Supporting Full Implementation of the Agricultural Education Model
Equipping Student Leaders to Utilize the Ag Ed Model

by Gaea Hock

As a teacher educator, I work to maintain the 3-circle model as a foundational practice in my courses at the post-secondary level. We ask our students to complete coursework, internships, and serve as leaders. I discuss the complete agricultural education model in the Introduction to Agricultural Education course each fall. I quickly learned that not all students were entering the program with the same awareness and appreciation for the model. We modified the course syllabus to make sure we clearly taught the model while also allowing for experiential learning in each component.

In Kansas, we have seven FFA district officer teams comprised of current high school students. Each summer they are invited to the District Officer Conference to prepare them for their year of service. In 2019, I presented a workshop about the 3-circle model at the conference. I started by having them consider what they already know about the model and what they want to know (they documented their thoughts on a KWL chart).

I then shared a basic overview of the complete agricultural education model and asked them to reflect and discuss the following question:

- How does your classroom and laboratory experience differ from others in your officer team?

In Kansas there are 36 courses in 8 pathways. The students were not aware of the breadth and diversity of available courses in our state. I encouraged them to learn more about the courses Kansas agriculture students were completing in order to fully appreciate the classroom component of the model.

I then asked them to reflect on the FFA component of the model.

- What FFA events/activities/programs are you familiar with and which ones are you aware of, but don't participate in?
- What are some of the more unique programs offered by Kansas FFA/National FFA?

Over the years, I have gained an awareness and appreciation for how unique each state is regarding their FFA structure, events, and goals. Leadership in all states have worked to create opportunities to fit the unique needs of their students. I encourage you to dig a little deeper into what your state currently offers while exploring opportunities in other states you may want to integrate.

Finally, I showed a picture of the new SAE for All model to the officers and asked:

- How many of you have seen this graphic? What is it?

The SAE for ALL model was very new in 2019. I wanted them to be aware of the change and research it further. Have you attended SAE for All training yet? I encourage you to become more familiar with the model and how it can benefit each student in your program.

After walking them through each component, I asked them to discuss the following:

- With your DO team, think about what specific items fall under the Classroom/Laboratory component.
- With your DO team, think about specific items/activities that fall under SAE.
- With your DO team, think about specific items/activities that fall under FFA.

Students then completed a Venn diagram on the three components. When they finished, we discussed what they wrote while encouraging them to think deeper about how there are activities/events that overlap and represent all three components of the model (i.e. Agriscience Fair, Proficiency Awards, National Chapter Award, several specific CDEs).

To connect the activity to their role as a district officer I asked them to think about events and activities they have hosted in the past (i.e. Greenhand information tests, workshops at GH Conference, District Banquet, District Social Activities, District Service Projects). They then moved tables to share their ideas with other districts and get new ideas to bring back to their officer team. They were tasked with evaluating current activities to identify how they could be enhanced, while also searching out new opportunities. We ended the activity with a goal setting session to capture their ideas and action steps.

We ended the workshop by completing the “L” column on their KWL sheet and having one last discussion about how they will apply their new knowledge during their year of service.
Leading this workshop allowed me the opportunity to reflect on how each component of the model supports the other two. It also offered me the chance to evaluate how well we are modeling the complete program in our Agricultural Education degree at KSU.

As you move through this school year, consider how well you are utilizing and supporting each component of the complete agricultural education model. Help your students fully appreciate the total program and how they will benefit from participating in each circle.

The QR code is to a Google Drive folder with all the workshop materials from the 2019 3-Circle Model workshop (in-person) and the 2020 workshop (virtual). Please make a copy and adjust to meet your needs.
Supporting Full Implementation of the Agricultural Education Model

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Do We Really Believe in the Three-Component Model?

by Dr. Zane Sheehan

The three-component model of School-Based Agricultural Education (SBAE) consists of classroom instruction, leadership development through FFA, and work-based learning (WBL) through Supervised Agricultural Experience (SAE). The three-component model (see Figure 1) was likely one of the earliest concepts we were taught if we took an SBAE course. As SBAE educators, we teach the three-component model to our freshmen in their introduction to agriculture courses. As teacher educators, the three-components form the core of our licensure program, as we structure standards and entire courses around FFA, SAE, and teaching methods. The three-component model has been around for nearly 100 years with only minor changes to the names and terminology we use for labels. Yet, at the same time, it can be hard to argue we, as SBAE teachers, educators, and leaders, actually believe in it. We preach the three-component model, yet many, many of our programs do not reflect it. We know there are more than 1.2 million students in SBAE across the country (Poeschl & White, 2019), yet only 700,000 of them are members of FFA (60% of SBAE students are members of FFA; National FFA Organization, 2021), and our best estimate of SAE participation suggests around 54% of SBAE students have an SAE project (i.e., 650,000; AET, 2021). How can it be that something we hold so sacred in SBAE is not reflected within our practices and actions? That data of SBAE can be so drastically different than what we hold to be true? Do we really believe in the three-component model?

Same Concepts, Different Labels

Generally, if you stay in education long enough, you might see the same theories and models re-emerge again and again, often with new labels and names. I would argue that we have been using the three-component model in more than just SBAE, and that it applies to more aspects of what we do and how we teach than we have ever realized, especially now in Perkins V with the surge of interest in WBL and social-emotional learning.

Consider the three domains of teaching and learning. There is the cognitive, affective, and psychomotor domains (Anderson & Krathwohl, 2001; Bloom, 1956; Dave, 1970; Harrow, 1972; Krathwohl et al., 1964; Simpson, 1972; see Figure 2). As teachers, we use Bloom’s Taxonomy, and the subsequent taxonomies, to write our learning objectives, plan the methods of instruction we will use to cause students to think, feel, or act differently than before the lesson, and design our assessments. Yet ironically, even though Bloom’s Taxonomy was not developed until the 1950s, SBAE had been practicing

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**Figure 1. Three-component model of School-Based Agricultural Education**

**CLASSROOM/LABORATORY**
Contextual, inquiry-based instruction and learning through an interactive classroom and laboratory.

**SAE**
Experiential service and/or work-based learning through the implementation of a supervised agricultural experience program.

**FFA**
Premier leadership, personal growth and career success through engagement in FFA, National Postsecondary Agricultural Student Organization or National Young Farmer Education Association programs and activities.
a three-component model with much in common for thirty years already. Classroom and laboratory instruction most significantly target the thinking or cognitive domain of learning, which is why most of the education system uses Bloom’s original cognitive domain. Through WBL programs and SAE projects, students get to “do” and apply their knowledge, which connects most with the psychomotor domain. Finally, FFA is where students develop social-emotional skills and leadership, which directly ties to the affective domain of learning, or feeling. Similar concepts, but many of us may have never connected the three component model of SBAE to Bloom’s taxonomy.

Another popular and powerful education model is the three Rs model. Dr. Willard “Bill” Daggett of the International Center for Leadership in Education developed the three Rs model in 1997 (Daggett, 2020). Dr. Daggett has spoken to the National Association of Supervisors of Agricultural Education (NASAE), presented at conferences to school administrators, and is a published author. His model for educational reform focuses on the need to develop the whole child, recognizing that students develop in three distinct dimensions, and that different dimensions or environments work best for targeting specific types of learning. Once again, the three Rs are similar to the three domains of learning, which are similar to the three-component model of SBAE (see Figure 3); rigor: classroom/cognitive, relevance: WBL/SAE/psychomotor, and relationships: FFA/affective.

In fact this very theme issue of The Agricultural Education Magazine has been done before, and will be done again, and again. In the February/March 2001 issue of News and Views from the National Association of Agricultural Education, Mr. Bernie Staller of the National FFA Organization wrote about what “integral” means within the SBAE three-component model, and questioned why we allow FFA to remain optional. In the article was one of the best figures for rethinking the three-component model I have personally ever seen, as a teacher, teacher educator, and state supervisor (see Figure 4).

The classroom aspect of the three-component model best focuses on academic knowledge, or the cognitive domain of learning, or through rigorous instruction in
We know how important technical skills and social-emotional learning are to career success...so why do we not do everything possible to make sure students gain technical skills and social-emotional skills in FFA and SAE going forward?

Figure 5. What and How of School-Based Agricultural Education.
students who drop out of vet. science programs because they did not have real experiences with what being a veterinary entails). An agricultural salesperson with vast knowledge and experience, will struggle with customer service and coworkers, because they lack social-emotional skills to manage conflict and communication. Each aspect of our model provides an essential and critical aspect of learning all people need for career success.

It is not acceptable for half of our students in SBAE to opt out of FFA or SAE. As teachers, we would not allow a student to say “no, thank you” to an exam or major project, so why are we comfortable with making SAE and FFA optional? We know how important technical skills and social-emotional learning are to career success—especially after COVID-19 deprived our students of these experiences for more than a year—so why do we not do everything possible to make sure students gain technical skills and social-emotional skills in FFA and SAE going forward? Especially when we see how we have embedded these three components in everything we do as teachers and educational leaders? The time for 100% SAE and FFA is here.

In this issue of The Agricultural Education Magazine, leading experts from across the country present strategies for how to engage all students in 100% SAE/WBL and 100% FFA/leadership through programs like SAE for All, AET, FFA Affiliation, assessing FFA and SAE as a graded component of the curriculum, trends in Perkins V, grant programs seeking to expand SAE and FFA for all students, and more. If we genuinely believe in our three-component model of rigorous classroom instruction (academic/thinking), relevant work-based learning/supervised agricultural experiences (technical/doing), and relationship development through FFA (social-emotional/feeling), then it is time to do everything we can to ensure all students experience all three aspects of school-based agricultural education.

