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The Best of Both Worlds: Exploring the Experiences of Alternatively Certified Agriculture Teachers

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Abstract

Alternative certification is often seen by policymakers and local school districts as the answer to the teacher shortage problem. Yet, little is known about the experiences of alternatively certified teachers in agricultural education. This case study sought to explore the experiences of alternatively certified agriculture teachers through a composite case study grounded in Dewey's conception of experience. The participants for this study included four early career alternatively certified teachers in Wisconsin. Our findings illuminate insights regarding the fortuitous nature of alternatively certified teachers entering the classroom, the importance of their prior experiences, their passion for the content, the hurdles of becoming certified, and the significance of support. This is the first study of its kind in agricultural education to examine the first-hand accounts of alternatively certified teachers in an attempt to understand the benefits and challenges and the stepping stones leading to alternative certification. How are alternatively certified teachers becoming certified? What personal and professional experiences are they utilizing in the agricultural education classroom? It is critical that we do not disregard these teachers or their valuable experience, but instead seek to understand their background and certification process to ensure continued school-based agricultural education success.

Key words: alternative certification; routes to certification; composite case study

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Introduction and Literature Review

The need for qualified teachers plagues the education profession for many reasons, including declining teacher education enrollments, increasing student numbers, and teacher attrition (Sutcher et al., 2016). The shortage of teachers spans multiple disciplines, including school-based agricultural education (SBAE), documented since 1965 (Kantrovich, 2010). The demand for agriculture teachers continues to grow, with 224 new positions and 156 new programs added in 2019-2020, while there were 60 full-time and three part-time positions that went unfilled (Foster et al., 2020). Therefore, policymakers and school districts have relied on alternative

certification as one solution to the teacher shortage (Ingersoll & Smith, 2003).

Historically, agriculture teachers are certified to teach through traditional teacher education programs in agricultural education (Flowers & Martin, 2010). However, alternative routes to certification in school-based agricultural education have become prevalent since the 1980s (Bowling & Ball, 2018; Flowers & Martin, 2010), with 16.5% of new agriculture teachers in the 2019-2020 school year holding an alternative certification (Foster et al., 2020). The characterizations of "alternative certification" span the continuum from programs that mirror university teacher preparation programs to emergency certification depending on the state licensing policy (Flowers & Martin, 2010; Walsh & Jacobs, 2007). Alternatively certified teachers in agriculture may have technical experience in the agriculture workforce, a degree in an agriculture-related field, or have been certified to teach in another content area (Claflin et al., 2020; Flowers & Martin, 2010). For this study, we consider any agriculture teacher who was certified to teach agriculture outside of a traditional university teacher preparation program and/or holds an alternative or provisional license in agricultural education to be alternatively certified (Claflin et al., 2020).

Most studies on alternatively certified agriculture teachers focus on the abilities of individual teachers. Findings indicate that most agriculture teachers who are alternatively certified are older and have more occupational experience than their traditionally certified counterparts and either come from industry or are current educators who added an agriculture certification (Claflin et al., 2020; Rocca & Washburn, 2006). Regarding SBAE, state supervisors of agriculture have expressed concern regarding the competency of alternatively certified agriculture teachers in teaching and understanding the expectations for advising the FFA organization and managing supervised agricultural experiences (Rice, 2012). Likewise, alternatively certified agriculture teachers indicated a basic understanding of FFA and supervised agricultural experiences but had challenges related to technical aspects of the program (Kinney, 2011; Robinson & Haynes, 2011).

Previous studies on alternative certification in school-based agricultural education centered on how to provide support, mainly via questionnaires on teacher self-efficacy and professional development needs (Coleman et al., 2020; Roberts & Dyer, 2004; Robinson & Edwards, 2012; Rocca & Washburn, 2006; Stair et al., 2019; Swafford & Friedel, 2010). These studies comparing traditionally and alternatively certified agriculture teachers provide inconclusive findings. For example, traditionally certified teachers in Georgia reported a higher self-efficacy than alternatively certified teachers (Duncan & Ricketts, 2008), while other studies reported alternatively certified agriculture teachers felt more self-efficacious (Robinson & Edwards, 2012) and had fewer professional development needs (Roberts & Dyer, 2004). In some instances, the comparisons between traditionally and alternatively certified agriculture teachers highlighted no difference between the groups for self-efficacy (Rocca & Washburn, 2006) and professional development needs (Stair et al., 2019; Swafford & Friedel, 2010). Additionally, researchers noted alternatively certified agriculture teachers were lower-performing than traditionally certified teachers based on teacher assessments and evaluations (Doerfert, 1989; Moore, 1987; Robinson, 2010; Robinson & Edwards, 2012).

