

We've Crossed a Line: A Philosophical Examination of Systemic Implications Surrounding SBAE Teachers' Attempts at Boundary Setting

Abstract

This philosophical paper situates the system of School-Based Agricultural Education (SBAE) in light of teachers' attempts at boundary work. We define the system of SBAE through a Social Ecological Resilience approach, particularly by examining publications in the Journal of Agricultural Education (JAE) from 2021 to explore what SBAE demands of its teachers. Having worked with SBAE teachers over the last three years as they have struggled with attempts at boundary ownership, we question what this personal struggle indicates about a broader system. We argue for a bounded system by which respect for boundary ownership is reciprocated as an expected norm. We conclude by situating solutions oriented around the factors of Social Ecological Resilience theory. This work engages individuals across the system, rather than just the teachers, toward systemic accountability and transformation.

Keywords: boundaries; boundary work; boundary ownership; system

Introduction

Vignette: *I'm overworked when I arrive at school hours before my first class starts and stay late almost every day to fit all the tasks in. I feel unappreciated when colleagues get upset if I don't respond to an email they send after 5:00 PM. I resent my job when I give everything I have, but my administrator tells me to do more. I'm annoyed when I see other teachers on Instagram because it makes me feel like I'm not doing enough. I'm shameful when my husband feeds the baby a bottle instead of me nursing her. The guilt of taking a weekend off or saying no to a project feels as though I'm letting students down. I feel shameful when parents compare our program to more successful programs; to teachers who are always at school. I feel all of these things, but how can I say no to the growing list of expectations? How can I say no when I know I'll be judged by parents, community members, and my peers in the profession? How can I create boundaries in this job when the expectations are endless and the demands are ever-growing? Boundaries and work-life balance sound nice, but they aren't realistic expectations for this profession. I know I need them, but I just don't see how to make them a reality.*

Purpose & Significance

The purpose of this philosophical paper is to expose characteristics of the broader system of Agricultural Education and its influence on School-Based Agricultural Education (SBAE) teachers. We used teachers' attempts at boundary work and their felt inability to reclaim boundaries as the basis for attaining this purpose. First, we offer a way of thinking about SBAE as a system using Social Ecological Resilience theory (SER) (Gunderson, 2000; Folke, 2006) as a guiding framework. Second, we explore how SBAE teachers are positioned as actors within the system of Agricultural Education, specifically how they interpret the demands of the system and how they are indoctrinated into the system. Finally, we offer a discussion on how tenets of SER help address system breakdowns and challenges, making a call for accountability to all invested in the Agricultural Education system.

Assumptions & Limitations

Our work with teachers and subsequent approach to the system of Agricultural Education is underpinned by these key assumptions:

1. Teachers experience a felt need to engage in boundary work. This assumption has been reified by over 600 workshop participants across the United States and the continued

engagement of over 700 SBAE teachers in a boundary-support Facebook group (BOMBs-NAAE, 2022).

2. Boundary work is intentional, agentic, and essential in all areas of life (Cloud & Townsend, 2017). Boundary reclamation extends beyond the work-life balance or resilience conversation to engage an emotional process of work (Hochschild, 2012).

3. The ability or inability to enforce boundaries is a function of personal choice and permission from the system to enact the desired boundary (Cloud & Townsend, 2017).

4. When actors have the freedom to set boundaries, power is an expression of mutual respect (Cloud & Townsend, 2017). In this way, boundary setting is an act in relation to the system.

We approached the system of Agricultural Education by focusing on the Journal of Agricultural Education (JAE), exploring the resilience of a system beyond an examination of its actors (i.e., SBAE teachers). We recognize the limiting nature of this approach, particularly as we view JAE as an actor—or individual(s) with agency— within the system, and are unable to address the education system at large. However, JAE is a logical starting point given the recommending nature of publications toward understanding the system of Agricultural Education and those who interact with it.

Situating the Problem

In 2019, we hosted our first boundaries workshop for secondary SBAE teachers. While the opening vignette is a compilation of things we have heard from teachers, it could also describe any individual teacher on a given day. Guided by the work of Cloud and Townsend (2017) and Tawwab (2021), our workshop defined boundaries as limits between someone or something, where your job stops and where it starts, and the necessary expectations to allow one to feel comfortable, stable, and safe in their work. Since then, we have hosted 22 workshops with over 600 participants in 14 states and at four nationwide professional development events. These workshops reached SBAE teachers at various life stages: parents, preservice teachers, early career and veteran teachers from small and large departments, rural, suburban, and urban communities, and those teaching a variety of subjects in various program structures. During these workshops, we asked participants to share their experiences of boundary struggles and circumstances in which their boundaries were crossed or ignored. We then offered strategies to reclaim boundaries and be agentic in their work and life.

