North Carolina FFA Association

CTE Grants for Agriculture

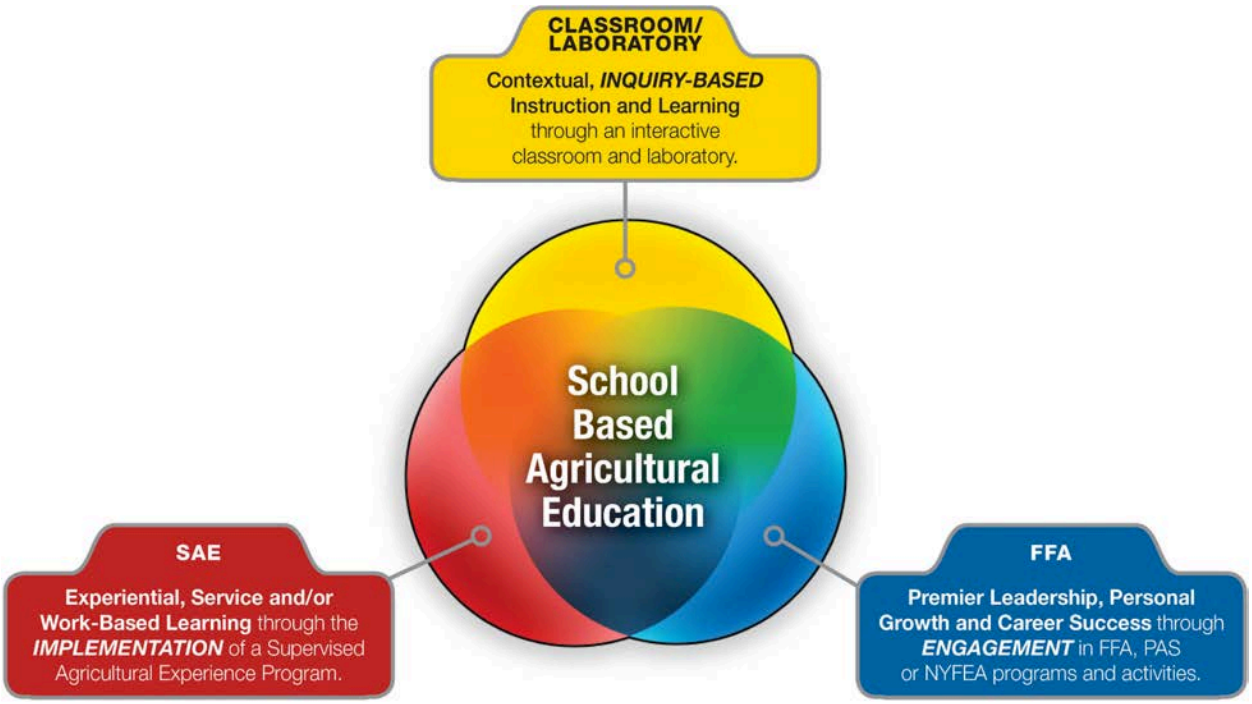
2023-2024 Grant Program

Updated: December 2025 Progress Report

North Carolina Agricultural Education

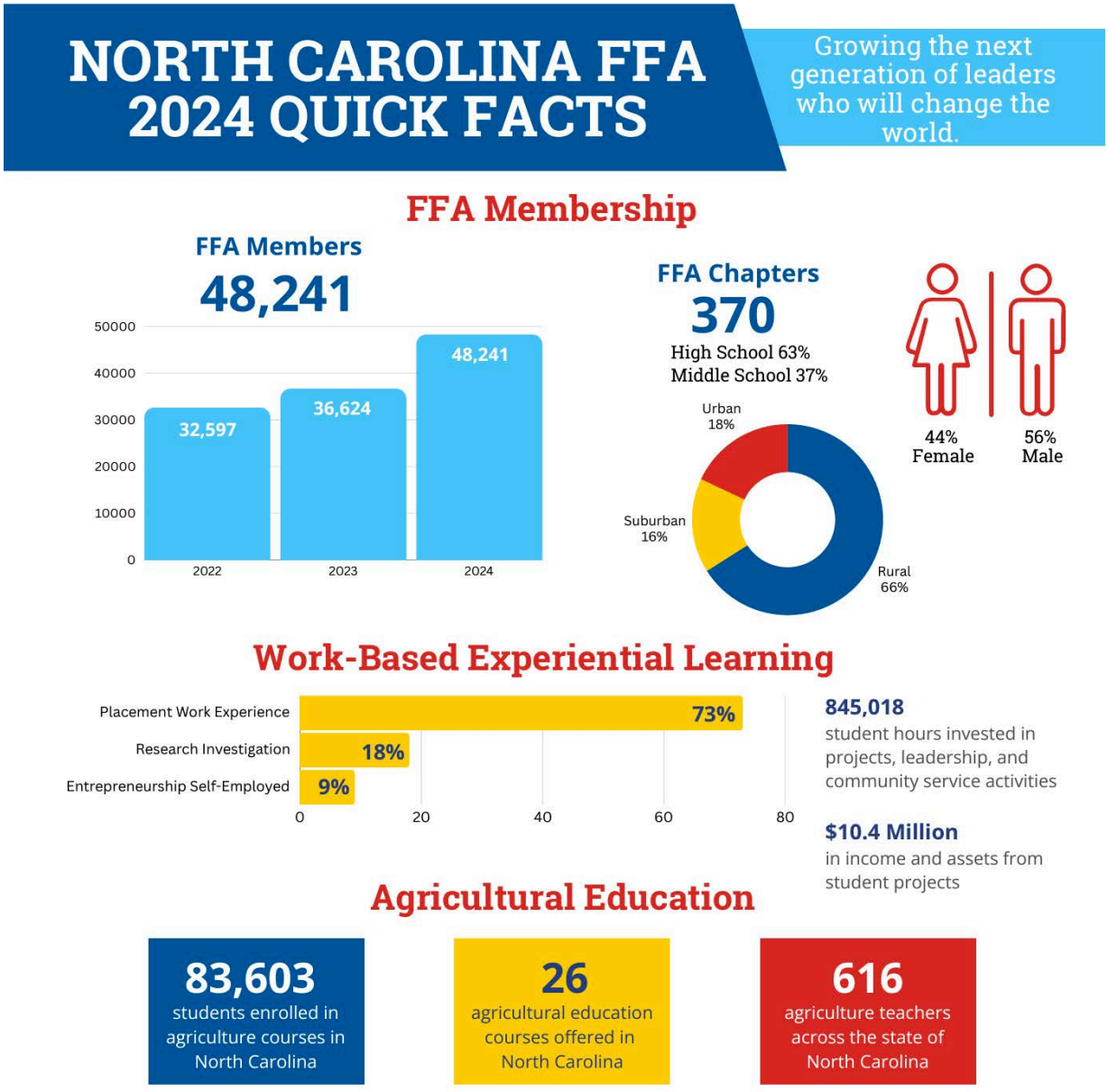
Agricultural education is a systematic program of instruction available to students desiring to learn about the science, business, and technology of plant and animal production and about the environmental and natural resources systems. Agricultural education first became a part of the public education system in 1917 when the U.S. Congress passed the Smith-Hughes Act. Today, over 83,600 students participate in formal agricultural education instructional programs offered in grades six through twelve in 98 counties across North Carolina. Agricultural education instruction is delivered through three major components.

