

Investigating the Key Social Supports for Early Career Agricultural Education Teachers

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Abstract

Amidst a national teacher shortage, school-based agricultural education (SBAE) faces serious challenges in recruiting and retaining qualified teachers. While preparing new teachers remains important, researchers suggest retention efforts, particularly for early career teachers (ECTs), may yield greater long-term stability. This convergent mixed methods study explored the social supports most beneficial to SBAE ECTs (teachers with five or fewer years of experience), aiming to identify periods of greatest need, sources of stress and confidence, specific professional challenges, and preferred forms of support. Using a basic interpretive research design with a realist epistemology, 19 SBAE ECTs participated in semi-structured Zoom interviews in fall 2022. Participants annotated monthly stress and confidence levels from their first year of teaching and reflected on their experiences with support networks. Findings revealed heightened stress at the start of the school year and again in February, corresponding with key FFA responsibilities, while confidence gradually increased. Key stressors included classroom management, limited agricultural mechanics preparation, and FFA administrative tasks. Teachers consistently identified other SBAE teachers, supportive administrators, and state staff with whom they had prior relationships as the most valuable sources of support. Timely, practical help via text or email was particularly appreciated. Recommendations include investing in flexible, individualized mentoring systems; ensuring real-time support from state-funded program staff; and advocating for multi-teacher SBAE programs to distribute workload. Efforts to scaffold ECTs' early responsibilities, especially around FFA, may improve retention and long-term teacher success.

Introduction

Across the United States, public schools face a continued and increasing shortage of qualified teachers, as not enough students enter the profession, and teachers leave at alarming rates (Garcia & Weiss, 2020; Sutcher et al., 2019). This problem is particularly salient in agricultural education, where historically, the demand for school-based agricultural education (SBAE) teachers each year far exceeds the supply of new teacher candidates (Eck & Edwards, 2019; Smith et al., 2024).

While training new teachers to fill the vacant positions is a solution to the problem, it may prove more effective to focus on retaining existing teachers. Research shows that 44% of teachers leave the profession within five years (Ingersoll et al., 2018), suggesting an opportunity to increase support and thereby retain teachers during that time. The Economic Policy Institute created a comprehensive plan to

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address the national teaching shortage, which suggests that to retain teachers, we must ensure they have support systems, mentors, and opportunities for professional development (García & Weiss, 2020).

In the field of education, increased teacher self-efficacy, or a teacher's beliefs in their own ability to influence student learning and achievement, has been continuously linked to decreased work-related stress and job burnout (Klassen & Chiu, 2010; Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2017; Yu et al., 2014). Novice teachers with access to more teaching resources may have higher teacher self-efficacy (Tschannen-Moran & Hoy, 2007). Inversely, emotional exhaustion, often related to burnout, has been linked to decreased classroom management self-efficacy, which may lead to depersonalization or blaming the classroom challenges on the students (Brouwers & Tomic, 2000).

SBAE teachers have opportunities and challenges unique to the model of teaching agriculture. The three-circle model of agricultural education calls for classroom teaching, leadership education through advising the FFA chapter, and supporting work-based learning through Supervised Agricultural Experiences (Croom, 2008). The challenges of teaching agricultural education in the classroom and serving as FFA advisors, in addition to their classroom duties, can lead to more time at work and less time for a personal life, increasing job stress (Clemons et al., 2021; Traini et al., 2020), especially for novice teachers (Mundt & Connors, 1999) and can lead to teachers leaving the classroom (Solomonson et al., 2018).

Within SBAE specifically, providing additional support to early career teachers (ECTs) or those with five years or less experience may increase a novice teacher's sense of efficacy, which in turn may lead to higher retention (Korte & Simonsen, 2018). Moser and McKim (2020) found that increased school connectivity predicted teacher career commitment among SBAE teachers, with teachers reporting the most connection to other SBAE teachers and to their curriculum.

Links have also been made between professional development and concepts related to career fulfillment for SBAE teachers. Easterly and Myers (2019) found that professional development moderately correlated with career satisfaction. McKim and Velez (2017) found professional development experiences related to increased teaching leadership self-efficacy, specifically science teaching self-efficacy for early career teachers.

Apart from traditional professional development, cases have been made for alternative methods to work with SBAE teachers to increase their knowledge. McKendree and Washburn (2021) made a case for teaching metacognition strategies through professional development instead of content-based skills, with the goal of teachers using these learning-how-to-learn strategies with their students. Webb et al. (2019) discussed a collaboration between SBAE teachers and university faculty for ongoing professional education experiences, resulting in more engaged teachers providing relevant curricula and reaching student outcomes. Leman et al. (2025) suggested bringing SBAE teachers together virtually to build their skills in content delivery through lesson study.

Many studies have looked at the professional development needs of SBAE teachers, including teachers in different years of experience (Figland et al., 2019; Thornton et al., 2020); teachers in traditional and alternative license types (Wood et al., 2024), novice teachers specifically (Disberger et al., 2022; Touchstone, 2015); and SBAE teachers in general (Hainline & Smalley, 2023). Others have reviewed professional development by content area generally (Yopp et al., 2020) and subject-specific (Wells & Hainline, 2021). Still, others have reviewed SBAE teacher professional development needs in relation to reaching specific populations such as youth with special needs (Ramage et al., 2022), English language learners (Salem et al., 2023), or diversity, equity, and inclusion in general (Wood et al., 2023). Different professional development needs are often found for novice and more advanced teachers (Thornton et al., 2020).

