A SYSTEMIC EXPLORATION OF AGRICULTURE TEACHER RETENTION AND IDENTITY DEVELOPMENT

By

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ABSTRACT

A teacher shortage exists across a multiplicity of educational disciplines, including school-based agricultural education. A breadth of research has been conducted on teacher retention within agricultural education, with many studies focusing on agriculture teachers and their experiences with retention or attrition. To extend the scholarship on agriculture teacher retention, we must better understand teacher retention within school, community, and discipline contexts, as agriculture teachers are key components of these communities. Relatedly, the immense number of interconnections within these diverse contexts necessitate a systemsthinking approach. As such, I employed a context-based, system dynamics approach to glean new insights on agriculture teacher retention. Through three interrelated studies, this dissertation employs the theory of margin and landscapes of practice theory to explore teacher workloads, boundary setting, and identity formation. The methodologies employed in these articles vary; the two empirical studies take a qualitative approach, with the latter being conducted via a participatory partnership. The non-empirical, philosophical contribution centers system dynamics modeling, created via researcher experience and a literature review. Taken in combination, these studies reveal interconnections between teachers and their contexts, insights into retaining teachers across career stages, and strategies teachers use to cope with the workload of being effective educators. Collectively, these studies illustrate ways incorporating systems thinking may provide additional insights into the teacher shortage, including seeing the bigger picture, creating models, and providing language for phenomena such as the noble sacrifice mindset. New perspectives on agriculture teacher retention include the importance of context-based research, the impact of community support on teacher workload and identity development, and the teacher-supporter-community interface. These findings contribute to a more holistic perspective of agricultural education and teacher retention. Future directions for research include continued context-based, systemic research, especially within various communities with diverse socio-cultural-historical backgrounds and with teachers who have marginalized identities.

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Chapter One: Contextualizing the System of Agricultural Education

Access to free and comprehensive public education is critical to ensuring each student in the United States has the opportunity to develop skills which will allow them to live a good life. As the leaders of their classrooms and curricula, teachers are orchestrators of the purpose of public education, playing a vital role in the public education ecosystem. Despite the importance of quality teachers for the greater good of society, there is a shortage of individuals, qualified and otherwise, within the teaching profession. Many educational researchers agree the teacher shortage is at, or near, the top of pressing issues facing public education in the United States (Carver-Thomas & Darling-Hammond, 2019; Ingersoll, 2003; Ingersoll & Tran, 2023; Sutcher et al., 2016, 2019). These authors argue this issue is complex, and the shortage impacts many teaching disciplines, including but not limited to science (Nguyen & Redding, 2018; Taie & Lewis, 2023), mathematics (Nguyen & Redding, 2018; Taie & Lewis, 2023), special education (Beckers, 2024; Peyton & Acosta, 2022; Taie & Lewis, 2023), and agricultural education (Smith et al., 2023). Without adequate staffing and certification for U.S. teachers, our educational system cannot achieve the best results for all students.

While having qualified teachers matters in every school and school district, evidence demonstrates this shortage is also an issue of equity. The teacher shortage is a national problem; however, this shortage disproportionately impacts schools with greater populations of economically disadvantaged students (L. C. Sorensen & Ladd, 2020). Students from economically disadvantaged backgrounds have less capital at their disposal to ensure the ability to live a good life, and quality education is a critical steppingstone to breaking cyclical, generational poverty. As a stopgap solution, many schools have begun filling positions with individuals who lack credentialing, training, and other qualifications as teachers. As more affluent school districts are generally able to afford higher wages and benefits, more qualified teachers are filling those positions, leaving less affluent districts behind. As of 2020, there are more uncertified teachers than in years past (L. C. Sorensen & Ladd, 2020), which has negatively impacted student academics (Gujarati, 2012; L. C. Sorensen & Ladd, 2020). As such, this is an issue of equity and educational quality.

While this shortage is impacting K-12 teachers broadly (Sutcher et al., 2016), it is also affecting teachers in rural areas (Ingersoll & Tran, 2023). Rural areas generally have smaller school populations and less funding per pupil than sub/urban districts, an issue sometimes

compounded by rural poverty. Additionally, rural areas are generally agricultural hubs; students learning in rural communities are likely going to maintain the agricultural systems the U.S. is currently reliant upon. Agricultural education is most prevalent within rural communities.

Because of the importance of agriculture and sustainable agriculture to the U.S. food supply and climate (United Nations, 2024; Yunlong & Smit, 1994), as well as the lesser concern for climate change and dislike of environmental regulations demonstrated by rural individuals (Bonnie et al., 2020), agricultural educators may play a key role in getting rural students and agriculturalists open to and prepared for sustainable agriculture and sustainability more broadly (Eck & Edwards, 2019; Pappo et al., 2022). Additionally, agriculture teachers are often integral components of their communities (Traini et al., 2020, 2021) and play a role in community sustainability, especially within rural areas. Therefore, it is important to both prepare agricultural educators to engage students in addressing agricultural issues within their communities and retain the teachers in the discipline.

Scholars within the agricultural education discipline have conducted a great deal of research concerning teacher retention. A disproportionate amount of teacher attrition occurs in early career stages (Disberger et al., 2023), flagging early career teacher retention as an area of need. One of the greatest challenges as an early career teacher is building connections and being integrated into a new school and school community. As teachers are less likely to leave their positions when they feel connected in their school environment (DeLay & Washburn, 2013), building these connections is critical for teacher retention. These connections between school and community also open avenues for support. Being more connected in school communities may help agriculture teachers find programmatic support from administrators, parents, and colleagues, assisting teachers in feeling self-efficacious and promoting their programs within their schools (Hasselquist et al., 2017). Programmatic support has been linked to teacher retention. When programs receive support, especially from administrators and parents, teachers may be more inclined to remain in the profession (Berry et al., 2021; Buchanan et al., 2013; Walker et al., 2004). Therefore, the more integrated into their school community early career teachers become, the more likely they may be to stay within the profession.

While supporting early career teachers and promoting their retention is important, early career teachers are not the only ones leaving agricultural education. Attrition prior to retirement is occurring across all career stages. Scholars have identified a variety of factors influencing

teacher attrition. The greatest factors influencing teachers leaving the profession were family and personal reasons, out of classroom expectations, school environments, student motivation, pressure to meet personal expectations, and salary (Solomonson et al., 2018). Solomonson et al. (2018) identified four domains which impacted teacher attrition, including personal factors, working conditions, teacher development, and compensation. Most of these factors are bound within the work domain opposed to the life domain, which is curious when one of the primary drivers for attrition was family and personal reasons (Solomonson et al., 2018). As such, this leaves space to explore lived experiences and how the work and life of agricultural educators may oppose one another. This space is one my dissertation seeks to address qualitatively, to explore where teachers find their power, how teachers navigate their workload, and maintain margin in life (McClusky, 1963).

Work-life balance has been linked to teacher retention by scholars within the discipline. Scholars have investigated work-life balance (i.e., Blackburn et al., 2017; T. J. Sorensen & McKim, 2014; Traini et al., 2020) via quantitative and qualitative research approaches. A nationwide survey demonstrated agriculture teachers perceived moderate work-life balance (T. J. Sorensen et al., 2016). The authors argued this balance could be easily upset and spiral toward teachers deciding to leave the profession when their work domain encroaches on their life domain. Additionally, qualitative research centering early career teachers found teachers perceived they could have career success or work-life balance, but not both (Traini et al., 2019). Because of this tedious balance and the pull toward career success, it is crucial agriculture teachers can set and maintain boundaries (Haddad et al., 2023). Haddad et al. (2023) suggested establishing and maintaining boundaries should include community members, and my dissertation helps to contextualize the complex relationship between agriculture teachers and community members. First, I explored the relationships between setting boundaries and the natural inclination of teachers to employ the "noble sacrifice mindset" in response to community members (Marzolino & McKim, 2024) via system modeling. Then, via a case study centering the experiences of a first-year teacher, I explored teacher identity development as influenced by school and geographic community members. This case study is limited to a specific community within Michigan, and I believe there are insights gleaned which will assist us in thinking about the systemic nature of this issue.

Situating Systems Thinking

Teacher retention and the teacher shortage have been classified as incredibly complex issues both overall and within specific educational disciplines. Therefore, it is important to explore many facets of the issue while also examining the issue more holistically. Systems thinking offers a means of examining the broader context of the teacher shortage and the many relationships and dynamics between facets within it. Understanding patterns within these systems – also called feedback mechanisms – allows us to expand our perspective on where and how we may intervene to address this issue. As systems thinkers like Meadows (2008) express, acting without first understanding the system may have unintended consequences or will address the issue symptomatically and not at its root. To make meaningful change, the root of the issue must be addressed.

There are a variety of lenses for systems thinking that may be employed. The method for systems thinking I employ in my dissertation is system dynamics. System dynamics is a method of systems thinking and modeling which prioritizes feedback structures and system models as heuristic tools to better understand system behavior (Ford, 2009; Forrester, 1968; Meadows, 2008). Understanding the behavior of the many systems within agricultural education may help address the teacher shortage. Modeling these systems will help stakeholders to identify feedback structures. Feedback structures are often drivers of system behavior (Ford, 2009; Meadows, 2008) and understanding feedback mechanisms can help to identify leverage points within the system where a small change could have a large impact on system behavior (Meadows, 2008). Ideally, making these changes would help teachers and their supporters with retention. When employing system dynamics, it is important to identify the boundaries of the system being modeled. The system explored within this dissertation relates to school-based agricultural education (SBAE). Each article takes a different approach to exploring the system of SBAE, providing insights on each of the facets explored. Much of the literature concerning SBAE prioritizes individuals and the decisions they are making, failing to consider the impact of outside forces on teachers (Haddad et al., 2023). By employing a system lens, those outside forces can be identified and modeled to aid the discipline in approaching the complex issue of teacher retention. System dynamics specifically has many advantages in exploring teacher retention from a systemic point of view, as teachers, students, schools, and communities all participate in various feedback cycles which impact teachers' power, load, and identity

formation. Power, load, and identity are all aspects critical to teacher retention, as argued throughout my dissertation.

Theories Utilized

As previously expressed, having ample qualified agriculture teachers may help us to address issues of social equity and sustainability (agricultural, community, economic, environmental) in the United States. To explore the shortage of agriculture teachers, my dissertation utilizes two theories; both are relatively new to agriculture education as a discipline. The first theory is McClusky's theory of margin (1963), previously employed by McKim and McKim (2023) as it pertains to teacher professional development. McClusky's theory of margin states everyone has fluctuating power, load, and margin in life (McClusky, 1963). Power is defined as a person's ability to achieve their load, derived from a multiplicity of sources, including but not limited to emotion, social support, finances, and wellness. Load is defined as the work in life that needs to be accomplished, whether it is at home, work, or otherwise. Margin is the difference between power and load; when we have plentiful margin, we can learn, think, and experience life more freely. When we lack margin, we may feel more stressed, be unable to learn, and need to find a way out to a healthy mental space. The theory of margin provides a framework in which to holistically analyze the state of teacher affairs, as well as building blocks with which to explore teacher retention. As many aspects of one's life or career impacts power, load, or margin, this framework is useful for the topics explored within this dissertation. The second theory informing this dissertation is Wegner-Trayner and Wegner-Treyner's landscape of practice theory (2015), also called social learning theory. Landscapes of practice are local and contextual (Wenger-Trayner & Wenger-Trayner, 2015). Within each landscape, communities determine the competence of an individual; competence is the currency of trust. When characterizing competence, Wenger-Treyner and Wenger-Treyner (2015) describe the following:

- 1. Competence is "negotiated and defined within a single community of practice" (p. 13)
- 2. A practitioner's competence is defined via their "[c]onnection, engagement, status, and legitimacy" (p. 14) within their community
- 3. Practitioner competence is negotiated based on the community's existing "regime of competence" (p. 14); to demonstrate competence, a practitioner is evaluated by community members based on the practitioner's accountability to said regime

4. "[C]ompetence is not merely an individual characteristic," "it is something that is recognizable as competence by members of a community of practice" (p. 14)
With these principles in mind, a practicing teacher must prove their competence, which is socially negotiated, within their newfound community of practice. These communities of practice are situated within broader landscapes of practice, with various members of these communities evaluating practitioner competence throughout their time there. A more competent practitioner is one who may be viewed more favorably by community members, especially as competence is a product of a comparison between the community's ideas of what competence looks like. In the context of my work, competence may be evaluated by staff within a school district, fellow agricultural educators, alumni and supporters, parents, and students. The regime of competence may be influenced by school traditions, the work of former agriculture teachers, and more.

Competence and the perception of being competent is important for identity development and navigating landscapes of practice. Landscapes of practice impact identity formation within each individual landscape; our identities are "[s]haped by our journey through our landscape" and "come to embody the landscape, its practices, and its boundaries" (Wenger-Trayner & Wenger-Trayner, 2015, p. 20). There are three principles affecting identity development within a landscape: alignment, engagement, and imagination. Alignment refers to whether someone as a person and practitioner fits into a landscape's regime of competence, exploring individual and community values and fit. Engagement refers to a practitioner's direct involvement with the landscape around them and sharing in experiences within the landscape. Imagination refers to the space in which a practitioner and community members can imagine themselves/others as belonging in that landscape; imagination may also refer to how the practitioner imagines the perspectives of others around them. Each of these manifests differently based on a practitioner's context, which is why locality is important for exploring identity-related phenomena.

Furthermore, every individual can be a part of multiple membership categories, which may complicate their multiple identities in unique, landscape dependent ways.

Within SBAE literature, this theory has been utilized by Traini et al. (2021), Traini et al. (2020), and Traini (2019) to explore teacher retention beyond the individual who makes the decision to leave the profession. There is a load associated with landscape and identity navigation, especially as it pertains to appearing competent; individuals within an agriculture

teacher's landscape of practice may also add emotional load to their journey, support their power, and/or help them manage their load (Fenton-O'Creevy et al., 2015; Kubiak et al., 2015; Wenger-Trayner & Wenger-Trayner, 2015). Further exploration of these dynamics within a landscape of practice would be valuable, as it could help us understand the feedback mechanisms that support or hinder a teacher's identity development (and longevity) in the profession, vis-à-vis their relationships with school and community supporters. Furthermore, identifying ways in which a teacher's supporters are witnessing, examining, and interrogating teacher competence, alignment, engagement, and imagination within a landscape of practice can articulate important concepts early-career teachers should be prepared to experience as they enter their own landscape of practice.

Overall, the articles within my dissertation seek to understand how teachers navigate their lived experiences while teaching. Each of these articles explore teacher margin and teacher identity in its own unique way, while making a broader contribution to the literature and agricultural education.

Positionality Statement

For my dissertation, I have chosen to employ qualitative and participatory research methodologies. Qualitative research and participatory action research both rely on the researcher as an instrument. As such, I would like to elaborate on my positionality here. I am a white settler; I am of European descent, though my family is not entirely certain which European countries our ancestors are from. I grew up in a rural area, within a low socioeconomic status household with a single parent. I am non-binary, though I have been socialized as a woman; I present more femme than masculine. I am able-bodied and neurodivergent (AuDHD). I care a great deal about ensuring adequate and equitable public education; my education has helped me tremendously, and we need education to help others, too. I also care about sustaining rural communities like the one I grew up in. I taught agricultural education for three years within a public high school, and this experience was as rewarding as it was challenging. It brought me great joy to positively impact my students and teach about agriculture, but I experienced burnout, depression, and never experienced a year of teaching untouched by the impact of the COVID-19 pandemic. While moving through my undergraduate programming and teaching, I was able to interact with a wide variety of fellow teachers and supporters; I want to do the work I am doing because I hope this research may have practical significance and impacts on their lives. I value agriculture and

agricultural education, though I believe the system to be flawed and unsustainable. I expound more on the unsustainability of the current system and my vision for improving it in Chapter 5. Overall, my positionality informs who I am as an individual, which impacts the research I conduct.