- Classroom/Laboratory instruction
- Supervised Agricultural Experience programs
- Student leadership organizations



North Carolina FFA Association

FFA is a dynamic youth organization that changes lives and prepares members for premier leadership, personal growth and career success through agricultural education. FFA develops members' potential and helps them discover their talent through hands-on experiences, which give members the tools to achieve real-world success. Members are future chemists, veterinarians, government officials, entrepreneurs, bankers, international business leaders, teachers and premier professionals in many career fields. FFA is an intracurricular student organization for those interested in agriculture and leadership. It is one of the three components of agricultural education.



Report Summary

House Bill 259, Section 8.9 allocated $2,000,000 in grant funding to support agricultural education programs within career and technical education in middle and high school public school units across North Carolina. The funds were designated for purchasing essential equipment and expanding facilities for agricultural education programs.

The North Carolina FFA Association released the 2023-2024 CTE Grants for Agriculture application on October 31, 2023, and included information and resources online at: https://ncffa.org/agricultural-education/cte-grant-for-agriculture/

Grant applications were due on February 1, 2024, and the program received 88 submissions requesting a total of $5,868,093.31 in funding. All recipients were reviewed to ensure they met the legislative criteria, which prioritized public school units located partially or entirely in counties where at least one local school administrative unit received low-wealth supplemental funding in the previous fiscal year. Additionally, priority was given to schools with a high population of at-risk students or students with disabilities. After validating eligibility, the applications were evaluated.

To ensure impartiality, scoring was conducted by an independent party unaffiliated with North Carolina Agricultural Education or the North Carolina FFA Association. On March 1, 2024, grants were awarded to 35 applicants, totaling $1,983,540.23. Funds were distributed to grant recipients in July 2024, and project work commenced shortly thereafter. Grant recipients submitted individual progress reports by October 15, 2024. The information provided by teachers and school administrators was compiled to produce this report.

The 35 grant recipients were spread across a wide area, from Haywood County in the west to Camden County in the east. The recipients represent 30 counties in total, with 20 classified as urban and 10 as rural. The grant awards ranged from $2,926 to a maximum of $100,000. The legislation allowed up to $50,000 to be allocated for grant administration. However, the North Carolina FFA Association used significantly less, spending only $1,500.00 for this purpose.

Grant recipients used the funding to acquire a wide range of equipment and expand facilities across all agricultural education curriculum pathways. In the area of sustainable agriculture, land lab equipment, planters, seed drills, and irrigation systems were purchased. Modern livestock facilities were constructed or expanded, and livestock equipment was acquired to enhance instruction in animal science. For plant science, grants supported the construction of raised beds and gardens, fruit and vegetable production, greenhouse construction, hydroponic systems installation, and the creation of a micropropagation lab. Instruction in natural resources was bolstered with purchases like sawmills and the expansion of nursery areas. Additionally,

grant funds provided CNC routers, welders, plasma tables, trailers, lawnmowers, tractors, trucks, utility vehicles, and skid steers, all aimed at increasing hands-on learning opportunities for students in agricultural mechanics and engineering.

As of this report, some grant recipients have successfully finished their projects. Other recipients have encountered project implementation delays stemming from various factors, such as supply chain disruptions, labor shortages, and fluctuating material costs. Despite these challenges, all recipients have made progress and remain confident in meeting project deadlines.

The reminder of this report includes an impact summary and a financial summary to provide an overview of the grant program and its recipients. Additionally, individual progress reports from grant recipients are included to showcase the details of each project.

Impact Summary

Program	Students Impacted by Project	Community Members Benefited by Project	Total People Impacted by Project
Alexander Central High School	465	25	490
Alleghany High School	100	5	105
Asheboro City School	520	150	670
Camden Middle School	197	0	197
Chatham Central High School	80	350	430
Corinth Holders High School	412	35	447
Corriher-Lipe Middle School	210	120	330
Davie County High School	1,940	600	2,540
E.B. Frink Middle School	120	20	140
East Wilkes High School	75	0	75
Gates County High School	42	0	42
Jones Senior High School	65	10	75
Lakewood High School	212	50	262
Ledford High School	200	20	220
Midway High School	180	30	210
Monroe High School	90	4	94
Mount Pleasant High School	1,500	200	1,700
North Carolina School for the Deaf	70	45	115
North Forsyth High School	135	20	155
North Iredell High School	458	2,500	2,958
Northwest Cabarrus High School	96	50	146

Program			
Pender High School	120	75	195
Perquimans County High School	53	0	53
Polk County High School	72	0	72
Riverside High School	70	10	80
South Granville High School	80	25	105
South Rowan High School	40	1	41
South Stokes High School	98	0	98
Southern Nash High School	100	10	110
Sun Valley High School	45	10	55
Vance County High School	45	2	47
Wake County High School	7,541	30,164	37,705
Waynesville Middle School	330	3,000	3,330
West Rowan High School	425	120	545
Whiteville High School	147	25	172
Totals	**16,333**	**37,676**	**54,009**

Financial Summary

Description	Amount ($)
Starting Balance	2,000,000.00
Grant Scoring and Evaluation	1,500.00
Schools Awarded Grants	
Alexander Central High School	57,641.27
Alleghany High School	36,693.00
Asheboro City School	9,000.00
Camden Middle School	25,204.00
Chatham Central High School	9,090.00
Corinth Holders High School	70,853.06
Corriher-Lipe Middle School	100,000.00
Davie County High School	58,118.91
E.B. Frink Middle School	2,926.84
East Wilkes High School	79,218.52
Gates County High School	17,609.45
Jones Senior High School	30,125.18
Lakewood High School	99,886.97
Ledford High School	69,813.14
Midway High School	16,522.17
Monroe High School	29,900.00
Mount Pleasant High School	79,683.00
North Carolina School for the Deaf	9,385.00
North Forsyth High School	25,546.25
North Iredell High School	75,769.69

Description	Amount ($)
Northwest Cabarrus High School	93,652.00
Pender High School	99,161.58
Perquimans County High School	98,797.43
Polk County High School	15,000.00
Riverside High School	96,724.86
South Granville High School	100,000.00
South Rowan High School	10,908.65
South Stokes High School	100,000.00
Southern Nash High School	61,670.28
Sun Valley High School	15,630.44
Vance County High School	80,941.63
Wake County High School	100,000.00
Waynesville Middle School	21,000.22
West Rowan High School	87,026.69
Whiteville High School	100,000.00
Remaining Balance	**14,999.77**

Detailed Grant Recipient Reports

Program Name
Alexander Central High School

Project Title
Agriculture Facility and Equipment Upgrade

Status of Project
Completed

Activities completed to achieve stated goals
The new equipment has been purchased and integrated into students' classroom assignments. The new equipment utilized includes welders, welding helmets, a CNC Router, Makita Hand tools, harvesting equipment, and aquaculture tank heaters. Some of the completed projects include finishing our woven wire fencing project, rebuilding the livestock lab, and paving at the greenhouse.