Several realizations resulted from this work. Workshop participants struggled with work-related boundaries. They felt crossed boundaries most poignantly when perceived expectations were imposed upon them, their personal time was impeded due to various work-related obligations, and when various individuals (e.g., parents, students, administration) expected uncompensated commitment. It became evident agriculture teachers were interacting with blurred boundaries—a lack of defined limits or bounds—in their chosen vocation. Operating this way often resulted in frustration, feeling overworked, unappreciated, guilty, shameful, disrespected, and overwhelmed (Cloud & Townsend, 2017). SBAE teachers in our workshops knew they needed to say “no” to additional commitments and expectations to protect and enhance their physical and mental well-being. Yet, external forces (e.g., community members, parents, students, other SBAE teachers, professional associations, and professional norms) said otherwise. Our participants discussed feeling like they could not say “no” or put limits on their work, because saying “no” would negatively impact their program, reputation, students, or identity as an SBAE teacher. However, they also felt a deep need to reclaim their boundaries. Teachers spoke of missing children’s bath times, family reunions, home-cooked meals, and other life events due to working outside contracted hours. They were regularly asked to sit on committees, attend meetings, or accept other requests without being given time, opportunity, or resources to complete their other work. They mentioned pressures from state FFA or SBAE teacher and CTE associations to fight for their programs and professions at the local, state, and national levels. They voiced a need for change (which is often why they chose to attend the workshop in the first place) but struggled to manage the tension between personal agency and external forces. Discussing

boundaries allowed agriculture teachers to think about how they interacted with their work and the ramifications of those interactions.

These boundary workshops revealed something much bigger than the individual struggles of SBAE teachers. Our conversations with teachers exposed dysfunctionalities and problems in a broader system and profession. We attempt to address this need as we recognize teachers' failed attempts at boundary ownership are evidence of system dysfunction. This may seem a stretch considering a focus on our workshop audience; a group that had a felt need for boundary setting. However, as we will see, comments from workshops are not the only indicators of a boundary problem in SBAE. SBAE teachers do not feel like they have, can have, or are able to enforce boundaries. Teachers cannot keep attempting to set boundaries in a system that does not reciprocate.

Situating the System

Agricultural Education as a Resilient System

Acknowledging the limitations of research attending to single dimensions of a discipline, scholars have called for more holistic approaches in SBAE, including systems-based research (Kitchel, 2021; Pauley et al., 2019). Therefore, we examined SBAE teacher attempts at boundary setting by conceptualizing SBAE as a complex system, an essential but uncommon approach within the discipline. Conceptualizing SBAE as a system required acknowledging the multitude of actors comprising the system. *Actors* within SBAE include but are not limited to, students, teachers, administrators, community members, state staff, industry representatives, teacher educators, parents, alumni, associations and organizations, communities, and school systems (Phipps et al., 2008). We posit actors within SBAE are interrelated but do not share equal agency in directing the current or future direction of the system. For example, a vocal parent group or popular administrator may hold significantly more power than the SBAE teacher regarding decisions about the local agriculture program. Similarly, a teacher educator may shift components of the SBAE system by emphasizing certain concepts, theories, or practices in their curriculum or publishing a policy piece that influences state education practices. Embracing a systems-based perspective necessitates acknowledging and evaluating the distribution of agency across actors within a system when creating change. Thus, systems work often results in recommendations for reallocating agency by shifting traditional paradigms. In this paper, we utilized SBAE teacher attempts at boundary setting to expose and critically analyze the SBAE system toward such recommendations.

Our systems-based evaluation is grounded in a SER framework. SER stems from ecological research exploring the ability of natural habitats to remain the same during patterns of disequilibrium (Holling, 1973). The inclusion of human interactions within these ecological investigations led to the emergence of a social-ecological framework (Gunderson, 2000; Folke, 2006). In this framework, *resilience* is defined as social and/or ecological systems maintaining similar identities as they interact with other social and/or ecological systems. Therefore, resilience can be a positive or negative attribute of a system. For example, if SBAE remains intact during challenging economic times, we may consider this positive resilience; however, if SBAE fails to evolve in alignment with emerging agricultural technologies, we might consider this negative system resilience. This enables consideration of SBAE as a system that interacts with other systems (e.g., policy, other academic disciplines, agricultural industry); a definition that veers from existing SBAE literature and perspectives situating resilience as an individual attribute (Easterly & Myers, 2018; Thieman et al., 2012; Thieman et al., 2014). Recognizing resilience is not always favored, the framework includes two structures for system change. *Adaptation* is a change localized to one system element (Nelson et al., 2007; Smit & Wandel, 2006) and *transformation* is a change that permeates the entire system (Gunderson & Holling, 2002).

