

To Those Concerned with Teacher Retention: A Collective Thought Experiment

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Abstract

This unique thought experiment invites the field of agricultural education to a critical dialogue on issues related to making teaching a career. Leveraging elicitation techniques, we introduce a series of nine letters on agriculture teacher retention. Written by agriculture teacher education faculty with expertise in teacher retention, these letters orient readers to the collective thought experiment by introducing the complex reality of engaging in the field via multifaceted viewpoints representative of perspectives we have encountered within the profession. Representing the broad range of perspectives on teacher retention, readers can expect to initially agree with components of some letters and disagree with others; however, readers should refrain from dismissing perspectives as this opposes the need to collectively understand the depth and diversity of perspectives on teacher retention in agricultural education. Understanding these diverse perspectives is critical to creating innovative, adoptable solutions to address the explicit and implicit challenges and opportunities embedded within these letters. To support engagement in the thought experiment, we provided resources for reviewing the letters and contributing to the dialogue as appendices, with specific opportunities for individuals and groups to engage with intentionality. Readers are, therefore, encouraged to explore the appendices prior to reading the letters.

Introduction

A recent publication in *Nature* highlighted the decline of disruptive science as researchers' foci narrow, leading to diminished impact within whole disciplines (Paper et al., 2023). This challenged us to

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seek new ways to use the existing structures of our discipline to engage in difficult conversations around the agriculture teacher shortage issue and step out of our “narrow slices” to promote future opportunities and innovation (Paper et al., 2023). While the current body of research related to the teaching career--in agricultural education specifically and education more broadly--was necessary for us to offer this paper (Clemons & Lindner, 2019; DeLay & Washburn, 2013; Haddad et al., 2020; Hasselquist et al., 2017; Moser & McKim, 2020; Robinson & Edwards, 2012; Solomonson et al., 2018; Solomonson et al., 2021; Solomonson et al., 2022; Solomonson & Retallick, 2018), we recognized a need to engage with data differently. Moving beyond isolated studies, we desired an opportunity to discuss taboo topics, vocalize concerns and ideas people may be too afraid to share publicly, and create a mechanism for vulnerability to occur. We saw a need to discuss complexities and ask tough “what if” questions about the teacher shortage such as, what if agriculture teachers felt like they could be both successful in their jobs and parenthood? What if they felt empowered and supported to create boundaries for both programmatic success and personal well-being? What if they could openly express feelings of exhaustion or burnout without fear of chastisement or judgement? What if folks across the agricultural education system could candidly acknowledge the systemic and structural challenges perpetuating the agriculture teacher retention issue?

As we reflected on our own practice, the systems in which we work, and the challenges we frequently hear from teachers, we turned to exemplars whose writing has inspired new thinking toward solving the wicked problems of their discipline (Crenshaw, 1991; Delpit, 1988; Freire, 1970). Where we diverge from Delpit (1988) and others’ examples is the power of this manuscript. Rather than sharing our own arguments or rebuttals, this work leverages emerging methods in the social sciences to foster collective thought (Deshpande, 2020; Kornberger & Mantere, 2020). We invite readers to participate in this new method of engagement, grapple with multiple perspectives and voices, and consider the underlying challenges that will allow future discovery and invention (Paper et al., 2023).

Thought Experiment Methodology

Our thought experiment aligns with a philosophical approach to problems to derive novel solutions (Aguinis et al., 2022; Bishop, 1999; Brooks, 1994; Deshpande, 2020; Irvine, 1991; Kornberger & Mantere, 2020; Sorensen, 1992; vonWehrden, 2021). In essence, rather than gathering new data, we repurposed data long overlooked and attempted new ways to use it. This aligns with some approaches to thought experiment to confirm or disconfirm current theory (Aguinis et al., 2022); in our case, arguing that current approaches and explorations are not solving a systemic teacher shortage. Our purpose is to engage readers in reflection on the problems generating the experiences conveyed in these letters. We invite readers to experiment with ideas and possibilities by reflecting on the structures inducing the conversation (Deshpande, 2020; Kornberger & Mantere, 2020). By examining the ideas shared and moving these conversations from the hallways to the spotlight, we come face-to-face with an opportunity to render something more informative.

Thought experiments have been used throughout history and in various fields to test ideas that are otherwise difficult to test empirically in the real world (Bishop, 1999; Brooks, 1994; Irvine, 1991). This use of thought experiments bounded itself largely in short, fictitious scenarios pushing the thinker to consider the moral or physical ramifications of the thought experiment scenario (e.g., frictionless surfaces or diverting trolleys). While thought experiments have been used since ancient times, they saw a resurgence in the 1990s largely attempting to align their approach to real-world experimental models (Bishop, 1999; Brooks, 1994; Irvine, 1991). More recently, there has been a call to engage thought experiments in the social sciences (Aguinis et al., 2022; Deshpande, 2020; Kornberger & Mantere, 2020; vonWehrden, 2021), with varied explanations regarding how the experiment should be established and subsequently used. This use ranges from holding to a largely experimental design with dependent and independent variables to test theory that could not be feasibly tested outside the mind (Aguinis et al., 2022), to imaginative devices that engage an exploration of the uncertainty that is the human experience (Deshpande, 2020; Kornberger & Mantere, 2020; vonWehrden, 2021). Our thought experiment aligns more closely with the thought

experiment as an imaginative device, allowing the exploration of “what ifs” to envision a more ideal future state for the teaching career.

Even with this roadmap, there is little to draw on, methodologically, for thought experiments in education research. Education is both a system in itself and a component of a larger system influenced and influencing others. As such, a thought experiment exploring how teachers engage in their work is necessarily large, amorphous, and multi-voiced. In addition, since this is a systemic exploration, the thought experiment moves beyond the simplicity of a single scenario to engage the experience of those participating in the system. It follows, then, that our thought experiment would engage a significant imaginative effort on the part of the reader to put themselves into the shoes of the speaking teacher for each letter to subsequently engage in a broader conversation. A conversation that, collectively, has the power to shift how the education system requires people to engage in their work. In this way, we align with Deshpande (2020) and Kornberger & Mantere (2020) in our efforts to convey truth about truth with a thought experiment, engaging devices that will teach us about our ideas and the world, and to engage with those ideas in ways that support bettering the system for the benefit of the collective. Readers should expect this experiment to challenge their notion of the status quo (Kornberger & Mantere, 2020).

Imaginative thought experiments are built to allow us to manipulate the standing worldview, requiring us to pose a “what if” question to engage a hyper-realism from which to explore the reality of the classroom while embracing the uncertainty that is human reality (Deshpande, 2020). Ultimately, our thought experiment asks readers to consider: *What new solutions to agriculture teacher attrition emerge when we remove the system’s constraint on teacher vulnerability?* Because of this, we ask readers to join the experiment at this point; suspending the current realities of the education system to imagine alternative conditions. Engaging this way means the thought experiment no longer “belongs” to the authors. While we hope readers will participate with us, your engagement has made the experiment yours—the collectives’.