Student outcomes
- Students were instructed on safety practices and proper use of the Miller Multimatic. Additionally, weld joints were completed in Agriculture Mechanics I and Agriculture Mechanics II Metal Fabrication, following state pacing guides.
- Fencing Project with Agriculture Mechanics I and Animal Science students
    - Students completed a bill of materials and cost analysis on the 1.3-acre fencing project on campus. They installed a woven wire fence, posts, electric high-tensile wire, and gates associated with the project.
- Agriscience and Agriculture Mechanics students were involved in building the livestock shelter addition and paving projects that have been completed. Students were involved in designing and developing a bill of materials and installation of the projects, which covered multiple objectives from safe use of tools to calculating board feet and square feet. Additionally, multiple objectives such as agricultural structures and terminology associated with the building and installations were met.

Impacts of grant program
- Students worked hand and hand with a local Landscape Company on the paving installation. This allowed students the opportunity to ask questions and see the project through from start to finish. The new pavers will help in providing a safe walkway for customers during the plant sale while upgrading the look of our Ag Department.
- The purchase of the CNC Wood Router, Makita Tools, and welding equipment will offer opportunities to students to gain hands-on skills in a safer environment while allowing them opportunities to gain skills that will allow career readiness and the integration of technology.
- The addition of the Livestock Lab and the fencing project will allow us to bring animals on campus in a safe educational environment. This will also allow our agriculture education students and program to market more opportunities to high school students, thus giving them more opportunities in the agricultural fields.

Grant amount awarded (in $)
57,641.27

Amount spent to date (in $)
57,641.27

Amount spent from other sources to date (in $)
396.58

Program Name
Alleghany High School

Project Title
AHS Livestock Project Barn Expansion

Status of Project
Completed

Activities completed to achieve stated goals
As of March 2025, the Alleghany County Livestock Barn Expansion Project has been completed. Initially envisioned as a renovation and expansion of the existing barn and shed, the project evolved into a full-scale new construction project. The result is a 48' x 32' state-of-the-art metal barn designed to enhance the Agriculture program.

Due to unforeseen circumstances, the project exceeded its original scope; however, with the support of the community and business partners, as well as the dedication of agriculture and carpentry students, we have constructed an animal science facility that reflects the highest standards of agricultural education.

The new livestock barn is equipped with:

- An upgraded head gate system for safer and more efficient livestock handling
- Livestock pens with a secure gating system to facilitate observation and care
- Reliable water access to ensure proper hydration and sanitation for animals
- A locking refrigerator for livestock medications, enhancing safety and compliance
- A dedicated feed loft, improving organization and accessibility

This modern facility provides an optimal learning environment, allowing students to engage in hands-on instruction regardless of weather conditions. By integrating real-world agricultural practices into the curriculum, the barn significantly enhances both student safety and the quality of experiential learning, better preparing them for careers in the agricultural industry.

Student outcomes
Learning Outcomes & Objectives Met

- Animal Science Course Outcomes
    - Animal Welfare & Health – Students demonstrated an understanding of proper animal care, welfare issues, and the benefits of producing healthy livestock.
    - Livestock Evaluation – Applied criteria to assess animals based on quality traits and desirable production characteristics.
    - Animal Science Terminology – Used industry-specific vocabulary accurately in discussions and written assessments.
    - Reproductive Systems & Management – Gained knowledge of breeding cycles, reproduction methods, and best management practices.
    - Animal Behavior & Handling – Understood animal behavior and demonstrated proper livestock handling techniques using the new head gate system.
    - Livestock Facility Maintenance – Learned how to maintain and manage animal care facilities, including feed storage and medication safety.
    - Leadership & Employability Skills – Developed leadership, communication, and teamwork skills essential for careers in agriculture.

- Agricultural Mechanics Course Outcomes
    - Construction & Carpentry Skills – Applied hands-on construction techniques while building the new livestock barn.
    - Structural Design & Planning – Learned how to read and follow blueprints, measure materials, and ensure structural integrity.
    - Use of Tools & Equipment – Gained proficiency in using industry-standard carpentry and welding tools to construct livestock pens, gates, and feed storage areas.
    - Problem-Solving & Critical Thinking – Addressed real-world challenges in the barn construction process, adapting plans as needed.
    - Safety & Workplace Readiness – Followed proper safety protocols while using tools, lifting materials, and working in a construction environment.
    - Collaboration & Project Management – Worked as a team to complete tasks efficiently, developing skills essential for the workforce.
- Overall Impact on Students
    - Cross-Disciplinary Learning – Students connected agricultural mechanics with animal science by building and utilizing the barn for hands-on instruction.
    - Career Preparation – Gained real-world experience applicable to careers in agriculture, construction, and veterinary science.
    - Increased Student Engagement – Learning was enhanced through hands-on, project-based experiences that reinforced classroom knowledge.
    - Post-Secondary & Workforce Readiness – Students are now better equipped to pursue further education or enter the workforce in agriculture-related fields.

This project not only provided students with valuable hands-on experience but also solidified their understanding of core agricultural concepts, bridging the gap between classroom instruction and real-world application.

Impacts of grant program

Project Impact

- The project initially began as a renovation of our existing barn and shed, but evolved into a full-scale new build due to unforeseen circumstances. Thanks to the support of our community, business partners, and contributions from our agriculture and carpentry students, we now have a modern, fully functional 48' x 32' metal livestock barn that greatly enhances our agriculture program.

Facility Upgrades

- The new barn includes:
    - Updated head gate system for safe livestock handling
    - Livestock pens with a gating system for structured animal care
    - Water access to ensure proper animal hydration
    - A locking refrigerator for livestock medications and storage
    - A feed loft for organized supply management
- This state-of-the-art facility provides a safer, more controlled learning environment by allowing students to observe and engage with livestock out of the elements, ensuring both student and animal well-being.