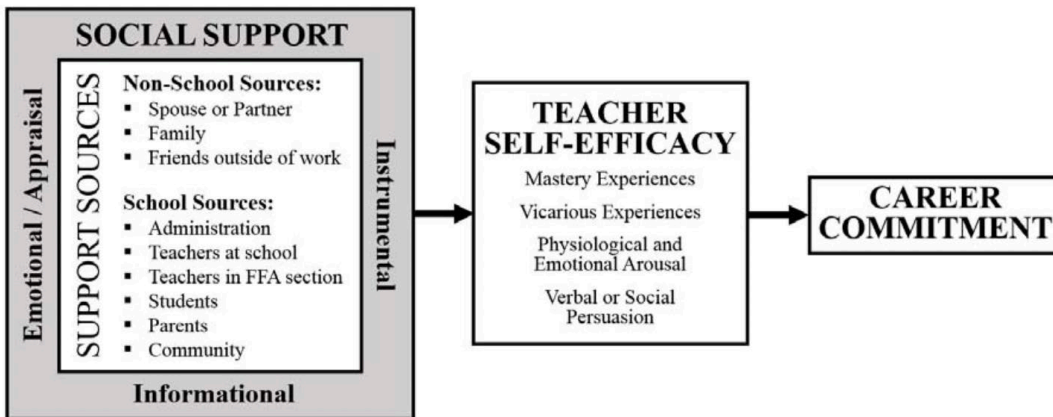
Despite extensive research on professional development needs, less is known about the interpersonal and institutional support systems from professional development that novice SBAE teachers receive that directly impact their self-efficacy and career commitment. This study seeks to fill that gap by exploring which types of social support early career teachers perceive as most influential.

Conceptual Framework

House (1981) defined social support as “a person’s relationships with partners, friends, work colleagues, and work supervisors” and linked increased social support to decreased work stress and increased well-being (p. 7). Korte and Simonsen (2018) developed a conceptual framework describing the connection of social support to teacher sense of efficacy and career commitment, specifically for SBAE teachers. The framework lists various sources of potential social support for an SBAE teacher, including school-based (school administration, other teachers in their school, other SBAE teachers) and non-school-based (partner, friends, family) individuals. We used the social support construct of Korte and Simonsen’s (2018) model as the framework to guide our study (see Figure 1).

Figure 1

Influence of Social Support on Teacher Self-Efficacy in Novice Agricultural Education Teachers



Korte & Simonsen, 2018

In the teaching profession in general, research has continued to find links between social support, teacher self-efficacy, and positive relationships in the teaching profession. Strong social support from both school and non-school sources has been found to reduce the risk of teacher burnout and increase job satisfaction (Marcionetti & Castelli, 2022; Nwoko et al., 2025). Kahn et al. (2006) linked social support to teacher professional self-efficacy and reduced emotional exhaustion among high school teachers. In a study of beginning elementary school teachers, Thomas et al. (2019) found that teachers with a broader range of social support had a more positive attitude towards their job than those with the least access to social support. Similarly, Baker-Doyle (2012) found that beginning teachers with strong professional networks of support and diverse networks of supporters were important for teacher success, connecting to the various sources of support in the Korte and Simonsen model.

Purpose and Objectives

This study examined the social support most beneficial to SBAE ECTs. Our specific objectives were to:

- 1) Determine when ECTs most need support by examining perceived levels of stress and confidence during the school year,
- 2) Analyze ECTs' levels of stress and confidence during the school year for similarities and differences based on their reported demographics,
- 3) Identify specific areas of difficulty for ECTs, and
- 4) Determine the types of social support ECTs find most beneficial.

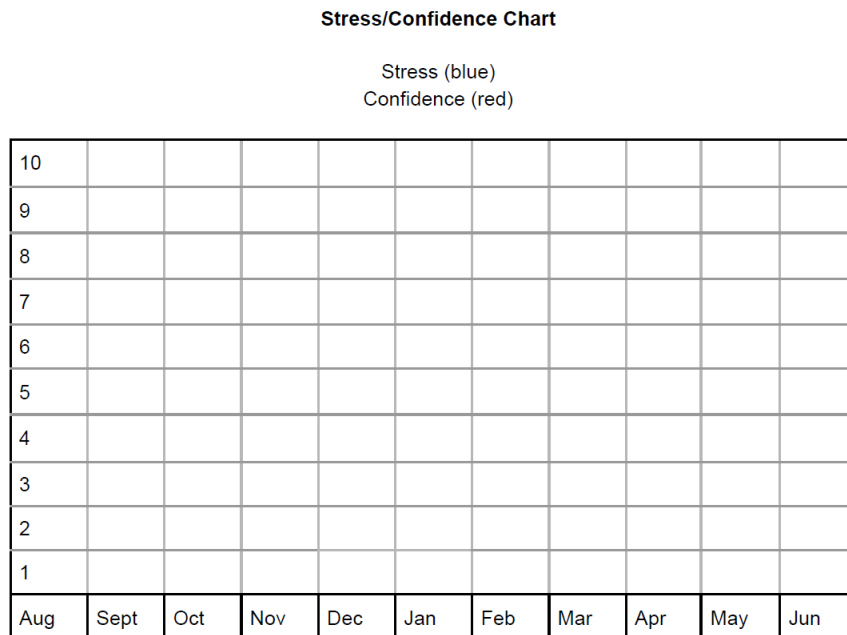
Methodology

Our convergent mixed methods study utilized both qualitative and quantitative methods, with integration in the data analysis phase of the research (Creswell & Plano Clark, 2018). The convergent approach allows for multiple types of data to determine how our participants interpreted and constructed meaning within their lived experiences. After receiving IRB approval, we acquired a contact list from the Illinois agricultural education state staff and sent a recruitment email to all 126 SBAE teachers in their second to fifth year of teaching. Nineteen ECTs agreed to participate in our study. We collected consent documentation and demographic information using a Qualtrics XM© survey.