As we use boundary work in SBAE to operationalize the SER framework, we must acknowledge SBAE is both a system itself as well as a composition of systems. As an example, SBAE teachers are actors

within the system of SBAE; however, can also be viewed as a system themselves. Viewing SBAE teachers as a system means we can consider their resilience as they interact with other actors within the SBAE system (e.g., administrators, community members, parents) and actors external to the SBAE system (e.g., family, friends, spiritual/religious group). In this paper, we conceptualize SBAE teachers' attempts to reclaim boundaries as adaptations localized to one element of the SBAE system (i.e., the teachers) and argue the limits of these attempts toward resilience in a system that does not accommodate them. The perspective of SBAE teachers being a system embedded within SBAE provides an essential foundation to consider boundaries, resilience, adaptation, and transformation within SBAE.

Understanding SBAE Teachers as Actors in a System Seeking Resilience

As of publication, only four previous articles in JAE focus on the broader system of SBAE. These shed light on teachers' interpretation of the demands of SBAE and indoctrination within the system. However, these are not the only articles situating SBAE teachers in a broader system. In assuming teachers operate within a system of SBAE, we also assume the various actors (JAE being one), contribute explicitly and tacitly to teachers' interpretations of systemic demands. To situate SBAE teachers in the conceptualized system, we used the articles published about SBAE in the Journal of Agricultural Education (JAE) in 2021 to understand what adaptations of SBAE teachers and the SBAE system are needed or recommended. We constrained our review to 2021 to align with the most recently published work prior to our research. Recognizing boundary work often comes about in response to perceived expectations (Cloud & Townsend, 2017), we focused on conclusions, implications, and recommendations pertaining to sentence stems indicating what SBAE programs and teachers "should," "are," and "need" (e.g., "teachers *need* additional professional development," or "teachers *should be* advocates for their program to their administration").

Interpreting the Demands of the System

Four articles elaborated the demands of SBAE from the teachers' perspective. These articles outlined the system of SBAE, identified how teachers operated in that system, and examined work-life balance in SBAE.

Not surprisingly, SBAE teachers functioned in a complex system of multiple accountability partners with varying expectations, a low margin for error, high levels of competition, and an intense need for validation (Traini et al., 2021b). To maintain effective operation within this landscape, teachers worked long days, piling on work to fulfill expectations (Traini et al., 2021b). They strove to meet the expectations of individuals holding power in the landscape by meeting reified markers of professional success (e.g., winning awards), often at the expense of personal and familial goals. This manifested personal fear, pressure, self-consciousness, lack of confidence, inadequacy, stress, and tension as SBAE teachers navigated a low margin for error, judgment, and competition with and to those they felt accountable (Traini et al., 2021b). SBAE teachers felt silenced in their struggle to prioritize personal goals and create boundaries. They could not voice their challenges to individuals in power as those individuals invalidated their struggles (Traini et al., 2020). Cumulatively, this landscape required SBAE teachers to engage in intense emotional work as they sought belonging and meaning within their chosen profession (Traini et al., 2021b).

While these challenges painted a bleak picture to situate SBAE teachers, they also maintained their own resilience within the system. Clemons et al. (2021) identified teachers coping with challenges in their careers through family, peer, and spousal support and success in their local program. SBAE teachers, however, were reluctant in addressing professional challenges with their peers and counterparts (Clemons et al., 2021). They used student success and the autonomy afforded by their local program to function within a demanding profession (Clemons et al., 2021). However, SBAE teachers found themselves in a constant "tug-of-war between career and family" (Clemons et al., 2021, p. 109). Teachers bargained away personal capital as they struggled with boundary ownership to gain professional success through activities closely aligned with their self-worth as a teacher (Clemons et al., 2021). Teachers found their work affirming and

were validated by professional success and achievement, but these evaluations did little to capture the personal sacrifice of the most overworked (Clemons et al., 2021).