Long-Term Impact

- The long-term benefits of this project will be evident as students:
    - Earn industry-recognized credentials in the agriculture field

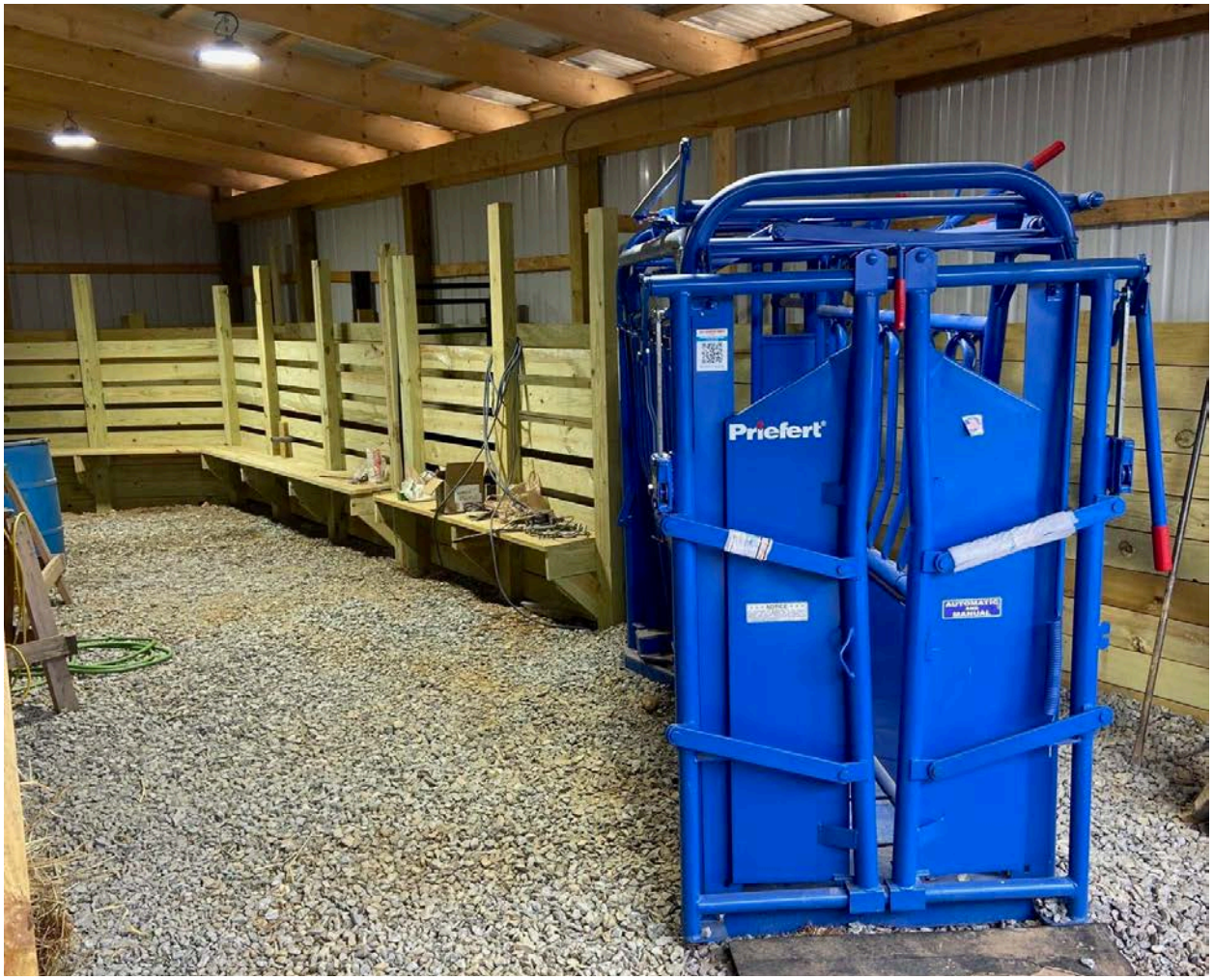
- Compete in agriculture-based competitions
- Pursue post-secondary education at community colleges, four-year institutions, or universities
- Enter the workforce in agricultural fields or establish their own production farms

The completion of this project marks a significant milestone in our commitment to developing creative leaders in the agriculture industry. Without the support of this grant, our community and our business partners, this achievement would not have been possible. Thank you for your investment in our students' futures.

Grant amount awarded (in $)
36,693.00

Amount spent to date (in $)
36,693.00

Amount spent from other sources to date (in $)
664.00



Program Name
Asheboro City Schools

Project Title
Comet Improvements

Status of Project
Completed

Activities completed to achieve stated goals
The items we have purchased have allowed us to incorporate more hands-on learning and career-based lessons/activities in our classes. Along with more implementation of the full CASE AgX curriculum in our middle school classes. Examples of this are testing water for pollutants, growing cucumbers that have been used to make pickles in another class, and learning how to make bows for flower arrangements.

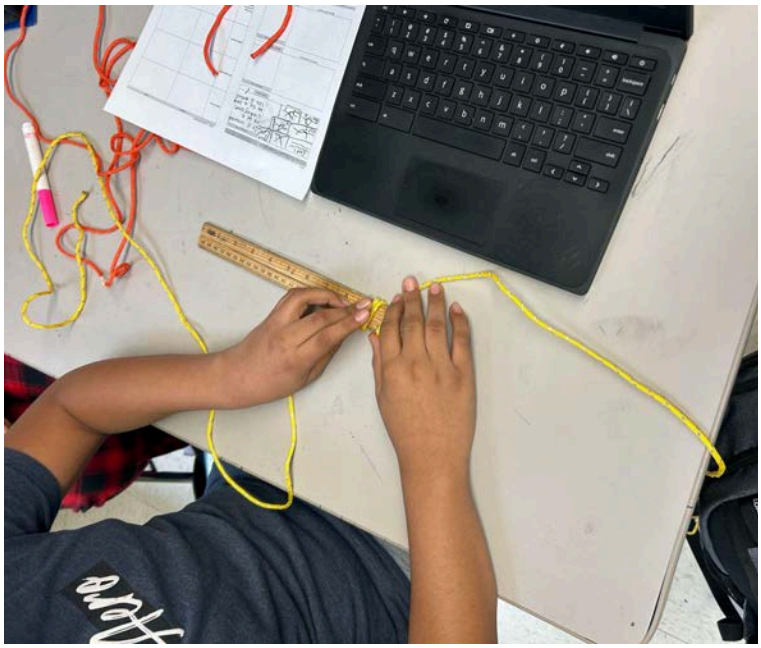
Student outcomes
- Career-based learning - (2.00 Understand how environmental stewardship within the agricultural industry relates to natural resource stewardship.) Students in our 6th-grade middle school classes have completed a project on solving the soil erosion problem around our school. After researching a solution, they had to create a model and test how well their solution stopped the erosion on the stream tables. This project has allowed students to understand the impact they have on our natural resources and let them explore a career (erosion control specialist) they did not know of.
- Increase understanding of material for FFA competitions - (5.01 Implement floral design practices) Students have been using items purchased to help prepare and have a better understanding of material that will be used during FFA CDEs/LDEs throughout the year. An example of this is our high school students learning how to make bows for the Floriculture CDE.
- Hands-on learning - Students at all three schools have been able to participate in more hands-on learning opportunities since the purchase of materials. Students have been able to learn how to properly ear notch & ear tag animals (AY21-1.00), practice proper veterinary practices used on food animals (AA22-6.01), and create a recipe, market, and bake a healthy granola bar as a final project (AY22-1.01, 1.02, 1.03).

