeneutic phenomenological approach focused on the phenomenon of participation in the agriculture teacher community of practice (COP). Phenomenology is grounded in the study of everyday lives through meaning-making and reflection (Merriam & Tisdell, 2016; van Manen, 2014). Through the hermeneutic phenomenological approach, we adopted an ontological view emphasizing interpretation, recognizing the importance of personal knowledge to the research process, and allowing us as researchers to acknowledge our own experiences and knowledge (Lopez & Willis, 2004; van Manen, 2014).

A phenomenological study should encompass only participants who have experienced the phenomena being examined (van Manen, 2014); therefore, we considered all secondary agriculture teachers who held an alternative license in agriculture and/or did not complete a traditional route to agriculture teaching. We aimed to include participants from across the United States and selected nine states based on prior research and anecdotal evidence relating to alternative certification. We all considered location within the American Association of Agricultural Education (AAAE) regions, aiming for participants from three selected states in each of the three AAAE regions (American Association for Agricultural Education, 2017). Agricultural education state staff and teacher educators from nine states were asked to recommend participants who met the criteria for the study. Contacts from eight states agreed to share a list of names and emails of teachers who were alternatively certified who were then recruited via email to participate in the study.

The thirteen individuals who chose to participate in the study were assigned pseudonyms. Six participants identified as females (Angela, Erin, Hannah, Karen, Mindy, and Pamela) and seven participants identified as males (Aaron, Cody, Evan, Hayes, Randy, Robert, and Wade). Seven participants had prior experience with SBAE as a student (Aaron, Cody, Evan, Hannah, Hayes, Mindy, Robert, and Wade) and taught SBAE for between one year (Evan) and 26 years (Randy). The participants varied in their path to the classroom, with three participants holding a teaching certification in a different content area before teaching agriculture (Angela, Pamela, Randy), three individuals who worked in the agriculture industry (Aaron, Karen, and Robert), and three individuals completed teacher education courses and either did not meet licensure requirements or accepted a teaching job before concluding the program (Cody, Hannah, and Wade). See Table 1 for additional information about the participants.

Table 1Characteristics of Participants

Pseudonym	AAAE Region	Gender	# of years teaching SBAE	SBAE background as student?
Aaron	Western	Male	6	Yes
Angela	North-Central	Female	5	No
Cody	North-Central	Male	3	Yes
Erin	Western North-Central	Female	10	No
Evan	North-Central	Male	1	Yes
Hannah	Western	Female	2	Yes
Hayes	Southern	Male	12	Yes
Karen	North-Central	Female	10	No
Mindy	North-Central	Female	4	Yes
Pamela	North-Central	Female	8	No
Randy	Western	Male	26	No
Robert	North-Central	Male	3	Yes
Wade	North-Central	Male	3	Yes

Due to the importance of participants sharing their lived experiences and personal narratives in phenomenological studies, interviews were chosen as the source for data collection (Cohen et al., 2000; Merriam & Tisdell, 2016). We developed a semi-structured interview protocol to ensure questions were centered around the phenomenon and allowed for flexibility based on each participant's narrative shared while being grounded in the theoretical framework and prior literature (Merriam & Tisdell, 2016). For example, participants were asked to describe the agriculture teacher community, describe their experiences interacting with the agriculture teacher community, and whether they considered themselves members of the community. Semi-structured interviews were conducted over Zoom in the winter and spring of 2020.

Interviews were transcribed verbatim, and the lead researcher's field notes were used as an additional data source. Throughout the analysis, we engaged with the *hermeneutic* circle as we interpreted data "between part of the text and the whole text" (Sloan & Bowe, 2014, p. 1296) to uncover the meaning related to the phenomenon (Lopez & Willis, 2004). As we sought to locate meaning from the narratives of the lived experiences of our participants, which eventually emerged

as themes after an extensive coding process (van Manen, 2014), we utilized eclectic coding—adopting both structural and in vivo coding—highlighting conceptual phrases, as well as short phrases verbatim from the participants (Saldaña, 2009). We adopted the framework that Merriam and Tisdale (2016) advanced to maintain trustworthiness in the study based on credibility, consistency/dependability, and transferability. Additionally, we aimed to establish transferability through "thick" description as we provided rich details of the participants and their context and made connections with themes, theories, and meanings (Geertz, 1973).

Findings

Through the analysis to answer the research question, how do alternatively certified agriculture teachers participate with the agriculture teacher community of practice? two themes emerged: (1) we're all in this together, and (2) belonging. The findings feature the lived experience of participants as they shared narratives of their participation with the agriculture teacher community of practice, including how they interact with other agriculture teachers (i.e., mutuality of engagement) and see themselves as members of the community (i.e., accountability to an enterprise).

