

**The ASSET Model: An Integrative (Innovative) Professional and Leadership Development
Model for SBAEs**

Amber Kearney M.Ed.
amberkearney@tamu.edu

Lori Moore Ph.D.
lori.moore@ag.tamu.edu

Rafael Landaverde Ph.D.
rafael.q@ag.tamu.edu

Scott Cummings Ph.D.
scott.cummings@ag.tamu.edu

Craig Rotter, Dr.P.H.
craig.rotter@ag.tamu.edu

Department of Agricultural Leadership, Education, and Communication
Texas A&M University
600 John Kimbrough, College Station, TX 77843
(979) 862-1979

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Need for Innovation

The shortage of highly qualified teachers in secondary education is a significant challenge, and school-based agricultural education (SBAE) programs are also impacted (Eck & Edwards, 2019; Foster et al., 2021; Smith et al., 2022). Twenty-one states have reported a critical demand for teachers for agriculture, food, and natural resources (AFNR) (Cross, 2016). Many graduates from teacher preparation programs do not enter the teaching profession. (73% in 2020), and many leave within five years of teaching. As a result, positions often remain unfilled or are staffed by uncertified personnel, creating a gap in adequately preparing students for agricultural careers. To address this, we have developed the Agricultural Sciences Summer Experience in Teaching (ASSET) model as part of a program funded by USDA, which aims to provide pre-service AFNR teachers with the necessary skills for a long-term career in teaching. ASSET is a comprehensive model for recruiting and supporting pre-service AFNR teachers, offering them hands-on mentoring and summer teaching experiences to build skills, confidence, and a strong professional identity for a successful career in SBAE programs.

How it works

The ASSET model prepares pre-service AFNR teachers by recruiting 10 interns annually from diverse Texas institutions and pairing them with experienced mentors for an 8-week summer internship. During the internship, interns will engage in, at a minimum, four planned pillar experiential learning activities. Throughout the internship, interns will (1) receive high-quality mentoring from an in-service AFNR teacher, (2) gain experience working with students and programs during the summer from a teacher's perspective, and (3) improve their leadership skills and teacher professional identity. Monthly virtual meetings with mentors before the internship help interns prepare for these responsibilities. In the fall, students reflect on their experiences using the DEAL (Describe, Explain, Articulate Learning) Model (Ash & Clayton, 2009) to solidify their learning. The model equips interns with practical skills and insights to succeed as AFNR teachers, aligning with USDA workforce development priorities.

Results to date

We (Texas A&M) have partnered with great universities such as Sam Houston State University, Stephen F. Austin State University, Tarleton State University, Texas A&M University-Kingsville, Texas State University, and West Texas A&M University. An advisory board has been established as part of the funded program, including members who collectively bring decades of experience in teaching, learning, SBAE training, and mentoring within higher education. Members are recognized for their expertise in SBAE and leadership, successfully guiding undergraduates, leading impactful Extension internship programs, and directly mentoring students in professional internships.

To elevate competitiveness, a state-wide recruitment program, including printed and digital informative and outreach materials, has been developed. Additionally, strategic partners across the state serve as recruiters, disseminating the model features and benefits across professional and academic circles. We have developed a logo to represent our program and have created an application to begin recruitment on January 5th. The first cohort of AFNR teachers (interns) is expected to begin completing the academic, professional, and leadership development activities included in the model during the Spring, Summer, and Fall of 2025.

Future Plans

The ASSET model will be replicated for the next five years. This mentoring program will include advising students at leadership events, supervising state-level programs, engaging in professional development, and participating in informal agricultural activities with local educators. The model includes summative and formative evaluation processes across all activities. Formative evaluation will be used to identify improvements and solve any difficulties preventing the model's success. For example, mentors will provide informal daily feedback and formal evaluations at the midpoint and end of the interns' program, while interns also assess their mentorship experience.

Participant Support Costs

Each of the 50 participants completing the ASSET program will receive a stipend, subsistence allowance, and travel allowance totaling \$7,700. The stipend (\$3,200) will be paid directly to participants so they can dedicate time to the ASSET internship without seeking additional employment. The subsistence allowance will be paid directly to participants to help with room and board costs incurred during the 8-week internship. A \$2,500 travel allowance will be provided for participants to attend ASSET activities at no cost to the SBAE program. Additionally, a \$1,000 mentor program incentive will be paid to each SBAE program hosting an intern.

Conclusion

The ASSET model can potentially impact the AFNR teacher shortage by preparing highly qualified and committed educators who will be ready to enter work in the classroom. Through immersive, hands-on experiences and continuous mentorship, interns will gain the confidence, skills, and professional identity essential for a successful teaching career. Structured guidance, real-world practice, and ongoing mentor relationships foster a supportive environment that prepares interns and inspires them to remain in the profession long-term. By enhancing retention and equipping future teachers with the necessary tools, ASSET could serve as a disciplinary model for replication in other educational regions and settings.

References

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