A common resistance to the thought experiment methodology lies in the scenarios comprising the experiment (Yiftach & Brown, 2022). Leveraging the thought experiment methodology for this conversation means we need to first separate the thought experiment from the imaginative devices of the scenarios (Deshpande, 2020; Kornberger & Mantere, 2020). The thought experiment is a simple question: *What new solutions to agriculture teacher attrition emerge when we remove the system’s constraint on teacher vulnerability?* Simply having the hallway conversation will not do, which grounds the need to approach the question with additional scenarios to consider. Likely, it is hard to imagine a system where the need for the conveyed conversations is not the case. Suspending reality to imagine an alternative world is intense work, work we hope to expedite by providing scenarios from hypothetical teachers outlining their current status quo. While the following scenarios are derived from real conversations, they do not represent any individual member of the SBAE system. We drafted representative conversations from those with whom we interact in our various roles in letterform around the common starting point, “To Those Concerned with Teacher Retention in SBAE” to form the scenarios allowing us to consider the thought experiment question. Readers may notice recurring themes in our scenarios, and this is both intentional and necessary. We developed these letters to represent the duplicity present in the underlying message and concern, so as not to portray any individual thought or position as isolated or irrelevant. This requires thought experiment participants to emphasize complexity; live in the letter, sit with the ideas, and embrace the complexity rather than trying to reduce to the simplest form of the challenge conveyed.

The scenarios of the thought experiment are conveyed in the following series of nine letters, from the perspectives of SBAE teachers, teacher educators, and educational researchers. These letters emerged after significant frustration at a national problem-solving conversation related to teacher retention. We will not try to convince the reader that our initial vent was intended to develop an experiment for collective thought. However, as we began hypothetically responding to each other, imagining our own conversations “to those concerned with teacher retention,” we realized we had stumbled into something that would be

best explored by a much broader collective. This article is the start of an effort to move the thought experiment conversation from a party game for the educated elite (i.e., moral, ethical, and physical science dilemmas) into the hands of those with the power to make decisions to change the status quo of the teaching career. You, reader, will engage with these scenarios to different degrees, depending on your own perspectives, and we encourage you to lean into the difficult conversations around differing ideas. To support this engagement, we have included four appendices to support and collect conversations. Appendices A-C offer a process and reflection questions for individuals and groups to engage with the thought experiment. Appendix D provides a mechanism for participating in the broader convening conversation. We piloted these appendices in co-iterative efforts with practicing teachers, teacher educators, and educational researchers.

We now invite you to explore the scenarios, and a collective conversation more broadly, about systemic challenges in SBAE, asking yourself: ***What new solutions to agriculture teacher attrition emerge when we remove the system's constraint on teacher vulnerability?*** First, read and interact with the letters below, which illuminate various challenges in the SBAE system. Consider the reflection questions in the appendices and the best modality for engagement. Then contribute to the broader conversation by sharing your perspectives, insights, and ideas about these challenges.

To Those Concerned with Teacher Retention

Letter 1:

To Those Concerned with Teacher Retention in SBAE:

Can we please talk about demand? I was recently struck by the presentation of our current teacher staffing situation: “We’re not in a shortage, we just have high demand.” As someone who researches workforce development in agricultural education, I chuckled the first time I heard this statement but grew frustrated as the conversation progressed. This frustration only grows knowing our profession’s significant challenge in retaining early-career teachers. The same day I heard this framing, an SBAE teacher posted in a social media group about teaching their heart out but not being able to check off anything contributing to their stress. They shared how all the most stressful parts of teaching have nothing to do with actual teaching, and how the toughest part is the constant decision-making around what to do or not. The constant onslaught of opportunity and requisite to better engage is drowning teachers.

Even as I write this, I found out our state’s first opening due to resignation from teaching SBAE was submitted this morning. To be “in demand” means to be sought after, needed, or wanted by many people. I can certainly agree this is true about today’s agricultural educators. Program growth and expansion, teacher attrition, and expanded licensure accommodating a broader range of subjects put SBAE teachers in demand. And yet, I continue to attend problem-solving sessions related to addressing teacher retention. In the same update touting demand over shortage, we listed several efforts to retain teachers to the profession.

I am concerned, after the conversations I participated in and observed, that we are so quick to bring a strategy and solution we fail to ask *why* the solution is needed. I’ve witnessed conversation after conversation focused on strategies for retention, but little helping us identify the actual problems. I am concerned about this for several reasons. First, generating strategies without first discussing what we know about the problem leads to a superficial conversation that does not provide real solutions. Second, I hear strategies we assume work or will work. Third, these strategies often add to the work we expect teachers to do (i.e., attend additional professional development). And finally, without understanding the underlying problems, we are, as one facilitator said, “only pitching water out of the boat.”

I found myself asking why again and again. Why are teachers overwhelmed? Why do they need to build resilience? Why do they feel like they can’t set boundaries? Why is there so much opportunity to say

“no?” Why do we ask them to accept abuse from administrators and parents? Why do we encourage more? Why do we expect professional commitment? Why do they need so much encouragement to get through the day/week/year? Why are they so drained nothing seems to fill them up? Why are we surprised when teachers leave? Knowing where to direct these efforts starts with examining those already in place and asking, “Would this still have value if we had enough teachers?”

While I have only just begun my journey as an educational researcher, I know “in demand” means much more than, “not enough to go around.” Being sought after in much of the rest of the working world comes with pay incentives, continuing education opportunities, career scaffolding for success, and intensive onboarding and leadership programs, to name just a few. Being in demand comes with privileges not currently offered or afforded to teachers. Are we advocating for these? Problem-solving around teacher retention should certainly “pitch water out of the boat.” We want to continue reducing the chance of drowning. But ultimately, our conversation seems a little stuck. We still reference the 1980s farm crisis and the impact it had on agricultural education in public schools. We advocate for Career and Technical Education programs but fall short in advocating for the teacher. Teachers cannot work their way into additional compensation; they only work their way into more work. NAAE, AAAE, FFA, NASAE, and others, especially at the state level, are well positioned to provide immense support for teacher advocacy around issues of compensation reflective of demand, whether base salary, extended/coaching contracts, preparation time aligned with heightened teaching loads, opportunities for continuing education, or some combination.

I recently heard a panelist recognize the centrality of identifying “where [we] go when [we] need to recharge.” Our current efforts attempt to be our teachers’ recharge in addition to being a job and their “family.” But if we truly advance sustainability, we must engage in the hard, slow changes in thought and process. We owe it to our teachers to do that challenging work. We must capitalize on the opportunities we have to come together to take advantage of each other’s expertise to legitimately problem solve.

Sincerely, An Educational Researcher

Letter 2:

To Those Concerned with Teacher Retention in SBAE:

There are few things more predictable than a local coffee shop in a farming town. The constant chatter of forks, plates, spoons, and cups never interrupts the hum of good, somewhat honest conversations. The combination of eggs cooking, bread toasting, and coffee brewing creates a smell that is unquestioningly familiar. Somewhere, in one of these coffee shops, two old men who made a modest living farming and two old men who made a modest living teaching about farming sit together, swapping stories. There are few places I would rather sit than at this table, not because the conversation is new, but because the honor of that seat is earned.