We're All in this Together

As the participants discussed their participation in the agriculture teacher community of practice, they overwhelmingly discussed the connections and support fellow agriculture teachers provided. Three sub-themes developed as participants discussed how they interacted with agriculture teachers, the unique familial feeling of the group, and the willingness to help one another.

Sit and Mingle

Participation in the agriculture teacher community of practice centered on *where* and *how* the agriculture teachers in the study were connecting with others in the community, including sources of tension on some occasions. Over and over again, participants mentioned the value they placed on connections they had with other agriculture teachers. These connections were formed through repeated interactions at FFA events (i.e., conventions, contests, meetings) and agriculture teacher meetings (i.e., conferences and committees) throughout the year. Karen noted, "we're all at stuff together all the time. It's amazing how much we see of one another." Additionally, participants shared emails, text messages, phone calls, and interactions via social media were all crucial for them to keep in touch.

Many participants discussed how easy it is to relate to other agriculture teachers due not only to the same occupation but sharing similar values and interests outside of work. The agriculture teachers in the study talked with pride about their relationships with other agriculture teachers. Hayes related his experience talking with agriculture teachers from across the country at the National FFA Convention and National Association of Agricultural Educators (NAAE) Convention exclaiming, "it's ridiculous getting to sit there and talk to them and talk about their problems. We all have similar problems, and we all are in closely related areas and come from similar backgrounds." Participants look forward to the opportunities to meet with agriculture teachers, which usually includes a chance to catch up professionally and personally. Participants shared that when they saw other agriculture teachers, they wouldn't just catch up about teaching

agriculture and their schools but would check in on their families. Erin shared how she used email to banter with other agriculture teachers, but they would also stop by and visit one another. She noted, "we would get together for coffee and talk about what we were teaching. We had a pretty open-door policy for stopping into our programs." Robert and Cody also mentioned how their interactions with other agriculture teachers transferred into their personal life, as they often get together with other agriculture teachers to go hunting or hang out.

One crucial component of the connections between agriculture teachers occurred at inperson events when agriculture teachers would "huddle up" or "sit and mingle." Participants shared that when they brought students to events, they would find other agriculture teachers, maybe around a pot of coffee. This time was used to bounce ideas off of each other, ask questions, and "sharpen the saw." Hannah talked about taking advantage of this opportunity, sharing, "I always make a point to go find an ag teacher that I know to talk about how things are going, and what's something new that you're doing?" As a fellow early-career teacher, Evan echoed the value of taking the time at events to connect with others, highlighting how the conversations between agriculture teachers allowed them to share suggestions and help each other out. Professional development and state-level agriculture teacher meetings, usually run through the state agriculture teacher association, were where participants visited with other agriculture teachers and gained information relevant to their positions. Mindy talked about the fall agricultural education professional development event she attends sharing, noting, "I really, really love that cause that's when you get to meet with all the teachers, and they share a lot of their experience." Six participants commented that they tended to stick to the agriculture teachers they knew when networking, as they had a stronger relationship with those individuals.

While the participants in this study overwhelmingly had positive experiences as they participated in the agriculture teacher community of practice, there were notes of tensions and non-participation shared by four participants. These participants were subtle as they shared how their participation differed from the rest of the agriculture teacher community due to personal decisions or values. For instance, Aaron participated in professional development and took students to events but didn't exude the same passion when discussing connecting with other teachers. He stuck to those agriculture teachers he knew and mentioned how at contests, "it's not really a collaboration, it's just more of someone to talk to while we're waiting for the contest to get over." For Pamela, it was challenging to commit to attending a multiple-day professional development conference during the school. However, she felt strongly about the value of connecting with other agriculture teachers and would try to attend for one day.

Erin and Angela highlighted their interest in non-traditional agriculture as an impediment to connecting with other agriculture teachers. This difference was accentuated for Erin due to her experience in two different states. There were several non-traditional agriculture programs in the first state where she taught, and the agriculture teachers willingly shared ideas and resources. After Erin moved to another state, she found fewer agriculture teachers willing to collaborate with her due to her non-traditional agriculture focus. Likewise, Angela has found it more challenging to connect with agriculture teachers who were not as welcoming due to her non-traditional agriculture background or did not recognize her experience teaching another content area. While she admitted having respect for the other agriculture teachers and was able to develop a rapport, Angela has continued to grapple with the existing tensions as she has negotiated meaning as a member of the

agriculture teacher community. She shares, "It's hard, I feel I'm in the Ag Ed world, but not often. And my students notice, my students know, they're like, she's just different."