Naturally, my positionality brings with it biases which must be checked throughout the research process. Due to my own experiences in agricultural education, I have a predisposition for emphasizing the negative aspects which are pressing on teachers. This is something I have aimed to combat by incorporating peer review from fellow researchers and incorporating inductive techniques which value and emphasize participant voice. I have also been intentional about unpacking this bias, reflecting on why it exists and working to understand how all human experiences have elements which are shared and elements unique to the individual. My own marginalized identities help me to see ways in which belonging is felt or embodied, a feeling I cherish and like to see. Additionally, I have underwent a great deal of loss from transitioning my identity as an agriculture teacher – my dream since high school – to a new identity as a researcher and teacher educator; because of this and my love for my students and teacher friends, I maintain a stubborn hopefulness that insists there is a way to reform the system to improve it for future people whose dream is teaching agriculture. There must be ways to improve the system to make it more friendly to all.

The Three Articles

The first paper, "The teacher's noble sacrifice: A qualitative exploration of teacher margin" (Marzolino et al., 2024), explores how teachers are living their workloads. This basic qualitative study (Merriam & Tisdell, 2016) utilized preliminary and secondary coding methods (Saldaña, 2016) to get to the heart of agriculture teachers' power, load, and margin in life. The overall theme of this paper was the teacher's noble sacrifice, as agricultural educators were largely willing to take on as much as they could to ensure their students were successful within their programs. Additionally, this paper helps to break down what Michigan teachers are expected to do, as teachers, career and technical education teachers, and as people. Furthermore, sources of teacher power were also explored, and teachers derive a good deal of power from positive experiences with their students. This holistic view provides insights into teachers as professionals and as people, which I believe is important as a researcher. For access to the full text article, please find the link in its section below.

The second paper, "Retaining school-based agricultural educators: A system dynamics approach" (Marzolino & McKim, 2024), explores this noble sacrifice mindset and a margin mindset utilizing a causal loop diagram (CLD). CLDs are excellent tools for mapping systems, which was the purpose of this paper. The model presented here explores systems traps that teachers may fall into, accidentally or intentionally, and how they might be able to get out of those systems traps. Overall, this philosophical piece utilized researcher lived experience and a review of agricultural education literature to form an image of one of the many internalized systems shaped by paradigms within agricultural education. For access to the full text article, please find the link in its section below.

The third paper, currently unpublished, is a qualitative participatory project conducted throughout the course of a school year. Via a partnership with a first-year teacher, I sought to immerse myself (Mott & Haddad, 2025) in his school context (i.e., a part of his landscape of practice) to see what insights could be drawn from the case and transferred to other contexts (Flyvbjerg, 2006). Insights from this case study were plentiful, with the overarching lesson of this case demonstrating how tremendously community support (or hindrances) can help or harm a first-year teacher, their longevity, and their teacher identity.

Taken together, these papers explore the need for sustaining teacher power in life, reducing teacher load, and increasing teacher margin. While these articles provide some exploration, there is far more knowledge to co-create via participatory and qualitative inquiry. Agricultural education contexts are unique and rich, so the more we understand, the closer we may come to identifying ways to sustain agricultural communities via their agricultural educators. As a variety of acronyms are utilized throughout my dissertation, please see Appendix A for an outline of these terms and their definitions.

REFERENCES

- Beckers, G. (2024). The social injustice of the have-nots in the special education teacher shortage. *Research Issues in Contemporary Education*, 9(1), 139–151.
- Berry, B., Bastian, K. C., Darling-Hammond, L., & Kini, T. (2021). *The importance of teaching and learning conditions: Influences on teacher retention and school performance in North Carolina* [Industry Brief]. Learning Policy Institute. https://learningpolicyinstitute.org/product/leandro-teaching-and-learning-conditions-brief
- Blackburn, J. J., Bunch, J. C., & Haynes, J. C. (2017). Assessing the relationship of teacher self-efficacy, job satisfaction, and perception of work-life balance of Louisiana agriculture teachers. *Journal of Agricultural Education*, 58(1), 14–35.
- Bonnie, R., Pechar Diamond, E., & Rowe, E. (2020). *Understanding rural attitudes toward the environment and conservation in America*. NI R 20-03. Durham, NC: Duke University.
- Buchanan, J., Prescott, A., Schuck, S., Aubusson, P., Burke, P., & Louviere, J. (2013). Teacher retention and attrition: Views of early career teachers. *Australian Journal of Teacher Education*, 38(3). https://doi.org/10.14221/ajte.2013v38n3.9
- Carver-Thomas, D., & Darling-Hammond, L. (2019). The trouble with teacher turnover: How teacher attrition affects students and schools. *Education Policy Analysis Archives*, 27(36), 1–32. https://doi.org/10.14507/epaa.27.3699
- DeLay, A. M., & Washburn, S. G. (2013). The role of collaboration in secondary agriculture teacher career satisfaction and career retention. *Journal of Agricultural Education*, *54*(4), 104–120. https://doi.org/10.5032/jae.2013.04104
- Disberger, B., Washburn, S., Hock, G., & Ulmer, J. (2023). A qualitative analysis of agriculture teacher's attitudinal changes toward the teaching profession in the first three years of teaching. *Journal of Agricultural Education*, 64(1), 61–81. https://doi.org/10.5032/jae.v64i1.30
- Eck, C. J., & Edwards, M. C. (2019). Teacher shortage in school-based, agricultural education (SBAE): A historical review. *Journal of Agricultural Education*, 60(4), 223–239. https://doi.org/10.5032/jae.2019.04223
- Fenton-O'Creevy, M., Dimitriadis, Y., & Scobie, G. (2015). Failure and resilience at boundaries: The emotional process of identity work. In E. Wenger-Trayner, M. Fenton-O'Creevy, S. Hutchinson, C. Kubiak, & B. Wenger-Trayner (Eds.), *Learning in landscapes of practice: Boundaries, identity, and knowledgeability in practice-based learning* (pp. 33–42). Routledge.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, *12*(2), 219–245. https://doi.org/10.1177/1077800405284363
- Ford, A. (2009). *Modeling the environment* (2nd ed.). Island Press.

- Forrester, J. (1968). Principles of systems. Pegasus Communications.
- Gujarati, J. (2012). A comprehensive induction system: A key to the retention of highly qualified teachers. *The Educational Forum*, 76(2), 218–223. https://doi.org/10.1080/00131725.2011.652293
- Haddad, B., Traini, H., & McKim, A. (2023). We've crossed a line: A philosophical examination of systemic implications surrounding SBAE teachers' attempts at boundary setting. *Journal of Agricultural Education*, 64(1), 82–95. https://doi.org/10.5032/jae.v64i1.31
- Hasselquist, L., Herndon, K., & Kitchel, T. J. (2017). School culture's influence on beginning agriculture teachers' job satisfaction and teacher self-efficacy. *Journal of Agricultural Education*, 58(1), 267–279. https://doi.org/10.5032/jae.2017.01267
- Ingersoll, R. M. (2003). The teacher shortage: Myth or reality? *Educational Horizons*, *31*(3), 146–152. http://www.jstor.org/stable/42926477
- Ingersoll, R. M., & Tran, H. (2023). The rural teacher shortage. *Phi Delta Kappan*, 105(3), 36–41. https://doi.org/10.1177/00317217231212008
- Kubiak, C., Cameron, S., Conole, G., Fenton-O'Creevy, M., Mylrea, P., Rees, E., & Shreeve, A. (2015). Multimembership and identification. In E. Wenger-Trayner, M. Fenton-O'Creevy, S. Hutchinson, C. Kubiak, & B. Wenger-Trayner (Eds.), *Learning in landscapes of practice: Boundaries, identity, and knowledgeability in practice-based learning* (pp. 64–80). Routledge.
- Marzolino, T. A., & McKim, A. J. (2024). Retaining school-based agricultural educations: A system dynamics approach. *Journal of Agricultural Education*, 65(4), 327–341. https://doi.org/10.5032/jae.v65i4.2826
- Marzolino, T. A., McKim, A. J., Goodwin, C. M., & McKendree, R. B. (2024). The teacher's noble sacrifice: An exploration of agriculture teacher margin. *Journal of Agricultural Education*, 65(4), 313–326. https://doi.org/10.5032/jae.v65i4.2828
- McClusky, H. Y. (1963). The course of the adult life span. In W. C. Hallenback (Ed.), *Psychology of Adults* (pp. 10–20). Adult Education Association of the U.S.A.
- McKim, A. J., & McKim, L. K. (2023). Enhancing professional development by increasing agricultural educator margin. *Journal of Agricultural Education*, 64(3), 16–25. https://doi.org/https://doi.org/10.5032/jae.v64i3.48
- Meadows, D. H. (2008). *Thinking in systems: A primer*. Chelsea Green Publishing.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

- Mott, R., & Haddad, B. (2025). Call to better qual: A philosophical and methodological examination to advance case study research. *Journal of Agricultural Education*, 66(1), 41. https://doi.org/10.5032/jae.v66i1.2762
- Nguyen, T. D., & Redding, C. (2018). Changes in the demographics, qualifications, and turnover of American STEM Teachers, 1988–2012. *AERA Open*, *4*(3), 233285841880279. https://doi.org/10.1177/2332858418802790
- Pappo, E., Wilson, C., & Flory, S. L. (2022). Enhancing climate change education through links to agriculture. *The American Biology Teacher*, 84(4), 207–212. https://doi.org/10.1525/abt.2022.84.4.207
- Peyton, D., & Acosta, K. (2022). Understanding special education teacher shortages. *State Education Standard*, 22(1), 20–25.
- Saldaña, J. (2016). The coding manual for qualitative researchers (3rd ed.). SAGE Publications.
- Smith, A. R., Foster, D. D., & Lawver, R. G. (2023). *National Agricultural Education Supply & Demand Study, 2022 Executive Summary*. Retrieved from: http://aaaeonline.org/Resources/Documents/NSD 2022Summary.pdf
- Solomonson, J. K., Korte, D. S., Thieman, E. B., Retallick, M. S., & Keating, K. H. (2018). Factors contributing to Illinois school-based agriculture teachers' final decision to leave the classroom. *Journal of Agricultural Education*, *59*(2), 321–342. https://doi.org/10.5032/jae.2018.02321
- Sorensen, L. C., & Ladd, H. F. (2020). The hidden costs of teacher turnover. *AERA Open*, *6*(1), 1–24. https://doi.org/10.1177/2332858420905812
- Sorensen, T. J., & McKim, A. J. (2014). Perceived work-life balance, job satisfaction, and professional commitment among agriculture teachers. *Journal of Agricultural Education*, 55(4), 116–132. https://doi.org/10.5032/jae.2014.04116
- Sorensen, T. J., McKim, A. J., & Velez, J. (2016). A national study of work-family balance and job satisfaction among agriculture teachers. *Journal of Agricultural Education*, *57*(4), 146–159. https://doi.org/10.5032/jae.2016.04146
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Palo Alto, CA: Learning Policy Institute. https://doi.org/10.54300/247.242
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Education Policy Analysis Archives*, 27, 35. https://doi.org/10.14507/epaa.27.3696
- Taie, S., & Lewis, L. (2023). *Teacher attrition and mobility. Results from the 2021–22 teacher follow-up survey to the national teacher and principal survey.* https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2024039

- Traini, H. Q., Claflin, K., Stewart, J., & Velez, J. (2019). Success, balance, but never both: Exploring reified forms of success in school-based agricultural education. *Journal of Agricultural Education*, 60(4), 240–254. https://doi.org/10.5032/jae.2019.04240
- Traini, H. Q., Stewart, J., & Velez, J. J. (2021). Navigating the social landscape of school-based agricultural education: A hermeneutic phenomenology. *Journal of Agricultural Education*, 62(1), 61–76. https://doi.org/10.5032/jae.2021.01061
- Traini, H. Q., Yopp, A. M., & Roberts, R. (2020). The success trap: A case study of early career agricultural education teachers' conceptualizations of work-life balance. *Journal of Agricultural Education*, 61(4), 175–188. https://doi.org/10.5032/jae.2020.04175
- United Nations. (2024). The UN Sustainable Development Goals. https://sdgs.un.org/goals
- Walker, W. D., Garton, B. L., & Kitchel, T. J. (2004). Job satisfaction and retention of secondary agriculture teachers. *Journal of Agricultural Education*, 45(2), 28–38. https://doi.org/10.5032/jae.2004.02028
- Wenger-Trayner, E., & Wenger-Trayner, B. (2015). Learning in a landscape of practice: A framework. In E. Wegner-Trayner, M. Fenton-O'Creevy, S. Hutchinson, C. Kubiak, & B. Wenger-Trayner (Eds.), *Learning in landscapes of practice: Boundaries, identity, and knowledgeability in practice-based learning* (pp. 13–30). Routledge.
- Yunlong, C., & Smit, B. (1994). Sustainability in agriculture: A general review. Agriculture, *Ecosystems & Environment*, 49(3), 299–307. https://doi.org/10.1016/0167-8809(94)90059-0

APPENDIX A

Glossary of Terms

Term	Plain Language Definition			
AET	The agricultural experience tracker – an online record-keeping system made available to all SBAE teachers in the state of Michigan courtesy of the Farm Bureau. Utilized for record-keeping and submitting award applications for various FFA awards.			
Alumni and Friends Chapter	Sometimes referred to as an FFA Chapter's alumni, an Alumni and Friends Chapter is a group of individuals who partner with FFA Chapters to help support students and the FFA Chapter. Many of these individuals tend to be alumni of the FFA Chapter or school, but alumni status is not necessary for participation.			
CLD	A causal loop diagram. CLDs are system dynamics models prioritizing visualizing systems and feedback mechanisms.			
Comprehensive public high school	A high school seeking to serve the needs of all its students, with a variety of pathways for students to select for their educational needs. This includes college preparatory courses, trades pathways, foreign languages, and more.			
СоР	A community of practice is "a community of people who contribute to the continued vitality, application, and evolution of the practice" (Wenger-Treyner & Wenger-Trayner, 2015, p. 13)			
CTE	Career and technical education, also known as vocational education, serves to offer high school students opportunities to acquaint themselves with a variety of careers and gain preparation in these careers. Many career pathways are offered via American CTE programming, including but not limited to agriculture, automotive, business, construction trades, cosmetology, criminal justice, nursing, and welding.			
CTE Center	A career and technical education center, also called a career center or technical center, is an institution commonly partnered with many school districts at the Intermediate School District level. CTE centers often have students from several schools and offer a variety of CTE programs. CTE programs are often facilitated in morning or afternoon sessions, generally around 2 - 2.5 hours each.			
FFA	Formerly the Future Farmers of America, the FFA is a leadership organization focusing on agricultural contexts. The FFA offers many leadership and career development opportunities through competitions. FFA is often deemed intracurricular by SBAE teachers as it is a component of the three-component model of SBAE.			