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School-Based Agri-cultural Education has a rich history of preparing students with the academic, technical, and social-emotional skills needed for success in food, fiber, and natural resource careers. School-Based Agri-cultural Education (SBAE) in many ways owes its existence to the network of land grant colleges and universities and early advocates of vocation-based education. The 1862 Morrill Act established a system of land-grant universities and colleges—originally one per state—dedicated to teaching “agriculture, the mechanical arts, and humanities to the sons and daughters of the working classes” (Auburn University, 2018, para. 1). The Morrill Act of 1862—and subsequent comparable acts in 1890, which primarily expanded land-grant schools in the segregated South for students of color, and 1994, for students of Native American heritage—laid the foundation for what is today known as secondary SBAE (Phipps et al., 2008; Talbert et al., 2013). Fifty-five years after the original Morrill Act, the Smith-Hughes Act of 1917 provided federal support for state and national boards of vocational education, teacher education programs, and funding for a system of secondary/pre-college, public education in vocational careers (Phipps et al., 2008). As a result, the Smith-Hughes Act was instrumental in formalizing what would later become the three-component model of SBAE.

The Smith-Hughes Act of 1917 defined the first two components of the SBAE model: classroom instruction and “home practice” that is now expanded as Supervised Agricultural Experience (SAE). Congress’ action in 1917 positioned vocational education as a national priority, providing federal funding for teachers of agriculture, home economics (i.e., family and consumer sciences education), and industrial technology (i.e., mechanics and engineering education; Talbert et al., 2013). The Act also required teachers to provide instruction in “directed or supervised practice” (i.e., home practice; Phipps et al., 2008, p. 28) in agriculture (i.e., SAE). Students were to receive rigorous, academic instruction in the classroom, paired with relevant, technical instruction/guided practice in a practical, realistic setting.

In 1928, unofficial agricultural clubs from eighteen states met to form FFA (i.e., formerly the Future Farmers of America, now the National FFA Organization; Croom, 2008). FFA became the third component of the model, focused on “social development and agricultural skill development” (Croom, 2008, p. 114). FFA received a federal congressional charter formalizing it as an intracurricular and an integral component of School-Based AFNR Education (National FFA Organization, 2021; Public Law No. 116-7). Together, rigorous classroom instruction, relevant work-based learning (i.e., SAE), and relationships/social-emotional skill development through participation in a student leadership organization (i.e., FFA), created the three-components of an integrated SBAE program.

Various acts in the 1960s and 1980s strengthened and improved the quality of SBAE. The Vocational Education Acts of 1963, 1968, and 1976 enhanced the work of the Smith-Hughes Act to “meet the needs of a changing American economy” (Talbert et al., 2013, p. 80), particularly in the areas of business education. The Vocational Education Acts of the 1960s expanded the definition of agriculture beyond the farm to include horticulture, agricultural business, and agricultural mechanics (Talbert et al., 2013). Most notably, the Carl Perkins Vocational Edu- cation Act of 1984 modernized SBAE and formalizing Career and Technical Student Organizations (CTSO) like FFA. The Act was reau-thorized in 1990, 1996, 1998, 2006, and 2018, each time aiming to...
improve quality and spark innovation within United States Career and Technical Education (Perkins Collaborative Resource Network, 2018; Talbert et al., 2013).

While SBAE, including FFA, continued to grow and expand for many years, the content area faced challenges in the 1980s through 2000s as well. For the first 41 years of its existence, membership in FFA was limited to males. In 1969, membership opened to females. Outside of a brief period during World War II, FFA membership continued to grow, until the 1980s. In the 1980s, the United States experienced a recession and a national farm crisis as agricultural commodity values plummeted. During the Farm Crisis of the 1980s, FFA membership (which is an integral and vital part of a total SBAE program), decreased by more than 100,000 students (a loss of more than 20%; see Figure 1; Sheehan & Moore, 2019). As a result, FFA rebranded itself to meet the growing needs of the industries of agriculture and natural resources. FFA changed its name from the “Future Farmers of America” to the “National FFA Organization” in 1988 and allowed junior high (i.e., grade 7 and 8) students to join the organization (National FFA Organization, 2021).

The story of SBAE during the past twenty years (2000 to 2020) is like that of the earlier seventy before it. SBAE continues to grow and modernize to meet the needs of industry, American education, and students. Decreased Career and Technical Education (CTE) funding, shifting academic standards, standardized testing in core academic programs, federal guidance changes—including revisions to Perkins law, and teacher burnout all present new challenges. Fortunately, SBAE continues to adapt. Innovations such as the FFA Affiliation membership model, the Curriculum for Agricultural Science Education (CASE) program, AET record keeping and program management system, and STEM integration all mark the SBAE profession’s spirit of growth and the promise of better days, through better ways.

While in many ways returning to the roots of SBAE and the three-component model, 100% engagement in FFA (i.e., leadership and social-emotional learning) and SAE (i.e., technical skills and work-based learning) may be the key to meeting the growing needs of a more diverse and global agricultural workforce. After years of slow membership growth following the Farm Crisis in the 1980s, FFA adopted a new membership possibility. FFA Affiliation began as the California Agriculture Incentive Grant in 1983 (California Department of Education, 2003). The National FFA Organization implemented the Affiliation model in 2010 as an alternative to individual membership dues, to reposition FFA as integral to SBAE, and to provide the benefits of leadership development to all students in all SBAE classes (Case, 2010; National FFA Organization, 2021). Since 2010, FFA membership grew by 28% and more than 150,000 members (National FFA Organization, 2018a). As of 2017, more than 50% of students in FFA are now Affiliated members, while 31% of FFA chapters have employed the affiliated membership model (Sheehan & Moore, 2019). As a result of FFA Affiliation, the National FFA Organization and numerous state
associations—particularly those in the Western Region where adoption has been strongest—have experienced membership growth, affecting state and national FFA programming, CDE events, conferences, and conventions. It is possible that this growth will continue to an even greater degree as the innovation reaches critical mass and the tipping point of adoption (Rogers, 2010). FFA’s new membership program has resulted in substantial changes to SBAE during the past eight years.

Just as FFA membership has shifted, SAE has changed in nomenclature and focus over the one-hundred-year history of SBAE as well. What began as “home practice” was later deemed “supervised farming program.” This latter terminology described correctly that a student’s home practice should be supervised by the teacher, a parent, or another adult. Because a primary purpose of SBAE until the 1960s was to prepare boys to become farmers, supervised farming programs were appropriately descriptive. When the purpose of SBAE was expanded to include off-farm agricultural occupations, the name of the educational practice became “supervised occupational experience program in agriculture.” Again, the moniker was both appropriate and descriptive. Subsequent expansion of the purposes of SBAE to include not only instruction/learning for agricultural careers, but also teaching/learning about agriculture. Thus, SBAE by the late 1980s was not just for those who would enter agricultural occupations upon program completion but also for those who wanted to learn about agriculture, food, natural resources, wildlife conservation, ecology, outdoor recreation, and related sciences, and those who intended to enter colleges or university to study agriculture, food, nutrition, and related sciences. Now, as SBAE and CTE shift focus again on innovation following federal Perkins V legislation, there is a renewed focus on Work-Based Learning (WBL), which ironically, is just another name for SAE, and something SBAE has been practicing from its very onset.

Overall, the three-component model of SBAE is both distinct—with each part of our model representing specific domains of learning and possessing its own history—and interconnected. Consider this example. As an SBAE instructor, we may be teaching parliamentary procedure in our classroom. We may also be trying to train an FFA team to compete. At what point does this change from one circle (classroom instruction) to another circle (FFA)? Does it even matter? SBAE consists of three definitive components—each important, even critical to optimum learning. Agricultural education—and many ways learning in general—depends upon all three functions of our three-component model. Guide and direct student curiosity (i.e., Classroom). Expose students to agricultural experiences to contextualize their classroom learning (i.e., SAE). Give students...
opportunities to grow and flourish with others while applying their agricultural knowledge (i.e., FFA). Today’s SBAE and CTE might use different labels like WBL and FFA Affiliation, but they are essentially the same concepts we have always believed in: classroom, SAE, and FFA. As teachers, we are better—in fact, the absolute best—when we embrace the three components and make them overlap and become additive and complementary. So now the only question left is, do you simply preach the three-circle model to students, or is it something you actually practice and believe in?

References


All Students in FFA – Why and How California Became a 100% FFA Membership State

By Dr. Lloyd McCabe

Historically, California has had many innovative and trend setting agricultural education leaders. Perhaps the one of the greatest FFA leaders in California’s history was Mr. Jerry T. Davis who served as FFA State Assistant Advisor from 1967-86.

Jerry was best known for developing the statewide Student Leadership Program, leading the charge nationally in allowing girls in FFA (1969) and urging his fellow FFA state advisors to make FFA membership required of all agricultural education students (1979). It is the latter that we will examine further in this article.

In 1979, I was in my fourth year as a young agriculture instructor at Chowchilla Union High School when I attended a statewide workshop conducted by Mr. Davis. At that workshop, Jerry presented a compelling argument for requiring all high school agriculture students to become FFA members.