From an outsider’s perspective, a seat at this table seems to be earned by either being a good storyteller or being the person about whom good stories are told. Stories are required at this table, yes, but the seat is not earned by stories alone. Potentially, what earns a seat is the ability to communicate how hard you have worked through these stories. It is the shared confidence of the men sitting at the table that you have put in *enough* hours and done *enough* of the hard work told in these stories to have earned your place.

These are good stories that tell better truths. Sitting for a while, you would become enamored with the lives these honorable men have lived. The work ethic, sacrifice, and commitment communicated through these stories would leave anyone in awe. You would hear things like “...I started at 3AM...,” “...there wasn’t another soul in the building...,” “...nobody in their right mind would have...,” “...I had

been at it all day...” Of course, the stories push the boundaries of what is possible, but the tellers dare not cross that line and lose the shared confidence of their friends at the table.

As I said, there is a better truth told through these stories. That is, there is a nobility to sacrificing your time for the betterment of others – just as these farmers and teachers have done their whole lives. This nobility of sacrifice permeates agriculture. Is there anything more noble than asking for nothing in return after waking up early to work till sundown on a Saturday helping someone to provide food for others? In agriculture, there is something spiritual about waking up early, worn-down clothes, long hours, doing the hardest job, hard-earned back pain, and sacrificing family time. Farmers don’t proudly proclaim they slept in, took a day off, went on vacation, or accepted money for being generous.

Do we in agricultural education strive to be those we laud, those who toil? Is it possible working long hours, ignoring our boundaries, and taking on more than we can achieve fulfills our need for noble sacrifice? If we change the conversation, do we change the outcome? Imagine a world in which earning a seat at the coffeeshop table of agricultural education requires margin, balance, and boundaries. You see, I can manage the reality of frustrating administration, underfunded budgets, misguided parents, endless papers to grade, administrative paperwork, immature students, poor salary, and all the rest in the name of noble sacrifice, but not for anything else. *I need* this to be about noble sacrifice; if you make it about margin, work-life balance, and boundaries, *I quit*.

Sincerely, An SBAE Teacher

Letter 3:

To Those Concerned with Teacher Retention in SBAE:

I recently saw a quote that stopped me in my scroll, “It’s not about teachers remembering their why. It’s about leaders helping to remove the barriers so that teachers can *access* their why” (Erika Garcia). This especially caught me as my “why” is as clear today as it was when I started teaching twelve years ago. I’m in this to share the importance of agriculture and support the next generation of innovators and global leaders. I’m in it for the farm kids.

But *why*? If anyone knows “the joys and discomforts of agricultural life,” I do. As a dairy farm kid, you don’t get vacations, holidays, sick days. The cows need to be milked and the calves need to be fed and the crops need to be tended whether you’re up for it or not. Whether you need a break or not, whether the weather is nice or not. You’re in it. All in, for all of it, all the time.

Until you’re not. I will never forget standing on the gate of that auction ring. The weeks of preparation leading up to the sale. The hours and hours of *additional* work—just to get ready to be done. The family and friends standing around that ring; some buying, some not, none knowing just how deep this iceberg of small farm non-vitality went. It boggles the mind to think of how many more farms like ours are no longer in operation since our auction. I’ll always remember my dad choking up when invited into the auction booth to talk about his cows. His head against warm flanks on a cold day as he finished his last milking in that old tie stall. Were we calling it quits or saying yes to something better? Little did I know how often I would be asking myself that question in my own career just 15 years later.

I can only speak as an early career teacher; while I have been in this profession for more than ten years, I only taught in the SBAE classroom for five. And those five were great. I was hired with the expectation to build my vision of the program. I had all the support I could handle, in part because I did not ask for much, and in part because everyone was enthusiastic about where we were headed. If I made a suggestion, we made it happen. We started a school garden, rebuilt an integrated SAE program, competed and held our own in several FFA contests, recruited community coaches, attended every leadership opportunity, showed up for service, got the grants, and applied for the National Chapter Award. I served on

school committees, coached basketball, and was active in state and regional events. I was a *good* FFA advisor and an aspiring-to-be-good classroom teacher.

Even in five years, I recap my experience moving from how I was doing and what I was hoping to be to a list of accomplishments. Surely if I was doing more, I was more qualified, right? More qualified for what? For what was next. I already knew the high school classroom was not my final destination. But I had to be good at what I was doing to be worth my salt in the next round. Didn't I? Was I? I so often wonder who I'd be as an ag teacher today. It's not fair, because hindsight is 20/20. I can see the strain from this angle, but it was invisible to me while I was in it. You just did what it took. That was all there was to it. No ulterior motives. No one telling me I had to do anything. I was just doing what needed to be done. I *loved* it. In fact, I left so I could help others love it.

Wasn't it Theodore Roosevelt who said, "Far and away, the best prize that life has to offer is to work hard at work worth doing?" My dad still says farm kids are a farm's most valuable product. Their work ethic, determination, and connection to what is important is unmatched. The teacher I was was born out of demanding work. I cockily told my hiring principal, "Lots of people will know more than me, but not many will outwork me." My why is so entrenched in working hard for the love of work. It is against my fabric to work anything less. I cannot slowdown in this work worth doing.
Sincerely, An SBAE Teacher Educator

Letter 4:

To Those Concerned with Teacher Retention in SBAE:

I came into my first semester of college with the dream of being in a classroom. I wanted to teach and be a role model for minority students who wanted to pursue careers or had an interest in agriculture and its related sciences. I wanted to be someone they could look up to, but also provide the tools to support them. I was excited to get started with my classes and continue my involvement in FFA. My path was set, and I was ready to make the change I had always wanted to see. Unfortunately, that was not what happened.

The first few months of my first semester were smooth sailing, and I enjoyed my classes. I was doing my best to balance my time between classes and leadership involvement. Eventually, involvement started to consume more and more of my time. Grades slipped and I got reprimanded. That led to weekly meetings with team supervisors and grade submissions so they could keep track of me. While some of my peers were in violation of the code of conduct, they didn't have to do any check-ins with team supervisors. The environment with my teammates grew toxic and I constantly felt unwelcomed. The isolation I felt led me to believe I could not talk to or trust anyone about what I was facing. Eventually, things got so bad I decided I couldn't continue serving. I decided I was no longer going to put up with microaggressions and toxic behavior. I left FFA and focused on my studies in Agricultural Education, thinking I could jump into my studies without any problem.