Finally, teachers adjusted, appeased, and rearranged as they reconciled the multiple demands of the SBAE profession (Traini et al., 2021a). Their attempts to be good, successful, or competent required constant modification based on perceived expectations and varied accountability (Traini et al., 2021a). SBAE teachers navigated too many responsibilities to feel they were rearranging them effectively and constantly worked to convince themselves (and others) of the legitimacy of revised competencies (Traini et al., 2021a). Perhaps most condemning was teachers' awareness of operating within and appeasing power dynamics to survive and find support (Traini et al., 2020; Traini et al., 2021a).

These navigations implied a power dynamic by which the system exerted influence over the teacher rather than a mutually resilient system. As we will see, the system imposed requirements of adaptation on the SBAE teacher with little accountability on the system to maintain resilience through transformation. This is both problematic and unsustainable. Continued demands for adaptation from the teacher without systemic transformation will continue to yield teacher shortages (Foster et al., 2021). Beyond maintaining the profession through supply and demand, we must look beyond survival to opportunities for accountable resiliency enabling the broader system to flourish.

Indoctrination Within the System

Against the backdrop of Agricultural Education as a system and the demands SBAE teachers interpret from the system, we are better equipped to understand how the system adapts through SBAE teacher efforts. To do this, we will outline the themes from 22 JAE conclusions, implications, and recommendations about what SBAE programs and teachers “should,” “are,” and “need.” We started with JAE as a source of knowledge regarding the system. Certainly, there are limitations to this approach. However, starting where knowledge is produced and disseminated makes logical sense when challenging the systemic implications of the individual experience of crossed boundaries.

SBAE Teachers Should. A substantial number of recommendations congregated around what SBAE teachers “should” add to or maintain in their practice. Four practices received the most attention: professional development, classroom practices, building the SBAE community, and local community development.

Researchers publishing in JAE recommended teachers attend additional professional development to understand and integrate the researched teaching strategies (Coleman et al., 2021; Thiel & Marx, 2021), grow in content-specific competence (Clark et al., 2021; Toft et al., 2021; Wells et al., 2021b; Wells & Hainline, 2021), explore the norms of SBAE teachers and build relationships (Moser & McKim, 2021), and familiarize themselves with liability protection (Hainline et al., 2021). In addition to learning about new teaching strategies or growing in specific content, JAE researchers also recommended the implementation of various classroom practices. These included reflection strategies (Coleman et al., 2021), inclusive and liberating pedagogy (Austin et al., 2021; Hartmann & Martin, 2021), student-centered teaching (Bird & Rice, 2021; Thiel & Marx, 2021), interdisciplinary curriculum for increased subject representation (Moser & McKim, 2021), lab preparation days and flipped classrooms (Bird & Rice, 2021), and classroom rules (Hainline et al., 2021).

Research suggested teachers should also enact the role of building the SBAE community. This involved participating in additional mentoring and collaboration (Bird & Rice, 2021; Eck et al., 2021; Thiel & Marx, 2021), sharing resources and materials (Bird & Rice, 2021; Hainline et al., 2021; Swenson et al., 2021; Thiel & Marx, 2021), actively engaging in facilitating professional development (McKendree & McKim, 2021; Wells et al., 2021a & b), and building relationships (Moser & McKim, 2021). While these ideals have been long-standing tenets of the SBAE profession, there was a further expectation of the SBAE

teacher to do these *and* ensure their local community knew about it. Teachers were encouraged to educate their school administration (Doss & Rayfield, 2021), learn more about their advocates to better garner their support (Bird & Rice, 2021; Pratt et al., 2021; Wells & Hainline, 2021), complete needs assessments (Toft et al., 2021), and adapt and be innovative (Hartmann & Martin, 2021).

In addition to the above, JAE researchers also advocated teacher growth in the areas of student and program development (Austin et al., 2021; Hainline et al., 2021; Hartmann & Martin, 2021; Pratt et al., 2021; Swenson et al., 2021; Thiel & Marx, 2021; Toft et al., 2021) and practitioner growth (Doss & Rayfield, 2021; Eck et al., 2021; Moser & McKim, 2021; Wells et al., 2021b). All this, in addition to maintaining classroom practices (Coleman et al., 2021; Doss & Rayfield, 2021; Toft et al., 2021), an integrated program (Pratt et al., 2021; Moser & McKim, 2021; Thiel & Marx, 2021), competence (Eck et al., 2021; Wells et al., 2021; Wells & Hainline, 2021), dispositions (Bird & Rice, 2021; Doss & Rayfield, 2021; Moser & McKim, 2021; Wells et al., 2021b), and compliance (Doss & Rayfield, 2021; Hainline et al., 2021). These “shoulds” are reified in the National Association of Agricultural Educators (NAAE) awards and recognition criteria as effective classroom and lab instruction, work-based learning implementation, student leadership development, supportive partnerships, effective marketing, and professional engagement (NAAE, 2022). Notably, only one recommendation released teachers from an expectation, as McKibben and Murphy (2021) contributed: “[Teachers should] feel empowered to stray from the widely accepted norms of providing ‘real-world’ authenticity in their project-based learning activities, and move into more novel projects that stimulate student interest and creativity” (p. 153). Arguably, even this release may implicate a need to cease current practices to find completely new methods and activities.