Ag Teachers are Like Family

The term, *family*, and especially descriptions of how the agriculture teacher community of practice is like a family, arose from six participants. The term first came as the agriculture teachers in the study tried to describe the agriculture teacher community. For many participants, there was a distinctive pause before answering, as Randy mentioned, "it's hard to put into words." Participants shared terms like tight-knit, collegial, clannish, and family as they described the community, with Hayes adding, "it's pretty surreal how tight we really are." This group of participants likened connecting with fellow agriculture teachers to connecting with their families. They mentioned checking in on each other's families during interactions before asking about school. Pamela compared this connection with that of a family holiday as she recalled her experiences at an FFA contest:

We're kind of like a family, you know what I mean? It's, like, you arrive, you sit down. 'How's the kids? How's your husband? How's your wife?' You know? Many of the ag teachers have side businesses, you know, "what do you know, how's your business going?" And it's more personal. It's like you're coming into Thanksgiving dinner with your family.

Beyond the support and togetherness felt, participants noted that agriculture teachers not only wanted to know about your family but also stood up for you and reached out to help during troubling times (car accidents, death, divorces, etc.). Hayes, Evan, and Angela all shared instances where the community emulated a family as they strived to care for each other. Hayes mentioned the state-wide memorial for agriculture teachers and spouses that teachers contribute to so that flowers can be sent for the funerals of those in the community. Evan shared an example of how the agriculture teachers in his region were discussing how to help a fellow teacher who had been in an accident. When Angela suffered a loss in her family, she received a check from the Agricultural Educator Relief Fund coordinated through NAAE, while neighboring agriculture teachers dropped off food and sent notes.

Helpful, but...

As participants shared their interactions within the agriculture teacher community of practice, they not only discussed the networking or familial nature but the sheer amount of assistance members provided to each other. The willingness of agriculture teachers to offer help or answer questions was prevalent throughout each interview as if helping one another is expected. The more experienced agriculture teachers in the study referenced how they valued serving as mentors and giving back to the profession. The early-career teachers in the study shared how other agriculture teachers supported them through the sharing of curriculum, teaching strategies, fundraisers, and advising FFA chapters. Cody credited his success to his network of fellow agriculture teachers and being able to call teachers who were willing to answer his questions.

Similarly, the agriculture teachers in the study were also sharing budgets, helping with fundraising, and helping each other in other ways. Other agriculture teachers were also quick to offer help with whatever the participants needed. Many participants shared how other agriculture teachers encouraged them to reach out when they needed something. Likewise, the participants shared how they needed to be able to take up the teachers on their offers to help or be forthcoming

and reach out themselves. Although the act of helping each other was woven into the fabric of the community of practice, Karen and Hannah thought the profession's success was behind the drive to help. Karen highlighted the feeling of "we all succeed together," while Hannah expanded on that idea in relation to agriculture teacher retention,

Everybody has been fantastic and the ag [teacher] community is extremely welcoming. They want people to be successful because they don't want them to leave the career. They want them to stay in it because there's clearly a shortage of ag teachers. And so, I think that they're so positive and welcoming because we don't want to lose those people and we want them to have positive experiences because if they don't, they're not going to stay.

As helpful as agriculture teachers were, participants noted the competitive nature of agriculture teachers around FFA contests was often a hindrance to receiving assistance. While participants had different experiences, the general concept remained the same - competition in FFA served as an underlying aspect of the community of practice. Several participants raised the "cutthroat" attitude of agriculture teachers regarding FFA contents as they described agriculture teachers and how they interact. Pamela shared the dualism she recognized in agriculture teachers,

I think they're extremely helpful, well, at the same time being competitive. What I've noticed about our ag teachers in our region -- we had a district competition yesterday -- Last night they're competitive there, but once we figured out who moved them, they kind of join you. We join forces and we invite their students to our schools, and we help each other out.

Pamela's experience showcased that competition does not necessarily equal rudeness but helps describe certain aspects of the profession agriculture teachers are willing to help each other out with. Similarly, Hannah noticed at FFA contests, agriculture teachers are "harder for me to interact with than at professional development because they don't have students competing against something and so they can open up and they're easier to have discussions with." Participants shared how other agriculture teachers were helpful based on whether they saw them as competition. While people shared contest materials freely, Karen noted, "maybe at some point if we get a little better that will dry up a bit." Likewise, Mindy shared,

I would say people are a little more open and willing to share ideas when you're not a competitor. But the more competitive you get in certain events; I feel like the less helpful people are. They're not standoffish, just we share a lot less ideas when we think that we're competing.