Boy was I wrong. I felt so out of place in my classes. I became more aware of myself and how I never truly fit in. I was the only student who wanted to teach in an urban setting. I was the only person of color. I had little to no background in agriculture. Imposter syndrome became my best friend. For the rest of the semester, I questioned my self-worth and my ability to be a teacher. I was stuck in a loop of negative thoughts about my ability to teach and make an impact. Thoughts that I, a person of color, had no business trying to pursue a career in a predominately white industry. Thoughts that I didn't belong. Thoughts that, because of the actions of a few, meant I constantly questioned who I could trust. Thoughts that meant I struggled alone. With those thoughts, I switched majors to put distance between myself and teaching agriculture. It was easier to run than to stick around. For months, I struggled to feel like I could make any sort of impact, so I quit trying. Why should I try to be a role model? Why should I try to make a difference? Why try? With that mentality, I decided to pursue a different major outside of agriculture. If I was going to

make an impact for minority communities, I had to remove myself from a place I loved and find a different way. Little did I know that I would find my way back to agriculture.

Life has a funny way of directing you back to your purpose. A couple of courses into my new Political Science major I was not enjoying any of it. It wasn't until a professor told the class if they wanted to be successful they had to go into academic research. Academic research?! That's not what I signed up for! With that in mind, my journey took another turn, at the one that ultimately put me on the path to making the change I wanted to see. I realized if I wanted to see change, I had to be willing to take the initiative to make change. I wanted to create a community for other students like me; students who found themselves struggling to build a community and find a support system that looked like them. Through establishing MANRRS, I found myself and my passion again. I was inspired to switch back to agriculture and be the change I needed.

Don't get me wrong--there are still times I walk into a room and question if I belong. I find myself looking for someone who looks like me to assure myself I do belong there. I am doing the work to create space for others who look like me, but sometimes it's draining. We talk about diversity and inclusion being an issue. We discuss the steps to create a more diverse and inclusive agriculture. Except nothing gets done, and we repeat the same discussion the following year.

My story is one of many that are ignored and forgotten. One of many where it felt like someone was just waiting for me to mess up. One of many where someone was looking for any little mistake. One of many where my shortcomings were highlighted over my successes. Where what had always been done trumped what I needed to grow. One of many where student development came second to holding up a particular image. How is agriculture and agricultural education supposed to grow more when we don't create space for minorities and underrepresented communities? Where do we grow agricultural educators that look like me when historically, agriculture was used as a form of oppression for minoritized communities? How do upcoming changemakers see themselves as educators when there are so few who look like them to look up to? We can't erase history, but we can do more to make sure we shift the culture of agriculture, so my story doesn't become a repeated history that ultimately dooms our future. Sincerely, A Student Concerned for SBAE

Letter 5:

To Those Concerned with Teacher Retention in SBAE,

We've all seen the quote from Frank Martin, South Carolina Head Basketball coach, right? I'll share it here anyway:

You know what makes me sick to my stomach? When I hear grown people say that kids have changed. Kids haven't changed. Kids don't know anything about anything. We've changed as adults. We demand less of kids. We expect less of kids. We make their lives easier instead of preparing them for what life is truly about. We're the ones that have changed.

I've seen this change in us and in our profession. We certainly don't demand the same from these adults; who are these graduates coming out, telling me during their student teaching experience they're not going to come to 6:30 AM practice or a 7:00 PM meeting? That's part of the job. They need to know that's part of the job. The job hasn't changed, but our teachers sure have. Our concern over burnout has made teachers weak. They're not ready to withstand the pressures of the classroom. They don't have what it takes to win. Understand me, of course I wouldn't say this out loud, but I'm frustrated. Has it really become old school to expect a hard day's work?

Part of the problem is schools don't get it, and we must advocate better. We must help schools understand the work it actually takes to be a successful ag teacher. I added it up. It takes 60-70 *more* hours

to coach a state-winning CDE team than it does to coach a state-winning football team. 60-70 MORE. And don't even get me started on a national team. That's what this profession is—more. More time, more community, more engagement because our students deserve more. We've got to teach incoming teachers to advocate for that. They must understand their value. Their worth. All the work they will put in to put that school's ag program on the map, because it's never just that one CDE team. It's seven of them. It's meetings and community events and fundraisers and advocacy. Every school board meeting. And for the kids? Every concert, performance, game, all of it. Why? Because we care.

How do we get our new teachers to care as much about these kids as they need to? Kids need what we have to offer. They need us. If you've been in schools at all in the last few years, you know kids need us. They need the push to see themselves as successful, as capable, as ready to be productive in the world. How can we inspire the next generation to do that when our teachers don't and can't? When our teachers aren't successful and burn out after a year, how are we securing any future for agriculture? Our retention problem is as much a recruitment and preparation problem as anything. Where are the go-getters? The self-starters? The day-in-day-out hard workers? Where are the ones who don't burn out? Who see a challenge as a wall to be scaled rather than run into repeatedly? Where are they? Why aren't we recruiting them? Probably, in part, because our preparation has gotten soft. We don't teach hard work and technical skills in agriculture anymore. Not in our high school classrooms, not in our preparation programs. We lose our stars before they even start shining for us because they'll be pushed harder somewhere else. We've done such a disservice to our profession.

Do you know what the life of an ag teacher is truly about? It's about working hard at work worth doing. It's pleasant *as well as challenging*. Everyone who comes to this profession through a high school ag program should know what they're getting into. It's about the joys and discomforts of agricultural life. It's our tradition. It's in the fabric of our national life, and anything less than that service fails in our charge. These new teachers need to understand there are dues to be paid. The first few years won't be easy. You'll make a ton of mistakes. You'll flounder. It's a sink or swim deal, and we need to do a better job getting teachers to swim. We'll all swim a different stroke, but either way, you're getting pushed in the pool. Doggy paddle if you must, float if you have to, but stay in the pool. Reach out to the life raft of your mentor or another teacher in your region. We're all here for you until you can swim on your own. You'll get there. You put in the time and eventually, you'll be good—it won't be easy, but you'll get good. Survive that first round in the pool, and you're so much stronger for the next set of laps.

We need a change. We need to help these new teachers understand that once you've put in the work you can make it in this profession. It's a noble profession. Where else do so many kids become yours through the shared hard work, dedication, and passion for agriculture that fuels this profession? Nowhere. We need to help recruits understand that.
Sincerely, An SBAE Teacher

Letter 6:

To Those Concerned with Teacher Retention in SBAE:

You know what's crazy to me? That at 16 years in, I'm a dinosaur in Ag Ed. I'm one of the oldest three teachers in our region, and in the oldest 10-15% in our state. Do you know how many of my graduating class are still teaching? I think there may be two of us. Do you know who they're replaced with? Teachers without licenses. Teachers, who because there aren't enough to replace them, are retained whether they're effective or not. It's sad. What kid aspires to be like that placeholder? That pulse? Our retention issue has become our recruitment issue. The foundation of education is cracking underneath us. This isn't just an Ag Ed problem. Something big needs to change, and soon.