LoP A landscape of practice is comprised of a variety of communities of practice. NoP A network of practice is comprised of a variety of landscapes of practice. SAE Supervised agricultural experiences are a form of work-based learning (i.e., where students have the ability to apply concepts in an authentic professional context) utilized in school-based agricultural education. **SBAE** School-based agricultural education is formalized education within a middle or high school context wherein students are learning about agriculture, food, natural resources, and/or the environment. Comprised of three components – classroom/laboratory instruction (i.e., direct teaching of pupils), FFA (i.e., leadership education and development), and SAE (i.e., supervised agricultural experiences, wherein students are theoretically taking knowledge they learned in the classroom and applying it within authentic work contexts) A method for systems thinking, prioritizing modeling and feedback System dynamics mechanisms to understand the dynamics of complex systems. Originally developed by Forrester (1968), system dynamics lends flexible modeling methods to visualize, understand, and sometimes simulate real-world systems and their dynamics. System dynamics also provides a variety of archetypes systems may fit (Meadows, 2008); when these archetypes are identified and understood, they can be useful for problem solving. Systems Systems thinking requires taking a step back and examining the bigger, systemic picture; a systems thinking approach helps to address issues which thinking are complex and non-linear. Utilizing systems thinking necessitates identifying elements within systems, understanding their interconnections, and examining the implications of issues being systemic. Three-The three-component model is emphasized in SBAE contexts; SBAE teachers are expected to include each of these three components component model (classroom/laboratory instruction, FFA, and SAE) in their agricultural programming.

Chapter Two: Exploring Agriculture Teacher Margin

In the article titled "The teacher's noble sacrifice: An exploration of agriculture teacher margin" (Marzolino et al., 2024), published in the *Journal of Agriculture Education*, my coauthors and I employed McClusky's theory of margin (1963) to examine how teacher's work and home lives impacted their margin in life and their perspective of their workload. This research utilized qualitative methods to explore 11 Michigan teacher's perspectives. Via semi-structured interviews with teachers selected due to their demographic characteristics (i.e., parents, spouses, career stage, gender, etc.), patterns regarding teacher margin were revealed. The overall theme of the study was the Teacher's Noble Sacrifice, referring to the idea wherein teachers are willing to give every part of themselves to see the success of their students. Additionally, teachers found power and navigated their loads in a variety of different ways, further expounded upon within the article's full text with recommendations from the authorship team.

For a full text of this article, please navigate to: https://jae-online.org/index.php/jae/article/view/2828

REFERENCES

- Marzolino, T. A., McKim, A. J., Goodwin, C. M., & McKendree, R. B. (2024). The teacher's noble sacrifice: An exploration of agriculture teacher margin. Journal of Agricultural Education, 65(4), 313–326. https://doi.org/10.5032/jae.v65i4.2828
- McClusky, H. Y. (1963). The course of the adult life span. In W. C. Hallenback (Ed.), Psychology of Adults (pp. 10–20). Adult Education Association of the U.S.A.

Chapter Three: Exploring Teacher Retention via System Dynamics

In the article titled "Retaining school-based agricultural educators: A system dynamics approach" (Marzolino & McKim, 2024), published in the *Journal of Agriculture Education*, my co-author and I employed system dynamics (Forrester, 1968; Meadows, 2008) and McClusky's theory of margin (1963) to explore one of the many systems within agricultural education. This system explores how teacher mindsets and boundary setting practices may be helped or hindered by other factors within the boundaries of the system. A causal loop diagram was constructed to model the system and the feedback mechanisms within it, seeking to give individuals language to utilize when speaking of this issue and emphasize the systemic nature of teaching experiences.

For a full text of this article, please navigate to: https://jae-online.org/index.php/jae/article/view/2826

REFERENCES

- Forrester, J. (1968). Principles of systems. Pegasus Communications.
- Marzolino, T. A., & McKim, A. J. (2024). Retaining school-based agricultural educations: A system dynamics approach. *Journal of Agricultural Education*, 65(4), 327–341. https://doi.org/10.5032/jae.v65i4.2826
- McClusky, H. Y. (1963). The course of the adult life span. In W. C. Hallenback (Ed.), *Psychology of Adults* (pp. 10–20). Adult Education Association of the U.S.A.
- Meadows, D. H. (2008). Thinking in systems: A primer. Chelsea Green Publishing.

Chapter Four: Exploring First-Year Teacher Retention and Identity Development Within a Landscape of Practice

Authors: Tiffany A. Marzolino, Nathan C. Snow, Catlin M. Goodwin, Aaron J. McKim Agricultural education continues to face a shortage of teachers. The longevity of early career teachers plays a key role in addressing this shortage. To better understand mechanisms of teacher retention, this case study centers a first-year teacher's (Curtis) identity development and workload within the context of his community. Utilizing the theory of margin and landscapes of practice theory, this case study identifies synergies between Curtis and program supporters with a significant impact on Curtis's margin. Forces shaping margin internally and externally were also captured; Curtis's load and power are influenced by student, stakeholder, school, and societal factors. In sum, we posit synergies between teachers and stakeholders may help predict teacher retention. We conclude by encouraging future studies exploring teacher context and stakeholder involvement.

Introduction

Their introduction into any career shapes an individual's experience within that career. Authors within agricultural education have expressed first-year teachers are often expected to perform as veterans, despite having less experience (Disberger et al., 2023). Further, expectations from communities surrounding first-year agriculture teachers shape teacher experiences (Traini et al., 2019, 2020, 2021), potentially determining teacher longevity. Under circumstances where community values and teacher values do not align, additional stress may be placed upon the teacher (Haddad et al., 2023). Furthermore, early career professionals are developing their identities as teachers, a critical piece of feeling belonging or alienation from the career (Mehdizadeh et al., 2024; Milford & Reed, 2024). Due to the complexities of first-year teacher identity, school and community relationships, and the burgeoning workload of teaching agriculture, it is important to explore these phenomena within the contexts they occur (Hong et al., 2024). Therefore, the authors of this study sought to inquire into the lived experiences of a first-year teacher in Michigan and his school community context to gain a better understanding of the dynamics surrounding this teacher.

Utilizing a case study approach, we partnered with a first-year agriculture teacher (hereafter referred to as Curtis), his school, and his community partners to gain a better understanding of

how his identity and workload are being shaped by forces both internal and external. The research questions guiding this case study were:

- 1. How is a first-year teacher's identity impacted by their landscape of practice?
- 2. How is a first-year teacher's workload shaped, internally or externally?
- 3. How do school community members influence a teacher's workload?

As agricultural education and educators tend to silo themselves from broader educational contexts (Shoulders & Myers, 2011) – not dissimilar to other specialty teaching disciplines (Feser & Haak, 2023) – it is important to provide some context on agricultural education. The agricultural education discussed in this manuscript takes place within high schools and/or career and technical education (CTE) centers. Agricultural education is part of CTE, or vocational education, and is often funded via separate state and federal dollars (i.e., Perkins Acts) set aside for CTE programming. Agricultural education has a unique three-component model (Croom, 2008) which has been propagated within the discipline; the model is commonly referenced as the basis for exemplar agricultural education programs (i.e., National Quality Program Standards; The Council, 2016). The three-components include classroom/laboratory instruction, FFA via the National FFA Organization (an agricultural youth leadership development program), and supervised agricultural experiences (SAEs; a form of work-based learning wherein students translate their learning into applied, out-of-school contexts). Furthermore, there are ample opportunities for competition and contests within agricultural education, leading to these teachers being described as three-season varsity coaches along with their teaching load by a variety of people familiar with agricultural education, including Luke and Todd (participants in this study). The landscape of agricultural education is diverse, with some teachers having summer contracts and others having no supplemental funding, some teachers teaching with several other agriculture teachers in their schools and some being alone, and more. Despite the unique context of agricultural education, the authors feel this manuscript's insights may inform the broader education literature base.

Literature Review

Teacher identity has been explored across many teaching disciplines via many theoretical lenses. Three major categories of teacher identity literature are explored in this review: First-year teacher identity, agricultural educator identity, and broader insights on studying teacher identity.

First-year Teacher Identity

First-year teacher identity is unique. Feser and Haak (2023) identified a theme within their meta-analysis across science and science-related teacher identity; this theme suggests beginning teacher identity is different from veteran teacher identity due to "ongoing processes of identity change and maintenance throughout the entire professional life" (p. 303). Another theme identified by Feser and Haak (2023) suggested teachers of specialty subjects often have identities which are linked to those specialty topics, thereby differing from generalist teachers. These themes suggest there are intricacies to be explored within teachers of specialty topics and their identity development.

Additional scholarship on teacher identity takes a more context-specific approach. Milford and Reed (2024) conducted a case study of two pre-service teachers – an English/language arts/mathematics teacher and a science/social studies teacher – who completed their student teaching and were hired at school districts where they student taught. Findings included failure being a crux of one of these teachers' identities, a conceptualization of the self as an infant (i.e., a baby teacher), and a tendency to devalue their own knowledge/experience and defer to those with greater standing (Milford & Reed, 2024). As first-year teachers, these participants also reported a feeling of isolation. These powerful emotions were seen as detrimental to teacher longevity that must be overcome to promote retention within the career. These sentiments were not true for all first-year teachers, however. In a longitudinal study by Mehdizadeh et al. (2024), a foreign language teacher was invited to share his experiences with identity development over eight years of teaching. In his first year, this participant was wellintegrated into his community of educators and reported being comfortable with his actual self, working to actualize his imagined future self. The role of imagination is key in this context, as one must be able to imagine a hopeful future to be resilient through difficult times. For this teacher, identity tensions were not present until the second round of interviews in his fourth year of teaching, in which he was less certain of himself (Mehdizadeh et al., 2024). It is clear from

these studies there is a diversity of experiences for first-year teachers and their identity development.

Another important component of first-year teacher identity is emotion (Truong et al., 2025) and emotion labor (Nazari et al., 2023). In their case study centering novice English as a foreign language teachers, Nazari et al. (2023) found emotion labor (i.e., navigating the emotions associated with teaching and relationships, especially negative emotions like stress) shaped how teachers imagined, engaged, and aligned with their community of practice (i.e., their schools). Times of emotion labor informed teacher identity construction, especially as it concerned teacher engagement with their context across time and space. Nazari et al. (2023) described how novice teachers are constantly engaged in their communities of practice, resulting in emotion labor influenced by the presence of absence of agency. This, in turn, informed how certain identities the teachers tried out could be verified or refuted by their communities, which sometimes resulted in the teachers aligning themselves to their communities in ways that "shield against the disharmonious professional contextualities" and resulted in the development of "strategic behaviors in order to survive and grow" (p. 10). This suggested the amount of emotion labor invested by teachers played a role in teacher identity development, especially as some teachers actively chose to present differently to protect themselves from emotion labor. Truong et al. (2025) also found emotion drove teacher agency; this suggested agency and emotion are intertwined and each informed teacher identity.

Agricultural Educator Identity

In agricultural education, scholars have examined various aspects of teacher identity. In their study regarding agricultural teacher identity and professional development, Shoulders and Myers (2011) argued agricultural education is "a subject in which teachers may hold professional identities very distinct to the profession" (p. 99). Shoulders and Myers (2011, p. 102) explained,

"We posit that the societal views and expectations of agriculture teachers also have the potential to be unique when compared to other teachers, and these differences, combined with the history of agricultural education, can create a distinctive professional identity shared among many agriculture teachers."

Exploring this further, Shoulders (2018) found agriculture teachers' identity was separate from identities as agriculturalists or as educators. The result is a siloing of professionals and the discipline of agricultural education, a potentially isolating notion for teachers. A feeling of

belonging has been shown to help pre-service teachers continue teaching, as it improves self-efficacy, teacher identity, and felt competence (Bjorklund et al., 2020). Additionally, the alignment of beliefs between teacher and school/mentors is important for a sense of belonging and willingness to engage (Bjorklund et al., 2020). As Haddad et al. (2023) point out, areas of tension within communities may not be conducive to teacher longevity.

Agriculture teacher identity is constructed in part by the social environments teachers are navigating (Traini et al., 2019, 2020, 2021). Traini et al. (2019) demonstrated teachers feeling pulled in different directions, between success and work-life balance, but never both. Tensions between success and balance do not end with this study. Traini et al. (2021) found agriculture teachers must navigate "multiple accountability partners," "different expectations," "little room for error," and a perceived "arms race" between themselves and other teachers as they chase success and seek "validation" (p. 70). These authors indicated exploring the context of agricultural education and examining these forces at play is necessary. Our understanding of the expectations placed on teachers was extended by a study focused on second-generation agriculture teachers (SGATs). Pozderac et al. (2022) found these SGATs "inherited values, skills, practices, and beliefs from their father by immersion" (p. 56). While the participants of this study all had parents who were agriculture teachers, many agriculture teachers have a background in agriculture (Shoulders, 2018; Shoulders & Myers, 2011) or agricultural education via 4-H or FFA (Shoulders, 2018; Solomonson et al., 2019). Overall, social contexts are shaping how teachers feel they belong and their identities within the profession (Traini et al., 2021).

Broader Insights on Teacher Identity

Other scholars focus on the broader system of teacher identity formation. Hong et al. (2024, p. 160) wrote, "teachers' identities do not exist in a vacuum; they are situated within a broader social-cultural-historical context that comes with its own constraints and affordances, such as cultural beliefs, ideologies, and master narratives present within particular societies." This idea is reinforced by Feser and Haak's (2023) meta-analysis, wherein a theme found teacher identities as fluid, informed by professional contexts, and being negotiated as teachers navigate their identities; this process of identity change was described as "complex and difficult, and sometimes even painful" (p. 303). Therefore, researchers need to heed to the context of teacher experiences. In agricultural education, this may require paying homage to the balance between agriculturalist, educator, and agricultural educator (Feser & Haak, 2023; Shoulders, 2018;

Shoulders & Myers, 2011). Furthermore, communities may come to their agriculture teacher with traditions, beliefs, and ideas of what agricultural education *ought* to look like, something the teacher must navigate as their identity develops (Traini et al., 2021). Hong et al. (2024, p. 162) reaffirm the importance of context to understanding teacher identity within their definition of teacher identity:

"We define teacher identity as teachers' understandings and beliefs about themselves as teachers in relation to other multiple intersecting identities, shaped through ongoing goal-focused, agentic regulating processes that facilitate the interpretation and re-interpretation of personal and professional experiences which are situated within multilayered, social-cultural-historical contexts."

Feser and Haak (2023) shared the multi-dimensionality of identity (i.e., identity being complex) as well as the importance of felt belonging and school culture to teacher identity. Truong et al. (2025) also found "institutional environments encompass both supportive and constraining factors significantly impacting the identity-cognition-emotion-agency interplay" (p. 8), suggesting context and interactions are important for teacher identity development and navigation. As various studies illustrate, context for teachers matters and agricultural educators conceptualize themselves as specialists. With the conclusions of these scholars in mind, it is important to consider context as a driver of teacher identity, especially among disciplinary specialties. Therefore, this study sought to explore how a first-year agriculture teacher experienced identity development within his context.

Theoretical Framework

This study employed concepts from two theories: McClusky's theory of margin (1963) and Wenger-Trayner and Wenger-Trayner's landscapes of practice (2015). While these theories are different, they each offer helpful lenses for analysis within the school community context. These theories were utilized to frame the case study, lending terms, vocabulary, and concepts to assist the research team in thinking about the case conceptually. Therefore, these theories were primarily utilized to inform case framing and provide precise language.