Belonging

The participants in this study agreed they were members of the agriculture teacher community of practice. Still, they acknowledged the amount of interaction with other members evolved over their time in the profession. Conversations regarding membership in the community of practice revolved around feelings of belonging, a notion Wenger (1998) indicated was a requirement for engagement in a community, as is the engagement itself. As participants were probed to explain their membership in the community, they talked of paying their dues (both literally and figuratively), their ability to contribute to the group, and being recognized for their contributions and achievements by others. Throughout discussions of the agriculture teacher community of practice, many participants mentioned the state agriculture teacher associations they belonged to as a source of networking and camaraderie, which led participants to associate that

group with membership in the community of practice. For instance, Evan first noted he considered himself a member because "I had to pay my dues," before elaborating on how his personal associations with other agriculture teachers were part of his membership in the community of practice.

Other participants referred to the felt need to "pay their dues" to the community of practice by gaining respect from more experienced members, helping other agriculture teachers, and being recognized by other members. As Wade shared why he considered himself a member of the agriculture teacher community of practice, he emphasized, "I think it's just being able to contribute and help out those that need it. I think that's really what it's all about." Pamela and Mindy agreed as they shared being able to give presentations or serve as a resource to other agriculture teachers provided them legitimacy in the community. As Mindy talked about her membership, she hesitated to call herself a full member. The doubt stemmed from other members not seeing her as a member, even though they reached out to Mindy with questions - she still felt like she was on the low end of the pecking order within the community of practice. For Pamela, simply being included encapsulated the feeling of membership, remembering:

The first time I walked into the conference, you know, you're looking around the room and you didn't know anybody. And then the next time you walk in, you have a seat saved for you. I think that's the point, you belong.

Unfortunately, not all participants shared the feeling of belonging in the agriculture teacher community of practice. Those who came from outside of SBAE experienced a sense of being outsiders due to their non-conventional agriculture focus and background. Pamela noted when she started teaching agriculture, she didn't feel as connected because of feelings of lacking experience in animal agriculture. Still, now she has animals and feels "embedded in it." Erin and Angela were still grappling with their participation and membership in the agriculture teacher community due to differing views of agriculture and experiences, such as not attending the same college as most other agriculture teachers in their state. Erin noted after moving to another state to teach, it was challenging to fit in and connect with others, commenting, "I just feel like I don't have a place at the table." For Angela, the tension between staying true to herself and trying to fit in with the group made things difficult, sharing,

I've developed a rapport with my local teachers.... We've come to a point where we respect each other enough to get along, but it's hard knowing we don't share the same vision for what we're teaching.

However, as participants continued to share their experiences related to participating in the agriculture teacher community of practice, belonging became less of a dichotomy (i.e., you belong or you don't) and more of a continuum. Many participants noted that they did not identify as community members early in their careers due to a lack of experience or knowledge of the community. Five of the participants only began actively participating in the community after their first few years of teaching and when they had gained a better understanding of how agriculture teachers interact with each other and including the expectations of them as new members of the community of practice. Karen described how she didn't start participating until after she felt her "head was above water" regarding teaching and managing an agriculture program. Randy and Hayes talked about how they became involved in leadership roles within their state agriculture teachers' association over time, while Evan noted that he identified his long-term goal of serving

in leadership roles. Once again, the idea of helping each other was highlighted as how the participants interacted within the community of practice. Randy shared, "I found a point in my life where I really felt it's important to give back to the organization and to the other ag teachers." Although Randy, the participant with the most agriculture teaching experience, also shared how he considers himself a member but is not as involved as he once was, affirming, "Even though I'm on the edges.... I'm still definitely part of the community."

Discussion

This study utilized hermeneutic phenomenology to study the phenomenon of participation of alternatively certified agriculture teachers in the agriculture teacher community of practice. The research presented in this manuscript is a component of a larger study that explores the lived experiences of alternatively certified agriculture teachers within the agriculture teacher community of practice. Two themes emerged in the findings: (1) we're all in this together and (2) belonging. The results of this study indicate that alternatively certified agriculture teachers are actively participating in the agriculture teacher community of practice as they connect with agriculture teachers at FFA events and SBAE meetings, recognize the group's familial bond, and members' willingness to support each other.

While the participants all identified as members of the agriculture teacher community of practice, many noted their level of participation increased after their first years of teaching. Additionally, there were aspects of outsider status for the participants who did not experience SBAE as a student and did not share traditional views of agriculture and the values of the larger group. These findings are consistent with the ideas shared by Wenger (1998) in Communities of Practice, as members define the community through mutual engagement as they develop relationships and engage with one another, whether it is positive or involves conflict. Likewise, Wenger notes that being included, or belonging, is needed for participation in a community of practice.