However, in a qualitative study on beginning agriculture teachers, Talbert et al. (1994) found alternatively certified participants exhibited no major differences to traditionally certified teachers. Rayfield et al. (2011) noted that alternatively certified agriculture teachers were more likely to differentiate lessons and use various teaching strategies based on student needs than their traditionally certified counterparts. Regardless of discrepancies in the previous research, current scholarship has sought to compare traditionally and alternatively certified agriculture teachers. These comparisons are complex and perhaps unnecessary, given the discrepancy between routes to

certification and the point in time that the research was completed (Flowers & Martin, 2010). We still know little about alternatively certified teachers themselves - their perspectives, experiences, stories, and reasons for entering the profession. Moving away from comparison research would allow scholars and practitioners to understand better the experiences of alternatively certified teachers, the assets they bring to the profession, what we can learn from them, and how we can support them throughout their careers.

Due to the ongoing teacher shortage, alternative certification continues to be an option for teacher licensure in agriculture, especially for individuals who did not decide to teach while earning an undergraduate degree (Claflin et al., 2020). Prior studies offer insight into the types and amount of support alternatively certified teachers need. Yet, several aspects of the lives of alternatively certified agriculture teachers remain unknown, including why they decided to teach agriculture, what the process was like to become certified, their experience teaching, and how they see themselves as members of the profession. To recruit and support agriculture teachers and understand the nuances in alternative certification, we need deeper insight into the circumstances of alternatively certified agriculture teachers. Therefore, the purpose of the study was to describe how alternatively certified agriculture teachers navigated the process of becoming agriculture teachers.

Theoretical Framework

We grounded our study in Dewey's theory of experience, utilizing a pragmatic and constructivist lens to explore how alternatively certified agriculture teachers navigated through the process of becoming agriculture teachers. Dewey (1934/2005) noted experience happens continually as a transaction between the subject and their environment, which constitute a whole. In situative and sociocultural theories, the individual is not alone in the experience as they are affected by and affect the social and material world (Dewey, 1934; Roth & Jornet, 2014**).** From a Deweyan perspective, the individual is not in control of events as they experience them, as "... we live through and undergo them…," (Roth & Jornet, 2014, p. 119). As a result, the focus of the theory of experience is the process, not the result (Dewey, 1934/2005, 1938; Roth & Jornet, 2014). *An* experience is in contrast to everyday experiences due to the completeness of the situation and the ability of an individual to recognize the impact afterward. According to Dewey (1934/2005, pp. 36–37):

> We have *an* experience when the material experienced runs its course to fulfillment. Then and then only is it integrated within and demarcated in the general stream of experience from other experiences. A piece of work is finished satisfactorily; a problem receives its solution; a game is played through; a situation, whether that of eating a meal, playing a game of chess, carrying on a conversation, writing a book, …. is so rounded out that its close is a consummation and not a cessation. Such an experience is a whole and carries its own individualized quality and self-sufficiency. It is *an* experience.

While ordinary experiences are a continuous part of living, they are not necessarily reflected on or complete in the same way as *an* experience, which has a meaning, purpose, serves as a unifying force, and is transformative. Identifying *an* experience occurs after the completion of the experience and as the individual reifies it as being memorable (Dewey, 1934/2005; Giamellaro, 2017). Disruptions, a time of transition or challenge, also prompt transformation through problem-solving and reflection (Dewey, 1910). As individuals are prompted to reflect due to the completion of *an* experience or a disruption, those experiences influence future behaviors and decisions. Dewey (1938) addressed this idea, noting "…the principle of continuity of experience means that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after" (p. 35). As the individual reflects upon experiences,

they learn by attaching meaning and significance to the event and change how they interact with the world (Pugh, 2011)**.**

In using Dewey's theory of experience for this study, we adopted Giamellaro's (2017) view of experience as a frame to view the experience as bounded events identified and reified by the participants. For our participants, we recognized the process, not the outcome. We focused on the transactional nature of experiences between the individual and their world, the delay in experiences being reified, the continuity of experience, and the effect of disruptions (Dewey, 1910, 1934/2005; Giamellaro, 2017; Roth & Jornet, 2014). Therefore, we emphasized the participant's perspective in identifying relevant experiences that led to their decision to teach agriculture, how they became certified, and their teaching experience. In addition, we recognized that our participants were not entirely in control of their experiences as they impacted and were impacted by the social and material world. For example, their background growing up on a farm; working with youth; individuals like teachers, family, administrators; current school districts; and where they lived were all factors that affected their experiences.

Additionally, we assumed our participants may not draw upon an experience or recognize the influence of a past event until much later in life. Furthermore, a disruption or challenge that our participants experienced prompts reflection and problem-solving, drawing on prior experiences and transformative learning. For instance, a participant unhappy in their current position may think about their positive experiences working with youth and consider teaching as a career, prompting them to seek out on their journey to becoming an agriculture teacher.