Each ECT participated in a semi-structured, 45-minute virtual Zoom interview in the fall 2022 semester. The interviews were recorded and transcribed using the Zoom automated transcription function, then reviewed against the audio recording to make corrections. Interview questions were developed in consultation with the Illinois Agricultural Education University Council, a committee comprised of all university agricultural education faculty at the four-year institutions within the state offering agricultural education degrees. As part of the interview, participants were shown a graph with the months of the school year and a 10-point scale (10 = high) and asked to recall their levels of *stress* and *confidence* for each month during their first year of teaching. The word *confidence* was used to collect perceived self-efficacy information from participants, as it is a more commonly understood construct (Klassen & Chui, 2010). Participants recorded their responses using the Annotate feature on the Zoom shared screen. The interviewer took a screenshot of the screen. Figure 2 below is a sample of the chart used in the interviews.

Figure 2

Stress and Confidence Chart for First Year of Teaching



Completing the graph became a basis for questions about the various stressor points and levels of confidence during the school year. The interviewer asked participants to describe why their stress and confidence increased or decreased at each point. Further questions asked teachers to discuss sources of social support adapted from Korte and Simonsen’s (2018) model of school-based support and adapted to include resources only available in Illinois, such as utilizing state-funded regional agricultural education consultants. Data collection continued until no new concepts or themes emerged, indicating that data saturation had been reached.

Before quantitative analysis, the points selected by teachers on the stress and confidence charts corresponding to each month were recorded to the nearest half point. The average stress and confidence ratings for each teacher were computed by calculating the mean of all monthly points. Data points were analyzed using descriptive and inferential statistics using SPSS software.

All qualitative interview data were analyzed using a descriptive, inductive, open-coding technique by our research team members using the Dedoose qualitative coding software (Saldaña, 2016). The analysis process involved several iterative rounds of coding. Initially, each researcher on our team independently coded a subset of transcripts to identify meaningful units of information. After initial open coding, our team met to discuss and refine code definitions and resolve discrepancies. The codes were then grouped into categories, allowing for the emergence of broader themes that captured the essence of participant experiences.

The credibility and trustworthiness of our study were achieved based on the recommendations of Lincoln and Guba (1985) and Stahl and King (2020), including engaging in reflexive self-analysis during the collection and analysis of data, environmental triangulation to interview a sample of teachers from multiple teaching contexts, and investigator triangulation by using multiple researchers in the coding and analysis process. Our Findings section is organized by objective, with data tables and figures to present the

quantitative data and quotes from interviews to represent the qualitative data (Creswell & Creswell, 2023; Merriam & Tisdell, 2016).

Participant Demographics

Our participants included ten teachers with traditional teaching licenses and nine with alternative licenses. Six identified as male, and 13 as female. All identified as white or Caucasian. Five worked in a school district with one SBAE teacher, and 14 worked in a multi-teacher program. Pseudonyms were used to protect the participants' identities. In qualitative studies, pseudonyms are used to protect the identities of the participants (Creswell & Creswell, 2023). The participants' self-describing demographic information is included in Table 1.

Table 1

Participant Demographic Information

Pseudonym	Teaching License	Degree(s)	Multi-teacher Program	Years Teaching	Sex
Arthur	Traditional	Agricultural Education	Yes (2 teachers)	2	Male
Betsy	Traditional	Agricultural Education	Yes (2 teachers)	5	Female
Chester	Alternative	Plant and Soil Science (BS); MBA	No	2	Male
Darla	Traditional	Agricultural Education	Yes (2 teachers)	4	Female
Earl	Alternative	Ag Business	Yes (2 teachers)	5	Male
Eleanor	Traditional	Agricultural Education	No	2	Female
Etta	Alternative	Agriculture Leadership Education	Yes (2 teachers)	2	Female
Eunice	Traditional	Agricultural Education	Yes (3 teachers)	4	Female
Harry	Alternative	Agriculture Leadership Education	No	4	Male
Lottie	Alternative	Forestry	Yes (3 teachers)	2	Female
Marjorie	Traditional	Agricultural Education	No	1.5	Female
Matilda	Alternative	Horticulture (BS); Agricultural Education (MS)	No	5	Female
Norma	Alternative	Animal Science	Yes (4 teachers)	2	Female
Oscar	Alternative	Agricultural Leadership, Education, and Communications (MS)	Yes (2 teachers)	4	Male
Rosemary	Traditional	Agricultural Education	No	5	Female
Roxanne	Alternative	Animal Science	Yes (2 teachers)	5	Female
Ruth	Traditional	Agricultural Education	Yes (2 teachers)	2	Female
Shirley	Traditional	Agricultural Education	Yes (2 teachers)	2	Female
Silas	Traditional	Agricultural Education	Yes (2 teachers)	2	Male

Reflexivity Statement

The researchers engaged in this study are current teacher educators from different institutions in the same state. One is a former SBAE teacher and state-level SBAE program advisor. The other has a background in Extension youth development education and Extension professional development. The researchers deliberately set aside personal backgrounds and experiences throughout the study to prevent bias.

Findings

Objective 1

Objective one aimed to determine when ECTs most need support during the school year by examining perceived levels of stress and confidence. In Figure 3, the perceived average stress level at the beginning of the school year was relatively high ($M = 7.71$; $SD = 1.16$), remained fairly steady through October, and finally declined into December. During the second semester, stress levels peaked in February ($M = 8.03$; $SD = 1.59$), with a steady decrease through the end of the school year.