I look at myself being a sixteen-year-old dinosaur and can't help thinking of the real dinosaurs. The ones who were dinosaurs when I was in high school and were super dinosaurs when I started teaching. You know what I noticed about all those guys who come to mind? I won't pretend like my hair is as thick as it used to be, but all those guys are bald. The stress just gets to you when that's what you do all the time. So many of them were on their second marriage, because their first marriage was their job. But we hold up their programmatic success. Why? Because they coached winning teams. They were FFA teachers. Kids loved them. Kids chased them into the profession. And you know what happened to those kids? Those kids got so overwhelmed when they entered the classroom. The job was so much more than they ever thought because they didn't see the sacrifice. Those guys were always dinosaurs to us. They've always been old and stressed. We never saw how they got there. But when we see it happening to ourselves, we panic.

Teachers don't graduate prepared for that first year. NOTHING prepares you for that first year. But even then, the first year is easy. I know that's where we lose a bunch, but while the first-year weeds some out, the second and third year really sorts them out. If you were a teacher, you know what I'm talking about. The first year is hard because you're drinking out of a fire hose, but honestly, you think you're getting by. And then you get through it and think, "yeah. I can do that again." Except the second year is harder than the first because you know everything you should be doing and you're still not doing it. And then year three, you're doing it, but you're not doing it well. But maybe if we get to year four or five it will get easier? At least we have the promise of the kids all being ours because the former teacher's kids graduated?

Except it doesn't get easier. You just get clearer about what you want. I recently told my student teacher, "I don't care if you work to contract or not. If you're doing what you gotta do to get the work done, that's what I care about. If you get your work done, get out of here." But these kids coming out don't know what work needs to get done and what doesn't. They see a huge list of opportunities; contests, proficiency awards, classes to offer, professional development. Never mind the day-to-day of keeping a program going. How many of these kids really know how to inventory and manage their shop, greenhouse, or lab? They can't. It's just too much to get ready for. But they've got to know if they put in the time, do all the preps, establish the program, they get to back off. They get down to the one or two areas they really like to teach in. They don't have to prep as hard anymore. They just need to pay their dues.

But that's only kind of the point. When we're talking about teacher retention, we're setting examples for our students and our student teachers about what's okay. We're so good at piling more on. What *ever* comes off the plate? How do we decide what we're not going to do anymore? Something has to stop. We can't keep putting more on this cracking foundation. It can't support the weight it's already carrying. But I'll leave the solving and what to take off to people who know more about this than me. I'm just a sixteen-year-old dinosaur.

Sincerely, An SBAE Teacher

Letter 7:

To Those Concerned with Teacher Retention in SBAE:

To say my four-year teaching career has had ups and downs is a massive understatement. One month into my first teaching job I had a nervous breakdown and was medically required to resign. I thought it was just a tough school at first, but the worse it got, the more alone I felt. I felt like such a failure. I'm still only vaguely sure what happened; I got so overwhelmed and had to step out before my students suffered. I just wasn't ready. I wasn't ready for the challenges my students brought to class with them, wasn't ready to be so far from home, wasn't ready for the things that would be broken or stolen, wasn't ready to not get along with my co-teacher, and wasn't ready to have to steel myself emotionally every single day. I kept hearing, "It'll get better." "Hang in there." "Just get through this week." Honestly, that message is probably what got me to the point of mental and emotional collapse. If I could just hold on, just a little longer, surely things would get better. And if they didn't, I must've been a failure as a teacher.

Despite that failure, I refused to accept that this career wasn't for me. So much of what's important to me is embodied in teaching and mentoring the next generation. While I was so ashamed and felt so guilty for resigning one month in, I knew I had to try again. A month after my breakdown, I was looking for substitute teaching jobs. I had to get my feet back under me. If nothing else, I had to prove to myself that I was the teacher I knew I could be. That meant my second attempt at the classroom kept me much closer to home. It was just too important for me to have a support system close by when classroom teaching got hard. I wasn't married, so my family was who I leaned on when I had a rough day. That's what I was looking for. Somewhere my family could come first, and my professional life would follow. I restarted with substitute teaching by heading back to where I student taught. This was before COVID, but even then, schools were in desperate need of substitute teachers. I found districts I wanted to be in, and focused on doing the best I could with what I had on any given day. By taking things in small chunks, I was able to take some pressure off and focus on the mechanics of teaching rather than the enormity of the whole task.

I write this to you today, back in the ag classroom, but still struggling. Instance after instance in this profession pushes me past where I feel like I'm competent into questioning whether it's realistic to meet the needs of my students. I am so committed to giving my all to teaching, especially ag teaching, but I don't know how many times it can beat me up and I'll keep coming back for more. I know I can make a difference. I know I can be a great teacher and role model. I've seen myself do it. Is it too much to believe there's a place for me? I'm so worried about agriculture, and content, and passion for learning, but I witness firsthand how much bigger teaching is than that. How can you possibly care about plants or math or World War II when you and your single mother are homeless renting a cheap motel and trying to find your next meal? Do I just go somewhere else to find students with fewer needs? I love helping others and I want to see others happy and healthy in life. What a rollercoaster. With all of that on top of the stress of teaching and classroom management paired with the anxiety and fear of living alone and away from home for the first time, I guess it really isn't out of line to crack so quickly.

At the end of the day, I'm writing to you because teaching is such big work. We need to stop turning our heads to the next person to do this big work for us; we, as teachers, have better opportunities to help because of our perspectives and connections. "Less need for charity and more of it when needed. In being happy myself and playing square with those whose happiness depends on me." It's bigger work than learning your content or learning pedagogy or even building rapport. It's work that you can never be truly prepared for. Even when you're doing it things blindsides you with their sheer magnitude. Not the magnitude of not knowing something, but magnitude of what some kids come up against. The magnitude of all the things you can't unknow once you get to know your students. What am I missing to make that mentally and emotionally sustainable to stay in *that* for the long haul?
Sincerely, An SBAE Teacher

Letter 8:

To Those Concerned with Teacher Retention in SBAE:

I believe I have earned the right to talk about teacher retention. Being older than the rest of you, I have learned to be an agriculture teacher by being an agriculture teacher for many years. I have earned the respect of my fellow agriculture teachers and I live to serve this noble profession. Today, my advice – ripened with wisdom – is to follow the leadership of our FFA history. To create a system of retained agriculture teachers, we must encourage our fellow teachers to embark on the four-step path outlined in our FFA motto.

Step 1: Learning to Do--Teaching agriculture is a complex, demanding job requiring sacrifice, time, and effort. You simply cannot learn to be an agriculture teacher by talking about it; therefore, step one in being a retained agriculture is to learn the complexity of the job. I believe the only way to learn this is to

work side-by-side with the most successful agriculture teachers in the state and observing them do the job for a sustained period (e.g., few months at minimum). During this time, it is critical to earn your agriculture teacher initiation by showing up, putting in the hours, and learning the nuggets of the trade.