Impacts of grant program
- Higher interest in agriculture careers from our students
- Higher interest in participating in our FFA program
- Cross-curricular lessons/Career opportunities - Students at one of our middle schools partnered with the advanced art class to learn about careers that fall under both agriculture & art (landscape designer). Students then had to pick an area of the school that needed to be revamped, design a new landscape for that area, and then make that design come to life. This has helped update our outdoor area of the school, while showcasing career opportunities for students.
- School/Community beautification - Our high school agriculture classes are located at the NC Zoo. Students took what they learned in class and updated the flower beds at the entrance of the Zoo School, and added other potted arrangements for visitors to see.
- Higher awareness of the agricultural education program - The grant has allowed us to incorporate lessons that bring awareness to the agriculture classes, along with the importance/benefit of career-based learning opportunities. Multiple community members, school staff, and students have commented on how they appreciate and find value in the opportunities given to students in the agriculture classes.

Grant amount awarded (in $)
9,000.00

Amount spent to date (in $)
9,000.00

Amount spent from other sources to date (in $)
34.49



Program Name

Camden Middle School

Project Title

Middle School Learning Lab

Status of Project

Completed

Activities completed to achieve stated goals

We have purchased and installed at the middle school a 16X24 Instructor Greenhouse from The Greenhouse Company of South Carolina. The instructor greenhouse installation was completed in mid-March 2025 due to weather and scheduling of the contractors.

Student outcomes

- Career Pathway exposure – students were able to see the many different careers/trades needed to install the greenhouse.
- Practical hands-on learning – to better understand plant physiology and plant products, students will be able to see plants that have been started in the classroom hydroponics unit finished off in the greenhouse.
- Operations of the greenhouse – students are currently projecting what supplies are needed to operate the greenhouse

Impacts of grant program

- The greenhouse has provided an additional learning lab for the school.
- It will be used as a resource center for STEM activities.
- Students were able to see the multiple career pathways needed as the installation was completed.

Grant amount awarded (in $)

25,204.00

Amount spent to date (in $)

25,204.00

Amount spent from other sources to date (in $)

65,752.48

Program Name
Chatham Central High School

Project Title
CCHS Enclosed Trailer Grant

Status of Project
Completed

Activities completed to achieve stated goals
The enclosed trailer has been a tremendous asset to our program. Students have been able to learn design skills by developing, installing, and pricing a shelving system for the trailer. Students have also completed two off-site landscapes, hauled poinsettias to local churches, and hauled poinsettias to a Winter Plant Sale at Fearrington Village.

Student outcomes
- AP41 1.00 Apply Leadership and Durable Skills
    - Students participated and sold over 300 poinsettias at the annual Women of Fearrington Holliday Bazaar. Students interacted with customers and sold plants.
- AP1 4.00 Apply knowledge of environmental conditions for plant growth.
    - The trailer has allowed us to expand the area in which we can sell plants, thus creating the demand for an increased supply. This year, students grew and sold over 600 8" poinsettias.
- AP44 5.00 Apply Landscape Installation skills.
    - Students were able to install the landscape for two different clients in our local community. Students learned the importance of proper planting techniques as well as estimating and bidding.

Impacts of grant program
- Overall, the trailer has allowed us to expand student learning into the local community. Students can showcase their skills and the knowledge they have learned in the classroom at various sites in our local community.
- The trailer has also provided an increase in revenue for our department. We have completed two landscapes and a winter plant sale. These events are tremendous fundraisers for our department.
- I believe the biggest impact of the trailer is that it allows Chatham Central High School students to gain confidence in the skills and techniques they have learned in the classroom. The trailer has provided them with a tangible way to showcase their talents and expose them to potential careers in the horticulture industry.

Grant amount awarded (in $)
9,090.00

Amount spent to date (in $)
9,090.00

Amount spent from other sources to date (in $)
80.00

Program Name
Corinth Holders High School

Project Title
Pirates Grow Ag Tech

Status of Project
In Progress

Activities completed to achieve stated goals
- Received and assembled the Powder Coating System
- Contracted Electrical Improvements for Spark CNC Router
- Received Spark Robotic CNC Router
- Received Bush Hog and Rototiller for Tractor

Student outcomes
- 14 students trained on 3-D Drawings and are currently creating designs for use with the CNC Router in Agricultural Mechanics II
- 19 show team members & 108 Animal Science students utilized the tractor for cleaning the animal science barn
- 67 Horticulture students utilized the tractor and mower for landscaping projects and the care of and around the greenhouse and livestock barn.
- 32 students trained to utilize the powder coating machine to finish metal projects created in Ag Mechanics Classes on the CNC Plasma Table

Impacts of grant program
- Provided the opportunity to train and complete the credential for the National Safe Tractor and Machine Operation Program for students in Agricultural Mechanics and Horticulture II Landscape. (Previously, there was no opportunity due to not having a tractor on campus.)
- The tractor has been used for cleaning out the livestock barn and chicken coop to help 110 (fall) and 108 (spring) students enrolled in animal science courses with their weekly tasks.
- Provided the opportunity for students to maintain landscape areas around the greenhouse and animal science learning lab.
- Provided the opportunity for students in Agricultural Mechanics to learn the basics of power coating to improve metal projects.
- Provided the opportunity for students to learn CNC routing as we learn to use this new technology.

Grant amount awarded (in $)
70,853.06

Amount spent to date (in $)
70,184.72

Amount spent from other sources to date (in $)
2,300.00


To practice brotherhood.
Honor agricultural opportunities and responsibilities and develop those qualities of leadership which an FFA member should possess
RTR SERIES
UNIT-RTR-00179


KOOL KOAT

Program Name
Corriher-Lipe Middle School

Project Title
Jackets Growing for the Future

Status of Project
Completed

Activities completed to achieve stated goals
The greenhouse project is complete. The structure is up and functioning with power, water, and heat. A ribbon-cutting ceremony will be held to officially open the structure and welcome students.

Student outcomes
- Students are beginning their farm-to-table learning experience, with the greenhouse just recently completed. Supplies and materials are being moved into the greenhouse to begin propagating and growing plants.
- A partnership has been created between South Rowan High School, other community supporters, and Corriher-Lipe Middle School to determine what to grow in the greenhouse and the best way to move forward with the operation to support the community best.
- Students have developed leadership skills in preparation for the ribbon-cutting ceremony, which will include a variety of community stakeholders. At this event, Corriher-Lipe Middle School Students will lead the ceremony.

Impacts of grant program
- There have been numerous levels of community engagement in this program, with the biggest one being that the contractor crew was comprised entirely of Corriher-Lipe Middle School alumni. There was also input from community members on the best infrastructure to build the greenhouse on.
- Program visibility has had a big impact on this program, as it has been able to share that Corriher-Lipe Middle School has an agriculture program with big things happening.
- Student engagement has improved in our agriculture classes from this grant program. Students are excited to be able to have a hands-on experience in the greenhouse and be able to follow a start-to-finish process of growing plants.