First, social learning theory, or landscape of practice (LoP) theory, was developed by Wenger-Treyner and Wenger-Treyner (2015). LoPs are local and contextual, characterized by each landscapes' unique agents (i.e., people). As practitioners become familiar with their LoP, they must navigate the unique socio-cultural-historical-context which accompanies it (Hong et

al., 2024). In turn, members of the LoP will evaluate practitioner competence based on the current regime of competence, as defined by the members of the LoP. In the context of this case, the members of the LoP are Curtis's supporters, whether administrators, students, or alumni. Practitioner identities are formed within LoPs and the two are intrinsically linked. Identities and perceived competence are informed by practitioner alignment, engagement, and imagination within a LoP (Wenger-Trayner & Wenger-Trayner, 2015). Alignment refers to individual values and fit. Engagement refers to how a practitioner seeks opportunities to work within their LoP. Imagination is the space where practitioners and communities envision belonging and understand others' perspectives. Each of these manifests differently based on a practitioner's context, which is why locality is important for exploring identity-related phenomena. As career stage shifts, teachers may rely more heavily on one of these components; for example, Balmer et al. (2021) found early career medical educators employed imagination more frequently than those with five years of experience engaging with their LoP. Furthermore, every individual can be a part of multiple membership categories (Wenger-Trayner & Wenger-Trayner, 2015), which may complicate their multiple identities in unique ways – all landscape dependent. LoP theory is helpful because it allows us to conceptualize boundaries for this system while heeding the context of the case.

Each LoP is comprised of communities of practice (CoP). A singular CoP contains a group of individuals who are discussing and honing their practice (Buckley & Lee, 2018; Pyrko et al., 2019). A group of secondary science teachers could be considered a CoP (Polizzi et al., 2021). An individual's imagination of, alignment within, and engagement with a LoP and their CoP will inform their identity (Wenger-Trayner & Wenger-Trayner, 2015). Individuals' competence, socially negotiated between individual and stakeholder, will determine their ability to fit within their LoP. Further, specific practices will be informed by a professional's CoP.

In this case study, we examine how Curtis explores his LoP while being situated within multiple CoPs. CoPs Curtis is situated within include his school's CoP as a teacher (Polizzi et al., 2021), his agricultural program CoP as an agriculture teacher and FFA advisor (Traini et al., 2021), his county's agriculture teacher CoP as the regional advisor, and as a member of the broader Michigan and national agriculture teacher LoP (Wenger-Trayner & Wenger-Trayner, 2015). Within Curtis's FFA chapter CoP, we have administrators, alumni members, and an advisory board as peripheral members and accountability partners who help shape the

occurrences within that CoP (Traini et al., 2021). As such, they have been invited to participate in this case study. While the CoP/LoP are helpful context, language from the theory of margin aids in identifying forces shaping Curtis's experience.

The theory of margin (McClusky, 1963) lends the language of load, power, and margin to this study. Load refers to everything in their lives a person must accomplish, whether it is at home, at work, or elsewhere. Power refers to a person's ability to accomplish their load, having multiple dimensions, like financial, emotional, social, or collaborative power. Margin is the difference between power and load, the space in which an individual can learn, reflect, and add more to their load without adverse consequences for their wellbeing. Having greater margin in life is generally better for individuals who are trying to learn and develop (Hiemstra, 1993; McClusky, 1963).

Methods

A case study was conducted spanning the course of the 2024-2025 school year. This study was approved by Michigan State University's Institutional Review Board. This case was selected because of its expected richness and capacity for informing our understanding (Flyvbjerg, 2006) of teacher identity formation via navigating a LoP. The lead researcher was close to the teacher partner, Curtis, as she was his student teaching supervisor and instructor; because of this relationship, it was evident Curtis was going to experience some unique community dynamics, emphasizing the potential for this case being one wherein learning about teacher identity and community interfaces could occur. Post-hoc, the research team has identified this case as an "extreme/deviant case" (Flyvbjerg, 2006, p. 230), as it may represent a more ideal reality for an early career teacher and be atypical from other cases – a "best case scenario" of sorts.

This case study most closely aligns with Merriam's (1998) conceptualization of case studies as methodology. Throughout the process, triangulation was emphasized, aiming to gain multiple perspectives to best understand the case. Case boundaries are established in the findings section (Merriam, 1998; Mott & Haddad, 2025). In justifying the usage of a case study, scholars such as Flyvbjerg (2006), Thomas (2010), and Ruddin (2006) informed the author's thinking about case study merits. Drawing from these authors, this study centers the value of *phronesis* (i.e., practical value and connectivity to real-life contexts), seeking to encourage "connection to one's own situation" (Thomas, 2010, p. 579). As "cases generate precisely that concrete,

practical, and context-dependent knowledge" (Ruddin, 2006, p. 801) which can be transferred to the context of practitioners, we argue this case is one with value to agricultural education and education generally. Furthermore, this study was designed to value the "spirit of inquisitiveness" (Thomas, 2010, p. 579), and authors are not seeking this inquisitiveness to be "extinguished in a search for generality" (Thomas, 2010, p. 579). Therefore, in keeping with participatory research ethic, as well as case study methodologists, this case's validity arises from the meaning made by readers, researchers, and practitioners throughout (Reason, 2006; Ruddin, 2006). This case was selected as the problem being studied is inherently context-dependent (Flyvbjerg, 2006); taking a case study approach can help to "clarify the deeper causes behind a given problem and its consequences" (Flyvbjerg, 2006, p. 229). Therefore, the utility of this case study lies in its pragmatic nature, with a focus on practice and context to investigate problems with an inquisitive spirit, thus making meaning and connections to other scenarios (Flyvberg, 2006; Merriam, 1998; Mott & Haddad, 2025; Ruddin, 2006; Thomas, 2010).

Participants

Participants were purposively selected in collaboration between Curtis and the lead researcher. Individuals identified as playing a strong role in the school or community were invited to participate in an interview. Members of the local Alumni and Friends Chapter were also invited to participate. School colleagues and students were also identified as playing a major role in the teacher's life, so these individuals were invited to participate as well. Each student was individually selected and invited by Curtis. Participants and their roles in the school community are outlined in Table 1. All participants have been assigned pseudonyms and identifying information has been removed from interview data to provide confidentiality to participants.

Table 1Participant Characteristics

Pseudonym	Community Role	Relation to Case	Age	Pronouns
Curtis	First-year agriculture teacher, FFA Advisor	Research Partner	25-35	He/Him
Ron	Alumni member, advisory board member, school board officer, former agriculture teacher in County, parent of former students	Stakeholder	55-65	He/Him
Jen	Alumni member, advisory board member, FFA contest coach, volunteer, parent of former students, Towne native	Stakeholder	55-65	She/Her
Gary	Alumni officer, spouse of former agriculture teacher, volunteer	Stakeholder	25-35	He/Him
Diane	Alumni officer, mom of two current students and FFA members, volunteer	Stakeholder	35-45	She/Her
Luke	State FFA supervisor, former agriculture teacher, community member	Stakeholder	55-65	He/Him
Emma	Curtis's spouse, volunteer	Stakeholder	25-35	She/Her
Todd	Building principal	Stakeholder	60-70	He/Him
Beth	Student, senior, chapter officer	Stakeholder	≤ 18	She/Her
Matt	Student, senior, chapter officer	Stakeholder	≤ 18	He/Him
Nick	Student, junior, chapter officer	Stakeholder	≤ 18	He/Him
Anna	Student, sophomore, junior chapter officer	Stakeholder	≤ 18	She/Her

Note. To obfuscate participant identity, participant names were changed, age estimations are provided opposed to actual age, and some details have been omitted (e.g., officer roles).

Data Triangulation and Generation

The research team utilized triangulation to ensure the credibility of results (Merriam, 1998). Regarding data triangulation, multiple sources of data were generated, including researcher observations and immersion, field notes, and an analysis of Curtis's social media. Curtis's TikToks were analyzed to identify sentiments captured via the TikTok videos which may or may not have been expressed during interviews. 78 TikToks were analyzed; eight of these were photos to scroll through and 70 were videos, averaging a length of 16 seconds. The lead researcher also served on the school's advisory committee as a postsecondary representative, attended a community-facing event to take observational notes, and had worked with Curtis closely the year before at the same school, providing more immersion within the case (Mott & Haddad, 2025). As a means of ensuring internal reliability and further triangulation (Merriam, 1998), the lead researcher also documented reflections from data generation to ensure relevant ideas were recorded.

Eight semi-structured interviews were conducted with Curtis at various points throughout the school year. These interviews averaged a length of 65 minutes from time of recording; the first two interviews were held in a university building office, whereas the rest were conducted inperson at the school. Community stakeholders like alumni supporters, administrators, and colleagues participated in semi-structured interviews as well, averaging a length of 40 minutes from time of recording. Stakeholder interviews occurred via phone, teleconference, or in-person. Student participants were invited to a focus group comprised of 4 students, which went on for 51 minutes from time of recording; this interview was held in Curtis's classroom. Curtis was present in the student focus group to provide comfort for students in talking with the researcher, acknowledging students would need to be encouraged to speak openly while Curtis was present.

Data Analysis

Interviews were inductively coded utilizing open and axial coding (Merriam & Tisdell, 2016). While the theoretical framework informed researcher schemas, theories were not utilized to code deductively. The constant comparative method was also employed during the coding process (Glaser, 1965) to ensure data were sorted appropriately as codes emerged. The lead researcher conducted a round of preliminary coding, then the research team met to negotiate individual codes. This also served as a means of data verification (Morse, 2018). Concepts of McClusky's theory of margin (1963) were employed when power, load, or margin were present

conceptually. As the findings were best presented by sorting codes into categories, categorization was conducted by the lead researcher. Categorization was conducted by bringing like codes together.

Content from TikToks was analyzed via concept coding (Saldaña, 2016), with Saldaña describing a concept as a "word or short phrase that symbolically represents a suggested meaning broader than a single item or action – a bigger picture" (p. 119). The process of coding included reviewing 78 TikToks, assigning each a concept or multiple concepts expressed by the video; multiple concepts were only assigned if their content spoke to each. Concepts derived from these videos included personal identity fulfillment, teacher identity fulfillment, job tensions, and community. Once coded, the researcher talked through findings with Curtis to see if he resonated with what was discovered. When tweaks were needed, they were made. All relevant aspects from researcher immersion, observation, and field notes were utilized to evaluate the credibility of interviewees and what was imagined versus reality; based on a review of these documents, no credibility concerns were identified.

Findings and Discussion

This case centers Towne High School (THS), which is situated within the community of Towne. Towne is situated within County, wherein "we have eight public high schools... with seven active FFA chapters, and that has always been that way" (Todd). To give an idea of the broader landscape, County is situated within one of six FFA regions in Michigan. This area is highly competitive as it pertains to FFA competitions. Curtis shared with me Ron's thinking on the region, calling it a "gauntlet" and indicating "you have to be ready to win states to get out of regionals sometimes." Yet, there are many teachers in County who are sure to help Curtis with seemingly anything he needs.

Curtis describes Towne as "a very rural community" where "over 50% of our students qualify for free and reduced lunch through the state." Additionally, Curtis said there are "a lot of students that come from split households," and "10 to 15%" are "almost transient in nature," only staying in the community for "two to three years" before "they have to move and move on." Per Curtis, "we're a district of about a thousand kids, a little over 340 in the high school." THS is a school which has their high school and middle school students in the same building. The building is well-managed and well-maintained, having just secured a new bond and new classroom furniture.

Todd shared more about the history of the THS agricultural education program; having been the principal since 2017 and involved in the district since 1999, he has seen four agriculture teachers within the program, the fourth being Curtis. Regarding these teachers, he shared: "And they're all good." Jen offered more insights on the agricultural education program: "Towne has always had a very strong community around their FFA program and Agriscience program." Jen also offered more insight into who is involved in the Alumni and Friends Chapter: "We have new parents, but we also have parents and grandparents of kids who, you know, are now out ten years out of the chapter, but they're still involved." During one of the Advisory Board meetings the lead researcher attended, members remarked on the need for repairs for the road leading to the back of the building, where the greenhouse and barn are located. The next time the lead researcher visited THS, this road had been fixed. This demonstrates a commitment to program infrastructure and an administration supportive of its agricultural program. Participants in this study shared a variety of benefits from having an agriculture program at THS. Many participants emphasized a focus on agricultural literacy, like Nick. Nick explains,

"[It's important to teach] everyone the importance of agriculture, and I think it's important for people to know where their food comes from. And that's why agriculture education kind of, to me, exists, is to educate students on where their food comes from, but also just the agricultural industry as a whole. I mean, many people don't realize that there's so many different job opportunities that come from the ag industry and it's not just about livestock and farming itself, and being able to educate others on that is, I think, very important."

Once Nick was finished sharing, Beth chimed in, adding: "It's not even just about food too, like forestry and all the other agricultural products that we get that aren't necessarily just like [in the] grocery store are important too." Each participant in this study shared how they felt agricultural education existed to help achieve agricultural literacy in various communities, including their own. Other benefits of agricultural education shine through as well, including building a willingness in students to invest in their community (Luke), teaching leadership (Anna, Beth, Jen, Luke, Nick, Ron), career awareness (Diane, Emma, Todd), pubic speaking skills (Gary, Matt, Ron), comfort with social situations (Diane, Gary, Matt), providing opportunities (Beth, Diane, Gary, Matt), building friendships (Beth, Gary, Matt, Jen), developing soft skills (i.e., time management, organization, teamwork; Anna, Jen, Matt, Nick, Todd), hands-on learning (Beth,

Matt, Nick, Ron), and feeling belonging (Anna, Beth, Diane, Matt). At THS, Curtis and stakeholders are providing ample opportunities for developing agricultural literacy and benefit from the agricultural education program.

At one of THS's many public-facing events, the researcher observed a keen sense of community. There were booths to showcase the rich history of the THS FFA chapter, boasting nearly 90 years of successful agricultural education within Towne. They proclaimed "shaping tomorrows agricultural leaders" while showcasing a variety of student-earned awards, FFA memorabilia, and a chapter scrapbook featuring currently enrolled students. Students were present at this event, playing a large role in staffing various booths. Also present were other teachers from County, a pre-service teacher currently student teaching, Emma, Ron, Jen, and other stakeholders. Ron was working to fundraise, and Jen ensured the cafeteria was well-managed for attendees. During this event, Curtis reported a late night, an early morning, and vendors being a tough bunch to satisfy.

Curtis himself has had career experience outside of teaching. He was hired into his role at THS after completing his student teaching there. He is someone who isn't afraid to ask for help, regularly referencing the people he's requested help from. Curtis is a storyteller who cares deeply for his students and their success, but he also feels that students must take responsibility for their success, too. As a teacher, Curtis has a big heart and a penchant for being sarcastic, which he acknowledges and likes to joke about using as a classroom management technique. Overall, Curtis is good-natured and easygoing (so long as he is permitted to be), responsible, and his own worst critic. A quote which captures the essence of Curtis is this: "I know I'm doing good. I don't believe it when people tell me it, you know, yet I know it. Because I'm, I'm the biggest self-critic."

County, Towne, THS, THS FFA, and Curtis are all important factors in this case study. LoP theory demonstrates imagination, alignment, and engagement are all important actions which inform teacher identity development. Presented below are several key findings of this study: Alignment between Curtis and stakeholders, imagination within a CoP/LoP, managing Curtis's workload, Curtis's identity development across time, and setting Curtis up for retention.

Alignment between Curtis and Stakeholders

This section presents several codes which speak to the alignment between Curtis and community supporters. These codes are showcased in Table 2, alongside an exemplar quote.