Step 2: Doing to Learn--Once you have seen the job being done by someone who does the job well, you can step into the role of being a *new* agriculture teacher. Of course, during this time you will be learning what it is *really* like to be an agriculture teacher because you are doing it; that is right, it is now *your* program. But, potentially more important, *we* will learn if you can stick it out long enough to *really* be considered a *true* agriculture teacher. Trust us, we have seen many *new* agriculture teachers come and go – we need you to prove you will stick around for *your* students. There is nothing worse for students, and a community, than agriculture teacher turnover.

Step 3: Earning to Live--Only a few make it to this stage; so, congratulations if you are here. You have proven you won't bail on your students after a few years. Now, it is time to earn your livelihood as an agriculture teacher. As you can tell, teaching agriculture is not about making lots of money. No, the currency we trade in are banners, plaques, and awards. Trust us, seeing your students jumping with unbridled joy because they won a contest is a far better reward than any fat paycheck. We look forward to seeing if you have what it takes to compete with us and realize the true joys of being an agriculture teacher.

Step 4: Living to Serve--You might expect this stage of becoming a retained agriculture teacher to be a cozy statement about serving students. It is not. When you get to this stage of the agriculture teaching ranks, your service is to the profession. You must uphold the tradition of excellence that is teaching agriculture. Ensure those who come after us learn to do, do to learn, earn to live, and live to serve as agriculture teachers. Without us, the profession is in jeopardy and our students will suffer. Thus, feel the weight of keeping the traditions of teaching agriculture alive, because it falls upon your shoulders now.

I still idolize those individuals who embarked on this path before me, and I am proud to say I have embarked on this path over the last 30 years. It was not easy, but it was worth it. To put it simply, the profession requires more people willing to take this journey - for our students, for our history, for ourselves. Sincerely, An SBAE Teacher

Letter 9:

To Those Concerned with Teacher Retention in SBAE:

I've been questioning my career in SBAE since August. Yes. Since the very beginning of the school year. Do you know what the biggest problem is? I want to stay. I've been working with a mentor since August to figure out the true root of what's got me so over teaching, because this job works. I love my school. I don't know if I'd teach anywhere else. I am in it because I'm in my community. I love learning, I love the kids, but I just don't know how I can keep going. I'm not sure what the way forward is for me here. I'm burned out. I'm emotionally drained. I'm stuck. As much as I'm all these things, I'm not sure I see myself doing anything else. This job works for my family. This job has a good retirement package and decent benefits. But this job takes so much. This job takes something from me every week. Sometimes it takes extra time with my kids. Sometimes it takes all the emotional capacity I have. Sometimes it takes my sanity. Often it takes more than I can give.

If I've learned anything over the last eight months of reflection on this career (almost a full school year, at this point), it's that there is so much suffering in silence. There are so few opportunities for teachers to voice and share legitimate concerns and work toward change, the bureaucracy itself is defeating and deflating. How do I know? I know because I thought I was just tired. With two little kids, I know the second shift well. I am in teacher mode at work and every waking minute outside of that is mom mode. But I'm

not just tired. I'm overwhelmed and insanely busy with ten different preps over six class periods; seven of those are brand new this year.

I'm also not new at this. I'm just out of the fifth-year new teacher zone and heading into year six. Except, instead of things getting easier, I feel like my eyes are just opening to the challenges of working in schools. Keep in mind, as a sixth-year teacher, I've seen a lot of chaos that those who've made it to teaching in 2023 were more seasoned when they experienced. I've been teaching since 2017. Do you know what that means? Right when I was hitting my stride, the world (not just my teaching) was upended. It basically means I was stuck on year three for three years. Even without the world turning upside down, I've had five different administrators in six years. That's a lot of change in expectation requiring no shortage of resilience.

Some of this is because I'm a mom. I've only recently stopped pumping during my planning period. It was just too much. I know it sounds like you're just sitting there, and should be able to get a lot done, but that's not how it works. For those who haven't pumped during their planning period, it's like trying to read a book, while writing an essay on a different book. Put another way, it's like trying to weld and deliver a lesson on propagation at the same time.

I can already hear a few of you who have gotten this far: "So what have you *done* about all the frustration and struggle you're feeling?" Some of you have already dismissed me as a quiet quitter. But I'm still here. I'm writing this from my classroom. I'm in the fight. And that's the stupidest part of all. Why is staying in the classroom a fight at all? When did enjoying teaching become such idealistic nonsense?

For those wondering, "what do we do about teacher retention?" I'll say this: we need to empower teachers. I've spent a year advocating. It started with advocating for myself. Before school even started, I talked with my principal about the overwhelm I was feeling and proposed a lighter course load. Ten preps over six periods while nursing wasn't going to be feasible. But that request was denied. Next, I looked to myself. Perhaps my own expectations were the source of the stress. I got a mentor to help me with setting boundaries and talked to someone in my state ag teachers' association. I really thought things were going to be looking up when someone from our ag teachers' association was going to meet with my principal and guidance counselor to help all of us navigate program expectations. Unfortunately, hope might be part of what has me writing this today. The state ag teachers' association never got to talk to my principal.

Teaching is hard anyway. Kids are struggling now as much, if not more, than ever. Teaching is even harder when the decision load is compounded daily with the question of, "Should I do this anymore?" But all this fighting to make this job work takes time I don't have, and it takes it from my students and my own kids. There is nowhere in my day for me to advocate for a better school climate or be involved with changes. No part of my day leaves room for me to keep up with educational policy, let alone engage in the conversation. There's no room for me to seek help working with my admin from outside my school. I wouldn't even know where to start.

One of the hardest parts is constantly having other opportunities. Opportunities that make it look stupid to stick around in teaching for the pension. Opportunities that make me question if time with my kids in the summer or afterschool--time I'm not getting now because of extended time and coaching FFA--is really the schedule it's cracked up to be. Opportunities that make me wonder why I keep trying to navigate (i.e., fight) this bureaucracy to try to make something better. You have to really believe in education to do that, and I'm not sure if that makes me passionate or stupid. Most days, I feel like it drives me insane. I lose sleep over this job, over these kids that aren't mine, and over decisions I have no control over, but will have to implement. What kind of opportunities *don't* look better than that?

What do I want those concerned with teacher retention in SBAE to know? I'm not really sure what to tell you at this point in the year. I'm over it. I'm committed. I'm looking for something better. I want to

teach *here*; not anywhere else. It's not the actual teaching I'm concerned about not being able to do. How long can someone navigate politics, moving targets, drama, student issues, micromanaging, and the inability to do anything about it without losing their mind? I don't know how much longer I can.
Sincerely, An SBAE Teacher

Engaging the Collective

What new solutions to agriculture teacher attrition emerge when we remove the system's constraint on teacher vulnerability? Thought experiments are well situated to identify and root out inconsistencies and challenge previous models toward improvement (Sorensen, 1992). Ours engages models of how teachers, teacher educators, and educational researchers may discuss their reality of the profession, recognizing our capacity to generate these perspectives is limited by our own experience in the field. We challenge others to take a similar approach in using the structures of our discipline in new and imaginative ways to engage with big issues and to harness the full power of what we do. We encourage readers to pay attention to elements of our teaching, research, professional development, and preparation so we recognize the significance in convergence and divergence. We hope you lean into questions about what makes something the case beyond merely asking, "what is?" to ask "what if?" As you participate in the conversation, we encourage you to consider what events and structures may induce the experiences conveyed.