SBAE Teachers Are. The identity of the SBAE teacher has been well documented prior to our review (Roberts & Montgomery, 2017; Shoulders, 2018; Shoulders & Myers, 2011). While none of the articles in 2021 specifically mentioned SBAE teacher identity, several conclusions, implications, and recommendations described what SBAE teachers are. These illuminated teacher dispositions and personalities, characteristics, deficits, and assets. Even for 2021, the assets of what SBAE teachers “are” was no small list. SBAE teachers were described as innovative and early adopters (Bird & Rice, 2021; Thiel & Marx, 2021; Wells et al., 2021a), student-centered (Bird & Rice, 2021; Swenson et al., 2021; Thiel & Marx, 2021), competent, well trained, and proficient (Clark et al., 2021; Hainline et al., 2021; Wells et al., 2021b), essential (Wells et al., 2021b), seeking growth (Haddad et al., 2021; Wells & Hainline, 2021), experienced (Doss & Rayfield, 2021; Wells & Hainline, 2021), able to bring the real world into their classrooms (Bird & Rice, 2021), relying on existing support (Eck et al., 2021), and familiar with models in thinking and education (Bird & Rice, 2021; McKendree & Washburn, 2021).

Yet, in addition to these accolades, other dispositions (Haddad et al., 2021; Ismail & Miller, 2021; Thiel & Marx, 2021), and characteristics (Bird & Rice, 2021; Eck et al., 2021; Haddad et al., 2021; Hainline et al., 2021; Moser & McKim, 2021; Solomonson et al., 2021; Toft et al., 2021), SBAE teachers were also described with several deficits. These included a lack of awareness (Austin et al., 2021; Thiel & Marx, 2021), struggling for balance in an integrated program (Thiel & Marx, 2021), lacking competence and confidence in several subject areas (Bird & Rice, 2021; Clark et al., 2021; Hainline et al., 2021; Thiel & Marx, 2021; Wells & Hainline, 2021), and encountering implementation barriers (Bird & Rice, 2021; McKendree & Washburn, 2021).

SBAE Teachers Need. One might hope to find a more supportive picture painted in the 2021 recommendations for what teachers need. Arguably, to meet the demands of the “should” and “are” categories, teachers likely “need” several things to set them up for success. The research, however, pointed to additional needs for the teacher, further removing accountability from the system and imposing resilience on the teacher to adapt to it. Most of the “need” recommendations focused on teacher professional development with others scattered around various resources. Overwhelmingly, SBAE teachers were

portrayed as in need of content-related professional development (Hainline et al., 2021; McKendree & Washburn, 2021; Thiel & Marx, 2021; Wells & Hainline, 2021), though McKendree and Washburn (2021) advocated for new models of delivery.

Underwhelming, however, was the address of the resources SBAE teachers may need to fulfill the things they should be and are to their local programs. Resource needs were loosely scattered across support (Ismail & Miller, 2021; Pratt et al., 2021; Thiel & Marx, 2021), time (Thiel & Marx, 2021), conscious administrators (Haddad et al., 2021; Ismail & Miller, 2021), supplies and equipment (Bird & Rice, 2021), collaboration (Bird & Rice, 2021; McKendree & McKim, 2021), curricular support (Bird & Rice, 2021; Solomonson et al., 2021) and working environment (Ismail & Miller, 2021). While stated, most gave only cursory nods to the need rather than suggesting particular funding streams or opportunities outside the teacher's own additional effort in securing funding. None addressed concessions for "should" and "are" if the necessary resources were not made available to the teacher. This gap alone shone a glaring spotlight on the indoctrination within the system to make personal sacrifices to do more with less.