During interviews, teachers discussed the monthly responsibilities of the state agricultural education calendar that led to changes in their stress levels. As Oscar said,

I had a flat line from October to November where stress went down, and I have stress going down again in December just because it's at the end of the semester, and I think a lot of people's lines would probably look similar to that. And then I have stress going up in January and February because of record books, proficiency award interviews amping up, state degree interviews, applications and those types of things.

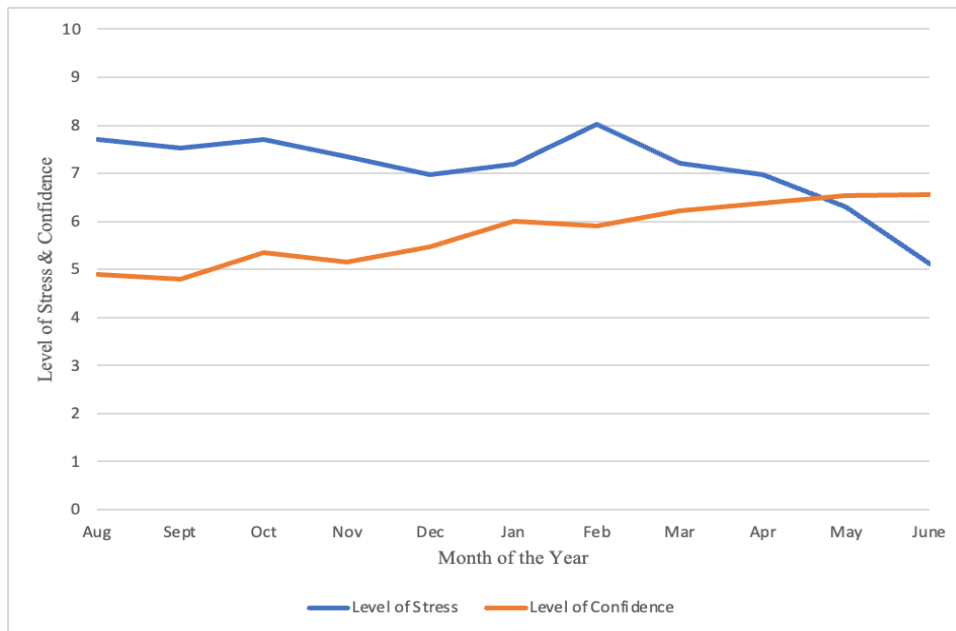
After the responsibilities in February, teachers talked about having petting zoos, plant sales, and chapter banquet through the end of the year, but the duties slowly tapering off to the end of the semester.

To start the school year in August, confidence levels of ECTs were fairly low ($M = 4.89$; $SD = 2.49$). Their confidence levels steadily increased throughout the year, dipping between October and November and January and February; however, they increased to an apex in June ($M = 6.56$; $SD = 1.46$). The months with the greatest differences between confidence and stress levels were August, September, October, November, and February.

During interviews, teachers described their lower confidence as related to their busier times of the year. Etta specifically said, "My busiest times probably had the least amount of confidence." Many teachers talked about their lack of confidence in mechanics-related classes and skills, and how their confidence shifted based on the topics they were teaching during the year. Both teachers with training in mechanics and those without felt they needed support for skills, including welding and small engines.

Figure 3

Average Perceived Levels of Stress and Confidence of ECTs During Their First Year Teaching



Objective 2

The purpose of objective two was to analyze ECTs' levels of stress and confidence during the school year for similarities and differences based on their reported demographics. ECT's average levels of stress and confidence were compared by sex, licensure type, and whether teachers were in a single or multi-teacher program using independent sample *t*-tests. The mean levels of stress and confidence were not significantly different between these variables as a whole. However, the monthly comparison of stress and confidence is explained in detail below to acknowledge unique trends between the ECTs in different categories.