Our goal with this thought experiment goes beyond individual engagement to leverage systems convening (Wenger-Trayner & Wenger-Trayner, 2021) to give a mechanism to the thought experiment. Systems convening involves intentionally bringing people together from different parts of a social landscape, such as SBAE, to address a problem collectively. Unlike isolated discussions, quick fixes, cynicism, or casual chats, convening unites people across the system to grasp the complexities behind current problems. It encourages them to reflect on transformative changes collaboratively. Convening is about fostering open, messy conversations across the system. It's a process that sheds light on underlying structures influencing our actions and acknowledges our shared responsibility. Convening calls for accountability and courage, recognizing our role in shaping the present reality and promoting collective ownership (Wenger-Trayner & Wenger-Trayner, 2021)

This is only the beginning of the experiment. By advancing this manuscript ahead of workshops and further conversation, we invite a much broader conversation than we could generate as authors. In this way, we encourage your response, not only to the points with which you resonate but especially where you experienced conflict with your own approach to teaching and support in SBAE. We ask readers to challenge the structures making these letters the case, and welcome responses, in whatever form, back to the authors. For our part, we will be disseminating opportunities for feedback through our professional development, preservice and in-service networks, and research outlets. We look forward to continuing the conversation.

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Appendix A - Individual Exercise

Overview:

This is an individual exercise to engage in this thought experiment. The goal is to notice how you react to the letters, what you react to, and eventually, understand what those reactions mean (to you, your work, the teaching profession, etc.).

Directions:

1. Read through all the letters in one sitting, trying to refrain from capturing notes or highlighting anything.
2. Read the letters again, one by one. This time, we encourage you to add your reactions in written form or digitally by underlining phrases, highlighting ideas that stand out to you, writing comments in the margin, or assigning your level of agreement/disagreement or alignment/unalignment with each. There is no exact procedure here. The goal is to just get your reactions to what you've read.
3. Now that you've spent some time reading and digesting the letters, take a few moments to consider the questions below.

Reflection Questions:

1. What are your overall reactions to the letters? Was there a particular letter you connected with? Was there one that bothered you, challenged your thinking, or was least like your own experience?
2. What influences or experiences may be contributing to the perspectives shared in the letters?
3. What underlying challenges about School-Based Agriculture Education can you identify after having read the letters? In other words, what problems exist in the profession?
4. Given the problems you highlighted, what needs to change? It's OK if you don't have perfect solutions or if your ideas don't feel feasible, economical, etc. The goal here is to think, dream, and envision possibilities.
5. Return to the thought experiment: What new solutions to agriculture teacher attrition emerge when we remove the system's constraint on teacher vulnerability?

Next Steps:

Your thoughts, observations, and reactions are a pivotal component of this collective thought experiment. We invite you to consider sharing your experience and perspectives. Please see Appendix D for engagement options.

Appendix B - Group Engagement

Overview:

The goal for this activity is to engage a group in this thought experiment. Similar to Appendix A, the goal is to notice how you react to the letters, what you react to, and eventually, understand what those reactions mean (to you, your work, our discipline, the teaching profession, etc.). This exercise is meant to be completed as a small or large group. However, we encourage participants to have the option for anonymous contributions before engaging in group discussions.

Directions for Facilitators:

1. Frame the Conversation – Take a few minutes to frame the conversation with your group. To do this, we recommend summarizing the introduction section of this paper. Inform the group that this is a thought experiment, and the goal is to utilize the letter activity to generate meaningful conversations. Reiterate each letter is a composite of several people's stories. It represents real individuals, stories, and life experiences that may or may not mirror your own. Additionally, establish norms and expectations for discussion, recognizing the value of differing perspectives and the potential for disagreement.
2. Reading/Hearing the Letters – Give directions for the individual consuming of the letters. This can commence in a variety of ways. You may distribute the letters to participants and ask them to read, re-read, and react silently (see Appendix A for directions). You may read each letter aloud to the whole group while they follow along with a printed or digital copy. This option could be powerful, especially if readers thoughtfully use their voices (i.e., inflection, tone, emotion) when reading the letters.
3. Individual Reflection and Reaction – Give participants an opportunity to react to letters anonymously. This is an important step as individuals should feel comfortable expressing opinions and reactions that may differ from the norm or the opinions of influential participants (e.g., veteran teachers, state association leaders, strong personalities, etc.). This can be accomplished through analog means (e.g., sticky notes) or digitally (e.g., Padlet). We encourage SBAE teacher participants to reflect on the questions below. Sample reflection questions for other stakeholder groups are provided in Appendix C.
 - a. What are your overall reactions to the letters? Was there a particular letter you connected with? Was there one that bothered you, challenged your thinking, or was least like your own experience?
 - b. What underlying challenges about School-Based Agricultural Education can you identify after having read the letters? In other words, what problems exist in the profession?
 - c. Given the problems you highlighted, what needs to change? It's OK if you don't have perfect solutions or if your ideas don't feel feasible, economical, etc. The goal here is to think, dream, and envision possibilities.
4. Group Discussion – As facilitator, pay attention to the responses coming in from the group. To the best of your ability, review each response to get an idea of developing themes emerging from individual responses. Use your best judgment to discern how to commence small and large group conversations. Suggestions for structuring small and large group activities and sample questions are provided below.

5. Wrap-up – By the end of the discussions, participants may feel seen, heard, hopeful, frustrated, defeated, or a combination of these and other feelings. It can be frustrating to think about problems and not walk away with quick solutions. Remind your audience that this work is the start of many conversations we (as authors and collectively as a discipline) will have about the future. Identifying what is going on and what needs changing is a good first step and they were a part of that. Thank them for their engagement and willingness to share.
6. After the Discussion – The thoughts, observations, and reactions of your group are a pivotal component of this collective thought experiment. Collect as much “data” as possible from group conversations and share it with the authors. We will use this to inform future conversations and possible change. We also invite you to consider sharing your experience and perspectives. Please see Appendix D for additional engagement options.