SBAE Programs Should. Thus far, our one-year review has illuminated how JAE perpetuates the SBAE system's indoctrination of teachers in terms of what they should be, who they are, and what they need. Substantial recommendations from JAE in the last year addressed the teacher, with very few addressing what SBAE programs should be. This onus on the teacher further builds a case for a system requiring adaptation without transformation. Even among the scant recommendations for programs, few presented a holistic, community-oriented approach to a program, further suggesting additional work for the SBAE teacher as they developed partnerships with diverse organizations (Austin et al., 2021; Hartmann & Martin, 2021), expanded the adoption of science integration (Coleman et al., 2021; Thiel & Marx, 2021), included principals in activities and goal setting (Doss & Rayfield, 2021), and developed communities (Hartmann & Martin, 2021; Thiel & Marx, 2021).

Seeking Resilience

Where implications converged bore significance for discussing SBAE as a resilient system. Notably, what programs "should" be and do received the least attention across the board, implicating a focus on the SBAE teacher rather than the local and other systems in which they act. In addition, teachers "need" received relatively little attention in the 2021 JAE publications. This exposed a perpetuation of a system asking teachers to be and do more without additional accountability on the system to provide further resources and support. Furthermore, little research existed to call the system into account. In this case, what was not said served as a greater tell than what was. Recommendations for research tended to reiterate continued needs in specific lines of inquiry without a holistic address of the broader actors or systems. When addressed, local administrators received cursory attention (Austin et al., 2021; Doss & Rayfield, 2021; Eck et al., 2021; Haddad et al., 2021; Hainline et al., 2021; Ismail & Miller, 2021; Pratt et al., 2021; Rice & Bird, 2021; Solomonson et al., 2021; Thiel & Marx, 2021; Traini et al., 2021a; Traini et al., 2021b), but largely at the initiative of the SBAE teacher. Meanwhile, school boards, educational organizations, parent organizations, and others were not addressed with any significant scope. Scant recommendations called influencing organizations (FFA, NAAE, AAAE, NASAE, and others) into account. At best, the reviewed research sought to address the system by offering recommendations for pre-service teacher preparation programs. These recommendations included sharing research findings (Coleman et al., 2021; Haddad et al., 2021), encouraging the implementation of programs, techniques, strategies, and initiatives (Swenson et al., 2021; Thiel & Marx, 2021; Toft et al., 2021), and providing additional training in specific content areas (Clark et al., 2021; Hainline et al., 2021; Wells et al., 2021b). Certainly, this paints a challenging picture to reconcile indoctrination within the system. If little exists to examine how SBAE programs are operating, it follows that researchers must point to the individual teacher to reconcile systemic shortcomings. It is almost justifiable, then, that little would be advanced to support the additional needs of the teacher to address the broader system, given this lack of accountability.

Few recommendations, to date, suggested teachers could take anything *off* their already overflowing plate, instead demanding teachers are not doing enough to satiate a system asking more of them with each passing year. In fact, if addressed, teachers were asked to continue improving and seeking balance to better navigate the system (Clark et al., 2021; Eck et al., 2021; Solomonson et al., 2021) and grow in their competence (Bird & Rice, 2021; Toft et al., 2021; Wells & Hainline, 2021). Certainly, we could argue for more support at the state or local level, but if research is important in informing that work, those publishing in JAE must be proactive in advancing recommendations addressing broader system transformation, rather than adaptations for individual teachers.

Situating Solutions

The resilience of the SBAE system is evident in its longevity. The history of agricultural education, however, is not absent of change. In fact, research suggests agricultural education has continually adapted to remain relevant (McKim et al., 2017). Our investigation into the recent literature offers a valuable glimpse into the adaptive and resilient nature of the discipline. Specifically, the 2021 research implies the work done to make the discipline resilient falls disproportionately on the shoulders of teachers while the benefits of resilience are enjoyed by all actors within the system. Therefore, we conclude the resilience of the agricultural education system is more adaptive than transformative, as only one component of the system (i.e., teachers) experiences the burdens of change.

Placing the weight of resilience on teachers is unsustainable; therefore, we envision a system in which resilience is the product of diverse actors within the system adapting and, when necessary, transforming the entire system. To inform this vision, we turn back to the SER framework for insight into characteristics that support system-wide ownership of change. SER literature identifies multiple factors which increase the ability of a system to adapt or transform to change and, thus, remain resilient. These factors include diversity and redundancy, connectivity, managing slow variables and feedbacks, complex adaptive thinking, learning, participation, and multiple decision-making hubs (Biggs et al., 2012; Pauley et al., 2019).