Purpose and Research Questions

Due to the ongoing teacher shortage and approximately 16% of new agriculture teachers entering the profession with an alternative certification, it is imperative to understand the nuance of the experiences of these teachers to retain them in the profession (Foster et al., 2020). The purpose of the study was to describe how alternatively certified agriculture teachers navigated the process of becoming agriculture teachers in Wisconsin. The following research questions guided the study: Why do agriculture teachers pursuing alternative routes to certification decide to teach agriculture? How do these individuals become certified? How do alternatively certified agriculture teachers perceive their experience as agriculture teachers? This study addressed the American Association for Agricultural Education's Research Priority Area 3: *Sufficient Scientific and Professional Workforce that Address the Challenges of the 21st Century* (Stripling & Ricketts, 2016)**.**

Methods

Description of the Case

The number of alternatively certified agriculture teachers in Wisconsin began increasing during the 2015-2016 school year due to the introduction of the experience-based technical and vocational education pathway to licensure (J. Hicken, personal communication, October 9, 2015). The experience-based pathway allows individuals with occupational training to be hired by a sponsoring school district by indicating their technical and pedagogical knowledge on their licensure application (*Experience-Based Technical and Vocational Education Subjects Pathway*, 2015). As of 2018, there were 25 alternatively certified agriculture teachers in Wisconsin, either holding an experienced-based license or obtaining certification via other routes, such as adding an agriculture endorsement to an existing teaching license or completing the two alternative teacher preparation programs that were approved for agriculture licensure (*Alternative Route Pathway*, 2012; J. Hicken, personal communication, October 9, 2015; Wisconsin Association of Agricultural

Educators, 2018).

State leaders in SBAE and agriculture teachers frequently brought up alternatively certified teachers during department of education meetings focused on agricultural education and state agriculture teacher board and committee meetings, especially the new teacher committee. Since 2015, the addition of the experienced-based license and the increase of agriculture teachers in Wisconsin with non-traditional agriculture teacher preparation left state leaders and agriculture teachers with many questions about what alternatively certified agriculture teachers needed for mentoring, support, and professional development (Wisconsin Association of Agricultural Educators, 2016, 2017a, 2017b).

Research Design

This holistic single-case study (Yin, 2018) focused on Wisconsin agriculture teachers who were alternatively certified with three to five years of experience teaching school-based agriculture during the 2018-2019 school year. The study was bounded by place due to the emphasis on real-life situations, especially focusing on Wisconsin licensure policies and early career teachers because they are usually more influenced by alternative certification and licensure policies than other teachers (Redding & Smith, 2016). Case studies are appropriate when focusing on the case itself, due to the unique experience of the participants and for matters that the researcher cannot control (Creswell, 2013; Yin, 2018). Case study methods were also relevant due to our theoretical focus on the process of experience, compared to a phenomenological approach, which focuses on the essence of a phenomenon (Merriam & Tisdell, 2016).

Data Collection

The use of multiple sources of evidence is a strength of case study methods (Yin, 2018). Data collection included semi-structured interviews with Wisconsin alternatively certified agriculture teachers, documentation from Wisconsin agricultural education meetings, and emails from state agricultural education leaders. Additionally, the research team utilized analytical memos from the lead researcher during data analysis.

Interviews

We conducted semi-structured interviews with four Wisconsin agriculture teachers who met the criteria of being alternatively certified to teach agriculture with three to five years of experience teaching agriculture in the 2018-2019 school year. Interviews are recommended when observations are not possible (Creswell, 2014). The interviews took place via Zoom, a video conferencing software, and averaged one hour in length for each participant. An interview protocol was prepared based on the theoretical and conceptual framework. Example questions included a) "why did you decide to teach agriculture?" b) "tell me about your experience in becoming certified to teach?" and c) "tell me about your experience in the classroom?" During interviews, probing questions were used to clarify and elaborate based on the participants' responses (Creswell, 2014).

The lead researcher contacted state leaders in agricultural education in Wisconsin to verify a list of teachers who met the study criteria to identify participants. The researchers reached out to the 11 teachers who met the requirements for the study and invited them to participate via email. Four teachers agreed to participate. Given the small and well-defined population for the study, the findings of this study are presented as two composite cases to protect anonymity. Characteristics of the four participants are included in Table 1, along with the composite case related to their representative data.

Table 1

Characteristics of Participants

	Gender	SBAE background as student	Employment prior to teaching agriculture	Number of years teaching agriculture	Composite Case
Participant A	Male	No	Agriculture industry	4	Noah
Participant B	Female	No	Natural resources industry	3	Noah
Participant C	Female	Yes	Non-formal education	4	Sarah
Participant D	Female	Yes	Agriculture industry	3	Sarah

Documentation

Documents such as emails, letters, administrative records, and minutes of meetings serve to validate and enhance other forms of evidence in case study research (Yin, 2018). Yin recommends researchers study files related to the case but stresses the importance of recognizing that documents are not without bias. The data included 25 documents in the study ranging from emails with state agricultural education leaders about alternative certification, meeting minutes from the Wisconsin Association of Agricultural Educators, and committee documents, including lists of new agriculture teachers with annotations about licensure and experience for mentoring purposes from 2014-2019. These documents were used to triangulate findings and provide context to the study.