During that era, the Future Farmers of America (i.e., FFA) was considered an extracurricular club for students. In 1979, California had 45,581 secondary agriculture students enrolled but only 17,251 FFA members in 314 FFA Chapters. In other words, just 38% of agriculture students were taking part in FFA.

Jerry argued during the workshop that FFA was not a club and that there should be no distinction between an agriculture student and an FFA member. He believed that FFA was an instructional leadership strategy and therefore all agriculture students should receive those educational leadership skills. These strategies included: team building, teamwork, critical thinking skills, work ethic, public speaking, parliamentary procedure, human relations, and social interactions; character building that promoted citizenship, volunteerism, and patriotism; and promoted cooperation and cooperative attitudes among all students. While young agriculture teachers, such as I, embraced Jerry’s “words of wisdom,” sadly many of the older more traditional teachers felt that FFA was still just a social club for some of their favorite students.

So, with this background in mind, how did California become a 100% membership state? In a nutshell, it took creative thinking, vigorous work, and groundbreaking state legislation and funding!

There were five key state legislative policies enacted that set-in motion the requirement that all students participate in student leadership activities. These five policies were:

- Senate Bill 187 (1983)
- Education Code 52454-42462 (1983)
- Education Code 52454 (1988)

**Education Code 52450 (1981)**

This Act declared that the Legislature of the State of California recognized that agriculture is the most basic and singularly important industry in the state, that agriculture is of central importance to the welfare and economic stability of the state, and that the maintenance of this vital industry requires a continued source of trained and qualified individuals for employment in production agriculture and agribusiness.

The Legislature further declared that it was within the best interests of the people of the State of California that a comprehensive vocational education program in agriculture be created and maintained by the state’s public school system in order to ensure an adequate supply of trained and skilled individuals and to ensure appropriate representation of racial and ethnic groups in all phases of the industry. For this purpose, the Legislature affirmed that a state program for agricultural education shall be established. It was the intent of the Legislature that a state program for agricultural education shall be a part of the curriculum of the state school system and made readily available to all school districts who may, at their option, include programs in vocational education in agriculture as a part of the curriculum of that district.

**Education Code 52375 (1982)**

This Act prohibited districts in assessing student fees or dues. No pupil shall be required to pay any fee or charge for enrollment or participation in activities of vocational student organizations, which are a part of a vocational class or course of instruction offered for credit, when those activities are integral to aiding the student to achieve their career objectives of the class or course.
Dr. McCabe was a high school agricultural education teacher, lecturer at the University of California, Davis, and served as an education consultant and administrator for 30 years at the California Department of Education. He retired in 2018 as State Supervisor of Agricultural Education. He was a product of FFA and credits his career successes to FFA and its many leadership activities.

This section shall apply to activities which occur during or outside of the regular school day.

The passage of this Act caused the California FFA Association to end all statewide dues and create a Chapter Affiliation Packet Program. Chapters paid an affiliation fee ($5 per student in 1982 which now cost $10 per student in 2021) and received a set of 25 Official FFA Manuals, a State Constitution, a record book for each member, the National FFA Magazine for each member, as well as covering National FFA membership. This FFA Chapter Affiliation Packet Program continues to this day.

**Senate Bill 187 (1983)**

The Agriculture Vocational Incentive Grant Program was started in 1983 with the passage of Senate Bill 187. This program initially provided state funds in the amount of $3,000,000 with the legislative intent to assist and improve secondary education programs in agriculture. Today, $4,134,000 is allocated to more than 345 local programs to assist them in program improvement based on meeting state-adopted, program quality standards and criteria that are developed by agriculture staff in the California Department of Education.


This Act clearly defined the agricultural education curricular components of those school districts taking part in the Agriculture Vocational Incentive Grant program.

These curricular components included:
- Organized classes in the study of agricultural science and technology,
- A student-supervised occupational experience program in agriculture (i.e., a work-based learning program),
- A program of leadership, organization, and personal skill development.

The Act specified that the student learning activity developed to supplement these components shall be considered intracurricular and shall contribute to the grade of the participating student when these activities are integral to aiding the student to achieve their career objective of the class or course.

The Act also defined the intent of the Legislature that opportunities are provided for teachers to be employed on a 12-month basis to support supervised occupational experience on a year-round basis for students enrolled in agricultural education programs.

Since the passage of these five Legislative Acts, California has had 100 percent FFA state membership for the last 32 consecutive years. Presently (2021), California has 345 FFA Chapters with 92,662 FFA members. Essentially, enrollment in agriculture, food, and natural resources doubled since the program began, while FFA membership tripled. In 2010, FFA Affiliation became a nation-wide option, and many more states and programs have adopted the model. What began as a simple question or challenge—that all students in agricultural education belong in FFA—today we are closer to that vision than ever.

If your state has an interest in knowing more about the California FFA Association or the Agriculture Vocational Incentive Grant Program, please contact Charles Parker, State Supervisor of Agricultural Education, California Department of Education at: (916) 319-0673 or cparker@cde.ca.gov.

If your state has an interest in knowing more about the California FFA Association or the Agriculture Vocational Incentive Grant Program, please contact Charles Parker, State Supervisor of Agricultural Education, California Department of Education at: (916) 319-0673 or cparker@cde.ca.gov.
I believe in leadership from ourselves and respect from others. I believe in my own ability to work efficiently and think clearly, with such knowledge and skill as I can secure, and in the ability of progressive agriculturists to serve our own and the public interest in producing and marketing the product of our toil.

Have you ever wondered what Professor Erwin Milton Tiffany was thinking when he wrote the FFA Creed in 1928? Imagine the definition of "leadership" he considered when he wrote this foundational document.

How do you define leadership? How might your students define leadership? Often, leadership is informed by relevant experiences shaping a person’s mindset and behavior (Kouzes & Posner, 2016). Each of these traits have an impact on the level of influence an individual has on another person, which inadvertently makes leadership traits powerful interpersonal characteristics.

How is it that “leadership from ourselves and respect from others” can carry just as much weight today as it did 93 years ago? Seems like E.M. Tiffany was giving us an early lesson in transferable skills.

Some skills are timeless. Classic. Foundational. Vital. Even though how we prepare students

**KEY EVENTS IN 1928**

- **Capturing Moments**
  - The first fully automatic photographic film machine is patented.

- **History in Flight**
  - Amelia Earhart becomes the first woman to fly across the Atlantic.

- **Future of Agriculture**
  - E.M. Tiffany authors the FFA Creed.

- **Advances in Medicine**
  - Alexander Fleming discovers penicillin.

- **Fastening Fashion**
  - The clip-on tie design is invented.

- **Television Broadcasting**
  - RCA and GE install their first television sets in homes in Schenectady, New York.

- **Welcome the Big Mouse**
  - Mickey Mouse makes his first appearance in a silent film.

- **Cool as Sliced Bread**
  - Sliced bread is sold for the first time by the Chillicothe Baking Company, Missouri.

- **Legendary Baseball**
  - Babe Ruth hits 40 home runs in a 13-1 win by the Yankees versus the St. Louis Browns.

- **31st Presidential Election**
  - Herbert Hoover is elected the 31st President of the United States.

- **Transmitting Across America**
  - NBC sets up a permanent, coast-to-coast radio network.

Figure 1. Key events that occurred in 1928.
for these skills in a modern classroom might look different than it did in 1928, the ever changing workforce suggest they are just as needed today as they were then. Maybe even more.

**Critical Growth Areas for the Agricultural Workforce**

In a study conducted by the Association of Public Land Grant Universities (Crawford & Fink, 2020), nearly 12,000 stakeholders (employers, faculty, alumni, and students) identified the top six critical growth areas for entry-level employees in the agriculture, food, and natural resources industries—communication, decision making and problem solving, self-management, teamwork, professionalism, and leadership.

Stakeholders also identified skill gaps prohibiting the ability to reach high performance in the workforce. Employers ranked “understanding role and expectation in the workplace” as the largest gap in entry-level employees, whereas current students ranked “building professional relationships” as their greatest professional development need prior to entering the workforce (Crawford & Fink, 2020, p. 30). Both gaps were indicators of professionalism and leadership.

Each of these critical growth areas are labeled as interpersonal, or relational, skills driven by an individual’s ability to interact with other people (Doyle, 2020). While slightly contested, most employers across industries rate interpersonal and relational skills higher than technical skills (Forbes, 2020). Especially in a mid-to post-COVID-19 workplace, employers are targeting candidates with strong interpersonal skills and growth mindsets. For example,

Dominique Farnan from Dot-Connect, a talent management company and official member of the Forbes Human Resources Council, stated, “I am more inclined to hire someone who wants to learn and is flexible than someone who has all of the technical skills but lacks curiosity or flexibility” (para. 3, as cited in Forbes, 2020).

Heide Abelli from Skillsoft, a national learning management company, stated, “The top skill to recruit is the ability to continuously learn... without the ability to continuously build and hone new skills, employees will struggle to adapt in rapidly evolving workplaces” (para. 4, as cited in Forbes, 2020).

If these statements do not provide justification for increased programming efforts supporting interpersonal skill development through premier leadership, personal growth, and career success, they should.

**Raising the Relational Bar**

The three-component model of school-based agricultural education combines rigorous instruction, relevant experiences, and resounding relationships. The National FFA Organization plays a critical role in preparing students to maintain strong relationships through exposure to social environments. Social and Emotional Learning (SEL) is the “process through which we learn to recognize and manage emotions, care about others, make good decisions, behave ethically and responsibly, develop positive relationships, and avoid negative behaviors” (Zins et al., 2007, p. 192). SEL targets a students’ self-awareness, social awareness, self-management, relationship skills, and responsible decision making (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2021; see Figure 2).