During his time at THS, Curtis has built relationships with people who are able and willing to help him and his students. The THS community is incredibly passionate and wants to help their selected teacher, Curtis, succeed in his role.

 Table 2

 Codes Representing Synergy Between Teacher and Stakeholders

Code	Exemplar Quote	Speaker
Community Supporting Teacher	"Yeah, it's my program, but I'm not the not the one doing everything."	Curtis
Finding Power	"I'm really excited about that class [Conservation]. It's just my passion."	Curtis
Good Intentions from Supporters	"I would like to think I'm helping [Curtis] more than I'm hurting."	Diane
Supporter Bolstering Power	"[W]e [Ron and Jen] sit on this advisory board, so we support him that way. Being on the school board, I, I always tell him, I am a lever for you to pull. So when you need something through the superintendent, through the board, through finances, through whatever, all you do is call me, and I will pull that lever for you, and we'll make that happen."	Ron
Supporter Taking Load	"Our goal is to take things off of his plate. And that's a, in my mind, a huge thing for me, an ag teacher myself."	Ron
Synergy Between Teacher and Stakeholder	"So it was nice to see her perspective too, because I think she sees a lot of the things that I see, which is nice to have from alumni."	Curtis

Curtis is in a location rich with synergies between himself and his supporters. He acknowledges this multiple times across multiple interviews. Luke shared a strategy of his which helped him as a teacher, and this strategy is one Curtis seems to have access to:

"If we [teacher and community member] work together and find a solution together and you think you're part of that solution, then you're going to fight like crazy to make that solution work, and I did that a lot. I hadn't taught very long before I figured that out."

In his quote, Luke is referencing the need to get stakeholders on board with your causes as teachers. Diane provides evidence she is aligned with Curtis and his teaching, saying,

"I know I very strongly feel that he wants what's best for the kids, wants to see the program grow, wants the alumni to be more active and involved so that they can bring more opportunities to the kids. So definitely, we both, feel the same there."

This alignment is also present with Todd, who goes a step further, sharing, "The input from those other groups is wonderful, and their help can be invaluable. But he [Curtis] is the ag science teacher. He is the FFA leader." While Todd acknowledges and appreciates help for Curtis from supporters, he also reinforces to Curtis who has the final say – Curtis himself. These synergies help Curtis maintain some amount of margin in life.

Supporters are finding ways to improve Curtis's margin, from both bolstering his power and reducing his load. Examples of how supporters are bolstering Curtis's power include: providing meaningful classroom décor, being enthusiastic, guiding conversations, extending help, extending opportunities, documentation, camaraderie, sharing diverse experiences, receptivity, trust, mentorship, generating ideas, donating funds, building strong relationships, sharing appreciation, donating time, providing emotional supports, ensuring adequate financial compensation, and encouraging Curtis to pursue his passions. While this power bolstering is quite impressive, supporters are also doing their best to reduce Curtis's load. Students, alumni, mentors, and administration are doing this by completing necessary tasks as requested, easing worries, redirecting anger from community members, dismissing him from meetings, coaching contest teams, volunteering to judge contests, transporting students, event assistance (organizing, facilitating, staffing), providing resources (from community, school, and county), purchasing premade curriculum, facilitating conversations, fundraising, being leaders, being responsible, and assisting with missed work makeup. Overall, many of Curtis's key supporters are doing a great deal to help him increase his power and decrease his load, thus assisting him in maintaining margin.

By assisting Curtis with maintaining margin, THS stakeholders are trying to provide him with the space he needs to learn, grow, and develop as a teacher. If they were not making this dedicated and often coordinated effort, Curtis may face even more trials and tribulations in his first year of teaching. Even with community supports, there were plenty of factors which worked to decrease Curtis's margin.

Imagination Within a CoP/LoP

There are two major areas in which Curtis experienced decreased margin and tried to manage it himself – while navigating his CoP/LoP and while navigating/coping with his load.

This process involved a lot of imagination as Curtis navigated his CoP/LoP. Table 3 showcases

codes which inform how imagination within a CoP/LoP may have impacted Curtis's identity and margin in life.

Table 3Factors Impacting Identity From Navigating CoP/LoP

Code	Exemplar	Speaker
Expectations for Agriculture Teacher	"You take this place over, you better do the crap they're doing because [community members] expect you to do crap."	Luke
First-year Teacher	"I appreciate the fact that a lot of people do not see me as a first-year teacher, but I don't want them to overlook the fact that I'm a first-year teacher."	Curtis
Imagination vs. Reality	"I did not imagine it would be this much of a headache, but we're making progress."	Curtis
Students Need to be Responsible	"You know, [Curtis] can only encourage so much - if [students are] not interested to go the extra mile, to do the contest, to do the skills, to do the, the extra legwork, they're only going to get so much out of it."	Diane
Tensions with Agriculture Teachers	"I think [other agriculture teachers in the region] are all mad at me right now."	Curtis

Imagination plays heavily into these codes, especially as it concerns reality. Expectations for agriculture teachers, including who they should be, how they conduct themselves, and what they ought to do, were included by many participants in this study. Todd shared, "I'm not organized enough to be an ag teacher." He added, "I've never heard of a case where an FFA ag teachers left somebody else hung out to dry, that's just not who they are. They believe in service." Ron said the following: "You gotta be a special type of crazy to be an ag teacher. Trust me." These quotes showcase a variety of expectations for agriculture teachers, which Curtis himself included in his interviews. These expectations inform perceptions of whether one belongs in a community and assist community members in evaluating the competence of the teacher. Not meeting these expectations could have a tremendous impact on a teacher's experience, just as it has impacted Curtis. Fortunately, Curtis and his community are synergistic; their ideas of what competence means are compatible.

While this compatibility is a boon, Curtis has been navigating competence between himself and other agriculture teachers. Tensions between agriculture teachers largely stemmed from individual teachers, as well as Curtis's perceptions of how teachers felt based on decisions regional officers were making for regional activities. Curtis was asked if he often compared himself to other agriculture teachers, and he shared those feelings ebb and flow for him. He tries to ground himself, though:

"So I think that's the hard part is everybody goes, well this is what the other chapters are doing. Okay, well, we're not them. If they're doing something cool I'm going to steal it... But, like, why does it matter how many kids compete?"

He is working to reconcile what is imagined, like the pressure to have kids compete, to what is real – how those numbers may matter. Other interpersonal tensions here often related to differing expectations for agriculture teachers and what they ought to be doing. For example, Curtis and another teacher had a dispute wherein Curtis felt the teacher did not properly credit a volunteer who had coached a successful contest team.

Being a first-year teacher brought with it a healthy dose of evaluating imagination versus reality, leaving Curtis to reconcile what he anticipated with what had occurred. Curtis knew, acutely, he was a first-year teacher, sharing more on what he imagined that was like. Todd complemented this, sharing how Curtis was less "green" than other teachers he'd hired. Understanding what being a first-year teacher *meant* was a challenge for Curtis, especially because of student teaching in his mentor's classroom the year prior and now transitioning into his own program at THS. A lot of Curtis's imaginings regarded what students should be doing, often providing dissatisfying results. Many of Curtis's supporters and Curtis himself acknowledged students needed to be responsible and take ownership of their own agricultural education experiences. Quotes within this code reference the classroom/lab, FFA, and SAE. In all three domains, students need to ensure they are working hard themselves and take responsibility for their own learning and development.

As this imagination element occurred, Curtis was engaging with his CoP/LoP. Despite efforts from community supporters to help him maintain a healthy amount of margin in life, Curtis still needed to find ways to manage and cope with his workload.

Managing his Workload

A large part of this study focused on how Curtis's workload was shaped, internally and externally, as well as how people influenced Curtis's workload. Explored in Table 4 are a variety of different factors which affected Curtis's load, both positively and negatively. These largely stem from engagement within Curtis's community context, within his CoP/LoP. Overall, this study's participants focused more on load than power.

Table 4Factors Impacting Identity From Navigating CoP/LoP

Code	Exemplar	Speaker
Bearing Load with Humor	"Yep, sarcasm as a classroom management strategy? No, never."	Curtis
Boundary Friction	"I learned how to say no, and now I'm bad at it again."	Curtis
Fear of Messing Up	"It would be like, oh, man, I made a mistake. Now somebody is going to come yell at me. And, you know, we expect better and all this stuff."	Curtis
Load Reduction Strategies	"I mean, every teacher in their first couple of years has these grand ideas of how they're going to do things, but after the first marking period, I was like, why am I wasting my time and effort trying this? Like, I can only make kids care so much and I'm not giving up on them, but like, the missing work kills me."	Curtis
Lack of Predictability	"But like in general, I think that he will be able to just work with the workload more. I don't necessarily think it will become any easier as time goes on. Maybe more like predictable and understood."	Emma
Load from Program Management	"The blessing and the curse of FFA and agriscience education is that it is a freakin' monster. They add things every year and hardly ever do they say, oh, by the way, we're going to take this away. No, we just keep adding and adding and adding and we, and, so, there's always something to do."	Ron
Load Symptoms	"I do not remember January and February."	Curtis
School-Based Load	"Because what the hell? Like, I understand that the state budget reduced cost reduced CTE money by 20%. Where's the other [\$2400]? So I don't know what that'll entail."	Curtis
Society-Based Load	"It's just that that group of kids, those families that are there, there is no push at home. There is no self-preservation in mind. They are just here."	Curtis
Students Adding Load	"If I try to make you guys do anything you're going to throw a hissy fit anyways."	Curtis
Pride in Students	"But I appreciate the ones that are actually trying and asking questions."	Curtis

Load was added to Curtis's life by a variety of living and non-living components. These were sorted into a few different codes: Load from program management, school-based load, society-based load, and students adding load. Load from program management involved how FFA, SAE, and livestock/facility management were stressing Curtis. Caring for the school's hogs occupied a great deal of our February interview, wherein Curtis was checking the barn camera on his phone, counting piglets, and sharing how he was sick and needed rest after waking up hourly to check on the sows. The greenhouse was also a major source of stress for Curtis initially, with him sharing, "I just want this greenhouse done. But I need to find some grants." Once the greenhouse was finished, he felt much better.

School-based load and society-based load pertain to the factors within school or society which influenced Curtis's teaching. The school-based load code hearkens to how school policies, programs, and infrastructure created more load for Curtis. During our December interview, Curtis shared: "Still don't have pin pad access on the barn." Regarding the school's phone policy implemented this year, "the hard part is the school won't just say, 'This is it. This is the policy.' They leave it very open to us [the teachers]. Their, their limitation was we don't want to see them [phones]." This sort of communication may increase teacher workloads, as it did for Curtis. Society-based load largely relates to how changes in societal factors, such as parenting styles, social media/technology, and government mandates are increasing load for Curtis. Disengaged parents were a major source of load, with Curtis saying students were failing classes "because the parents aren't involved. There's, there's no home support. They, they, there's no repercussions to not doing their work." Another parent took to social media to complain about a programmatic offering, and Curtis texted me about it after it happened. I commiserated with him. Later, he shared, "I don't understand her. I don't. Why do you let your kid take this class and be involved in this program if all you're going to do is bash the program on Facebook? Goodness gracious." Finally, Curtis was facing a great deal of pressure to secure credentials for his students, which are now tied to program funding. These are all examples of how external agents, or forces, are influencing Curtis's load.

As Curtis progressed through the year, his attitude toward teaching shifted. He began sharing more about his load reduction strategies. These load reduction strategies largely relate to setting boundaries, preserving his peace, and finding efficient strategies. At the beginning of the year especially, Curtis tried to set and maintain boundaries. He pushed his students hard to begin

logging their SAE hours into their agricultural experience tracker (AET; a software for agricultural and SAE record keeping) for ease of completing degrees, a battle he fought for quite some time, requiring innovation and efficient strategies to see progress in his students. Yet, when he spoke with me, he was adamant he would not be taking time during his summers to get students caught up on their SAE hour logging, stating "I'm not doing that." While he fought students to get them to log their hours, there were other battles he chose not to engage with. In fact, he began to focus on preserving his peace:

"I guess that's the biggest difference from like the start of the year to now is it's just like, go ahead. Like, do what you're going to do. I'm going to, I'm going to help the ones out that want my help. And I'm going to make sure you don't suffer. Like, but I'm not putting my time and energy into you anymore."

This strategy was applied to students and stakeholders who were creating challenges for Curtis. Fortunately, efficient strategies were implemented throughout his experience, especially with technology to help him address other challenges, like grading and barn chores.

With such a burgeoning load, Curtis had to find ways to cope. Coping mechanisms for Curtis included his TikTok, being humorous, and trying to focus on the good things students were doing. Pride in students was evidenced via conversations with Curtis; many of these points of pride stemmed from students taking responsibility and engaging with leadership opportunities. Other participants also conveyed a sense of pride in students who worked to grow and develop leadership qualities. Curtis was also sure to let his personality and sarcasm shine in a variety of exchanges, wherein he was navigating job tensions and trying to keep a sense of humor about things. A lot of this had to do with the emotional load students added, primarily via creating classroom management challenges or complaining about how things were being implemented. When sharing how students felt he was a jerk, he sarcastically quipped, "Yeah, I'm a jerk." To me, a means of distancing himself from emotional harm coming from sentiment like this being directed toward him, especially from students, whom he cares deeply about. As Beth said, "We give him a lot of crap, but, like, he, he cares."

Curtis's Identity Development Across Time

Another aspect Curtis had to contend with was how his identity developed over time. He demonstrated a variety of considerations he made to inform his identity and feel successful as a first-year teacher at THS. These codes are displayed in Table 5, along with exemplar quotes.

 Table 5

 Codes Derived from Curtis's Identity Development Journey

Code	Exemplar Quote	Speaker
Supporting Students	"So I just want I just want to be able to have conversations and come up with ideas and come up with a solution for the problems that the kids are facing."	Curtis
Ownership	"But I got to know him, and he never wants to be a burden. I'm like, dude, there are things you got to cue me in on because I can help."	Todd
Student Expectations	"I'm glad that they picked up on that because, yeah, I do get pissed off and I stop. I just I can't tolerate being disrespectful and that will burn out really fast."	Curtis
Comfort with Risk	"I'm trying to not I tried to really go into this with an open mind because I am, you know, new. It's a new concept. Cool. Let's give it a shot."	Curtis
Seeking Success	"I think a lot of the other answers we have were like, either he's going to help us because he has expertise or even if he doesn't, he'll find someone like even for outside of FFA stuff."	Beth
Desire for Engagement	"He's a, he's a good leader in the class. I feel like he makes the kids feel comfortable. He's kind of got a silly side to him that I feel [her children] really appreciate."	Diane
Figuring Himself Out	"I feel better than I did at the start of the semester. Ask me again in three weeks."	Curtis

Throughout the course of the study, it was clear there were some aspects of teacher identity Curtis was committed to maintaining. The first was providing supports, no matter what they may have looked like to his students. This was driven by his desire for success. Curtis wanted his care for his students to be something visible and *felt* by his students. He is someone who extends

grace and second chances to students, while striving to set and maintain expectations for those he works with. He shared a story about an experience he had in class:

"Especially because I looked at one of the juniors this year and I was like, I have basically like two rules. Don't be on your phone and don't throw things. And you've broken both of them in the first five minutes of class. Like, I don't ask for a lot."

He is working to make his expectations clear, to reinforce them, and to make it known that he cares for students and wants to see them succeed. A part of his philosophy is embodied in this quote: "And it's like, how do you have these kids work towards a goal or, you know, expect them to sell this and things like that if you don't communicate that?"