Data Analysis

After the interviews were transcribed, we read through the transcripts while writing notes and observations based on recommendations by Maxwell (2013). The researchers identified structural codes to determine similarities between participants and inform the composite case study (Saldaña, 2009). We then used descriptive and in vivo coding and memoing to formulate ideas into themes that conveyed similar ideas (Auerbach & Silverstein, 2003).

Composite Case

For this study, the researchers created two composite cases after data analysis. Two cases were constructed instead of a singular case due to the divergences in the participants' experiences. In displaying the participants as a composite, we provided confidentiality and focused on the similarities within the case (Canzoneri, 2017). Composite cases are typically found in medicine and psychology, focusing on descriptive characteristics to discuss cases but do not highlight the *ideal* case (Canzoneri, 2017; He, 2016; Santanello, 2011). A composite case provides a richer description of the data without revealing identifiable information. To create the two composite

cases, we used descriptive aspects of the four participants to compare their experiences. We crafted a narrative that remains true to their experiences using similarities between participants while protecting their identities.

Reflexivity Statement

As researchers, we recognized the importance of research credibility and the limitations of this work. For this study, we adopted a pragmatic, constructivist paradigm, focusing on the belief that reality is shaped by experience (Creswell, 2013). Each of the researchers is a former high school agriculture teacher trained through traditional routes to certification and is a current teacher educator. We recognize our biases from our experiences in teacher preparation and our opinions regarding alternative certification. To attend to our biases and maintain reflexivity throughout the research process, we wrote reflexive memos and looked for confirming evidence within the data to substantiate our claims. To ensure trustworthiness, we utilized triangulation between data sources, including interviews, documents, and analytic memos (Merriam & Tisdell, 2016). The research team also sent memos and transcripts to participants for respondent validation (Merriam & Tisdell, 2016). We recognize the limitations of this study, especially with the focus on only four participants. However, case study research is not meant to be generalizable (Yin, 2018). This paper is intended to highlight the experiences of four teachers in a bounded case to provide insight for practitioners and future research.

Findings

The findings below are presented through two approaches, using vignettes and salient themes that correspond to the vignette topic. The composite case study vignettes and the themes are organized to reflect the three research questions: participants' decision to teach agriculture, their route to certification, and experience teaching. The vignettes provide a narrative of the two composite cases, Noah and Sarah, based on the experiences of the four participants in becoming agriculture teachers. From each vignette, we expand with corresponding themes which utilize illustrative quotes from the four participants.

Vignette 1: Background and Decision to Teach Agriculture

Sarah and Noah are agriculture teachers in Wisconsin in their third and fourth years of teaching and are in their late 20s. As a child, Noah loved being outside and working with his hands but did not grow up with a connection to agriculture, nor did his high school offer agriculture classes. He grew to love science as an adolescent, which eventually led him to pursue a degree in science. Noah worked as a tutor for fellow college students during his college years. After graduation, he followed his love of science and was hired for an applied science position in agriculture and natural resources.

Sarah grew up surrounded by agriculture on her family farm. She spent hours with the animals she loved and enjoyed her involvement in 4-H. In high school, you would find Sarah in the agriculture classroom during the day and playing sports in the evenings. When it was time for college, she majored in agriculture and was active in a college of agriculture organizations. After graduation, Sarah found a job in the agriculture industry.

After a couple of years in the workforce, Noah and Sarah each came to a crossroads in their careers. Noah had been laid off due to staffing issues and worked for a non-profit organization focusing on natural resources. Sarah realized what she had pictured as the perfect job wasn't what she thought it would be, explaining, "I just realized this really wasn't what I wanted anymore."

Noah began thinking about how he was inspired by the agriculture and natural resources content and how much he enjoyed the tutoring work he had done in college. This reflection led Noah to plan to return to school and become a teacher, but he was not sure in what content area he wanted to teach. He started taking courses in education, but during that process, he came across a local school district looking for an agriculture teacher. He applied and was hired. On the other hand, Sarah was not thinking about teaching until she received a call from a school district looking to hire an agriculture teacher a couple of weeks before school started.