FFA provides SEL opportunities, which allow students to refine interpersonal skills through interactions with peers, ownership of different projects, collaborative competition, and exposure to differing experiences. When strategically applied in a classroom or event setting, SEL provides a holistic learning environment to strengthen students’ and teachers’ relational skills (Yopp et al., 2017). Preparing mindsets, skillsets, and capabilities to work with other people also boosts self-worth.

Developing self-worth has never been more important. Classrooms are currently facing some of the highest rates of anxiety disorders in history. Nearly 1 in every 3 students between the ages of 13–18 was diagnosed with an anxiety disorder in 2017 (National Institute of Mental Health, 2017).
Ironically, many of these anxieties were caused by social pressures, overcommitment, exhaustion, and stress associated with meeting high expectations. Sadly, these figures do not account for additional challenges, stresses, disappointments, or worries associated with adjusting to life during a global pandemic. According to Mental Health America (2021), nearly 14% of youth between the ages of 12–17 reported “suffering from at least one major depressive episode (MDE)” already in 2021, which increased by nearly 206,000 students compared to this date in 2020 (para. 3).

When the state of the world changes, teachers and students must engage a growth mindset. Cue the need for additional relational and SEL skill development through FFA.

**Strategies to Increase SEL Opportunities**

Here are a few suggestions to increase SEL through FFA and agricultural education courses. These exercises can be adapted to in-person, hybrid, or virtual environments. For more resources and ideas, visit CASEL (2021) and Pathway 2 Success (2021):

**Improving Self-Awareness**

Challenge students to see where and how they fit in the world through reflection exercises. Students who are aware of their skillsets and how they arrived at those skills are likely more self-aware, which can later translate into a growth mindset because they can operate on their strengths while adjusting to their weaknesses. Teachers can also help students improve self-awareness by helping students see the connections in differing topics in their courses, around their classrooms, or even between their friends. Seeking connections will help students increase their critical thinking and self-awareness.

**Improving Social Awareness**

Provide daily exercises for students to mingle with their peers and discuss a topic of the day.

**Improving Self-Management**

As adolescents grow, they are managing changing bodies and fluctuating hormones, especially during middle school. Self-management does not just relate to how to control emotions, but also how to humbly accept praise, graciously accept criticism, and teach empathy, kindness, and social awareness.

**Improving Relationship Skills**

Encourage positive self-talk and peer-talk. Have students write notes of affirmation to peers.

**Improving Responsible Decision Making**

Add life skills, such as budgeting, paying bills, resume development, and social media ethics to lessons.

Figure 3. Strategies to incorporate SEL in FFA events or agricultural education classrooms.
proudly achieve goals. Exercises to manage stress and becoming overwhelmed can include mindfulness, breathing exercises, journaling, painting, photography, or other expressive arts. Teachers can also provide time management lessons to help students manage FFA events and other scholastic, sporting, civic, or personal duties.

**Improving Relationship Skills**

To help students improve relationship skills, teachers can provide experiences to work with peers while operating under a common goal. Central to this strategy is recognizing and appreciating diverse opinions, approaches, and mindsets. Incorporating service-learning activities allow students to connect the value of giving back. Make sure to incorporate appropriate reflection conversations after FFA service events. Teachers can also encourage positive self-talk and peer-talk through affirmation notes to peers, posting to an affirmation board, highlighting student successes (not necessarily for just FFA events) at the beginning of class, and having students write thank you notes to community leaders, teachers, and supporters.

**Improving Responsible Decision Making**

Finally, to help students improve responsible decision making, teachers can incorporate lessons related to life skills a student may face after graduation, such as budgeting, paying bills, resume development, and how to manage their social presence. Students should also evaluate consequences of possible actions as they pertain to their reputations, to loved ones, and to privileges they have while in school, such as competing in career or leadership development events. Students can also connect competencies related to different events to help evaluate and explain the value of their involvement in FFA.

Developing leadership from ourselves flourishes when students build their personal brand of excellence. Make no mistake, exemplifying the highest level of leadership will also earn respect from others. By providing opportunities to develop interpersonal skills and SEL through FFA and agricultural education, teachers play a vital role in helping students meet the demands of an evolving workforce.

Who knew ideals written 93 years ago would help define the future of agriculture for careers that may not exist, yet? I believe it. Do you?

**References**


Dr. Shannon Norris is an Assistant Professor with a joint position in Agricultural Communications and Agricultural Business and Agricultural Economics at New Mexico State University.
FFA for Every Student, Every Class, Every Day

by William Deimler, Dr. Scott Stump, & Dr. James Woodard

The agricultural education profession has believed and taught a three-part approach to school-based agricultural education for a century. It is a method rooted in federal public law and is also a proven process for transforming students into competent and confident adults ready for their next step.

The three components of the school-based agricultural education model are inquiry-based instruction through classrooms or laboratories, experiential or work-based learning via supervised agricultural experience, and personal development through engagement in leadership opportunities. Together, these components create a cohesive, systematic program of instruction. Engaged students learn about the science, business, and technology of plant and animal production, environmental systems, and natural resources systems. Then, they put those skills to use. Yet data shows that this three-pronged approach is not the reality for all students in school-based agricultural education settings. In 2019-20, one in four agricultural education students aged 12-21 in the United States had no access to FFA.

Solving this problem is a priority of the National FFA Organization, but not merely for membership counting. The gap is a main concern because it emphasizes that hundreds of thousands of eligible students miss the opportunity of FFA engagement every day—despite the century-long commitment otherwise of our profession.

Public Law 116-7, which notes that the purposes of FFA include its existence as “an integral component of instruction in agricultural education, including instruction relating to agriculture, food, and natural resources” offers a fundamental argument for 100 percent of agricultural education students gaining access and membership to FFA. But the most important reason for allowing every student in every agricultural education class to engage in FFA is more straightforward. We believe that when more students have more access to all the benefits of school-based agricultural education, more students succeed.

Expanding access to FFA drives strength to other imminent requirements of school-based agricultural education settings. In 2018, the federal passage of the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), career and technical education programs—including agricultural education—must analyze program data to identify opportunity gaps. Put simply, Perkins V requires career and technical education programs nationwide to complete a Comprehensive Local Needs Assessment to ensure its student population reflects the composition of the community it serves.

The Perkins V needs assessment offers no room for career and technical education to only be offered to students of specific learning ability, language proficiency, religion, color, race, or creed. National FFA welcomes the needs assessment. It will encourage career and technical education programs everywhere to examine their delivery and seek out underserved students. As more students find the opportunity of agricultural education, FFA will better accomplish another stated purpose of our organization in Public Law 116-7: “To seek and promote inclusion and diversity in its membership, leadership, and staff to reflect the belief of FFA in the value of all human beings.” Together, these purposes support our goal of FFA delivery to every student, in every class, every day.

How can FFA make 100% engagement a reality for all school-based agricultural education students? One answer is found in a meaningful shift of our membership model that is now more than a decade old. In 2009, National FFA student delegates and the National FFA Board of Directors created an affiliate membership model. Now, both local chapters and entire state associations can opt for a membership model that automatically generates FFA membership for any student enrolled in agricultural education. In

We believe that when more students have more access to all the benefits of school-based agricultural education, more students succeed.
affiliated chapters, the barriers to entry, such as individual membership dues or other local requirements that hinder FFA participation, no longer exist.

As of 2020-21, 15 states—including California, Georgia, Oklahoma, and Tennessee—are 100% affiliated. In 2017, 30% of chapters had embraced the FFA affiliation model, and 51% of all FFA members were in affiliated chapters (Sheehan & Moore, 2019), which signaled a tipping point for adoption of the innovation. Today, 46.7% of all FFA chapters use affiliation (National FFA Organization, 2021), and across the country, there are an approximate two affiliated members for every one student who pays dues (Sheehan, 2021). But that is not enough. In response, the National FFA Board of Directors launched a committee in August 2020 to focus on meaningful updates to the affiliation program with one stated, and clear goal: **100% membership by 2028—the 100th anniversary of FFA.**

Agricultural education students from Neodesha High School in Neodesha, Kansas find value in rich classroom, SAE, and FFA experiences. *Photos courtesy of Emma Lehmann.*
What is Agricultural Education’s “anchor”—and how does SAE contribute?

Supervised Agricultural Experience has formally existed as part of the agricultural education program since Rufus W. Stimson pioneered the “project method” of teaching at the Smith Agricultural School in Northampton, Massachusetts, in 1908. Stimson’s motivation was based on a belief that students spent more time listening to and observing others than performing actual work themselves. The project method of teaching started a model where students applied classroom knowledge to their home farm operations (Stump, 2016).

While the name has experienced seven name changes from “project method” to today’s Supervised Agricultural Experience or SAE program (see Figure 1), the idea of “work” has remained at the core of SAE.

It is worth noting that much has changed since the early 1900s, including the type of careers for which agricultural education prepares students. In 1920 it was estimated that 34% of Americans lived on a farm; that number is now less than 2% (see Figure 2). The definition of careers related to agriculture has been vastly expanded from food production-based jobs to include more than 300 occupations across multiple career pathways in agriculture, food, and natural resources.