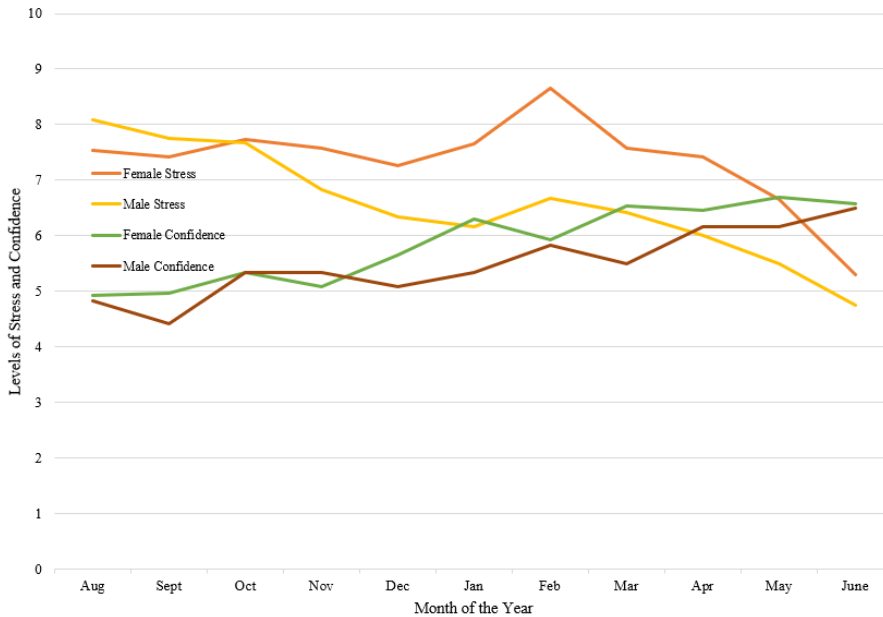
Differences by Sex

Comparing stress and confidence by sex, females reported higher stress ($M = 7.33$, $SD = 1.18$) and slightly higher confidence levels ($M = 5.64$, $SD = 1.50$) on average compared to males' stress ($M = 6.61$, $SD = 1.45$) and confidence ($M = 5.63$, $SD = .49$) levels. However, independent sample *t*-tests did not reveal significant differences between the groups for either stress ($t(16) = 1.14$, $p = .27$) or confidence ($t(14.8) = .03$, $p = .98$). Comparing the data by month, as shown in Figure 4, on average female stress levels were higher than those of males from October to the end of the school year. Male stress levels, on average, started slightly higher and ended slightly lower than those of females. Perceived confidence levels were fairly even throughout the school year for both groups, with the largest gaps in January and March. While the quantitative data seem to show different levels of stress, the interviews revealed that both groups reported the same calendar-related items as causing stress, including the increased FFA-related responsibilities with deadlines in February and then increased confidence after completing the tasks for the first time. Roxanne said, "it seemed like everything's due in the month of February, and you're still doing your same job at the same time." Silas described the February activities as, "that was just with record books I wasn't as stressed

about it, it was just hard to be confident about it because there's just so many aspects of record books and SAE projects that you're just unsure on."

Figure 4

Average Perceived Stress and Confidence Levels of ECTs in Their First Year by Sex

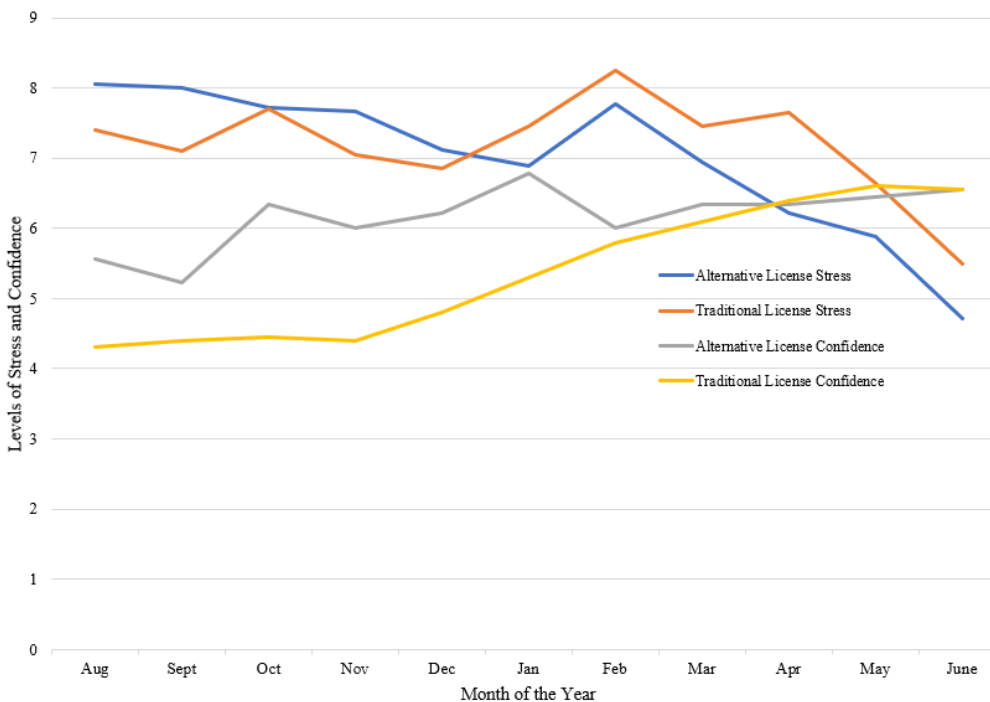


Differences by Licensure Type

Comparing stress by licensure type, teachers with alternative and traditional licenses reported similar stress levels. On average, alternative licensed teachers ($M = 6.95, SD = 1.21$) reported slightly lower stress than traditional licensed teachers ($M = 7.23, SD = 1.41$). An independent sample t -test found no statistical difference between licensure types ($t(16) = .45, p = .66$). Comparing monthly data, as shown in Figure 5, alternative licensed teachers started the year, on average, with slightly higher stress and ended with slightly less stress compared to traditional licensed teachers.

Figure 5

Average Perceived Stress and Confidence Levels of ECTs in Their First Year by Licensure



Both teachers with traditional and alternative licenses reported stress from classroom management, but teachers with alternative licenses often referenced not having training. Earl said, “I didn’t go to school to be an ag teacher, so classroom management I kind of had to figure out.” Further, alternatively licensed teachers talked about specific procedural tasks that led to stress. Lottie said,

it was like procedure stuff, just like, maybe not necessarily related to Ag... all of the like little things, didn’t really think about coming into it were more on the forefront of my mind most days. Okay, did I do attendance? Did I totally forget this kid? And this person used to be up here?

Additionally, alternative licensed teachers also talked about the stress from developing lesson plans and curricula. Roxanne said, “I literally spent entire Sundays [developing curriculum] and was never more than 2 days ahead of my students.”

In regard to confidence, teachers with an alternative license on average reported higher levels of confidence ($M = 6.17$, $SD = 1.22$) compared to traditional licensed teachers ($M = 5.10$, $SD = 1.05$). However, an independent sample t -test found no statistical difference between the two groups ($t(16) = -1.99$, $p = .06$). Comparing data by month, throughout the first year until April, alternatively licensed teachers reported higher levels of confidence, as shown in Figure 5. From April to June, both groups reported almost equal confidence levels, on average, higher than when they began their first year.

Traditionally licensed teachers talked about decreased confidence from their student teaching experience. Ruth said,

I was really confident near the end of student teaching, but [when I started my] first year teaching I didn't have someone right on my shoulder to look to if I needed help and I was stressed because it was something new.