Theme #1: Passion for Content

The participants' passion for agriculture and natural resources was extremely evident as they talked about their experiences growing up, education, and in industry. One participant's experiences growing up on the family farm had a huge impact. They talked about how agriculture has "…always been kind of a core part of the job bringing in family." Another talked about how they were "inspired by the agriculture content and ideas." They continued:

> You know I think that we sort of occupy a unique space, in that we can bring to life, I mean literally bring to life, concepts that are sometimes so abstract in high school that they are inaccessible. But we can do enough hands-on work, we can do living things, we can deal with things that make that learning real and visceral. Which for me as a learner is when I learn the best so as I was thinking what I wanted to do with my life, I was thinking I really enjoy being on the farm and enjoy teaching.

Theme #2: Weird Turn of Events

As participants discussed their backgrounds and the events leading up to their decision to teach, they talked about there being a "weird turn of events." They were all at a transition point in their careers due to circumstances outside of their control with lay-offs, hiring freezes, or realizing that what they were doing was not what they wanted anymore. One participant referred to the events leading to entering the classroom as fortuitous because,

> I had been saying to myself, "Alright, I think I am going to bite the bullet and go back to school and become a teacher...". As I was actively looking for programs that can do that, there was a position that opened up at a school in the city that I was living in that said "Do you have any background in agriculture? Are you interested in teaching? You can apply even if you do not have a license."

For other participants, having someone realize they could be a successful teacher catalyzed their career change. Two participants received a phone call from a friend or mentor who encouraged them to either apply for a current open position or go back to school to become a teacher. One of the participants talked about how it was due to a phone call "…that I knew about this opening and got an interview and saw myself in the classroom. That's a really weird, like jigsawing of things falling into place."

Vignette 2 – Certification Process

After Noah and Sarah decided to pursue a career change, they experienced the new world of teacher certification. While Noah had taken some educational coursework in college, he did not have an education degree. His school district petitioned on his behalf for an emergency license with the caveat that he had four years to complete an approved certification program. Noah's school offered him options of approved programs and he picked one that was located close to where he had begun teaching. The classes were run by a local university and lasted for a year and a half. The program required weekly meetings during the school year, coursework during the summer, and completion of the nationwide teacher performance assessment, edTPA.

Sarah was hired to teach a year after Noah, by which time the licensing rules in Wisconsin had changed. With her agriculture background, both as a child and adult, along with previously completed education coursework, she received an experience-based license that allowed her to be certified by the state to teach agriculture in the district that hired her. Due to the uncertainty in certification, Sarah chose to go through an alternative certification program to ensure her teaching license would be permanent. She attended classes once a month at a central location in the state with other individuals who were already teaching and those who had decided to become a teacher but were not yet in the classroom. This program required one year of coursework, one semester of student teaching, and the edTPA. Since Sarah was already in the classroom, she counted her time teaching as her student teaching experience.

Overall, Noah and Sarah appreciated the coursework but often felt like they were jumping through hoops to complete the program. They noted it was stressful because they were taking college-level coursework on top of teaching full-time. Noah and Sarah maintained motivation to continue the program by engaging in positive self-talk and a long-term perspective.

Theme #3: Jumping Through Hoops

All four participants shared their frustrations with the constant changes in teacher certification. One participant noted, “It’s almost impossible to keep up with all the changes that they’re doing.” Two participants said the people who work in the licensing office do not always have answers. At the same time, another commented that they had heard rumors that the certification rules were going to change “yet again.”

Additionally, for the participants who completed an alternative certification program while they were teaching, the requirements of their program were seen as a checklist to finish. When they shared about their programs, they focused on the big "to-dos" such as coursework, completing a performance-based teaching assessment, and finishing the appropriate paperwork for licensure. One participant talked about the stress of taking college-level coursework while teaching and advising the FFA chapter with little oversight. They said, "Things got put off because no one would ever give me a hard and fast deadline. It had to be done and there wasn't someone there in district like 'yep, make this happen.'" Yet, finally completing the certification process was seen as a significant accomplishment. One participant shared with a note of relief, "I'm very grateful that I am officially licensed."

Theme #4: Pedagogical Focus of Alternative Certification Programs

All four programs completed by the participants had a strong focus on lesson planning and classroom management. One participant shared that their program “assumed you had a lot of [content] knowledge,” while another discussed their program focused on pedagogy. Another referred to the pedagogical focus saying, “I felt like that was their strength. … They make sure when you leave you can make a super fancy lesson plan with everything considered and you can whip a group of kids into shape.” One participant discussed the limitations of their alternative certification program. They explained that as part of the coursework, the individuals enrolled never were exposed to actual students and lacked focus on current educational trends like standards-based grading that they encountered in their teaching positions.