The first factor, diversity and redundancy, refers to the importance of a system having actors with different functions as well as a system in which multiple actors can enact the same function (Kotschy et al., 2015). Diversity and redundancy support system resilience as these elements enable a response to diverse threats and opportunities *and* allow the system to progress should one actor within the system, and their abilities, be lost. The second factor, connectivity, suggests systems in which more closely connected actors can coordinate the actions of the system in response to external changes (Biggs et al., 2012). The third factor, managing slow variables and feedbacks, entails recognizing and intervening to address variables (e.g., enrollment trends, evolving teacher demographics, accumulation of teacher responsibilities) that influence the system over extended periods of time (Biggs et al., 2012). Complex adaptive thinking, the fourth factor, shifts attention to the way individuals think about the systems in which they operate. A system characterized by complex adaptive thinking is one where actors see the world as dynamic, non-linear, and interconnected (Pauley et al., 2019; Salomon et al., 2019). The fifth factor, learning, indicates systems are more resilient when the knowledge within the system is expanding and evolving. Systems that exemplify this factor are consistently seeking new ways to learn, expanding their knowledge of the system, and identifying effective ways to transfer knowledge to actors throughout the system (Pauley et al., 2019). The sixth factor, participation, entails a system in which actors are involved in making decisions that impact themselves (Biggs et al., 2012), a factor supported by system diversity, learning, and connectivity. The final system factor is multiple decision-making hubs. Related to participation, multiple decision-making hubs entail multiple groups empowered to contribute meaningfully to system operation, adaptation, and transformation (Pauley et al., 2019; Salomon et al., 2019). In total, these factors suggest a system in which all actors are meaningfully collaborating to learn about, evaluate, and manage the system, and are more prepared to experience adaptation, transformation, and resilience.

To examine potential adaptations and transformations to the SBAE system, it is useful to think about how we can employ the seven factors to support system-wide ownership change. And, while this is not the purpose of this paper, we offer a brief example to utilize a system breakdown as an entry point into a conversation about systems resilience. During nearly every boundary workshop, participants felt overworked and exhausted from work duties extending beyond contracted hours (e.g., FFA events, CDE practices, managing facilities, and travel). Participants noted enjoying this aspect of the job but felt guilty, shameful, and resentful for working during non-school hours due to consistently missing personal or familial activities such as child pick-ups and activities, family meals, or evening hobbies. Afterschool and weekend activities for SBAE teachers have been the status quo for decades, and much of the SBAE system is built upon the need for SBAE teachers to devote significant non-contracted hours to non-classroom activities, regardless of compensation. This is evident through the SBAE system's reifications (e.g., three-component model, award structures and qualifications, university curriculum) and participation (e.g., Instagram posts, NAAE messaging, ways of positioning SBAE teachers superior to other teachers). Despite this persistent challenge, echoed both by our workshop participants and in the literature (Clemons et al., 2021; Traini et al., 2021a; Traini et al., 2021b), few, if any, systems-wide efforts have addressed it. Instead, SBAE teachers are told to keep their struggles to themselves (Traini et al., 2020) or find ways to adjust, appease, or rearrange their work to manage the expectations (Traini et al., 2021a).

Rather than placing the adaptation work solely on the shoulders of SBAE teachers to address this challenge, we can operationalize the factors of the SER model, both in a diagnostic and prescriptive manner, to examine adaptations and transformations to hold multiple actors in the system accountable. Employing the seven factors with this example, we can quickly see the lack of diversity and redundancy (i.e., SBAE teachers are expected to perform all duties of the SBAE program), threats to connectivity (e.g., the isolation of teachers in their classrooms and the competitive nature of SBAE), and lack of slow variables and feedbacks (e.g., the continued accumulation of teacher responsibilities). Additionally, we see limited participation by the SBAE teacher (e.g., if the community expects long-standing traditions to be continued or when the state association asks SBAE teachers to complete additional paperwork), and limited decision-making abilities (e.g., teachers are rarely convened to engage in systems-level conversation).

To address this issue, systems adaptation and transformation might involve hiring non-teaching professionals to manage the local SBAE program or FFA chapter (diversity and redundancy), emphasizing collaborative relationships between SBAE teachers rather than competitive ones (connectivity), or redefining SBAE teacher position descriptions to reduce teaching load and/or reallocate teaching, coaching, and program managing duties (slow variables and feedbacks). Additionally, multiple actors such as teacher educators, state staff, and national organization leaders could convene with SBAE teachers to illuminate tensions within the system and work together to reimagine the agricultural education model (participation, multiple decision-making hubs). With these adaptations and transformations in place, our beginning vignette may sound different:

