

**Innovative Supervised Agriculture Experience (SAE): Local School Partnership with an Urban Farm**

Cristian Camacho, State Fair of Texas® – Big Tex® Urban Farms

Megan James, CityLab High School-Dallas ISD

Andrew Demler, State Fair of Texas® – Big Tex® Urban Farms

Robert L. Williams, East Texas A&M University

Cristian Camacho  
3921 Martin Luther King Jr. Blvd.  
Dallas, TX 75201  
(469-682-5491)  
ccamacho@bigtex.com

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## **Introduction**

The cohort partnership between CityLab High School, a school-based agricultural education (SBAE), and Big Tex Urban Farms embodies the American Associate of Agriculture Education (AAAE) core value of “Nurturing Positive Youth Development Through AFNR Systems” (AAAE, 2023). As Big Tex Urban Farms is part of the State Fair of Texas, the cohort program also embodies the State Fair of Texas’ mission of “promoting agriculture, education, and community involvement” (State Fair of Texas, 2018). Two years ago, when the cohort program began, we found there was a lack of educational pathways for those wishing to continue their education in urban agriculture and sustainable farming practices. The cohort was designed to provide access to a greenhouse industry environment and create an experience around hydroponics and urban agriculture. As part of the program, high school students would get to experience, attain and grow their on-the-job knowledge, hands on training, environmental impact, and ability to experiment in a safe environment. The foundation of the cohort was to focus on growing the next generation of urban farmers with SBAE, while providing a starting point for educational stimulation for urban agriculture (Texas FFA, n.d.).

## **Methodology**

Students are selected for the program based on a series of qualifications designed to ensure readiness and alignment with industry standards. First, candidates must successfully complete all three levels of the Texas Education Agency’s (TEA) Program of Study (POS) for Career and Technical Education (CTE) courses in sequential order (TEA, n.d.). This structured progression is intended to equip students with the foundational knowledge and skills needed for success in their chosen career pathways. By adhering to this sequence, students build upon prior learning, which prepares them for more advanced coursework and industry expectations.

In addition to completing the POS courses, students must pass their Industry-Based Certification (IBC), which TEA has developed in collaboration with industry professionals to ensure relevance to current workforce demands (TEA, 2024). Students typically take their first certification attempt during their sophomore year (level two), followed by a second attempt in their junior year (level three). Once these qualifications are met, students must submit a formal application to join the cohort. As the program enters its third year, it has become increasingly popular, with many seniors seeking this placement opportunity.

## **Results to Date and Implications**

The program has completed two cohorts, with 11 students participating during the spring semesters. The first cohort, in Spring 2023, produced notable outcomes. One student, BN, developed a strong interest in biology, particularly plant studies, following her experience in the program. Reflecting on the impact of their cohort, BN stated, "The program sparked my interest

in biology, so I switched my major and transferred to Texas State University to study Biology." Another student from the same cohort, A, extended their involvement through the summer after being offered a position to manage the Controlled Environmental Agriculture (CEA) shipping container farm at Big Tex Urban Farms. This opportunity led them to enroll in a local community college the following fall semester and continue developing their new interest.

The second cohort, in Spring 2024, also saw impressive achievements. One student pursued Environmental Studies at Texas A&M University, College Station, directly inspired by their participation in the program. Another student, driven by their dedication and interest, collaborated closely with Big Tex Urban Farms throughout the summer. This experience led them to study Environmental Sustainability at Rhodes College in Tennessee. As the program prepares for its third cohort in Spring 2025, it is positioned as a leader in such educational initiatives, with a growing reputation for fostering student success and creating pathways to higher education and careers in environmental and agricultural fields.

### **Future Plans**

Building on the success of the first two cohorts, the program's future plans aim to expand both its scope and impact. The program's duration will be extended from a one-semester format to a yearlong experience, including summer participation, providing students with more comprehensive learning and hands-on opportunities. The size of the cohorts will also increase in response to growing student interest, reflecting the program's rising reputation and appeal.

The program is also working toward potential scholarship funding for students who successfully complete the cohort. This partnership is further deepening with plans to integrate new urban agriculture techniques into the curriculum, such as gourmet mushroom and fruit production, as part of the urban farm's expanded operations. These developments aim to enhance the program's focus on innovation in urban agriculture, both within the high school classroom and in the broader community setting. With these expansions, the program seeks to become a model for cohort-based education, leading collaborations between school systems and non-profit urban farms to promote innovative agricultural education and sustainable practices.

### **Cost and Resources Needed**

Although the program utilizes pre-allocated supplies and existing greenhouse infrastructure, considerations such as full-time staff for the duration of the program and greenhouse assets should be acknowledged. There are no additional direct costs for students, except for transportation to and from the cohort site. To mitigate this, students can apply for transportation assistance through sustainable public systems. If approved, the school system will cover the cost of public transportation passes, ensuring students have the necessary support to participate fully in the program and maximize their chances of success. This approach helps maintain low program costs while promoting accessibility and sustainability.

## References

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