Still, at its core, both our past and today’s SAE celebrates work by giving students individualized

### Key Attribute

<table>
<thead>
<tr>
<th>SAE Name Changes Since 1908</th>
<th>1920</th>
<th>2020 (SAE for All)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Project (1908)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home-School Cooperation Plan (1908)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farming Project (1919)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productive Farm Enterprises (1926)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervised Farm Practice Program (1938)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervised Farming Program (1943)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervised Occupational Experience Program (1972)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervised Agricultural Experience Programs (1992)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SAE for All: For Real.

by Dr. Matt Kreifels

It is worth noting that much has changed since the early 1900s, including the type of careers for which agricultural education prepares students. In 1920 it was estimated that 34% of Americans lived on a farm; that number is now less than 2% (see Figure 2). The definition of careers related to agriculture has been vastly expanded from food production-based jobs to include more than 300 occupations across multiple career pathways in agriculture, food, and natural resources.

Still, at its core, both our past and today’s SAE celebrates work by giving students individualized

### Key Attribute

<table>
<thead>
<tr>
<th>SAE Counts Toward Grade</th>
<th>1920</th>
<th>2020 (SAE for All)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Labor Law Compliant</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>Supervision Location</td>
<td>On-site</td>
<td>Various – On-site, Virtual, Conference</td>
</tr>
<tr>
<td>Supervision Frequency</td>
<td>Weekly</td>
<td>On-going</td>
</tr>
<tr>
<td>Supervision Ratio</td>
<td>1 to 20</td>
<td>1 to 75 and up</td>
</tr>
<tr>
<td>SAE Work During School</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Alignment to Ag Career Interest</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Documentation Required</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Aligned to Community Need</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
and small group experience within the agriculture industry. If career development is the “anchor” of agricultural education, personally experiencing work and modern careers through SAE is critical for a student’s career development.

**Note:** More broadly, in Career and Technical Education (CTE), the term used for SAE-type experiences is Work-Based Learning (WBL). The idea is that all students in all CTE content areas should experience a level of WBL experiences due to the passing of the Perkins V legislation in 2018 to promote career readiness. In other words, Agricultural Education and its SAE programs are best positioned to help lead and support modern national WBL efforts in other CTE areas.

**Why (from where) did “SAE for All” Originate?**

With national estimates as low as 30% of students participating in Supervised Agricultural Experiences, SAE was at a crossroads (Womochil, 2019). In 2010, the National Council for Agricultural Education created a committee to explore the status of SAE, current barriers to SAE participation, and potential next steps to expand the scope and effectiveness of SAE nationwide.

Some of the common barriers limiting every student from having a quality SAE included:

- Non-traditional students do not have access to traditional resources;
- Some students do not have time / resources / transportation after school or during the summer for placement or entrepreneurship SAE experiences;
- Too many students for a teacher to adequately supervise; and
- Lack of teacher time / extended contract.

Over the last decade, work occurred within the SAE committee and in conjunction with AAAE, NAAE, and NASAE (see Figure 3). Significant events include two national summits, the writing of a Council-approved SAE Philosophy and Guiding Principles document, and eventually the creation and dissemination of SAE for All materials and train-the-trainer professional development open to all states.

**SAE for All: A Modified Approach**

As part of the second SAE Summit in 2016, a formal definition for SAE was created:

*Supervised Agricultural Experience is a student-led, instructor-supervised, work-

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**Figure 3.** A timeline of recent efforts to revise SAE (National Council for Agricultural Education, 2019).
based learning experience that results in measurable outcomes within a pre-defined, agreed-upon set of Agriculture, Food, and Natural Resources (AFNR) Technical Standards and Career Ready Practices aligned to a career plan of study. (National Council for Agricultural Education, 2020)

Based on this definition and the SAE Guiding Principles document, SAE for All was created to incorporate and operationalize SAE for a new era with the goal of 100% student adoption across all programs. To accomplish this goal, SAE for All introduces two primary categories of SAE: a Foundational SAE and five distinct Immersion SAEs.

The Foundational SAE: A New Paradigm

One of the core aspects of the SAE for All model is that every student is to have a Foundational SAE—even if they already have a traditional SAE. A Foundational SAE is composed of five aspects that help students become aware of and explore careers, including:

1. Career Exploration and Planning,
2. Employability Skills for College and Career Readiness,
3. Personal Financial Management and Planning,
4. Workplace Safety, and
5. Agricultural Literacy.

Students are to experience all five components each year they enroll in AFNR courses, suggesting that over time each student will “level up” and perform more focused tasks within each category. A sample of the types of career exploration and planning activities that students may complete is found in Figure 4. Similar (and more) ideas are included for all five aspects of the Foundation SAE in the SAE for All guides found on the SAE for All mini-site, SAEforAll.org.

To ensure that every student has a Foundational SAE, it is strongly encouraged that teachers incorporate SAE as a graded component in each AFNR class. In essence, the Foundational SAE serves as the “overlapping sliver” between the Classroom and SAE components in the Venn diagram of an Agricultural Education program. If SAE is a graded component of class, this approach also allows for class time to be utilized for students to complete Foundational SAE activities. This approach enables SAE to take place in class in the form of individualized student conferences.

Additionally, the Foundational SAE addresses many of the barriers for all students having as SAE, including:

<table>
<thead>
<tr>
<th>Foundational SAE: Career Exploration and Planning Sample Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Awareness (grades 6-9)</strong></td>
</tr>
<tr>
<td>- Complete Career Interest Inventory (ex. AgExplorer.com)</td>
</tr>
<tr>
<td>- Create Career Pathway Goals</td>
</tr>
<tr>
<td>- Start 4-year Career Plan, including:</td>
</tr>
<tr>
<td>- Academic/courses</td>
</tr>
<tr>
<td>- Immersion SAE Research/Plan</td>
</tr>
<tr>
<td>- Career Readiness Skills/Leadership</td>
</tr>
</tbody>
</table>

Figure 4. Example “Career Exploration and Planning” sample activities that students may complete as part of a Foundational SAE (Kreifels, 2019, p. 9).
Foundational SAE is different, as it’s for every student—even for those students who come to an agriculture program with a “born-in SAE.” Like James, every student deserves to experience career exploration and planning, personal fiscal management, and the other components of a Foundational SAE.

Immersion SAEs: Something Old Enhanced, Something New...

Beyond a Foundational SAE, students are encouraged to extend their learning to include one or more Immersion SAEs, including traditional and expanded opportunities that provide resume-worthy experiences.

These include three traditional types of SAEs that have been enhanced:
- Ownership/Entrepreneurship,
- Internship/Placement, and
- Research: Experimental, Analytic, or Invention.

SAE for All also introduces two new types of SAEs:
- School-Based Enterprise and
- Service Learning.

While not the focus of the article, Immersion SAEs play a critical role in a student’s career development by allowing them to experience an actual or simulated workplace. Each will enable students to develop technical knowledge and skills while also establishing relationships with professionals in the industry. Immersion SAE categories are each designed with core recommendations to maximize learning through proper planning, documentation, reflection, and teacher supervision. See the Immersion SAE guides on the SAE for All mini-site at SAEforAll.org.

Why does “for All” matter?

During an SAE for All Train-the-Trainer workshop, we asked teachers the open-ended question, “What could a student ideally experience that would contribute most to their individual career development?” We wrote down their answers on three blank flipcharts that, unbeknownst to the teachers, aligned to the three components of agricultural education: class/lab, SAE, and FFA. By far, the majority of ideas fell in the SAE category—and the reasons are clear: 1) SAE is individualized and custom-made around what a student is passionate about; 2) SAE includes career planning, personal finance, and more under the guidance of a teacher; 3) SAE connects students with industry professionals and establishes early relationships/mentors; 4) provides experiences that should contribute to their resume; and so much more. Doesn’t every student deserve this experience?
Hannah, another student from Adams Central School, sums it up best:

My Foundational and Immersion SAE experiences have helped me develop career goals, skills, and given me real-world knowledge because they are my own. By letting me do something that is uniquely my own it has allowed me to grow in my own way. By doing this I have learned and developed the skills that I will need when I am truly on my own in my career.

References:


The likely best answer to this question is growing each student individually to reach their full potential...easy and done! However, as an agricultural education program there are metrics teachers are asked to provide to illustrate the program’s value. Knowing your numbers is essential!

It can be common to turn to academic research to validate our programs. For example, Ball, Garton and Dyer (2001) found that involvement in agricultural youth organizations improved retention rates. Radhakrishna (2006) found agricultural youth organizations help children to learn new things, enhance their life skills, set goals and more. Hanagriff, Murphy, Roberts, Briers and Lindner (2010) found that SAE activities create economic impact values that bring value to the community and state an average of $105,877. There are literally thousands of articles that show the value of agricultural education, but why do we still struggle for school resources or support? We have former students who have reached the pinnacle of success, but we still struggle to gain support. The reason is programs are very diverse and knowing your own values from your own students is essential.

The values communicated likely should center around the Three-Component Model of Agricultural Education, which is recently defined in the SAE-for-All Initiative and outlined in Figure 1.

One method to collect or assemble data is student record book information. As outlined in many aspects of educational philosophy, program funding/Perkins and best practices, record keeping is a core skill that as each student completes provides teachers with essential aspects of programs value. In a very commonly used record book, The AET system, these reports are listed.

The Three-Component Model of Agricultural Education

**Figure 1. Model for Agricultural Education**
in the “Program Reports” section and available to all teachers in the program (Figure 2).