Vignette 3 - Experience Teaching

As Noah and Sarah began their teaching careers, they relied heavily on their previous

industry experience. They felt competent in the content and classroom management, thanks to their previous experiences and their pedagogical training. However, both lamented how they wished they would have student-taught to draw on that experience to guide them in their current position. Noah and Sarah both struggle with having enough time, especially with all the different expectations required of classroom instruction, FFA, and other school responsibilities. Noah and Sarah spent many nights planning and feeling "perennially tired" in their first years of teaching. They both have a strong focus on their students with whom they have built a rapport over the past few years. Their students influenced their planning as they talked about how they select strategies that will fit their students and align with how they learn through hands-on activities and real-life situations.

While Noah and Sarah's classroom experiences are incredibly similar, their experiences in school-based agricultural education (SBAE) are vastly different. Noah was not familiar with SBAE until he was hired, so he feels a bit behind in FFA and other state agricultural education events. When he talks about advising FFA, he defends why his chapter is not active on the state level. However, Noah's chapter is incredibly involved on the local level as they have monthly meetings, organize a community-wide food drive, and sell plants from the greenhouse. While he has not participated in professional development specific to agricultural education and did not connect with an agriculture teacher mentor, Noah has sought out other educational opportunities to continue growing as a teacher.

On the other hand, Sarah is a product of SBAE and excitedly shares about the conferences and events her students take part in on the state and national FFA level. She makes sure students know they have opportunities to take advantage of and that she is there to support them. Yet, despite her familiarity with FFA and SBAE, Sarah was still overwhelmed with her new advisor role. While she knew about the different events, she was unsure what her responsibilities were as an advisor, what to wear, or what to do with all the information she received during state-level meetings. Nevertheless, Sarah was thankful for the support she received from the "Ag Ed family" to help her navigate her role as an agriculture teacher. Noah and Sarah plan to stay in the classroom despite the ups and downs of being a new teacher, especially after a career change. They have long-term goals for their programs and enjoy the variety being an agriculture teacher presents.

Theme #5: Significance of Experience

It became clear the participants relied on their previous experiences as they began their new careers in the classroom. One participant discussed how they "…really enjoyed that I did other things and came back because it is easy for me to think of real-world examples and real-world instances…" emphasizing the importance of their previous experience in the agriculture industry. Another participant highlighted how the path they took to the classroom prepared them,

> I think my bachelor's degree got me content ready. My experiences outside of the classroom, you know, growing up, summers on the farm and then you know, jobs that I had when I was in college… coming full circle to be in the classroom. It just makes sense. It feels right.

One participant made the connection between their involvement in agriculture and their teacher training, sharing that the "…experiences gave me the competence to know this is what I want to do, what I'm meant to do, and the programs are giving me the tools to make it happen." Another participant appreciated explaining to students that the content they were learning was not abstract but related to the real world. They shared, "we could go through things say like, you know, I did this for a job. What you're doing right now. And the students would be like 'no way!'" A participant shared, "I feel like I'm where I should be just from a lot of those experiences I've had."

One participant added,

> …that teaching would be the best of both worlds. I don't have to have my livelihood tied to whether some crops come in or whether we successfully send out enough plants to an account. I could be around those things but also teach a new generation about those things.

Theme #6: Agricultural Education: A Welcoming, but Exclusive Community

The participants shared about the significance of the support they received from other educators, with one participant sharing, "Teachers just really help each other out." The participants' support came from administrators, mentors through the alternative certification programs, teachers in their district, and fellow agriculture teachers. For one participant, the encouragement from agriculture teachers made an incredible difference, sharing, "I don't know if I would have stuck it out if I didn't have that support." This participant also recognized the work of the state agriculture teachers' association and the new teacher and mentoring programs, saying, "…you feel like you belong and that you have value and you could have something to offer." Another participant elaborated on the feeling of belonging with how they "…had the support of all the other ag teachers around me…".

While it was clear the agricultural education community was welcoming, there were also instances where there was a lack of support. Two participants mentioned how time was a limitation for support. A participant who generally felt supported mentioned that her assigned mentor got too busy to talk but could rely on other teachers they had met when questions arose. Similarly, another participant shared their experience:

> My first year I was hooked up with a mentor, that was another advisor in the area and we met once and that was it. So, I don't really feel the support as a new teacher and a new FFA advisor…It's really hard, you know, to try to meet with someone, I mean time doesn't exist for some things.

The disposition of local agriculture teachers was also a factor in the amount of support provided to the new teachers in this study. One of the participants had taught in two schools in separate areas of the state. They noted the amount of support fellow agriculture teachers provided them was vastly different between the two locations. They shared,

> I mean it was, it was like being on an island. Whereas when I was in [my first school], … almost every month we were getting together for something, whether it was day on the farm or it was a holiday. … We were always helping each other out and when I didn't have any of that in [my second school], I thought it was so weird.

Additionally, one of the participants who did not have a background in agricultural education saw the agriculture teacher community as a limitation, noting, "It is a relatively insular community. It has a lot of jargon, a lot of assumptions about what you know or don't know. So, it can be intimidating." The other participant who had not participated in SBAE did not go above and beyond to seek help from the agricultural education community after the relationship with her assigned mentor from the state agriculture teachers' association "fizzled out."