Grant amount awarded (in $)
100,000.00

Amount spent to date (in $)
100,000.00

Amount spent from other sources to date (in $)
15,000.00

Program Name
Davie County High School

Project Title - Project 1
Putting Wheels on School-Based Projects

Status of Project
Completed

Activities completed to achieve stated goals
We purchased a truck and a steel flatbed to attach to the truck.

Student outcomes
- 2.00 Understand SAE components: Students have implemented school-based livestock SAE projects. The truck has been used to transport livestock to four shows across North Carolina.
- 7.00 Apply best management practices for food animal handling, housing, and facilities: Students have learned the importance of clean bedding, proper feeding, and veterinary care for animals. The truck has been used to transport feed, shavings/bedding from a local community partner, and transport animals to the veterinary clinic for pregnancy checking.
- 4.05 Apply basics of layout and framing to construct and finish a shop project: Agricultural Mechanics II students designed and built custom racks for the truck's flatbed.

Impacts of grant program
- We have been able to increase school-based SAE opportunities for students who otherwise do not have access to livestock at home.
- Students in Agricultural Mechanics II have implemented the design and build process to construct truck extras, including custom racks for the bed.
- We have been able to attend agriculture-based community outreach events, such as Davie Farm Fest, to spread awareness for FFA and agriculture.
- Liability for agricultural teachers has been reduced by eliminating the use of personal vehicles.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Davie County FFA
FFA

Program Name
Davie County High School

Project Title - Project 2
Davie FFA Food for Friends

Status of Project
Completed

Activities completed to achieve stated goals
Students planted raised beds and a garden in the spring of 2024. Their harvested produce included sweet peas, onions, potatoes, sweet potatoes, tomatoes, cucumbers, watermelon, cantaloupe, and pumpkins. The garden was not tilled due to the timeframe of funding, but the tiller will be utilized this fall to plant winter cover crops. Fencing supplies are being utilized to keep livestock out of the garden. The freezer is being utilized to store frozen produce, honeybee equipment, and meat from our hog fundraiser.

Student outcomes
- Horticulture II
    - 6.00: Students learned and performed tasks of growing and harvesting vegetables according to industry best practices.
    - 2.00: The garden was utilized as a school-based SAE project space for students in Horticulture I and Horticulture II.
- Sustainable Agriculture 3,4,5: Students practiced and applied sustainable agriculture production methods, including installation of efficient irrigation systems, environmentally conscious weed and pest control, and multi-use land management (hogs, sheep, vegetable production).

Impacts of grant program
- The garden provided produce that was donated to other teachers, students, and custodians throughout the summer and into the fall.
- Sweet potatoes that were harvested were used in partnership with the culinary arts program to provide educational workshops and professional development opportunities for teachers in our district. This opportunity to partner with another program helped increase awareness for our agricultural program at Davie County High School.
- The garden and raised beds provided opportunities throughout the summer for students to earn volunteer hours, and even supported our agricultural intern from May to August.
- As part of our sustainable focus, the garden area will be used from October to February as a pasture for our market hogs. The hogs will turn the soil, root out any unharvested produce, and serve as a fundraiser for our agriculture program.
- The garden and plants planted in the area provided increased nectar and pollen sources for our Busy Bee Honey bees housed on campus. This summer, we were able to harvest over 300 lbs of honey as a result. The money earned from honey sales goes directly back into the agriculture program to support student engagement and growth.
- Harvested produce was used in our annual fair booth to increase agricultural awareness. Our fair booth was titled "Agriculture is Awesome" and reached over 200,000 community members.

Grant amount awarded (in $)
58,118.91

Amount spent to date (in $)
58,118.91

Amount spent from other sources to date (in $)
4,042.65

Program Name
E.B. Frink Middle School

Project Title
Chicken Little

Status of Project
Completed

Activities completed to achieve stated goals
The panels for the chicken coop are in the process of being installed. Additional bedding and waterers have also been purchased, and actual nesting boxes have been purchased but are not yet put together.

Student outcomes
- Students have taken responsibility by helping to put together chicken coop panels.
- Students have taken an active interest in caring for chicks and chickens.
- Students are involved in program planning and placement of the coop.

Impacts of grant program
- We experienced great parental support as they encouraged their students to be a part of FFA.
- We had more student involvement due to the expansion of the animal program at school.
- We increased awareness of the FFA program within the school and community due to facility expansion.

Grant amount awarded (in $)
2,926.84

Amount spent to date (in $)
2,926.84

Amount spent from other sources to date (in $)
44.62

Program Name
East Wilkes High School

Project Title
EWHS Ag Mechanics Shop Improvement

Status of Project
Completed

Activities completed to achieve stated goals

- We ordered, received, installed (with the help of county maintenance electricians), & used Lincoln Electric CNC Plasma Table and Xtool to create custom metal and wood projects.
- Completed a training in June 2024 with Lincoln Electric on their CNC software and plasma cutting system; completed an online training course by Lincoln Electric.
- The CTE department purchased metal 4'x8' sheets and materials to build storage racks. In July 2024, students came in to help construct two new storage racks: one for wood sheeting and one for metal sheeting. We now have a much more organized and safer shop due to these efforts.
- Purchased a new laptop to house the CAD program
- Cut out a giant 3'x3' "E W" to go on the new softball building to showcase our capabilities and cut out various small metal projects. We have created an Agricultural Mechanics Logo to engrave into wood projects we create, and have used this on birdhouses this semester
- We used the magnet sweeper to clean up the back parking lot where welding wire, screws, nails, etc, were found from various campus activities.
- We plan to get the pipe cutter working this summer.

Student outcomes

- Agricultural Mechanics II - Obj. 4.02: Apply the proper use of metal fabrication equipment such as plasma cutters, chop saws, grinders, band saws, and CNC (Computer Numerical Control).
    - Students gained exposure to CAD software and CNC plasma cutting that was not previously offered on campus.
- Agricultural Mechanics II - Obj. 3.03: Apply safety skills when practicing cold and hot metal skills.
    - Students come to the agricultural shop once a week during club time and apply safety skills while cutting out metal signs.
- Agricultural Mechanics II - Obj. 2.01:Understand SAE components and application to work-based learning.
    - Students are learning how to use the equipment and how to complete their SAE projects.

Impacts of grant program

- Program:
    - Increased interest in students taking agricultural mechanics classes. We showcased the equipment to rising 9th graders. We now have two class periods scheduled for next year in Agricultural Mechanics II and two class periods in Agricultural Mechanics I.
    - This grant has brought attention to the needs of our agricultural education program – we removed carpentry last year (after having it only 3 years) because it overlaps with our agricultural mechanics program (which prior admin did not understand), it overcrowded our shop, and we were already very active in the space building chicken coops and dog houses.
    - I have had a series of conversations with the admin, CTE Director, Superintendent, and Wilkes Community College Dean about how our agricultural mechanics classes and the

college welding program can both be impactful for our students without weeding one program out. We have established a schedule next year for Agricultural Mechanics II students to have access to welders when there is no college class taught, so we will no longer be overlapping. We have also chosen to remove animal science classes to just focus on agricultural mechanics and horticulture. This year, I taught four class periods with combined level I and level II courses; next year, we have narrowed this down to one class period with combined courses.