Harry, an alternatively certified teacher, ranked his confidence at a 5 across the year saying that his status as having an alternative teaching license was his reason for lower confidence.

Differences Between Single and Multi-teacher Programs

We also compared stress and confidence between teachers in a school with only one agricultural education teacher and those teachers in schools with multiple agricultural education teachers. In terms of stress, across the school year ECTs in single-teacher programs reported higher stress levels ($M = 7.89$, $SD = .91$) than those in multiple-teacher programs ($M = 6.79$, $SD = 1.30$). An independent sample t -test did not find significant differences between the two groups in regard to stress ($t(16) = -1.71$, $p = .11$). Comparing stress levels reported monthly, as shown in Figure 6, ECTs in single-teacher programs reported higher stress every month compared to teachers in multiple-teacher programs.

In his interview, Arthur talked about the pressure from his co-teacher and the former teacher who taught at his school to win at FFA events. Arthur said, “[my co-teacher] was very much we need to win. So I was in that mindset, and we weren't winning. So, I took it a little bit more competitive, and it stressed me out to the kids.” In contrast, Silas talked about the support from his co-teacher meant record book time “wasn't so bad.”

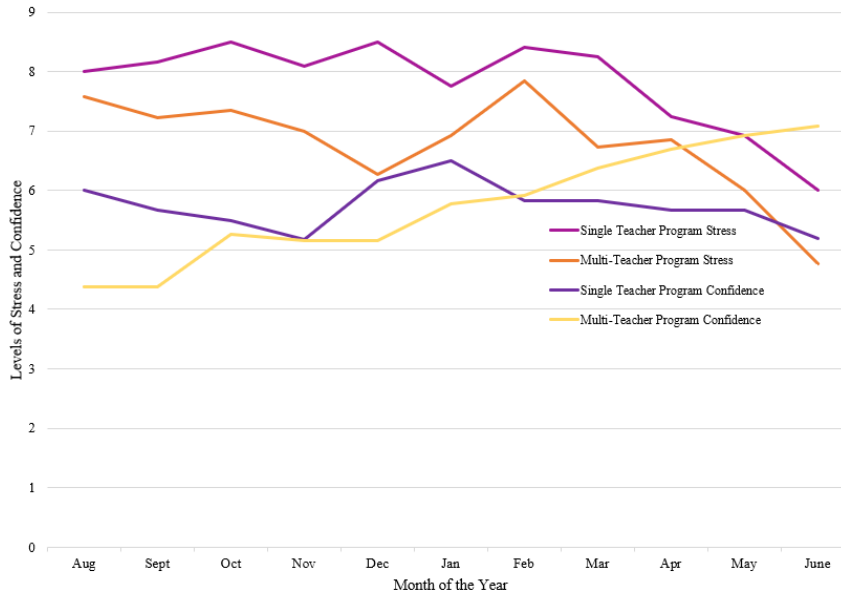
The average confidence level for teachers in multiple-teacher programs ($M = 5.75$, $SD 1.16$) was also higher than that of teachers in single-teacher program ($M = 5.33$, $SD = 1.50$). Independent sample t -tests did not reveal significant differences between the groups ($t(16) = .63$, $p = .54$). Comparing confidence monthly, teachers in multiple-teacher programs expressed less confidence through February, as shown in Figure 6. After February, teachers in single-teacher programs stayed the same or slightly declined, while teachers in multiple-teacher programs saw an increase in confidence through the end of the year.

For those in multiple-teacher programs, the first half of the year was often a time of figuring out how to work with the other teachers in the agricultural education program. Arthur talked about entering teaching with confidence from his own time as a student and serving as a state FFA officer but realized that he had to coordinate with the other teacher who had established relationships with the students. He describes how he approached his co-teacher:

We had a lot of sit-down meetings with one another saying, you know this happened to me, and I wanted to change everything, and I quickly realized it wasn't my program yet, and I had a lot of ideas. [My co-teacher] was telling me like we can't do that yet, and then we came up with brainstorming ideas and more communication about how to fix things where we want them.

Figure 6

Average Perceived Stress and Confidence Levels of ECTs in Their First Year by Those in Single or Multi-teacher Programs



Objective 3

In order to address the third research objective, specific areas of difficulty for ECTs, we identified four themes through our analysis of interview data.

Theme 1: The school environment and classroom climate are instrumental in determining the difficulty of adjusting to teaching as a profession.

Teachers discussed challenges in classroom management, especially in classes using a shop or lab setting, and related to students listening to and following directions from the teacher. Lottie, who began teaching with an alternative license and then went back to get her traditional license, found a difference between the preparation for working with students in her college courses and the reality she faced in the classroom:

I don't know how much you get that at your Ag Ed Program at college, but actually like being left alone in a room with like your students, it's like, okay, like I have to make these decisions. And that part, I think, was the biggest change for me, because even student teaching, [my students] were really helpful...I'm the one like in charge of the process, and like what that all entails, was kind of the biggest ... jump for me.

Rosemary echoes the feeling that college preparation did not match her classroom experience, saying, "I think at the college level it's very fluffy and nice, and it's not like kids are... [They are] way more naughty than what I ever thought they were in high school or college." Marjorie, a second-year teacher, had classroom management issues as students compared safety expectations in the school lab setting to what they did while at home:

One thing that I had to deal with was “this isn’t what I do at home.” That was always the excuse, and they don’t wear jackets at home. They don’t wear gloves at home. I understand that I’m not ignorant to the fact that farmers do whatever the hell they want. You know what? They are adults. They have that right. You are in high school, and I am in charge of you. You don’t have that right, right now, and to not wear gloves or not. Wear a jacket like you’re wearing them. So that was always something that I heard, and yeah, that was hard.