Theme #7: Dedication and Perseverance

The participants overwhelmingly shared their devotion to teaching. One participant talked about how they "fell in love with teaching" after starting their program. Other participants discussed their dedication to the classroom, having "every intention of staying where I am" and "I want to try to see something through and see the program grow." One participant shared how they "just keep moving forward [and] keep pushing myself professionally," while another participant mentioned

trying to continue to improve.

These participants invested hundreds of hours and dollars in becoming licensed. One of the participants specifically talked about the hours they spent driving on the weekends to attend monthly face-to-face course meetings. While the participants shared their frustrations, they all saw the end goal of being in the classroom with a license. One of the participants shared their attitude of "how do we make this work kind of mindset," which helped them make it through.

Theme #8: Feel Like a Unicorn

Participants noted that throughout their teacher preparation programs or asking questions about licensure, they often felt different from others. A participant noted,

> I feel like I was a little, I think I called myself a unicorn.... They didn't know what to do with me or they can never say like, okay, that's what it means for you... So, I just kind of went along with it**.**

Being focused on agriculture in an alternative certification program also highlighted participants' uniqueness. One participant shared the challenge:

> Where I started teaching the only hindrance was that no one knew how to help because they did not have the content area background. They were like, 'Well, we don't know what you teach. In fact, if you say anything about what you teach we are always going to be like 'oh wow, we learned something from you.'

While there were several similarities between participants, it was clear they each had a unique background and, consequently, a unique path to the classroom. One participant had completed an accelerated traditional teacher licensure program for another content area but was alternatively licensed to teach agriculture. Two participants had taken coursework in education after their bachelor's degrees, so they did not feel like they quite fit within the alternative certification program. Each participant had different "hoops to jump" based on the current state of the ever-shifting licensing decisions in Wisconsin for the given year in which they began teaching.

Discussion

The purpose of this study was to describe how alternatively certified agriculture teachers navigated the process of becoming agriculture teachers in Wisconsin, specifically why they decided to teach agriculture, how they became certified to teach, and their experience as agriculture teachers. The findings were presented through a composite case, illustrating the experiences of the four participants through two illustrative composites to maintain anonymity. Eight themes emerged from the data: (1) passion for content, (2) weird turn of events, (3) jumping through hoops, (4) pedagogical focus of alternative certification programs, (5) significance of experience, (6) Agricultural Education: a welcoming, but exclusive community, (7) dedication and perseverance, and (8) feel like a unicorn. We, therefore, can describe the process of becoming an alternatively certified agriculture for our participants as fortuitous, bolstered by their dedication to agriculture, and influenced by prior experiences. These findings, while not generalizable, provide a needed perspective on alternatively certified agriculture teachers by illuminating the context of how alternatively certified agriculture teachers entered the profession that previous literature has not offered.

Utilizing Dewey's theory of experience and a situative perspective, we recognize that the participants in this study were influenced by people, their environment, and feelings (Roth & Jornet, 2014). This influence and transaction between the participants and their world are highlighted in their *passion for content*, the *weird turn of events* that led them to teach, and the *significance of*

experiences. Participants noted experiences that relayed their excitement for agriculture, whether growing up on the farm or a love of the outdoors translating into an agriculture career. Individuals also influenced them, whether family members introduced them to agriculture or having someone reach out and encourage them to become a teacher. The timing of agriculture teaching jobs being available, updated teacher licensing options, and school districts' willingness to hire an alternatively certified teacher played a role in the participants' decision to become agriculture teachers and how they navigated the process. While prior literature has shown interest in agriculture content as a determinant of preservice teachers without a background in school-based agricultural education to become teachers (Marx et al., 2017) and that alternatively certified agriculture teachers choose to become a teacher after a career change (Claflin et al., 2020; Robinson, 2010; Rocca & Washburn, 2006), the literature focusing on the situative influences affecting alternatively certified agriculture teachers as they enter the profession is lacking.

In this study, all four participants took part in an alternative teacher preparation program that focused on pedagogy before or after teaching agriculture. However, those programs did not focus on agricultural education and therefore did not touch on technical agriculture content and essential concepts in SBAE, like FFA and SAE. The participants in this study relied on their prior experience in agriculture and SBAE to supplement their pedagogical training. They continued gaining that knowledge once they started teaching from other teachers and professional development. The lack of formal training in SBAE aligns with the concern exhibited by state supervisors of agriculture about the competency of alternatively certified agriculture teachers to manage an FFA chapter and SAEs (Rice, 2012) and challenges in those areas identified by alternatively certified agriculture teachers (Kinney, 2011; Robinson & Haynes, 2011). Overall, the participants discussed their experience teaching agriculture as positive and planned to continue teaching even with the hurdles faced due to certification, learning to teach, or *feeling like a unicorn*. Their commitment to teaching aligns with Claflin et al.'s (2020) findings that alternatively certified agriculture teachers were not more likely to leave the classroom than their traditionally certified colleagues, which may have been previously assumed. We can regard this as a positive sign that the participants found their place teaching agricultural education.