While Curtis is dedicated to supporting students and seeking student success, he is also comfortable with risk. For example, the opportunity arose to grow poinsettias and, despite never having tried this before, Curtis gave it a try. It did not end up being a feasible fundraiser this year, but he was okay with that. Curtis's comfort with risk is, in part, complicated by the immense feelings of ownership and responsibility over his program he experiences. He captured this feeling as he was discussing how things felt this year after he had student-taught at THS the prior year: "Just, the only thing that's changed is it's now my program and I don't know why I feel like that makes it any different, because not a whole lot has changed." When working through relationships and challenges, he takes responsibility onto himself: "And I said, it's a frustration, and I recognize that we have to work together to fix that." He is viewing himself as the leader of the program, and, from his perspective, is now the one who is responsible for its success. Yet, he acknowledges elsewhere this perception is untrue, as his supporters help him in a plethora of ways to achieve his goals. These discordant feelings were often present in the same interviews, demonstrating tension in identity construction.

Setting Curtis up for Retention

Finally, we see evidence of Curtis's first year being regarded positively. He is willing to imagine a bright future and several codes demonstrate this as his reality. Other stakeholders were doing this imagining as well, hoping to help Curtis be retained as THS's agriculture teacher and FFA Advisor. Table 6 showcases these forward-looking codes and exemplar quotes.

 Table 6

 Codes Demonstrating an Enthusiasm for Longevity At THS

Code	Exemplar	Speaker
Anticipating a Positive Future	"I literally was telling my alumni, you know, a couple of the alumni people after the meeting last night, I said, this is I feel like going to be a great group of freshmen."	Curtis
Longevity	"And [Curtis is] trying to encourage more people to get involved and more people to join. And he's like, he's getting a middle school class for the middle schoolers so they can get involved, like earlier than just freshman year."	Matt
Feeling of Support	[Recounting how he was depressed] "And I think that's why it's important to realize in two years I've gone from that extreme to, yeah, I've been doing this for a decade. No I haven't! It's, it's been six months! And that's a hard thing to I mean, think about sometimes, but the community has just made it that way. And not just the [Towne] community. The [County] community. This weird, fun loving group of basically brothers that are 30 some years apart in age."	Curtis

Despite it all, Curtis has been anticipating a positive future – and he is not doing this in isolation. He is excited to see what new students bring, and students are excited to see how Curtis develops as a teacher. Nick shared,

"So I'm sure 3 to 4 years from now, yeah, he's going to be a totally different teacher because he's going to be teaching the classes that he wants to. He's going to know what the heck is going on and it's going to be good."

Todd shared, "It's a very worthwhile program. I hope it goes on forever." He is trying to do his part to ensure Curtis is afforded the ability to keep the program around, just like the many stakeholders interviewed for this study. Everyone involved has a vested interest in Curtis's retention at THS.

Furthermore, it is abundantly clear Curtis feels tremendous support from many people within THS, Towne, and County. This feeling of support is deeply embodied, and supporters like Ron, Jen, Emma, and Todd are all working hard to ensure Curtis can access this feeling of support – a feeling of belonging. Emma shared, "[Curtis] knows I'm always there to help us figure out the logistics." Other agriculture teachers were also a key support pillar, with two being referenced by name as they had helped Curtis with many of the pig problems he was facing.

Curtis shared, "Yeah, I mean, it's just the group of people we have is good and makes it a good environment. They answer the questions, they step up and help." Ron and Jen invite Curtis and Emma out to dinner and have them over to their house, with Jen leading an "agriculture teacher spousal support group" to help Emma, as both Jen and Emma felt they were "married to the FFA" being married to their husbands. There are many layers of support for Curtis, and these are deep and profoundly felt.

Summary

Overall, the findings from this case study provide valuable insights into our research questions. These key takeaways are explained further below.

How is a first-year teacher's identity impacted by their landscape of practice?

Our data suggest Curtis's identity was impacted by his landscape of practice in a plethora of ways. He was supported by his synergistic communities of practice as he explored what being an agriculture teacher meant to him. His community tried to ensure he had a heathy amount of margin in life, which assisted in having the mental space to process complex identity formation processes (Hong et al., 2024).

How is a first-year teacher's workload shaped, internally or externally?

Regarding RQ2, Curtis's workload was shaped by internal factors, such as his desire to see students succeed, his innate desire to build connections, and his intrinsic motivation to develop a strong THS agriculture program. Curtis's workload was also shaped by external factors, like school- and society-based load, load from program and facility management, load from students, and community stakeholders working to promote Curtis's power and decrease Curtis's load.

How do school community members influence a teacher's workload?

School community members had many ways of impacting a teacher's workload. In this study, Curtis's stakeholders worked to support him via personal, emotional, and physical means. Many of Curtis's supporters actively sought to help him make it through his first year of teaching, aiming to take aspects of his workload to ensure he was not overburdened by existing expectations stemming from this historic program.

Conclusions and Recommendations

Overall, this case study demonstrates the power of community synergy and support in shaping a first-year teacher's power, load, and margin in life. Furthermore, establishing oneself

as a competent individual, as Curtis has, may be less challenging when an individual has inherent alignment with their community. This helps confirm Haddad et al.'s (2023) assertion that community tensions may negatively impact a teacher and their boundary setting. While Curtis and his supporters are not in perfect alignment, they are also not actively vying for control over the program or presenting hurdles to one another.

This case also illustrates how an embodied feeling of support may inspire feelings of positivity and visions of longevity, from a teacher as well as stakeholders (i.e., Haddad et al., 2023; Milford & Reed, 2024; Nazari et al., 2023; Traini et al., 2021). By implementing a great deal of practical actions to both bolster Curtis's power and reduce his load, stakeholders interviewed did their best to ensure Curtis had workable amounts of margin in life. The domain these stakeholders have the least amount of influence over – the classroom/lab – was the place in which the least help was provided. As Curtis conceptualizes himself as an agriculture teacher first, the classroom/laboratory is primarily his responsibility. Students and classroom elements presented many challenges to Curtis, especially as he navigated his identity as a teacher. As Curtis is interacting with his students every day, it makes sense for the greatest amount of strife to come from the classroom domain. As he can bear the load of the FFA alongside talented, appreciative, and hard-working supporters, the burden from the FFA component is lessened. The SAE component is bore in large part by Curtis as well, but this component is one which could relate more heavily to students and their own implementations. Students need to be responsible, after all. The three-component model, when taken as a whole, was well-supported by THS's community.

Looking across the literature, this study speaks to several others. Disberger et al. (2023) highlighted the need to differentiate between early career and veteran teachers, which individuals at THS were sure to do – especially Curtis. For Curtis's unique context, this line becomes blurred, but he still reflected on being a first-year teacher and what that meant to him. Next, Curtis displayed a great deal of community building and connection making, ideally supporting his retention within the profession (DeLay & Washburn, 2013). As THS's school environment is incredibly supportive, Curtis is facing minimal barriers from administrators, supporting his retention (Berry et al., 2021; Buchanan et al., 2013; Hasselquist et al., 2017; Walker et al., 2004); however, some issues with students, parents, and social media may present further challenges for him.

Traini et al. (2019) found early career teachers felt they could have success or work-life balance, but not both. In Curtis's case, supporters are helping him find success and trying to support his work-life balance – Curtis may be one of the few first-year agriculture teachers where having both success and balance is more feasible. I asked Curtis for his perception on this post-hoc, and he shared, "I honestly would say both! It truly does come down to your support group and I know I have an alumni base who can run things without me if I needed it." This demonstrates Curtis's definition of success and work-life balance which may differ from participants in Traini et al.'s (2019) study. This warrants further examination.

Components of being a successful agriculture teacher outlined by Traini et al. (2019) include winning awards, blue banners, securing grant dollars, having more students enrolled in programs, and high FFA participation. Curtis acknowledged pressure to do the same throughout, but maintained he saw himself as successful – likely because, like the participants in Traini et al. (2019), Curtis's personal definition of success differed from these expectations of success experienced by agriculture teachers. Additionally, (healthy) work-life balance is also subjective (when not explicitly defined); Traini et al. (2019, p. 248) argued,

"[W]hile participants acknowledged tensions that exist between notions of success and notions of work-life balance, any progress on achieving such balance is done in vain as no examples of balanced agriculture teachers exist, and messages about success and work-life balance are paradoxical and unsubstantiated."

Curtis feels he has achieved work-life balance to some degree, yet his spouse (who is "married to the FFA") and other supporters are also working together to help him achieve this perception.

Does someone have work-life balance if that balance requires multiple individuals to maintain it?

When it comes to teaching agriculture and feeling balance, is a Towne required? This is, perhaps, a testament to why Curtis's case is being classified as deviant by the authors of this study.

Curtis's case is deviant because finding a combination of these historic programs with high-caliber supporters like Ron, Jen, Gary, and Diane may be incredibly challenging, especially when an informed principal like Todd and students such as Beth, Nick, Matt, and Anna are involved in leadership roles. Furthermore, Emma's support and interest in helping Curtis assist him with work-life balance, too. Curtis, being a first-year teacher with prior managerial experience, who was hired in at the same district where he student-taught, is also incredibly unique. Recreating THS and Curtis's experience would be a challenge indeed.

Overall, supporters may play a role in the feasibility of both success and work-life balance for agriculture teachers, especially those who enter the profession at historic programs. Harnessing positive support from individuals who understand their community can be incredibly powerful for early career teachers, especially first-year teachers, and provide more opportunities for healthier amounts of margin in life.

Limitations and Recommendations

As this is a case study, certain insights will be unique to this case. As this case is an extreme/deviant case (Flyvbjerg, 2006), the authors do not anticipate a great deal of generalizability from this case. Transferability is more realistic, and the overarching message of this work is likely transferable to a variety of contexts: The more synergies there are between a teacher and their community, the more likely the teacher will be retained.

Recommendations for practitioners and their community supporters largely relate to bolstering synergies between teachers and stakeholders. While teachers are likely to try their best within a job they are selected for, others play an important role in shaping the teacher's workload, margin in life, and identity development. As a supporter, try to learn to anticipate teacher needs; offer plenty of help in practical ways; and communicate respect, support, and appreciation. Students, as the primary contacts for teachers daily, would do well to try to minimize added burden. Seizing opportunities for responsibility and leadership are immensely helpful. Parents and guardians, taking an active role in your student's life is helpful not only for your student, but also for their teacher.

Recommendations for future research include conducting more studies on how community synergy or conflict may impact teacher retention. Teachers, while often the focus of teacher retention studies, do not teach in a vacuum – their identities are formed in tandem with their socio-cultural-historical context (Hong et al., 2024) and the people within it, so these factors must be considered. Discovering how supporters, teachers, administrators, and others may increase synergies practically may help communities who wish to see their teachers retained do just that – retain their teachers. As all these aspects are interconnected, this necessitates a systemic approach to exploring these phenomena. Furthermore, generating insights which may be widely applicable to various teaching contexts could be vastly beneficial for addressing the issue of teacher retention.

REFERENCES

- Balmer, D. F., Rosenblatt, S., & Boyer, D. (2021). Navigating landscapes of practice: A longitudinal qualitative study of physicians in medical education. *Medical Education*, 55(10), 1205–1213. https://doi.org/10.1111/medu.14572
- Berry, B., Bastian, K. C., Darling-Hammond, L., & Kini, T. (2021). The importance of teaching and learning conditions: Influences on teacher retention and school performance in North Carolina [Industry Brief]. Learning Policy Institute. https://learningpolicyinstitute.org/product/leandro-teaching-and-learning-conditions-brief
- Bjorklund, P., Daly, A. J., Ambrose, R., & van Es, E. A. (2020). Connections and capacity: An exploration of preservice teachers' sense of belonging, social networks, and self-efficacy in three teacher education programs. *AERA Open*, *6*(1). https://doi.org/10.1177/2332858420901496
- Buchanan, J., Prescott, A., Schuck, S., Aubusson, P., Burke, P., & Louviere, J. (2013). Teacher retention and attrition: Views of early career teachers. *Australian Journal of Teacher Education*, 38(3). https://doi.org/10.14221/ajte.2013v38n3.9
- Buckley, P., & Lee, P. (2018). The impact of extra-curricular activity on the student experience. *Active Learning in Higher Education*, 22(1), 37–48. https://doi.org/10.1177/1469787418808988
- The Council. (2016). *National quality program standards for agriculture, food and natural resource education*. Accessed from: https://ncffa.org/as/ncffa/i/chan/images/tc_national_quality_program_standards_revised.pdf
- Croom, D. B. (2008). Development of the integrated three-component model of agricultural education. *Journal of Agricultural Education*, 49(1), 110–120. https://doi.org/10.5032/jae.2008.01110
- DeLay, A. M., & Washburn, S. G. (2013). The role of collaboration in secondary agriculture teacher career satisfaction and career retention. *Journal of Agricultural Education*, *54*(4), 104–120. https://doi.org/10.5032/jae.2013.04104
- Disberger, B., Washburn, S., Hock, G., & Ulmer, J. (2023). A qualitative analysis of agriculture teacher's attitudinal changes toward the teaching profession in the first three years of teaching. *Journal of Agricultural Education*, 64(1), 61–81. https://doi.org/10.5032/jae.v64i1.30
- Feser, M. S., & Haak, I. (2023). Key features of teacher identity: A systematic meta-review study with special focus on teachers of science or science-related subjects. *Studies in Science Education*, 59(2), 287–320. https://doi.org/10.1080/03057267.2022.2108644
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, *12*(2), 219–245. https://doi.org/10.1177/1077800405284363

- Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social Problems*, 12(4), 436-445.
- Haddad, B., Traini, H., & McKim, A. (2023). We've crossed a line: A philosophical examination of systemic implications surrounding SBAE teachers' attempts at boundary setting. *Journal of Agricultural Education*, 64(1), 82–95. https://doi.org/10.5032/jae.v64i1.31
- Hasselquist, L., Herndon, K., & Kitchel, T. J. (2017). School culture's influence on beginning agriculture teachers' job satisfaction and teacher self-efficacy. *Journal of Agricultural Education*, 58(1), 267–279. https://doi.org/10.5032/jae.2017.01267
- Hiemstra, R. (1993). Three underdeveloped models for adult learning. In S. B. Merriam (Ed.), *An Update on Adult Learning Theory* (Vol. 57, pp. 37–46). Jossey-Bass Publishers.
- Hong, J., Cross Francis, D., & Schutz, P. A. (2024). Reconceptualizing teacher identity development. *Educational Psychologist*, *59*(3), 159–176. https://doi.org/10.1080/00461520.2023.2292713
- McClusky, H. Y. (1963). The course of the adult life span. In W. C. Hallenback (Ed.), *Psychology of Adults* (pp. 10–20). Adult Education Association of the U.S.A.
- Mehdizadeh, M., Pourhaji, M., & Derakhshan, A. (2024). Evolution of communities of practice, realignment of possible selves, and repositionings in EFL teacher professional identity development: a longitudinal case study. *The Language Learning Journal*, *52*(3), 336–348. https://doi.org/10.1080/09571736.2022.2163685
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. Jossey-Bass.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Milford, Z., & Reed, A. C. (2024). From student to teacher: Renegotiating professional identities. *Educational Considerations*, 49(3). https://doi.org/10.4148/0146-9282.2381
- Morse, J. (2018). Reframing rigor in qualitative inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Inquiry* (5th ed., pp. 796–818). SAGE Publications.
- Mott, R., & Haddad, B. (2025). Call to better qual: A philosophical and methodological examination to advance case study research. *Journal of Agricultural Education*, 66(1), 41. https://doi.org/10.5032/jae.v66i1.2762
- Nazari, M., Seyri, H., & Karimpour, S. (2023). Novice language teacher emotion labor and identity construction: A community of practice perspective. *Teaching and Teacher Education*, 127, 104110. https://doi.org/10.1016/j.tate.2023.104110