Etta was an ECT, so stressed out about classroom management that she went on medication her first year. She disclosed, “The thing that stressed me out the most was just like dealing with the discipline of students... I literally went to the doctor and went on medication because I was so stressed out... It was a rough first year.” ECTs also discussed addressing the social-emotional needs of students and the changing needs of students since COVID. Matilda expressed her views on how different she finds students post-COVID. She said, “Accountability is a huge issue right now with having students care and do their homework and do it on time.”

Theme 2: The responsibilities of administering an FFA program provide added challenges not addressed by traditional agricultural education teacher education programs.

ECTs identified challenges in learning administrative aspects of FFA, including knowing and remembering event deadlines, understanding how Career Development Events run, entering information into online database systems, and preparing for FFA awards. Chester explained that although he was involved in FFA, he “never knew of all of the conferences and all these levels.” Oscar said that running the FFA chapter was his biggest struggle, including “how to do the roster, how to organize the chapter...it wasn’t so much the curriculum and lesson planning. It was just the FFA side of it and record books.”

Teachers also identified the increased stress of January and February as related to FFA responsibilities. Oscar explained, “I have stress going up in January and February because of record books, proficiency award interviews coming up, state degree interviews, applications, and those types of things that all fall in January and February.”

Traditionally licensed teachers discussed the pull between learning the principles of educational-related theories and the need-to-know specific details to run an FFA chapter. Darla indicated, “Colleges did not prepare us well... to be FFA advisors. They do a really good job preparing us to be Ag teachers, but not FFA advisors.” Arthur agreed that colleges could do more to get teachers prepared for FFA, saying, “FFA and Ag Ed are two different jobs, and as an [FFA] advisor, there’s so many different things that get added on.”

Theme 3: ECTs identified gaps between their knowledge and skills and job expectations.

All teachers in our sample felt that they needed additional knowledge beyond what their backgrounds and education prepared them to teach, acknowledging that agricultural education is a broad subject that also differs greatly by school district. Earl, an alternatively licensed teacher, said, “Even if I went through student teaching, I wouldn’t have known every single subject that I’m teaching now because I would have been student teaching at a different school that had different courses.” In addition, those with traditional teaching licenses also expressed the challenge of unfamiliar content, while those with alternative licenses expressed challenges with understanding educational pedagogy and teaching methods.

Many expressed a need for additional support for an agricultural mechanics curriculum. When asked where a learning gap exists, Marjorie, like many others, admitted, “Without a doubt, ag mechanics would be my number one thing...we even took ag mechanics in college, and there was just so much I still miss.” Arthur did not take mechanics classes in high school, and his university did not offer mechanics

classes. He felt his university was not “fully preparing their teachers” without welding and shop courses. Arla said, “You can fake your way around plant and animal science. You really can’t fake your way around small engines or welding.”

Theme 4: ECTs struggled to attain positive work-life integration with the expected workload.

Teachers talked about the struggle of teaching five to seven different class preps a day, while finding time to plan and teach new content to themselves, manage the FFA chapter, and maintain a personal life. Earl told us:

That first year was really stressful. I brought work home a lot, and so my work-life balance was not the greatest because I just found myself every night for 1-2 hours coming home... I didn't have enough time in the day to then figure out what tomorrow is going to look like.

Objective 4

To address the fourth objective, assistance ECTs find most beneficial, we identified two themes.

Theme 1: ECTs prefer support from other SBAE teachers, state staff, and supportive administrators, as well as people they know and with whom they have existing relationships.

ECTs went to other SBAE teachers, state staff, and supportive administrators with their various work-related needs. They were most comfortable and went first to those teachers and staff they already knew. Earl agreed and said, “I think other ag teachers are, first and foremost, the best resource to bounce ideas off of. Not that my school’s bad, but they may not understand what I need if it’s related to the Ag classroom.” Teachers with traditional teaching licenses mentioned contacting their former cooperating teachers. Rosemary contacted her cooperating teacher because they “developed a pretty good relationship, and she’s really open to answer any questions.” Ruth agreed that she contacted her cooperating teacher because “she is a really good teacher, so she always has the answers.”

Teachers also took advantage of advice and support from state agricultural education advisors. Ruth said her assigned state staff member provided timely and useful assistance with classes and content:

She was there 24/7. She gave me her personal phone number, so if I texted her and had a question about a horticulture class or something, I could just shoot her a text. She would get back to me within a few minutes and never took a long time to respond... I had a hard time passing the content test there for a while, and she would sit there with me and study with me and give me all the resources that I needed to pass.

ECTs also felt that support from people they did not already know was not as welcome or important. As part of a state program to support university teacher educator visits to first-year teachers, Darla was visited by an instructor from a university different from her alma mater. She felt that the universities took “different approaches” to teaching and “like the things that I was taught, and things that, like I valued [the university instructor] did not necessarily know.”

Theme 2: ECTs appreciate timely answers to various questions as they occur.

Teachers went to the person with the timeliest response and answer to their questions. They used email and text messages, the priority being the most efficient method to get a quick response. Norma told us state staff is who she went to most. She said, “[state staff member] is amazing. She, anytime I call, text, email, anything, she’s on it. She answers all our questions.”

Teachers appreciated that state staff sent out reminders for deadlines. Chester explained: Having [state staff] help navigate through all these dates that you have to worry about, and she's very good with sending out reminders. She'll check stuff and be like, hey? You haven't sent this in yet...we have so many emails from the State, with different dates, different contests, conferences, keeping track of all of those is kind of hard.