To review program value, consider three example programs all using AET and representing a varying set of states and programs. Program A (4 teachers and 457) represents a middle-sized program, Program B (9 teachers and 1,038 students) represents a very large program and Program C (1-teacher and 46 students) represents a smaller program.

In the classroom portion, content metrics such as retaining freshman students, measuring pathway completers and tracking program retention are key program metrics. Using new management reports from AET, the following are program metrics for the classroom (Table 1).

Using a freshman cohort (theoretically ¼ or 25% of students) creates an appropriate sample of students. In the examples, 17% to 26% of all students in the program are listed as the freshman cohort and is a logical listing of students in the program. An important success metric of the classroom is retention of students, which for these programs is approximately 50% of students with female students illustrating higher values.

In terms of pathway completers, program C (small program) appears to have more difficulty in offering enough courses for students to gain completion in a specific pathway, but the other programs illustrate about ¼ of their students (25%) can be pathway completers and both were in agricultural mechanical/power systems areas. In AET, teachers can view the students each year and identify if students are missing from the cohort or years of enrollment, so monitoring report data to ensure accuracy is essential.

In terms of SAE data metrics, concepts such as the percent of students with an SAE, SAE retention and engagement, related student demographics, SAE financial investments, and time invested in SAE learning are some common metrics to share. Table 2 serves as an example set of data for each program.

In summarizing SAE data, current student participation varies from 54% to 96% of students. The national average is approximately 54% of students have an active SAE. In terms of students retaining an SAE, they seem to retain an SAE at a higher rate than just course enrollment (57% to 67%) students. This is potentially a valuable result to share, which is once students begin their SAE in their freshman year, they are more likely to continue being engaged in the process.

SAE economic values vary in each program and is likely a subset value of higher/lower in entrepreneurship SAEs. However, local and state economic impact values are an essential metric to share with program stakeholders ($79,033 to $920,739). Student SAE hourly investments offer another metric of involvement and potential skill acquisition, and again offer another value metric to share.

FFA metrics are likely percent of students who are members, how well students are retained as members, how many students are engaged in actual FFA activities (meetings, contest, camps/conferences, etc.) and how well students are engaged in community service activities. These results are summarized in Table 3.

<table>
<thead>
<tr>
<th>Data Metrics</th>
<th>Program A</th>
<th>Program B</th>
<th>Program C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman Cohort (17 Fresh./21 Grads)</td>
<td>81 students</td>
<td>183 students</td>
<td>12 students</td>
</tr>
<tr>
<td>Freshman Cohort % of all students</td>
<td>17.7%</td>
<td>17.63%</td>
<td>26%</td>
</tr>
<tr>
<td>Freshman Classroom Retention</td>
<td>50.6%</td>
<td>48.6%</td>
<td>58.3%</td>
</tr>
<tr>
<td>Retention of Male Students</td>
<td>48.2%</td>
<td>48.0%</td>
<td>33.0%</td>
</tr>
<tr>
<td>Retention of Female Students</td>
<td>56.0%</td>
<td>49.4%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Senior Classroom Completers (4-years)</td>
<td>23.4%</td>
<td>25.9%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Senior Pathway Completers</td>
<td>27.8%</td>
<td>26.5%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Highest Pathway Completion</td>
<td>Power Systems (n=31)</td>
<td>Ag. Mech. (n=77)</td>
<td>N/A</td>
</tr>
</tbody>
</table>
In summarizing FFA data, membership in these programs ranges from 64 to 100% of members, but having members engaged in FFA activities is a wider range from 27 to 100%. Retaining freshman FFA members is somewhat consistent across these programs (50-67%) and differences in gender retention is minimal.

Each of the previous tables illustrate example program metrics that are automatically calculated using record book data and can be quickly assembled and shared. The Model of Ag Education implies a balance of each aspect is the definition of a complete program, which could be viewed as the “balanced scorecard” of the three-circle model. Let’s take the results from each example program and view how they balance each area.

As illustrated in Table 4, Program A, student engagement has larger proportional involvement in SAE and Classroom with lower involvement in FFA. This program does show a “balance” in retaining students in all three areas, which is a success to share. This program is a somewhat large program and is not FFA affiliated, which likely explains their lower than desired initial engagement in FFA membership.

In terms of Program B, this is a much larger program that is affiliated and illustrates a higher level of involvement in the classroom and FFA, but proportionally much less engagement in SAE. However, once the students are engaged, they proportionally retain in similar values with FFA higher than the other areas.

### Table 2. SAE Metrics for Involvement, Retention and SAE Program Values

<table>
<thead>
<tr>
<th>Data Metrics</th>
<th>Program A</th>
<th>Program B</th>
<th>Program C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020-21 School Yr. Students</td>
<td>457</td>
<td>1,038</td>
<td>46</td>
</tr>
<tr>
<td>Current Yr. - 2020-21 SAE Students (%)</td>
<td>398 (87.09%)</td>
<td>557 (53.6%)</td>
<td>44 (95.65%)</td>
</tr>
<tr>
<td>Freshman Cohort (2017-18)</td>
<td>85 students</td>
<td>91 students</td>
<td>12 students</td>
</tr>
<tr>
<td>SAE Freshman Cohort Retention</td>
<td>63.5%</td>
<td>57.8%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Retention of Male Students</td>
<td>63.8%</td>
<td>55.0%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Retention of Female Students</td>
<td>63.0%</td>
<td>63.3%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Senior SAE Completers (4-years)</td>
<td>32.3%</td>
<td>25.9%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Senior SAE Pathway Completers</td>
<td>20.2%</td>
<td>11.0%</td>
<td>27.8%</td>
</tr>
<tr>
<td>Highest SAE Pathway Completion</td>
<td>Animal Syst.</td>
<td>Ag. Mech.</td>
<td>Agribusiness</td>
</tr>
<tr>
<td>SAE Pathway Completion Areas</td>
<td>7 Areas</td>
<td>2 Areas</td>
<td>3 Areas</td>
</tr>
<tr>
<td>2020 Program SAE Economic Impact</td>
<td>$920,739</td>
<td>$181,273</td>
<td>$79,033</td>
</tr>
<tr>
<td>2020 SAE Per Student Eco. Value</td>
<td>$1,161</td>
<td>$171</td>
<td>$888</td>
</tr>
<tr>
<td>2020 SAE Experiential Learning Hrs.</td>
<td>35,687 hrs.</td>
<td>30,437 hrs.</td>
<td>10,388 hrs.</td>
</tr>
<tr>
<td>2020 SAE Hours per Student</td>
<td>89.67</td>
<td>29.32</td>
<td>225.82</td>
</tr>
</tbody>
</table>

### Table 3. FFA Metrics and Community Service

<table>
<thead>
<tr>
<th>Data Metrics</th>
<th>Program A</th>
<th>Program B</th>
<th>Program C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman Cohort (2017-18)</td>
<td>52 students</td>
<td>334 students</td>
<td>12 students</td>
</tr>
<tr>
<td>FFA % of Cohort Students (Classroom)</td>
<td>64.2%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>FFA % Engagement in Activities</td>
<td>98.1%</td>
<td>27.2%</td>
<td>100%</td>
</tr>
<tr>
<td>FFA Freshman Retention</td>
<td>50.0%</td>
<td>66.8%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Retention of Male Students</td>
<td>50.0%</td>
<td>69.0%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Retention of Female Students</td>
<td>50.0%</td>
<td>64.8%</td>
<td>66.7%</td>
</tr>
<tr>
<td>2020 Volunteerism Value</td>
<td>$16,301</td>
<td>$4,476</td>
<td>$9,122</td>
</tr>
<tr>
<td>2020 FFA Experiential Learning Hrs.</td>
<td>16,942 hrs.</td>
<td>2,971 hrs.</td>
<td>2,991 hrs.</td>
</tr>
</tbody>
</table>
In terms of Program C, which is a much smaller program illustrates very balanced engagement and retention values for each area as well as involvement. This program did struggle in pathway completers but shines in this balanced aspect of agricultural education.

So, what is the value of your agricultural education program? It does depend on your state, size of your program, FFA affiliation and community demographics, but there are common values that you should know and strategically share. In addition to the value, be sure and look at your “Balanced Scorecard” for another way to monitor your program.

A very important aspect is: What are your fellow CTE programs sharing with your school leadership? Agricultural education is well positioned to have valuable data to share and shine when it comes to competing for school resources. Track your values, share your results, and be a leading program in data reporting in your school district! If you can get that done, budgets and priorities will likely follow.

### Table 4. Balanced Scorecard of Student Engagement and Retention for the Model of Ag. Education

<table>
<thead>
<tr>
<th>Areas</th>
<th>Program A</th>
<th>Program B</th>
<th>Program C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman Cohort Student Engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 37%</td>
<td></td>
<td>FFA 44%</td>
<td>Class 33%</td>
</tr>
<tr>
<td>SAE 39%</td>
<td></td>
<td>SAE 12%</td>
<td>SAE 33%</td>
</tr>
<tr>
<td>Freshman Cohort Retention (3-4yrs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FFA 30%</td>
<td></td>
<td>FFA 39%</td>
<td>FFA 35%</td>
</tr>
<tr>
<td>Class 31%</td>
<td></td>
<td>Class 28%</td>
<td>Class 30%</td>
</tr>
<tr>
<td>SAE 39%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dr. Roger Hanagriff is an associate professor of agricultural business and agricultural education at Texas A&M University - Kingsville and part of the executive team at The AET, the nation's leading agricultural experience recordkeeping and work-based learning management system.
Federal Perkins legislation has always been about innovation, now more than ever, and student technical experiences have resonated as a primary need for successfully preparing students for their future. Therefore, the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), which passed in 2018, has a strong focus on work-based learning (WBL). For the first time, federal law defines WBL (also known as Supervised Agricultural Experience at the immersion level within agricultural experience programs) as “sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, firsthand engagement with the tasks required in a given career field, that are aligned to curriculum and instruction.”