Participants continually referred to the implied sense that agriculture teachers looked out for one another, apparent in the theme, we're all in this together, and the subtheme, ag teachers are like family. The agriculture teachers in the study shared experiences of having other agriculture teachers reach out to them to offer advice and make sure they were available as a resource, whether in the classroom or at an FFA event. DeLay and Washburn (2013) found collaboration among agriculture teachers often occurs informally with a "sense of community, leading to the construction of shared knowledge and culture" (p. 114). In terms of Communities of Practice, the level of support and familial nature can be equated to the mutuality of engagement in community membership (Wenger, 1998).

Regarding the subtheme, *helpful*, *but*... participants noted that while agriculture teachers were eager to help answer questions, share curriculum, and brainstorm ideas for the agriculture program, they weren't as helpful when it came to FFA contests, assuming that was due to the competitive nature of contests. The aspect of competition, another aspect of mutual engagement in the community of practice, has recently been explored in SBAE as a reification of the community and equated to a success trap (Traini et al., 2019; Traini, Roberts, & Yopp, 2020). The agriculture teachers in these studies felt pressure from other agriculture teachers to be successful, which was defined partly by the number of awards and contests won by students. While competitions were not the focal point of this study, contests and the competitive

nature are clearly part of the agriculture teacher community of practice, as referenced by the participants in this study and prior research.

In the second theme, *belonging*, participants shared how they felt included by other agriculture teachers and how their levels of belonging and membership changed over time. Wenger (1998) noted that inclusion is required for membership in a community of practice, although not all members are full members. Participants shared how they felt compelled to contribute to the community to be seen as a member, which can be interpreted as their accountability to the enterprise of the agriculture teacher community of practice (Wenger, 1998). Accountability to an enterprise influences members to make certain decisions and act in specific ways they feel have value within the community of practice (Wenger, 1998). Additionally, participants noted they did not consider themselves full members of the agriculture teacher community of practice as soon as they started teaching. Reasons for the delay included a postponed introduction to the community, waiting until they felt more competent in the classroom, and time to figure out what was expected.

Recommendations

As SBAE researchers and teacher educators, we do not want to diminish the importance and value of traditional agricultural education teacher preparation but offer these recommendations to be proactive and meet the needs of alternatively certified agriculture. We echo the recommendation of Bowling and Ball (2018) that the profession should take "...a supportive and proactive stance," (p.118) towards alternative certification. As alternatively certified teachers enter the profession, we cannot presume they have no experience in SBAE or no teacher preparation. The majority of the participants in this study had traditional teacher preparation in agricultural education or another content area before becoming alternatively or provisionally certified, and each had slightly different experiences getting certified due to changing policies, which is supported in prior literature (Claflin et al., 2022, 2020).

While prior literature offers insight into the professional development needs (Coleman et al., 2020; Roberts & Dyer, 2004; Stair et al., 2019), the informal aspects of professional development and programming directly related to the implicit practices of the community should also be considered. For instance, do alternatively certified teachers know the expectations for engagement at professional development and meetings (i.e., the method of introductions) and the terminology that will be used? We also recommend those in SBAE be mindful of ensuring teachers are welcoming and kind to teachers who may differ in their SBAE background or focus on agricultural education. The participants in this study recognized the agriculture teacher community had a sense of togetherness and helpfulness but highlighted underlying strains for "outsiders." What is the long-term impact of these strains on the SBAE profession? We call for SBAE leaders to be forward-looking and consider what changes must be made to ensure a productive agriculture teacher community of practice.

The need for continued research on alternative certification in SBAE is justified to ensure a more robust understanding of this population of educators. We recognize this study is but one piece of the puzzle. There are certain limitations to this avenue of research, as anecdotal evidence highlights differences among states regarding levels and types of alternative certification and types of programming, adding to the confusion. The most current literature in SBAE focuses on the *needs* of alternatively certified teachers, not from the perspective of the alternatively certified teachers but based on how this valuable population of teachers is gaining entrance to and understanding the practices of the agriculture teacher community of practice. We do not have a sound understanding of successful programming (i.e., induction programs, mentoring) implemented across states and with teachers from varying years of experience or the positive effects of content shared at professional development by alternatively certified agriculture teachers. We recommend qualitative and quantitative studies to provide additional insight to ensure quality support of alternatively certified agriculture teachers. As long as policies allow alternative certification, we cannot ignore this pathway into the SBAE profession.

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