- Polizzi, S. J., Zhu, Y., Reid, J. W., Ofem, B., Salisbury, S., Beeth, M., Roehrig, G., Mohr-Schroeder, M., Sheppard, K., & Rushton, G. T. (2021). Science and mathematics teacher communities of practice: Social influences on discipline-based identity and self-efficacy beliefs. *International Journal of STEM Education*, 8(1), 30. https://doi.org/10.1186/s40594-021-00275-2
- Pozderac, M., Casey, T. T., & Kitchel, T. (2022). Insights from second generation agriculture teachers on career choice and identity. *Journal of Agricultural Education*, 63(1), 47–61. https://doi.org/10.5032/jae.2022.01047
- Pyrko, I., Dörfler, V., & Eden, C. (2019). Communities of practice in landscapes of practice. *Management Learning*, 50(4), 482–499. https://doi.org/10.1177/1350507619860854
- Reason, P. (2006). Choice and quality in action research practice. *Journal of Management Inquiry*, 15(2), 187–203. https://doi.org/10.1177/1056492606288074
- Ruddin, L. P. (2006). You can generalize stupid! Social scientists, Bent Flyvbjerg, and case study methodology. *Qualitative Inquiry*, 12(4), 797–812. https://doi.org/10.1177/1077800406288622
- Saldaña, J. (2016). The coding manual for qualitative researchers (3rd ed.). SAGE Publications.
- Shoulders, C. W. (2018). A description of the professional identities of Arkansas agriculture teachers. *Journal of Agricultural Education*, *59*(3), 278–290. https://doi.org/10.5032/jae.2018.03278
- Shoulders, C. W., & Myers, B. E. (2011). Considering professional identity to enhance agriculture teacher development. *Journal of Agricultural Education*, *52*(4), 98–108. https://doi.org/10.5032/jae.2011.04098
- Solomonson, J. K., Thieman, E. B., Korte, D. S., & Retallick, M. S. (2019). Why do they leave and where do they go? A qualitative study of Illinois school-based agriculture teachers who left the profession. *Journal of Agricultural Education*, 60(4), 115–131. https://doi.org/10.5032/jae.2019.04115
- Thomas, G. (2010). Doing case study: Abduction not induction, phronesis not theory. *Qualitative Inquiry*, 16(7), 575–582. https://doi.org/10.1177/1077800410372601
- Traini, H. Q., Claflin, K., Stewart, J., & Velez, J. (2019). Success, balance, but never both: Exploring reified forms of success in school-based agricultural education. *Journal of Agricultural Education*, 60(4), 240–254. https://doi.org/10.5032/jae.2019.04240
- Traini, H. Q., Stewart, J., & Velez, J. J. (2021). Navigating the social landscape of school-based agricultural education: A hermeneutic phenomenology. *Journal of Agricultural Education*, 62(1), 61–76. https://doi.org/10.5032/jae.2021.01061

- Traini, H. Q., Yopp, A. M., & Roberts, R. (2020). The success trap: A case study of early career agricultural education teachers' conceptualizations of work-life balance. *Journal of Agricultural Education*, 61(4), 175–188. https://doi.org/10.5032/jae.2020.04175
- Truong, K. D., Cong-Lem, N., & Li, B. (2025). The interplay of language teachers' identity, cognition, emotion, and agency, and the role of context: A scoping review. *Teaching and Teacher Education*, 158, 104967. https://doi.org/10.1016/j.tate.2025.104967
- Walker, W. D., Garton, B. L., & Kitchel, T. J. (2004). Job satisfaction and retention of secondary agriculture teachers. *Journal of Agricultural Education*, 45(2), 28–38. https://doi.org/10.5032/jae.2004.02028
- Wenger-Trayner, E., & Wenger-Trayner, B. (2015). Learning in a landscape of practice: A framework. In E. Wegner-Trayner, M. Fenton-O'Creevy, S. Hutchinson, C. Kubiak, & B. Wenger-Trayner (Eds.), *Learning in landscapes of practice: Boundaries, identity, and knowledgeability in practice-based learning* (pp. 13–30). Routledge.

Chapter Five: Key Insights, Conclusions, and Recommendations

The three manuscripts presented in this dissertation have sought to explore the system of agricultural education via empirical and philosophical means. When taken together, these manuscripts demonstrate the importance of a systemic view of agricultural education. There are three major lessons which can be pulled from this work: SBAE is a system, communities impact teacher margin, and combined insights for teacher retention. First, I explore my conceptualization of the system of SBAE as I understand it. Then, I impart my understanding of how community support begets or prohibits healthy teacher margin. Afterward, I explore insights for teacher retention. Finally, I share general recommendations and conclusions for where scholars ought to take us next.

Conceptualizing the System of School-Based Agriculture Education

When conceptualizing the system of SBAE in the United States, I feel it needs to be situated within its socio-historical context. The system of school-based agricultural education (SBAE) in the United States began with legislation in the 1900s (Rosenberg, 2016). Agricultural education within and outside schools has been shaped by societal purposes (e.g., the USDA's attempt to sustain rural populations via heteronormative camps; Rosenberg, 2016), branching into two youth-based organizations we know today - 4-H and FFA. 4-H is extracurricular, whereas FFA is thought to be intracurricular, an integral component of SBAE. SBAE is shaped by the values of those who came before our current population of SBAE teachers. Our current population of SBAE teachers now have an exemplary model placed before them they are expected to adhere to: the three-component model. Croom (2008) detailed the three-component model of SBAE, which is thought to be the pinnacle of what an SBAE program ought to be: Classroom/laboratory instruction, FFA, and SAEs. I propose this model is putting undue pressure on teachers, facilitating facets of unsustainability within the discipline.

Evidence of tensions with the three-component model are clearly presented by Curtis, who playfully groaned about having to depict his three-component model after the first couple of times he was asked to do so. Furthermore, Curtis and I have had conversations wherein he describes himself as an agriculture teacher first, and an FFA advisor second, but the crux of his identity is not bound by the FFA component. Throw in SAEs, which some teachers simply aren't doing because they already cannot manage their workload (personal anecdote), and one is left with a tremendous workload and pressure to achieve it all. Actors within the SBAE system apply

pressure to teachers to adhere to the three-component model in a multiplicity of ways. As examples:

- 1. CTE programs are expected to have documented work-based learning, so agriculture teachers must create documentation demonstrating their students are meeting these requirements. SAEs may be perceived as vocational agriculture's premier, or only, work-based learning opportunities, as this is likely how these teachers have been trained.
- 2. Community members, especially within longstanding and established contexts, expect new (or new to district) teachers to fill the shoes left by their old teachers; as Luke has said, a good part of the job is people management and teachers may need to get crafty and wait on the system to be ready for a change before lessening their workload. Different expectations from multiple accountability partners puts pressure on teachers (Traini et al., 2021).
- 3. The noble sacrifice mindset exists in our agriculture teachers (Marzolino et al., 2024; Marzolino & McKim, 2024); this mindset encourages teachers to take on everything, especially what they may feel they are expected to do, to ensure students have ample opportunity to engage within their programs. Teachers are pressuring themselves to meet the exemplar model of SBAE, all the while feeling competition against fellow agriculture teachers, who have also been demonstrated to be some teachers' biggest supports.

These examples are only a small part of the bigger picture. Because of the intracurricular nature of the three-component model, historical precedents achieved by agriculture teachers who have deeply impacted their communities, and the reputation of the FFA, teachers' workloads are shaped by these perceptions. Their landscapes of practice include individuals within each of the three domains (Traini et al., 2019), all the while trying to fit in with the broader community of agriculture teachers (Traini et al., 2021). As such, alongside authors such as Haddad, Traini, and collaborators (e.g. Haddad et al., 2023; Traini et al., 2019, 2020, 2021), I conceptualize the system as a place where individuals are impacted by those around them. Teachers who do not allow the system to shape their program may face pushback from communities, as they are beholden to expectations which encompass them.

As it stands, the system of SBAE is unsustainable. I would even venture to say a greater portion of our public education system is unsustainable, but that isn't the focus of this dissertation. We have had ongoing teacher shortages for decades, with agricultural education's

beginning in the 1970's. Some authors have described SBAE as a system which "eats its own young" (Osborne, 1992, p. 3) as our teachers are not making it to later career stages. Now, in 2025, this shortage remains unhealed; there is still "professional cannibalism" occurring (Osborne, 1992, p. 3). If the system were sustainable, would we have a shortage? One may argue the SBAE system is around, therefore it must be somewhat sustainable (or at the very least, resilient), but with our current early career teacher attrition rates, how much longer will we be able to keep program doors open? What happens when retired teachers are truly ready to relax and not willing to step back into classrooms to support them in times between teachers? What about programs with a so-called "revolving door" wherein teachers enter and quickly exit the district? All of this to say, the sustainability of SBAE is inherently context dependent. Teachers, while often the focus of research, are not the only actors in this system. Community members, like Ron, Jen, Luke, and Todd, are all playing a role in Curtis's story. To address this complex socioeconomic sustainability challenge, we need to address change at a systemic level, even if that means making some uncomfortable decisions to do so.

I argue there are a variety of feedback structures embedded within this system which vary in impact. How these systems manifest varies by individual, school, and community. For example, teachers with supportive administrators (like Curtis or Penny) will have different experiences from those with less supportive administrators (like Shane). SBAE programs with alumni chapters may have different expectations for their agriculture teachers (like Ron and Jen) than brand new programs where the teachers are beginning to forge community ties (like Abigail). These supports can be just that – a support – but when agendas and expectations don't align, this friction may increase workload, decrease power, and wear on the teacher (Haddad et al., 2023). When these aspects do align, the teacher may be in a more positive space, feel empowered by supports, and achieve their workload in tandem with others. Curtis is a shining example of this. This comes back to the importance of collaboration within and outside of the teacher's school and community (DeLay & Washburn, 2013; Hasselquist et al., 2017; Moser & McKim, 2020) and the importance of being able to set and maintain boundaries as an educator (Haddad et al., 2023). Yet, communities can also be a huge boon to their teachers, especially those like Curtis.

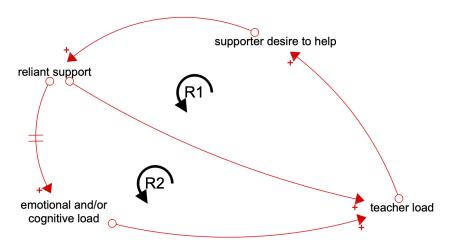
The Teacher-Community-Supporter Interface

As a key facet of creating a more sustainable model of SBAE is employing a systems perspective, I hope to share further insights from my dissertation via a new CLD. This CLD depicts a system evident in the lived experience of the teachers I've spoken with throughout the course of my dissertation, breathed into life from the stories of people like Curtis, Ron, Jen, and Robin. When properly seized, I believe the increase in power from community partnerships would benefit our teachers. Many community members, like those included in Chapter 4, understand how tedious the life of an agriculture teacher can be. Because of this understanding, they are often willing and able to help teachers with their workloads. On the flipside, when poorly or not at all developed, this system, hereafter referred to as the teacher-community-supporter complex, serves to exacerbate teacher load. Terms and definitions are explored as the model is revealed, much like in Chapter 3. For those who need extra support, Chapter 3 has a table and provides more information which may be helpful in interpreting this CLD. Aaron McKim and Catlin Goodwin have assisted with preliminary review of this CLD.

To explain this CLD, I first break it into two parts – the first part relates to teacher load and the second relates to teacher power. Once each part has been talked through, I demonstrate how they are connected.

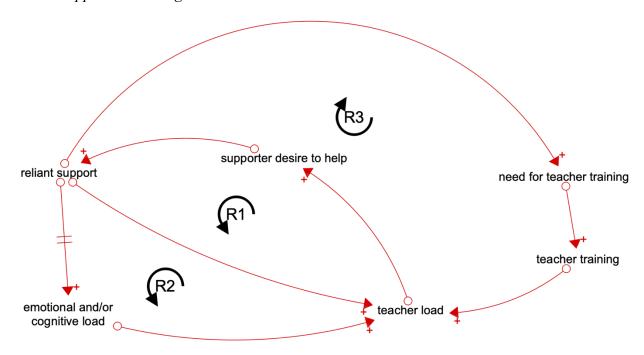
Beginning with teacher load, I posit there is an inherent relationship between teacher load and supporter desire to help the teacher achieve their load. As evidenced by individuals like Jen, Ron, Todd, Gary, etc., we see a desire from supporters to assist the teacher with everything on their plate, with the admirable desire to remove things from the plate opposed to adding more. This is complicated by the existence of what I term 'reliant support,' which is support from individuals who have good intentions but do not know how to help the teacher. Over time, this leads to an increase in emotional and/or cognitive load, wherein the teacher must figure out how to explain their needs to their supporters. For Curtis, this resulted in frustration and logistical issues he did not want to confront in the first place. This is depicted in Figure 1, alongside reinforcing loops R1 and R2. Loop R1 demonstrates that as supporters want to help, there will be an increase in reliant support, which adds to teacher load. Loop R2 tells a similar story, demonstrating that as supporters desire to help, reliant support increases, which increases emotional and/or cognitive load, thereby increasing teacher load. Therefore, teacher load is doubly reinforced by the existence of reliant supporters.

Figure 1 *Teacher Load and Reliant Support*



Because the reliant supporters need some sort of training or assistance, there becomes a need for teacher training. Naturally, the teacher is responsible for said training, adding to their load. For the sake of clarity, the 'teacher training' variable in this CLD refers to the SBAE teacher training their community members. This adds two more variables to the CLD, as well as reinforcing loop R3. Loop R3 demonstrates how supporter desire to help increases reliant support, which increases the need for teacher training, which increases actual training from the teacher, which further compounds teacher load. See Figure 2.

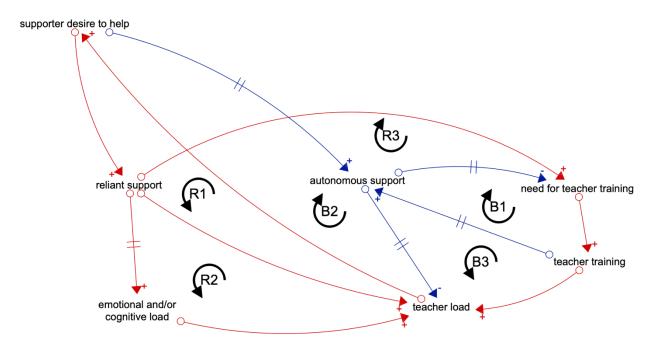
Figure 2 *Reliant Support Increasing Teacher Load*



Fortunately, the complex is larger than this. Supporters who have been "trained," as Robin put it, are able to be more autonomous. Robin had shared once she had made her expectations clear and worked with supporters, they eventually became autonomous and could anticipate needs, running program events independently when needed. People with good relationships with Curtis, like Ron and Jen, can anticipate Curtis's needs and will move to support him without needing to ask him what they ought to do. They are also able to operate independently of Curtis. This introduces us to 'autonomous support,' or support conducted by community members who do not need the teacher's guidance to get them there. They are no longer reliant on the teacher's guidance – they can work autonomously. This introduces us to balancing loops B1, B2, and B3, which help to reduce teacher load. See Figure 3.