We conclude our participants were committed to their positions as agriculture teachers, as highlighted in the themes of *jumping through hoops and dedication and perseverance.* These findings echoed those Brown (2009) reported, who highlighted alternatively certified teachers' advice to other alternatively certified teachers included being devoted to the job and relying on prior experiences. Once the participants decided to teach, they invested time and money to complete teacher preparation programs, meet licensing requirements, and work with their students. They recognized areas of growth similar to the findings shared by Robinson (2010) regarding alternatively certified agriculture teachers in Oklahoma. To continue developing as an educator, the participants in this study drew on their previous experiences, connected with teachers and state leaders, and attended professional development. Other studies of alternatively certified teachers recognized these avenues of support for alternatively certified teachers in career and technical education (Boggs Sass et al., 2011; Welfare, 2013) and agricultural education (Kinney, 2011).

While the participants in this study noted the support they received from other agriculture teachers was helpful, the two participants who had not been part of SBAE as high school students noted SBAE was a *welcoming, but exclusive community*. The participants with a background in SBAE found it relatively easy to assimilate into their role as an FFA advisor and work involving the state agriculture teachers' association. Their non-SBAE counterparts found the agricultural education community exclusive and faced additional hurdles as they navigated the norms and expectations. The idea of agricultural education as a community is supported by the work of Traini et al. (2019), who examined SBAE as a sociocultural community with its own norms, history, and

expectations. Perhaps the alternatively certified teachers, especially those without a background in SBAE, did not identify as members of that community.

Conclusions and Recommendations

This composite case study on alternatively certified agriculture teachers from a situative perspective contributes to the current literature by examining the process of becoming an agriculture teacher that our participants experienced. In this study, alternatively certified agriculture teachers drew on previous experiences and their passion for education and agriculture to identify that they wanted to teach agriculture and navigate the process of licensing and learning to teach agriculture. While this study did not evaluate the teaching ability or knowledge of the participants, the findings highlight the impact of the environment, background, people, timing, and place in the decision to teach, how they became certified to teach, and their experience as an agriculture teacher. Echoing the tenet of alternative certification within agricultural education espoused by Bowling and Ball (2018), we must accommodate alternative certification pathways as a profession as long as we have teachers entering the profession through alternate routes. This study provides an understanding of the experiences of a small sample of alternatively certified agriculture teachers that we should keep in mind in research and practice.

It is evident we do not clearly understand who is becoming alternatively certified in agricultural education, how they are becoming certified, or their experiences in the classroom. Consequently, future research should examine the background of alternatively certified agriculture teachers. What is their educational background? What technical agriculture experience do they bring to the classroom? When and why did they decide to teach agriculture? The answers to these questions will provide empirical evidence to broaden our understanding of this diverse population of agriculture teachers, in addition to the literature on teacher efficacy and professional development needs (Coleman et al., 2020; Roberts & Dyer, 2004; Rocca & Washburn, 2006; Stair et al., 2019; Swafford & Friedel, 2010). In our study and one by Robinson (2010), school administrators recruited and willingly hired participants without traditional teacher preparation in agriculture. We recommend future research explore the reasoning and impact of districts' hiring practices, considering the additional support required to mentor and maneuver through the certification process. In addition, more research is necessary on certification pathways and programs while recognizing the discrepancy in routes and support within and between states (Claflin et al., 2020; Flowers & Martin, 2010). Examining how alternatively certified agriculture teachers are certified and educated will complement findings of their background and provide insight for those seeking to support alternatively certified teachers.

Furthermore, the findings from this study offer recommendations for practice. Most importantly, we recommend scholars and practitioners in agriculture education view alternatively certified agriculture teachers with an asset mindset and recognize what they can add to the profession instead of seeing them as "less than" or a burden on the profession. With a nationwide shortage of agriculture teachers (Foster et al., 2020), individuals with a passion for agriculture looking for a career change provide a unique group for recruitment. Our participants came into the profession by chance - can we be more purposeful in recruitment? Additionally, the finding of SBAE as a welcoming, but exclusive community paired with the recommendation by Bowling and Ball (2018) to support alternatively certified agriculture teachers through a community of practice, should be considered. How are alternatively certified agriculture teachers being welcomed into the profession? How are agriculture teachers and state leaders attempting to connect them to resources and help them understand expectations? We must not disregard these teachers or overlook their valuable experiences, but instead, be open to other routes to certification to ensure continued SBAE success.

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