- School:
    - We cut out a giant 3'x3' E and a W to install on the new softball changing and concessions facility. The softball coach frequently gets asked who he had to create this, and he tells them the agricultural education program. Our softball team last year won the 1A State Championship, so this was our way of supporting them this year. Our Principal has shown pictures of this work with all the other county principals to highlight what we are doing and to potentially bring in fundraising opportunities for us.
    - The fall Agricultural Mechanics class this year removed wooden bleachers from our old gym, planed them, and we're in the process of making tables out of them. With our Xtool machine, we will be able to engrave the school logo along with our agricultural mechanics logo onto the bottom trim of the table to highlight where the material came from and who created it. We plan to have a silent auction on the tables. Several staff have come by and stated to contact them immediately when we start selling them because they have or they know people who spent a lot of time sitting on those bleachers watching kids and grandkids, and would like to be able to purchase one.
- Community:
    - In working on the E and W, a local business donated the aluminum sheet and enthusiastically insisted on coming back out when we cut them out to see how the CNC plasma worked. They were amazed at how clean the process was and how our students would have the opportunity to use this equipment. They make boat railing and are now interested in employing our welding students.
    - I have shown the equipment to numerous community members who attended our fall plant sale and/or were dropping kids off for practice. This has helped to build community relationships.
    - Numerous parents have expressed their excitement that their students have gotten to participate in this project, and they see how it is making a difference in their children's education and lives.

Grant amount awarded (in $)
79,218.52

Amount spent to date (in $)
79,218.52

Amount spent from other sources to date (in $)
56.62


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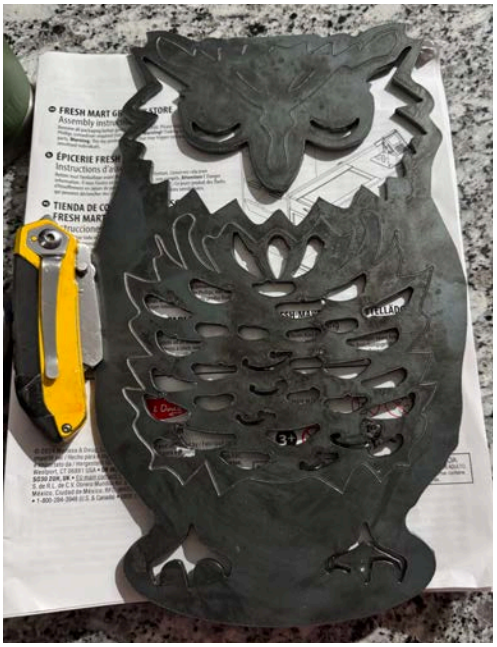


Program Name
Gates County High School

Project Title
Brighten the Agricultural Shops

Status of Project
Completed

Activities completed to achieve stated goals
Vancelectric has replaced the lights in the agricultural mechanics and horticulture shops at Gates County High School. Replacing the overhead lights with new LED lights has increased the visibility in both shops. Since being back in school, the students have noted how both shops are much brighter. The agricultural mechanic students have recently started their Nut and Bolt project. It is amazing to see the difference good lighting in the shop makes, especially with the efficiency of students completing their projects. New outlets were also added, which had previously been removed when new welding booths were installed in 2018. When a student was grinding a piece of metal that needed to be welded, he was able to plug it into a short extension cord and continue with his work. Also, it has been a great advantage to have a 3-way switch at the rear exit doors of both shops. Now, anyone who enters or exits through the rear exit doors can turn the lights off.

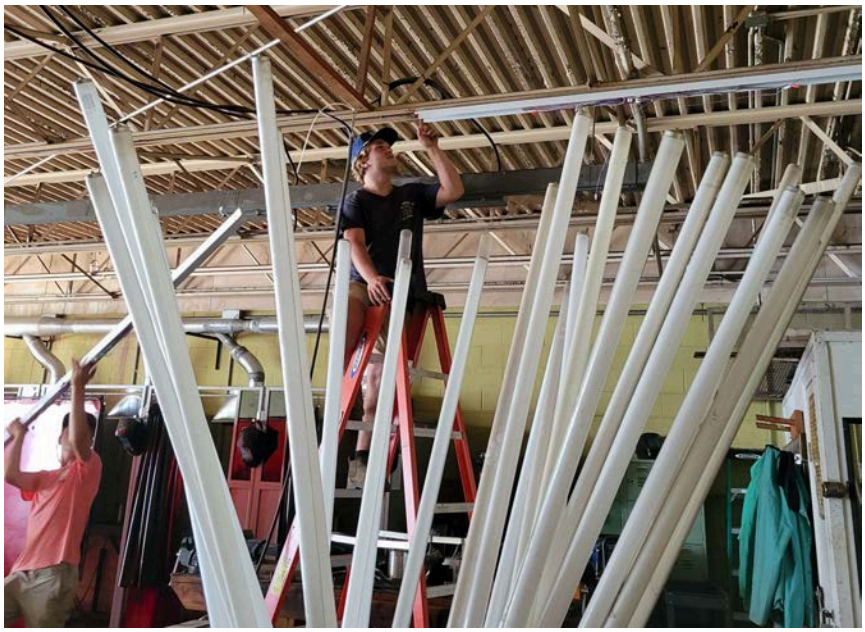
Student outcomes
- Agricultural Mechanics I – Objective 3.02 Apply safe work practices when setting up, adjusting, and using hand and power tools.
    - Students can view the spurs on their nut and bolt project and use a flat file efficiently in any area of the agricultural mechanics shop.
- Agricultural Mechanics II – Implement a Supervised Agricultural Experience (SAE).
    - This was a surprise for the student learning outcome because one of the students who completed Agricultural Mechanics II last school year was working for Vancelectric, helping to wire the new lights in the shop. This was a great service for this student to be able to give back to his school.
- Horticulture II – Objective 6.01 Implement vegetable production practices.
    - Students planted microgreens for a project with vegetable production. Students could view each of the seeds that were planted for microgreens, and were able to spread the seeds over the growing media.

Impacts of grant program
- Students are more focused on their work as they go into the agricultural education shops. They can see that I value the space and put work into it to make it better for them; in turn, they put forth better effort in the projects they are completing.
- The horticulture shop is used as a place for residents to house their animals during a natural disaster. Putting a 3-way switch at the rear exit doors gives these people using the shop as a shelter a way to turn the lights on and off easily.
- Some students want to work in the agricultural mechanics shop to fix items around the school. I asked a student to weld a broken table leg for an elementary school. He fixed the leg and is now fixing a chair for a teacher. Before the new lighting, students' ability to see their work greatly impacted their work ethic. Now this student is willing to complete additional projects because he wants to learn and is enjoying what he has accomplished.