Figure 3

Autonomous Support Reducing Teacher Load

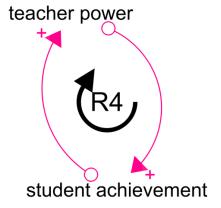


Loop B1 demonstrates that as autonomous support increases, the need for teacher training decreases, leading to a decreased amount of teacher training implemented. Loop B2 demonstrates an increase in teacher load results in an increase in supporter desire to help, which leads to an increase in autonomous support, which decreases teacher load. Loop B3 demonstrates that as teacher load increases, supporter desire to help increases, leading to more autonomous support; this autonomous support decreases the need for teacher training, thus reducing the amount of teacher training required and reducing teacher load. Therefore, these balancing loops created by having autonomous supporters take a considerable amount of load away from the teacher. One thing to note, however, is the number of delays in this portion of the system. Supporters like Ron and Jen who have been active in their community for a while did not start out being excellent supporters; they needed to learn the ropes, which takes time. Robin shared it took her years to train her supporters. Therefore, teacher load would increase over time, in a period of already low margin for novice individuals, increasing strain – yet, there could be tremendous reductions in load post-training.

The story this part of the complex tells is thus: The more autonomous support a teacher receives, the more load supporters remove from the teacher's plate without adding to it. As supporters are good intentioned, it's important to illustrate the need to get away from asking questions like, "What can I do for you?" and instead offer to take things the teacher is struggling with. Naturally, this can be challenging; we are all new to things, and we need time to be able to anticipate someone else's needs. In an example from Curtis, if a teacher is worried about having food available for students at contests, consider arranging food to be delivered to the contest location opposed to volunteering to donate some snacks. Jen did this for Curtis, designing a survey for students to indicate what they wanted to eat, and then she proceeded to ensure this food made it to students. This kind of support places more of a burden onto supporters, but in turn, it lessens the load the teacher must bear. This concludes the tale of this part of the complex.

We now move to the power portion of this complex. Teacher power is influenced by a series of elements and interconnections within their context. We begin with an intuitive reinforcing loop (R4) between teacher power and student achievement. The more teachers see their students achieve, the more power teachers have. Most teachers who have participated in the studies within my dissertation have made comments which confirm the existence of this phenomenon. See Figure 4.

Figure 4
Student Achievement Reinforcing Teacher Power

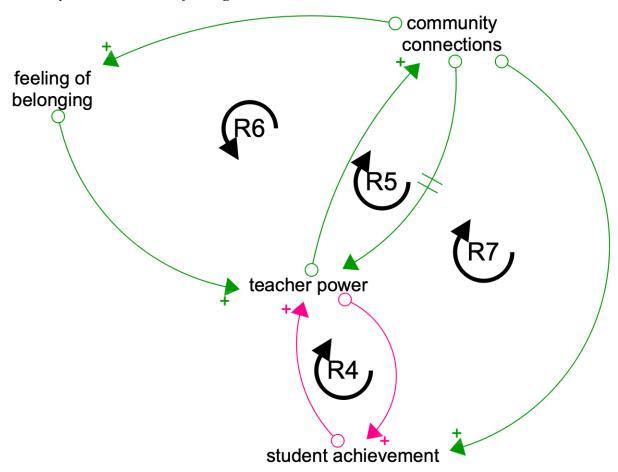


Teacher power is also influenced by community connections, or the number of people the teacher is close to in the community. This network is a source of power for many teachers in these studies, including Curtis. Community connections also increase the teacher's feeling of belonging, which helps teachers feel empowered within their communities. Community

connections are also something that can help student achievement, as supporters like Jen are helping to coach teams for contests, which are a great source for student achievement. See Figure 5.

Figure 5

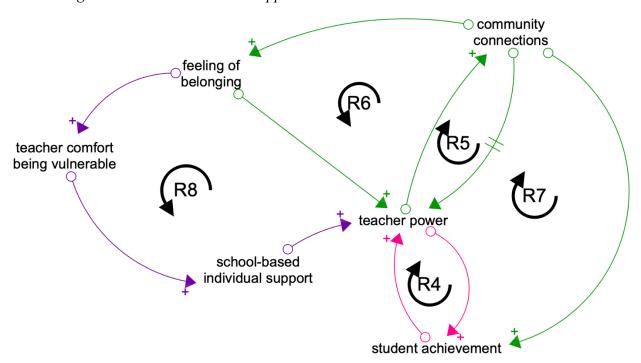
Community Connections Reinforcing Teacher Power



Here we are introduced to more reinforcing loops. Loop R5 demonstrates that community connections increase teacher power, with a delay between community connections establishing this, as reciprocal relationships take time to establish. Loop R6 demonstrates how the more connected one is to their community, the more they feel they belong. The importance of feeling belonging cannot be understated, as this will open other opportunities for teachers they would not have had otherwise. Loop R7 demonstrates how greater community connections may result in greater student achievement, as these individuals may be available to help bolster student success, thus increasing teacher power.

Next we explore more on the feeling of belonging teachers experience. When a teacher feels they belong, they may have an easier time being vulnerable with people who would support them. This is connected to school-based individual support, referring to administrators, teachers, and others within the school itself who can help to bolster teacher power. If the teacher can share with them their needs, these folks can help provide the teacher with what they need to be successful. As an example, Curtis and Todd have a relationship wherein Todd is happy to sign whatever needed to ensure Curtis's needs are met. This is a reinforcing loop (R8), where the more teachers feel they belong, the more comfortable they are being vulnerable, the more they receive support, and the greater their power becomes. See Figure 6.

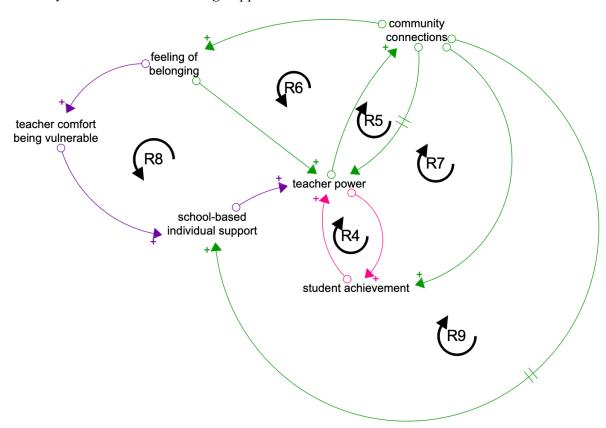
Figure 6
Introducing School-Based Individual Support



Community connections may also increase school-based individual support for teachers, as community members also have a platform they can utilize to ensure teachers have what they need. As it may take time before community connections feel they need to try to influence school-based individual support, there is a delay here. When I attended an advisory board meeting at THS, I witnessed supporters speaking on the need to fix the driveway to agricultural program facilities. The next time I returned, this issue was fixed. This leads us to loop R9, which

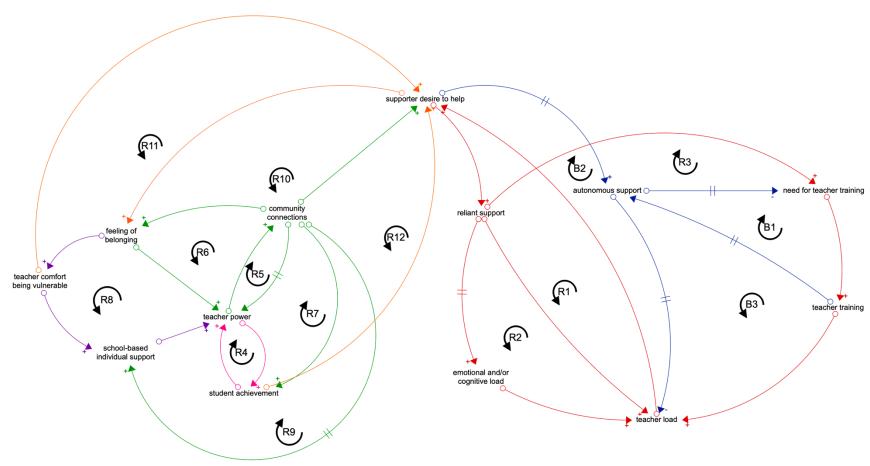
demonstrates as there are more community connections, there is more school-based individual support, which bolsters teacher power. See Figure 7.

Figure 7 *Community Connections Increasing Support*



This concludes the teacher power part of this CLD. The teacher load and teacher power portions of this model are connected via supporter desire to help. The full model is pictured in Figure 8.

Figure 8 *The Full Teacher-Community-Supporter Complex*



In Figure 8, we can now see more connections. Community connections increase supporter desire to help as well, and supporter desire to help increases a feeling of belonging, which bolsters teacher power (R10). Additionally, community connections increase supporter desire to help, and this desire to help may help the teacher be more comfortable with vulnerability, which can help them to seek school-based individual support and reinforce their teacher power (R11). Finally, as community supporters are working to see students succeed – in fact, that is often their reason for helping – we have a connection between student achievement and community connections, which will have downstream effects in the system and create loop R12.

The power portion of this model is riddled with reinforcing loops which must be seized, lest they begin to reinforce a *lack* of teacher power. For example, as a teacher has less power, they may have less community connections, which will theoretically decrease power the teacher may have had otherwise. Furthermore, if a teacher does not feel like they belong, they may be reluctant to be vulnerable, missing out on opportunities to bolster their power by sharing their needs. This demonstrates a need to help teachers, especially those who are new or new to the district, establish those connections and a sense of belonging. This speaks to the importance of connectivity perceived by teachers in studies like those conducted by Moser and McKim (2020) and DeLay and Washburn (2013). In turn, they can bolster their power and leverage their community connections to assist them in reducing their load, especially once they have had time to encourage and develop autonomous support networks.

Insights on Teacher Retention

The three studies found in this dissertation speak to the value of a systemic exploration of teacher retention within agricultural education. There have been many insights into teacher load, power, and margin in life through this research. Furthermore, there have been insights into how teachers shape their community contexts, and how their community contexts shape their experiences. I expound more on each of these areas below.

Regarding teacher power, load, and margin in life, these studies demonstrate these variables are shaped by teacher context, as well as teachers themselves. There are practical steps teachers can take to impact their own power, load, and margin in life, but each of the CLDs presented demonstrate how these variables are not impacted by the teacher alone. Looking forward, it is important for teachers to register how much their community and support systems

may impact their longevity as a teacher. Furthermore, and perhaps more importantly, its essential community members are made aware of how much they can impact their teacher's power, load, and margin in life. I am a staunch believer in the natural good humans wish to do; there are actionable ways to help valued members of your community, and this work speaks to that. Things are complex, but our relationships with others can have a tremendous impact on our identities as professionals, as well as our embodied feelings, like belonging. As someone with marginalized identities, that feeling of belonging and its importance cannot be understated. Therefore, I recommend we approach everyone as they are, get to know them, and forge strong relationships which value humanity and all its many imperfections.

The context of an individual's job greatly impacts how their identity is formed. This is demonstrated well via Curtis's case study; as he is working on who he is as a teacher, his community is trying to help him do so by trying to help maintain his margin in life. Curtis, like other teachers, was not hired into a place without any background whatsoever; Towne has a history, and Curtis has worked to understand that history, as well as the individuals who are deeply connected to Towne High School, Towne FFA, and County. Beyond this, Curtis is also receiving support from those who can understand what he is going through; teachers in Marzolino et al. (2024) also report the strength brought about by having relationships with other agriculture teachers, as they can empathize and understand the triumphs and tribulations which accompany this career. While these agriculture teachers are inherently a source of support, they are also busy. Furthermore, keeping company with other agriculture teachers may serve to create tensions based on definitions of success and work-life balance (Traini et al., 2019). Agriculture teachers often silo themselves away, as noted by Shoulders and Myers (2011), but my encouragement would be to seek supports available within the school context as well. Other teachers will be able to speak to teaching within a specific community and its contexts, and this relationality is also important for the development of a sound teacher identity. These folks understand parts of your context, too.

In sum, SBAE is a system; how a teacher experiences said system is incredibly context dependent. Teacher experiences, in-school, around school, and outside of school will predict teacher longevity. The more favorable experiences community members and school districts can provide, the better the odds for teacher retention. While this is by no means a failsafe, it is an

important step to take to begin to identify lived interconnections and feedback mechanisms within communities.

REFERENCES

- Croom, D. B. (2008). Development of the integrated three-component model of agricultural education. *Journal of Agricultural Education*, 49(1), 110–120. https://doi.org/10.5032/jae.2008.01110
- DeLay, A. M., & Washburn, S. G. (2013). The role of collaboration in secondary agriculture teacher career satisfaction and career retention. *Journal of Agricultural Education*, *54*(4), 104–120. https://doi.org/10.5032/jae.2013.04104
- Haddad, B., Traini, H., & McKim, A. (2023). We've crossed a line: A philosophical examination of systemic implications surrounding SBAE teachers' attempts at boundary setting. *Journal of Agricultural Education*, 64(1), 82–95. https://doi.org/10.5032/jae.v64i1.31
- Hasselquist, L., Herndon, K., & Kitchel, T. J. (2017). School culture's influence on beginning agriculture teachers' job satisfaction and teacher self-efficacy. *Journal of Agricultural Education*, 58(1), 267–279. https://doi.org/10.5032/jae.2017.01267
- Marzolino, T. A., & McKim, A. J. (2024). Retaining school-based agricultural educations: A system dynamics approach. *Journal of Agricultural Education*, 65(4), 327–341. https://doi.org/10.5032/jae.v65i4.2826
- Marzolino, T. A., McKim, A. J., Goodwin, C. M., & McKendree, R. B. (2024). The teacher's noble sacrifice: An exploration of agriculture teacher margin. *Journal of Agricultural Education*, 65(4), 313–326. https://doi.org/10.5032/jae.v65i4.2828
- Moser, E. M., & McKim, A. J. (2020). Teacher retention: A relational perspective. *Journal of Agricultural Education*, 61(2). https://doi.org/10.5032/jae.2020.02263
- Osborne, E. (1992). A profession that eats its young. The Agricultural Education Magazine, 3.
- Rosenberg, G. N. (2016). *The 4-H harvest: Sexuality and the state in rural America*. University of Pennsylvania Press.
- Shoulders, C. W., & Myers, B. E. (2011). Considering professional identity to enhance agriculture teacher development. *Journal of Agricultural Education*, *52*(4), 98–108. https://doi.org/10.5032/jae.2011.04098
- Traini, H. Q., Claflin, K., Stewart, J., & Velez, J. (2019). Success, balance, but never both: Exploring reified forms of success in school-based agricultural education. *Journal of Agricultural Education*, 60(4), 240–254. https://doi.org/10.5032/jae.2019.04240
- Traini, H. Q., Stewart, J., & Velez, J. J. (2021). Navigating the social landscape of school-based agricultural education: A hermeneutic phenomenology. *Journal of Agricultural Education*, 62(1), 61–76. https://doi.org/10.5032/jae.2021.01061

Traini, H. Q., Yopp, A. M., & Roberts, R. (2020). The success trap: A case study of early career agricultural education teachers' conceptualizations of work-life balance. *Journal of Agricultural Education*, 61(4), 175–188. https://doi.org/10.5032/jae.2020.04175