Sample Group Activities and Questions:

1. Breakout Group Reflection - Create small groups and ask participants to take 10-15 minutes to share their reactions with peers, review reactions from others, and think about what they are noticing from the individual responses.
2. Socratic Seminar – In small group settings, seat participants in a circle and begin the conversation with deep, open-ended questions (see probing questions below). Facilitators should not lead the discussion, but rather encourage participants to ask questions of each other’s perspectives from the letters, challenges identified, and potential changes to the profession, and engage in meaningful discussion. The focus of this strategy is on discussion rather than debate. See Castellanos-Reyes' (2020) chapter on Socratic Seminars for more information and strategies for implementation.
3. Fishbowl Discussion – For larger group settings, select a smaller, representative group from the whole and seat representatives in a small circle, surrounded by remaining participants. Allow representatives to reflect and/or use questioning techniques to promote discussion about the letters, challenges identified, and potential changes to the profession. The remaining participants listen, reflect, and share observations in a written or oral format. For more variations and information, see Barkley et al.’s (2014) chapter on the fishbowl technique.
4. Probing Questions – Example questions, in addition to the reflection questions above, are provided.
 - a. What experiences have you had with the challenges identified by the group?
 - b. Based on the group’s responses to the “what needs to change?” question, what are your experiences with these challenges?
 - c. If you could change anything about the job/profession, what would it be?
 - d. How might the proposed changes affect other areas of the profession? Consider intended and unintended consequences.
 - e. What support systems and structures came to mind from your own experience in schools as you read these letters? What in your own practice makes you feel supported, valued, or empowered?

Appendix C – Stakeholder Perspectives

Overview:

This section provides an opportunity to gain perspectives from non-teacher actors in SBAE. Directions for individuals are found in Appendix A, while directions for group facilitators are found in Appendix B. The directions for engagement in activities are similar, however, reflection questions may vary by stakeholder group. Below are sample reflection questions based on different groups.

Sample Reflection Questions by Stakeholder Group:

1. Post-Secondary SBAE Faculty & Staff (e.g., Teacher Educators, FFA Staff)
 - a. What are your overall reactions to the letters? Was there a particular letter that surprised you, bothered you, or challenged your thinking?
 - b. What underlying challenges about School-Based Agriculture Education can you identify after having read the letters? In other words, what problems exist in the profession?
 - c. Given the problems you highlighted, what needs to change? It's OK if you don't have perfect solutions or if your ideas don't feel feasible, economical, etc. The goal here is to think, dream, and envision possibilities.
 - d. What supports or barriers to the proposed changes exist in your teacher preparation program or state context?
 - e. Return to the thought experiment: What new solutions to agriculture teacher attrition emerge when we remove the system's constraint on teacher vulnerability?

2. School Administrators
 - a. What are your overall reactions to the letters? Was there a particular letter that surprised you, bothered you, or challenged your thinking?
 - b. Do you think any of the perspectives offered in the letters relate to the SBAE teacher(s) at your school? If so, which ones?
 - c. What underlying challenges about School-Based Agriculture Education can you identify after having read the letters? In other words, what problems exist in the profession?
 - d. Given the problems you highlighted, what needs to change? It's OK if you don't have perfect solutions or if your ideas don't feel feasible, economical, etc. The goal here is to think, dream, and envision possibilities.
 - e. What supports or barriers to the proposed changes exist in your school and community?
 - f. Return to the thought experiment: What new solutions to agriculture teacher attrition emerge when we remove the system's constraint on teacher vulnerability?

3. Pre-service SBAE Teachers
 - a. Prior to reading the letters, what challenges do you expect to have in the profession?

- b. What are your overall reactions to the letters? Was there a particular letter that surprised you, bothered you, or challenged your thinking?
 - c. What underlying challenges about School-Based Agriculture Education can you identify after having read the letters? In other words, what problems exist in the profession?
 - d. How do the challenges you identified compare to the those you expected before reading?
 - e. Given the problems you highlighted, what needs to change? It's OK if you don't have perfect solutions or if your ideas don't feel feasible, economical, etc. The goal here is to think, dream, and envision possibilities.
 - f. What could you do in your future practice to mitigate the challenges you might experience?
 - g. Return to the thought experiment: What new solutions to agriculture teacher attrition emerge when we remove the system's constraint on teacher vulnerability?
4. SBAE Support Groups (e.g., Advisory Board, FFA Alumni & Supporters)
 - a. What are your overall reactions to the letters? Was there a particular letter that surprised you, bothered you, or challenged your thinking?
 - b. What underlying challenges about School-Based Agriculture Education can you identify after having read the letters? In other words, what problems exist in the profession?
 - c. How do the perspectives in the letters compare to your perspective of the SBAE teacher at your school? In other words, do you think your SBAE teacher experiences similar challenges? What local systems or structures are in place to contribute to or reduce the challenges?
 - d. Given the problems you highlighted, what needs to change? It's OK if you don't have perfect solutions or if your ideas don't feel feasible, economical, etc. The goal here is to think, dream, and envision possibilities.
 - e. Return to the thought experiment: What new solutions to agriculture teacher attrition emerge when we remove the system's constraint on teacher vulnerability?
5. SBAE Teacher Family & Friends
 - a. What are your overall reactions to the letters? Was there a particular letter that was like the experiences shared by your family member or friend, or at least one that surprised you, bothered you, or challenged your thinking?
 - b. How do the perspectives shared in the letter impact you as a member of a SBAE teacher's support network?
 - c. What underlying challenges about School-Based Agriculture Education can you identify after having read the letters? In other words, what problems exist in the profession?
 - d. Given the problems you highlighted, what needs to change? It's OK if you don't have perfect solutions or if your ideas don't feel feasible, economical, etc. The goal here is to think, dream, and envision possibilities.
 - e. How would the proposed changes impact your family member/friend and you?
 - f. Return to the thought experiment: What new solutions to agriculture teacher attrition emerge when we remove the system's constraint on teacher vulnerability?

Appendix D – Capturing Collective Thought

Overview:

As you engage with the thought experiment, we encourage you to share your and/or your group's reflections, reactions, and experiences with the author team. The data you provide will contribute to discussions and action for possible future change. Our goal as authors is to engage collective conversations, not necessarily propose strategic change. This may include but is not limited to sharing aggregated data during workshops or state association meetings, analyzing data for themes, publishing data, and other forms of dissemination. We thank you in advance for your willingness to participate in this thought experiment and look forward to hearing from you.

1. Individual Contributions
 - a. Share your responses from the reflection questions.
 - b. Write your own letter, capturing your own experience and perspective.
 - c. Write a response to a letter which you connected with, bothered you, or challenged your thinking.
 - d. Take photos that represent your experience or feelings/attitudes/emotions experienced. Caption the photos and share them with us.
2. Collective Engagement
 - a. Collect group responses in a Padlet by [clicking here](#). You can also access it through the URL: https://padlet.com/ag_education/collective-thought-experiment-vu3pwzetg94qo2nt
 - b. Create a collaborative mind map on paper or electronically.
 - c. Host a workshop to engage others in the conversation.
 - d. Request a workshop to be facilitated with your group.
3. How to Share Feedback
 - a. Qualtrics - Capture your or your group's reactions to the letters here. Clicking on this [Qualtrics survey](#) will give you the option to react in many ways (written, audio, video, file share, screen capture). Choose the best option for you. Unless you opt out of anonymity, all identifying information (name, town, school, etc.) will remain hidden or transformed using pseudonyms before we (the researchers) share this with anyone. You can also access it through the URL: https://oregonstate.qualtrics.com/jfe/form/SV_6YGn16kf2juTGZg
 - b. [Email us](#) directly with questions, insights, thoughts, or ideas.