This definition has created clarity around the types and lengths of work experiences students should have access to. Additionally, the law allows states to select WBL as one of the indicators for quality and growth of secondary CTE programs. This new quality indicator has amplified conversations about the components of effective WBL programs and has fostered collaboration between broader groups of educational stakeholders.

To date, twenty-six states—including my own state of Minnesota—have selected WBL as a statewide measurement indicator for secondary program quality (United States Department of Education, 2021). As Minnesota navigates the implementation of this new performance indicator over the next years, the Minnesota Department of Education has focused its technical assistance efforts on addressing three areas: meaningful career exploration, access and equity in WBL programs, and in-depth data analysis.

**Meaningful Career Exploration**

As part of the process in selecting WBL as a program quality indicator, Minnesota reviewed current practices in WBL around the state. Through this review, two common WBL practices emerged. In the first practice, students commonly had access to sustained interactions with employers, but the experiences defaulted to students spending more time at existing part-time jobs that were disconnected from long-term career goals. It is important for teachers to connect WBL and SAE content to student career plans and academic content. If a student plans to pursue a career in plant systems, it does not make sense for their WBL/SAE project to be showing an animal at a fair. Sure, there are always transferable skills, but learning is far more powerful when we can connect their technical skill experiences (i.e., SAE) with what they are learning in the classroom and in their leadership organizations.

There are always transferable skills, but learning is far more powerful when we can connect their technical skill experiences (i.e., SAE) with what they are learning in the classroom and in their leadership organizations.

**Access and Equity**

As part of the implementation of the WBL program quality indicator, Minnesota also reviewed baseline data related to student enrollment in WBL courses to identify programs where certain demographics of students may be underrepresented. In particular, this process...
revealed many students with a disability had access to WBL programs, but their opportunities to engage in WBL in a competitive, integrated environment were limited, and there were often gaps in enrollment for male and female students in WBL, particularly in agriculture courses. As such, the Minnesota Department of Education has partnered closely with Vocational Rehabilitation Services to align resources and services for students with a disability as the transition from high school into postsecondary education and employment.

Looking ahead, there will be a continued focus on fostering collaboration between CTE teachers and special education teachers to assist them reviewing data for other disparities and in offering coursework and in offering data and helping employers better understand benefits of employing individuals with a disability. It will be important for SBAE teachers to self-assess their programs to figure out who has access to WBL and SAE in their programs, and who does not. To ask why more male students might take a WBL/advanced SAE course than female students, or how social-economic status can play a role in WBL. Further, how school-based enterprise facilities like a greenhouse, school farm, or forestry plot might provide students opportunities for WBL they might not otherwise be able to have.

**Data Analysis**  
Finally, as part of the implementation of the new WBL program quality indicator, Minnesota, similarly to other states, had to determine what “counted” for WBL and how that data would be captured. Ultimately, the use of course codes connected to work experiences exceeding 40 hours was selected as the primary method for tracking WBL. However, looking ahead, this method will continue to be reviewed and strategies for collecting information about other types of experiences such as job shadows, practicums, and workplace simulations will be explored to ensure a full picture of the WBL ecosystem within the state. For example, many agricultural programs implement WBL and SAE projects within a course, such as a five- or ten-hour SAE project. SBAE teachers and leaders will need to find innovative ways to track both WBL courses, and WBL within a course (such as an SAE project) to show how agriculture is both a leader and partner in WBL and federal CTE innovation.

**References**  

Students are encouraged to participate in WBLs or SAEs to foster the growth of technical and career skills through in-depth, firsthand engagement experiences. Photos courtesy of the National FFA Organization.

Erin Larsen is the Work-Based Learning State Specialist at the Minnesota Department of Education and has experience directing CTE in both Minnesota and South Dakota.
The Agricultural Diversity, Leadership, and Technical Skill Challenge: 100% FFA and SAE

by Lavyne Rada, Dr. Amy Smith and Dr. Zane Sheehan

Teachers prepare students for their future by developing lifelong learners who are critical thinkers and have the social-emotional skills needed to communicate and work collaboratively. Students must be empowered to apply their skills in the workforce but must also gain experiences to prepare them to be active and engaged citizens. For agriculture to address today’s most pressing challenges, a workforce well-trained in both technical and soft skills is essential. However, students do not view agriculture as an attractive career possibility, resulting in a knowledge and workforce deficit (PCAST, 2012). A 2015 National Institute of Food and Agriculture (NIFA) commissioned study predicted the U.S. economy would annually generate 60,000 jobs in the food, agricultural, natural resources, and human sciences (FANH) sector in the next five years and would be unable to find qualified graduates to fill 41% of the positions (Goeker et al., 2015). Years later, the national workforce shortage and skill misalignment continues to require actionable strategies to help students see agriculture as a career option and to clearly link technical disciplinary knowledge with soft skills. One such strategy is student engagement in all three components of School-Based Agricultural Education (SBAE): academic instruction, work-based learning, and leadership development.

Agricultural education celebrated 100 years in public education in 2017, and the foundation-components of agricultural education have remained consistent since its initial creation. The model for school-based agricultural education (SBAE) includes three interconnected components which are classroom and laboratory instruction, experiential learning (commonly referred to as Supervised Agricultural Experiences or SAEs), and leadership development through agricultural youth organization participation (Dailey et al., 2001; Phipps & Osborne, 1988). The interconnectedness is evident in the beliefs and values of agricultural education and FFA which is demonstrated in the FFA organization’s mission statement: “FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth, and career success through agricultural education” (Phipps & Osborne, 1988). Simply put—through agricultural education, student’s potential for leadership, personal growth, and career success should be developed—but is it being developed for every student in every SBAE course?

SBAE Model
Students enrolled in SBAE courses perform at the same or higher level on standardized science assessments than students not enrolled in SBAE courses (Chissors & Burnett, 2001; Enderlin & Osborne, 1991; Rogge & Russell, 1990). Students engaged in total SBAE programs are also more likely to enter careers in agriculture. Through the SAE component, students can participate in authentic experiences that help them clearly connect academic and technical learning to real world settings (NCAE, 2020) yielding personal, occupational, and educational benefits (Dyer & Williams, 1997), as well as the promotion of career and college readiness (NRC, 2000, 2009). SBAE program completers “who had high participation in FFA activities were [also] more likely to enter agricultural occupations" (Fraze & Briers, 1987, p. 24). Adedokun and Balschweid (2008) reported that FFA members were “4.1 times more likely to choose careers in agriculture than non-FFA members” (p. 7).

The original SBAE model intended for every student to actively engage in all three components of SBAE instruction (Case, 2010; Croom, 2008). However, the passage of the Vocational Education Act of 1963—which many believe removed the federal mandate for SAE—coupled with increased educational demands and pressures placed on teachers (e.g., limited time, increased paperwork, high enrollment, and more students without an agricultural background), has allowed for significant variation in the degree to which teachers offer a total SBAE program to all students (Hoover & Scanlon, 1991; Talbert & Balschweid, 2004). Such variability involves reducing or entirely removing the SAE and FFA components of the SBAE program for some or all students, thus negatively impacting their development. Retallick and Martin (2008) concluded that despite recent SBAE enrollment growth, “fewer
students received the benefit of a complete program...as evidenced by the growing gap between students enrolled in [SBAE] and students who also participated in SAE and/or FFA programs" (p. 35).

### Innovative SBAE Models

California long ago recognized the economic implications and need to provide a consistent, qualified, employable agricultural workforce. In 1983, the California Legislature established the Agriculture Incentive Grant (AIG) program to support and fund the original intentions of the total SBAE program model. According to the California Department of Education (CDE; 2016), to ensure rigorous STEM-based agricultural instruction, schools in the AIG program must have appropriately credentialed instructors of agriculture who participate in agricultural professional development, engage in professional learning communities, and are guided by a community-based advisory committee of industry leaders. There are eleven primary criteria schools must meet to receive incentive funding in the grant program:

-Criterion 1 – Curriculum & Instruction,
-Criterion 2 – Leadership & Citizenship Development,
-Criterion 3 – Supervised Agricultural Experience,
-Criterion 4 – Qualified & Competent Personnel (i.e., Teachers),
-Criterion 5 – Facilities, Equipment, & Materials,
-Criterion 6 – Community, Business, & Industry Involvement (i.e., Advisory Committee),
-Criterion 7 – Career Guidance,
-Criterion 8 – Program Promotion,
-Criterion 9 – Program Accountability & Planning,
-Criterion 10 –Student-Teacher Ratio, and

AIG incentivizes teachers and schools to engage in a complete and total SBAE program model. For example, under criterion two, leadership and citizenship development, all students must engage in leadership, communication, and social emotional skill development (i.e., FFA) as a graded component of their curriculum, and at least 80% must participate in at least three events per year, with the chapter overall participating in a minimum of 12 programs above the local level. If schools meet this criterion, they receive additional, incentive grant funding. If not, the state staff works with administration and the teachers to help grow and enhance this aspect of their program. This was the emergence of the FFA Affiliation program; it is important to note that