Vignette: *The expectations associated with my job align with my assigned FTE, which is 40% teaching and 60% program management. I have sufficient time to perform these expectations during the workday, and well. If I find myself spread too thin, I am comfortable having conversations with my administrator, booster club, and advisory board to discuss adjustments to the program and my role in it. My colleagues honor my commitment to taking my son to swim meets in the evenings, which helps me be a more present parent. Our program's recent strategic planning meeting resulted in a refined program vision where we "do less, but do it well," resulting in fewer afterschool and weekend commitments. The state's new program evaluation metrics emphasize community demographics and needs, allowing us to focus on initiatives that better benefit our students and community. I feel heard, seen, and valued as a SBAE teacher. I am able to consistently show up for students and family in a way I am proud of.*

An Invitation to Accountability

In this philosophical paper, we used teachers' attempts at boundary work to expose characteristics of the broader Agricultural Education system and its influence on SBAE teachers' felt inability to reclaim boundaries. As examined from the perspective of boundary setting attempts to understand SBAE as a resilient system, we find a system that develops the actors hoping they will be resilient enough to survive. Rather than allowing interactions that permit adaptations to evolve toward system transformation, our system exemplifies "survival of the fittest." The teachers who make the necessary adaptations (i.e., sacrifices) survive. Yet, we must make a turn to transform the system itself by asking difficult questions aligning with a systems-oriented paradigm. This will require reciprocal and accountable resiliency. What follows are some recommendations for beginning this work.

Given our emphasis on JAE, and the opportunities for its contributors to interact with various actors in the system, we must consider how our research efforts report recommendations and address challenges without limiting the potential of teachers. Our processes must engage practitioners in participatory research, especially to consider feasible recommendations. Currently, if one sought to review the literature (even from a condensed period) to determine what it means to be an effective SBAE teacher, one would find a cyclical narrative to which they could not measure up. In addition to the self-fulfilling prophecy that becomes the literature review process, recommendations limited in scope to the current research question fail to capture more systemic issues. While we could argue for more support at the state or local level, if we are to suggest that research is important in informing that work, we must be proactive in advancing recommendations that also address broader system transformations, rather than adaptations for individual teachers. It bears reminding, scholars in agricultural education often enjoy access to resources not afforded SBAE teachers (e.g., time to read and process literature, support staff, technology, and funding). When speaking to the profession via research, scholars must situate recommendations within the constrained realities of SBAE teachers. Extending recommendations to include funding for implementation, necessary policy reviews, and address of diverse actors in the system could lend starting points to this process.

In addition to considering adaptations for practicing teachers, further evaluation of SBAE programs must support additional actors in transforming local structures for the SBAE teacher. Few recommendations embraced the community-oriented approach to programs that SBAE advances as central (Phipps et al., 2008). If SBAE programs are to meet the needs of the communities they serve with sustainability, longevity, and adaptability, they must engage additional actors. This is not to dismiss the role of the teacher, but the teacher must be allowed to step back from the roles of counselor, scheduler, judge, accountant, and coach (Traini et al., 2020). Transformation of this nature starts at home, but not without tandem transformation at the systems level to make local-level changes feasible.

As an academic association, we have established teachers as well equipped for this work. The assets highlighted above are not bad things. We admire teachers for being innovative, student-centered, competent, well-trained, proficient, seeking growth, being experienced, bringing the world into their classroom, being well-read, and relying on support. However, our current system does not exist in a way that allows any individual to be *all* of these things. While it is not the place of three researchers to define what the system must be to allow this, we ask the following questions to advance the conversation: Which adaptations do we continue to uphold as core tenets of what an SBAE teacher should be? Which best align with relevance-increasing transformations enacted and embraced by all actors within a truly resilient system? Put another way, how do we reassess what teachers need (awareness, balance, competence, confidence, barrier-free implementation) to evaluate the system's demands? Does a system exist in which SBAE teachers can graduate prepared, competent, and well-situated to initiate their community's vision for an integrated program? Is our system bound in such a way as to promote power as an expression of mutual respect?

As a system, and as scholars within it, we must be willing to evaluate our patterns of disequilibrium as keys to unlocking systemic transformation. We cannot continue with a "survival" mentality, in which

adapting by setting boundaries is for the weak. SBAE teachers should not live in a system where boundary-setting takes enormous acts of courage— an uphill battle met with resistance. Fear of setting boundaries is natural (Cloud & Townsend, 2017). The expectation not to have them is a disrespectful abuse of power that will continue to maintain systemic disequilibrium. If SBAE does not have clear boundaries, how can anyone expect to have a lasting and meaningful relationship with it?

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