Discussion

While the concepts of self-efficacy, social support, job stress, and retention are frequently found in the literature pertaining to the teaching profession in general (Brouwers & Tomic, 2000; Klassen & Chiu, 2010; Marcionetti & Castelli, 2022; Nwoko et al., 2025; Schwarzer & Hallum, 2008; Tschannen-Moran & Hoy, 2008), the work in SBAE adds nuances not addressed by the general education literature and other content areas. SBAE requires more classes to prepare for and includes the facilitation of FFA and Supervised Agricultural Experiences programming, per the three-circle model of instruction (Croom, 2008). Further, these occur both during the school day and outside contractual time. In our study, these added responsibilities outside of contract time seem to be the cause of stress and the subject of needed support for ECTs.

Our study confirms past work chronicling the challenges of SBAE teaching. Our participants discussed the challenges of work-life balance in their early years of teaching, which teachers throughout their careers seem to experience (i.e., Clemons et al., 2021). Our participants echoed the calls for assistance with classroom management (i.e., Disberger et al., 2022) and training in agricultural mechanics topics (i.e., Wells & Hainline, 2021) found in the literature. However, there was no consensus that all teachers needed the same training, meaning a "one-size-fits-all" approach to support and professional development will not meet all of the needs of ECTs.

Consistent with the findings of Korte and Simonsen (2018), the teachers in our study felt they needed more support when stress levels were high. Our findings show this was typically in the first semester and then again in February. The February increase in stress was related to FFA responsibilities, not classroom-related responsibilities, echoing past research (Mundt & Connors, 1999) listing the FFA chapter responsibilities as a source of stress. While some of our participants discussed that part of the challenge of managing the FFA chapter was related to their lack of preparation for the tasks in their college-level teacher preparation programs, the tasks they described, such as using recordkeeping and grant reporting software, may not make sense to a student until they are in the position to use them.

Interestingly, our participants shared the need for real-time question responses to questions. All were short on time and often realized they needed assistance at the last minute before due dates or events. Providing support and information in various ways, from text messaging to phone calls to emails, was appreciated. While many databases and searchable resources exist for SBAE teachers, our participants did not have time to sift through multiple resources and find their answers. They needed simple answers they could implement and use immediately.

While Disberger et al. (2022) found that teachers were looking for additional feedback in general on their teaching practices, our participants were more particular about their feedback needs. They specifically wanted feedback from other teachers and from people whom they knew. Our state has a long-standing program in which university teacher-educators visit first-year teachers in the general vicinity of each university. Our participants did not find feedback particularly helpful from a university teacher-educator whom they did not know and were unfamiliar with their teaching style and practices. Since this study, we have revised the program to instead match first-year teachers with recently retired teachers for mentoring and feedback during their first year of teaching.

Limitations

As part of our research design, our sample included teachers in their second to fifth years of teaching to discuss their experience in their first year of teaching. We realize that teachers may remember their experiences and needs differently than if they had been in the moment. However, we felt that the opportunity for reflection for teachers past their first year allowed for a more complete view of first-year teacher needs than asking first-year teachers about their experiences while in the middle of their first year. Further research could include comparing the experiences of first-year teachers at the end of their first year to teachers reflecting after a few more years in the classroom.

Our study is limited to the experiences of Illinois SBAE teachers who took part in interviews. Experiences can and will differ with teachers from other areas, making our findings not generalizable. We encourage researchers to examine teacher experiences from different regions and backgrounds. Study participants frequently referred to teaching during the COVID-19 pandemic. Therefore, their experiences are shaped by how each school district handled pandemic protocol, which could lead to different needs and stressors for each individual teacher. We realize that our research reflects this period of history and that teachers' needs could change with chronological variations that impact education.

Implementation and Recommendation

The diversity of needs of SBAE teachers makes generalizable recommendations difficult. In addition, each state offers different levels of state-wide resources and support staff. Our state SBAE teachers have support from regional program advisors who work directly with the teachers in their regions to offer support and resources customized for each teacher. Our participants find the individualized attention and flexibility in providing support through text, email, phone calls, and meetings to be a major benefit of the funded program. We encourage states to consider funding for support positions focusing on SBAE teacher needs as a supportive factor for training and encouraging their teachers.

As mentioned previously, the agricultural education teaching position has extra responsibilities compared to mainstream content teachers. Perhaps exploring ways to simplify the job duties during the first years of teaching would allow teachers to gain the confidence to expand their responsibilities as they continue their careers. Are there aspects of the FFA program and system that can wait for a year until teachers are more confident in their teaching? These decisions would need to be locally negotiated with community and school stakeholders who have expectations of SBAE teachers. Haddad et al. (2023) propose systematic challenges that lead to unrealistic expectations for SBAE teachers. Could teacher-educators better prepare future teachers by teaching negotiation skills and advocating for a gradual introduction to all aspects of the three-circle model instead of the never-ending checklist of items they may need to know in the future?

Our sample included many teachers who are part of multiple-teacher programs. Teachers in our sample who had a second SBAE teacher in their school reported relying on the advice and support from this second teacher. On average, ECTs in multiple teacher programs reported lower stress through their first year and reported finishing the school year with much higher confidence. A teacher in the same school has experience with the school district's and administration's nuances, making each teaching position unique. Multiple teachers also allow for shared responsibilities of the FFA chapter and can lessen the load that ECTs face when managing the FFA responsibilities on their own. We recommend further research comparing teachers' self-efficacy, stress, and retention in multiple-teacher SBAE programs. While school district funding and school populations limit the schools that can have multiple-teacher programs, advocating for a multiple-teacher SBAE program, when possible, provides a unique solution to dealing with the challenges of agricultural education.

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