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**INCENTIVE GRANT CHECKLIST**

<table>
<thead>
<tr>
<th>Yes No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2A. An FFA Chapter has been chartered by the State Association or has been applied for.</td>
</tr>
<tr>
<td>2B. A Chapter Program of Activities is developed annually and a copy is made available to the Regional Supervisor by November 15th.</td>
</tr>
<tr>
<td>2C. Every student is given a grade based upon participation in leadership activities. (per Ed Code Section 52454)</td>
</tr>
<tr>
<td>2D. The program has a clearly stated department policy that identifies the criteria for a student to earn full credit for leadership development.</td>
</tr>
<tr>
<td>2E. All students enrolled in agriculture classes are affiliated with the State FFA Association.</td>
</tr>
<tr>
<td>2F. Based on previous year’s records, the department participated in a minimum of 12 activities as listed on the FFA Activities Check Sheet. (Attached)</td>
</tr>
<tr>
<td>2G. A minimum of 80% of the students participate in at least three leadership development activities annually as verified by department records.</td>
</tr>
</tbody>
</table>

**2. LEADERSHIP & CITIZENSHIP DEVELOPMENT**

---

**3. PRACTICAL APPLICATION OF AGRICULTURAL SKILLS**

<table>
<thead>
<tr>
<th>Yes No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3A. Student participation in Supervised Agricultural Experience (SAE) is part of the grading criteria for every agriculture student in the program. (per Ed Code Section 52454)</td>
</tr>
<tr>
<td>3B. The program has a clearly stated department policy that identifies the criteria for a student to earn full credit for their SAE.</td>
</tr>
<tr>
<td>3C. First year students have either been engaged in a SAE project(s) or have a plan in place for a SAE, as verified by the Student’s AET records.</td>
</tr>
<tr>
<td>3D. A minimum of 80% of continuing students are engaged in SAE project(s) as verified by Department records.</td>
</tr>
<tr>
<td>3E. Students with SAE projects are visited by their agriculture teacher and the visits are documented in Department records. (e.g., AET)</td>
</tr>
<tr>
<td>3F. Students apply for advanced degrees and/or awards above the local level based on their SAE.</td>
</tr>
</tbody>
</table>

**4. QUALIFIED & PROFESSIONAL PERSONNEL**

<table>
<thead>
<tr>
<th>Yes No</th>
</tr>
</thead>
<tbody>
<tr>
<td>4A. Every teacher has an appropriate credential. (Single Subject Agriculture &amp; Agriculture Specialist or a Designated Subject Agriculture) or has an approved variance request.</td>
</tr>
<tr>
<td>4B. Based on the previous year’s records, every agriculture teacher, teaching at least ¾ time agriculture, attends a minimum of four professional development activities. (Complete attachment)</td>
</tr>
<tr>
<td>4C. The agriculture staff meets a minimum of twice a month. This is to be verified by minutes or records of action taken. The records of such meetings are shared with the principal.</td>
</tr>
<tr>
<td>4D. Teachers are reimbursed for personal expenses they incur while participating in all approved integral activities associated with FFA, SAE, and professional CATA in-service activities.</td>
</tr>
</tbody>
</table>

**5. FACILITIES, EQUIPMENT & MATERIALS**

<table>
<thead>
<tr>
<th>Yes No</th>
</tr>
</thead>
<tbody>
<tr>
<td>5A. Modification of facilities and equipment has occurred when necessary, based on the needs of students, including special populations.</td>
</tr>
<tr>
<td>5B. There is appropriate storage space for materials, records, equipment and supplies.</td>
</tr>
<tr>
<td>5C. Community or school-based laboratory facilities have been provided to accommodate students who have no * School Farm Laboratory * Greenhouse * Growing Area * Agriculture Shop * Community &amp; school-based laboratory facilities have been provided to accommodate students who have no * School Farm Laboratory * Greenhouse * Growing Area * Agriculture Shop</td>
</tr>
<tr>
<td>5D. The facilities are appropriately equipped for the courses being taught.</td>
</tr>
<tr>
<td>5E. A schedule is provided, available to each agriculture teacher for SAE activities and matrixing.</td>
</tr>
</tbody>
</table>

---

*Figure 1. California’s Agricultural Incentive Grant checklist.*
not all students must be state officers or state winning CDE participants, but instead all students must have access to leadership and take part in local programs. Every student can do community service or attend an FFA meeting. In criterion three, practical application of agricultural skills, students must receive graded, technical skill training through practical, outside-the-classroom, work-based learning experiences (i.e., SAE). SAE for All works great here, as every student can have a foundational SAE project that leads toward an immersion work-based learning (WBL) project such as an internship or starting their own company. Finally, as an example, teachers must attend professional development and have relevant school facilities and equipment.

The California program has been demonstrably successful in and outside of the classroom. According to CDE (2017), agriculture students consistently test higher on science graduation tests than students in general science courses and are more likely to attend college. More students participate in leadership development conferences in California alone than National FFA offers nationwide for all other states (CDE, 2017). California’s members comprise the largest scope of work-based learning programs in the country, where students annually earn more than $31 million, which is an estimated $50 million in local economic impact (AET, 2017). Furthermore, California’s student demographics in SBAE programs is representative of the state and local communities (i.e., 52% of students in California SBAE and FFA are Hispanic; CDE, 2017). California’s FFA membership more than tripled and AFNR enrollment doubled in the forty years since they began the program, and SAE continues to be very strong in the state. The AIG program in California has been so successful, other states have adopted similar programs, with comparable results, to address their workforce needs (i.e., Georgia, Illinois).

Replication of California: ADLTS

To improve the quality of SBAE instruction in Minnesota, the University of Minnesota (UMN) partnered with Minnesota FFA and the Minnesota Department of Education (MDE) to implement the total program model in Minnesota schools and develop a national model for future replication. The Agricultural Diversity and Leadership/Technical Skill Challenge (ADLTS; pronounced “adults”) project was funded in a nearly $300,000 federal United States Department of Agriculture (USDA) NIFA, SPECA grant to replicate California’s model (United States Department of Agriculture, 2020). ADLTS intends to increase the technical knowledge and soft skill development in agriculture students in grades 7-12, specifically increasing opportunities for underrepresented populations by removing barriers to their participation in all three components of a total SBAE program, and then publish and share our findings so other states can replicate it as well.

In year one, ADLTS staff has supported 27 SBAE teachers in thirteen districts to implement the total program model. School districts received grant funding to support the implementation of the total program model through FFA program affiliation and adoption of SAE for All. Affiliation and SAE for All are both complex philosophical shifts for SBAE as they require teachers to think and act differently than before. To support the philosophical shift of teachers and districts, orientation and mid-year meetings were held with SBAE teachers and district administration to provide an overview of the total program model, assess and reflect on a program evaluation using the National Quality Program Standards, and develop short and long-term goals for total program development. Teachers in the grant receive mentoring and support from state staff, as well as monitoring visits and calls to check on their progress. Teachers receive training and professional development, and then collaborate to develop resources to help one another find success, sharing in each other’s challenges and successes.

Initial findings after one year of the project are limited, but there are early signs of success. One teacher shared how it has shifted their mindset for getting students involved:

“I have never really thought of sitting down with a student and asking them their plan for FFA, what they want to accomplish in these four years as a member, and so on. It has always been a thing where they sign up; you know the kids who want to do it all, and others that do not. But I really like just giving the opportunity to everyone, because I feel like there are probably students getting missed that would like to participate but are getting overlooked.”

Another teacher was pleased how this program model has removed the barriers for non-joining students. No longer is it a question of if students want...

For agriculture to address today’s most pressing challenges, a workforce well-trained in both technical and soft skills is essential.
to be a member, instead it is simply about if they want to get involved with a particular FFA event or activity.

“It is so cool how now there are no barriers when we bring up FFA things. They simply apply to everyone now, and anybody can go. Kids are participating that would have never participated before had you made them pay dues or asked them to fill out a form to join. It is just a question of what they want to do... Students do not have to think about money or the stigma of FFA and whether they want to join or not, because some kids do not want to join anything, no matter what it is. So now they just know everybody is invited now and we simply focus on what each student would like to do.”

A SBAE teacher and CTE director discussed how they are thankful there is a process and a slower timeline for adoption. Their district is considering splitting their middle school and high school FFA chapters and looking for new WBL internship opportunities around town for all of their new students. It has resulted in “growing pains,” in a good way, but the funding from the grant has been critical to help shift conversations with administrators and plan for long-term solutions.

Next Steps
The ADLTS project is only one such attempt to replicate California, Illinois, and other states models for true, 100% engagement in the SBAE three-component model of classroom, FFA, and SAE. Career and Technical Education is more important than ever as states recover from COVID-19, dealing with massive job shortages and talent misalignments. We know future workforce needs are going to require skills in both the technical and social-emotional domains (i.e., SAE and FFA). Now is the time, more than ever, for state leaders, legislators, SBAE teachers, and even students, to lean into the SBAE three-component model. If you or leaders in your state have questions about Minnesota’s attempt to replicate this model, or the original models (California, Illinois, etc.) please connect with us.

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Lavyne Rada is FFA state staff and a regional supervisor in Minnesota, as well as the director of the state’s Teacher Induction Program, and a doctoral candidate at the University of Minnesota.

Dr. Zane Sheehan is the state supervisor of agricultural education and FFA state advisor at the Minnesota Department of Education.


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