Grant amount awarded (in $)
17,609.45

Amount spent to date (in $)
17,609.45

Amount spent from other sources to date (in $)
829.95



Program Name
Jones Senior High School

Project Title
Hands-on Animal Science Barn

Status of Project
In Progress

Activities completed to achieve stated goals
The last of the money from the grant has been allocated towards running electricity to the barn. This will be completed by January 15, 2026.

Student outcomes
- Students in Animal Science I continued to use the content knowledge they learned throughout the year to establish a final electrical plan for required lighting, outlets, and switches.
- Students in Agricultural Mechanics I were also involved in the prep for electrical, being present during the initial quote visit, where they could see electrical being used in the agricultural industry.
- Animal Science I students did a check-off list on final project steps to see if we had everything we needed (other than electrical) to finish out the barn.

Impacts of grant program
- This barn will house a herd of sheep that can be utilized by both Animal Science I and Animal Science II students for hands-on care.
- This barn will serve as an area to collaborate with Jones County 4-H during many of their animal-based projects.
- This barn will also serve as an outdoor classroom area for all students in the agricultural education program at Jones Senior High School.

Grant amount awarded (in $)
30,125.18

Amount spent to date (in $)
30,125.18

Amount spent from other sources to date (in $)
4,007.02


JONES SENIOR
HIGH SCHOOL
AGRICULTURE
DEPARTMENT

Program Name
Lakewood High School

Project Title
AgriRevitalize Facility Upgrade Initiative

Status of Project
Completed

Activities completed to achieve stated goals
To improve our agricultural education program, we completed the following activities:

- Purchased New PPE for Agricultural Mechanics: We outfitted our agricultural mechanics shop with updated personal protective equipment to enhance student safety and meet current industry standards.
- Repaired Greenhouse Infrastructure: We replaced the aging polycarbonate panels on our older greenhouse to improve functionality, temperature control, and plant health.
- Acquired New Equipment: We invested in modern, industry-relevant tools and machines, including a CNC router, CNC plasma cutter, band saw, and a SawStop table saw. These additions greatly expanded our capabilities in both woodworking and metalworking instruction.
- Expanded Growing Space: We installed new tables in our newest greenhouse, increasing usable growing space and allowing for more student-led plant science and horticulture projects.

These activities have significantly advanced our program's capacity to deliver high-quality, hands-on agricultural education aligned with workforce needs.

Student outcomes

- Improved Technical Skills in Agricultural Mechanics
    - Standard Alignment: Agricultural Mechanics I and II — "Demonstrate safe and proper use of tools, equipment, and materials used in agricultural mechanics."
    - Impact: Students gained hands-on experience using advanced equipment such as the CNC plasma cutter and SawStop table saw. This not only improved their tool proficiency but also reinforced safe shop practices, reducing risk and increasing student confidence in a lab environment.
- Enhanced Understanding of Precision Agriculture Technologies
    - Standard Alignment: Agricultural Engineering — "Apply principles of technology and engineering to solve agricultural problems."
    - Impact: By integrating CNC router and plasma cutter technology, students were introduced to precision fabrication, design-to-production workflows, and digital blueprint interpretation, aligning learning with real-world agricultural engineering applications.
- Expanded Horticultural Production Skills
    - Standard Alignment: Horticulture I and II — "Demonstrate plant propagation and production techniques."
    - Impact: The addition of new tables in the greenhouse enabled more efficient plant spacing and management. Students participated in seedling production, transplanting, and plant maintenance at a larger scale, better preparing them for careers in greenhouse and nursery operations.

Impacts of grant program

- Strengthened Agricultural Education Program
    - The grant enabled significant upgrades in equipment and facilities, leading to more engaging, hands-on instruction across multiple agriculture pathways (mechanics, horticulture, and engineering). This has enhanced student interest and enrollment in agriculture courses.
- Improved School Safety and Resources
    - By purchasing updated PPE and installing a SawStop table saw, the program dramatically increased lab safety. These improvements demonstrate the school's commitment to student well-being and modern CTE instruction, boosting the overall credibility of the program.
- Increased Community Engagement and Support
    - The revitalized greenhouses and student projects have allowed for more interaction with the local community through plant sales and school events. These activities have increased public awareness of the value of agricultural education and helped foster stronger partnerships with local stakeholders.

Grant amount awarded (in $)
99,886.97

Amount spent to date (in $)
99,886.97

Amount spent from other sources to date (in $)
2,412.90

Program Name
Ledford High School

Project Title
From Classroom to Career

Status of Project
Completed

Activities completed to achieve stated goals

- Provide an engaging and interactive way for students to demonstrate skill mastery through real-world scenarios and simulations.
- Differentiation for every learner.
- Career exploration. Teach transferable career skills.
- Prepare students for various industry-recognized certifications.
- Provide resources for innovative hands-on teaching of 21st-century relevant curriculum.
- Integrate 21st-century work skills – problem solving, creative thinking, teamwork, communication, and entrepreneurship.
- Provide students with college and career readiness skills.
- Train students in science, technology, engineering, and mathematics (STEM).
- Use the latest agricultural technologies and resources. Integrate and utilize technology in instruction.
- Enhance program facilities, equipment, and laboratories.
- Engage students through experiential learning and leadership development.
- Facilitate learning for students.
- Increase the academic and technical attainment of students.
- Inspire creativity.

Student outcomes

- Provide resources, hands-on learning experiences, specialized training, and real-world skills available to the agricultural education program and FFA chapter.
- Engage students with content in interactive and applicable ways.
- Students will learn content and demonstrate skill mastery.

Impacts of grant program

- Number of students served by the grant annually: 200
- Number of at-risk students or students with disabilities served by the grant annually: 110
- Number of community members served by the grant annually: 20

Grant amount awarded (in $)
69,813.14

Amount spent to date (in $)
69,813.14

Amount spent from other sources to date (in $)
154.09


WORLD MAP

Program Name

Midway High School

Project Title

Expanding Our Horizons

Status of Project

Completed

Activities completed to achieve stated goals

To date, significant progress has been made toward improving our agricultural education program through the completion of the new cattle-pasture fence. All activities have directly supported the goals outlined in our original grant application.

1. Development of Students' Skills in Fence Construction
    a. Students actively participated in every stage of the fence project. They assisted with the safe demolition and removal of the deteriorated fencing and were then engaged in the layout, measurement, post-setting, stretching, and fastening of the new fence. This hands-on involvement allowed students to apply classroom concepts to real-world tasks, strengthening their technical skills in modern fence construction.
2. Hands-On Learning in Animal Husbandry and Land Management
    a. The fence build was incorporated into regular class instruction, giving students extended, hands-on experience with tools, equipment, and construction practices commonly used in agricultural operations. By working directly in the pasture area, students discussed and observed land-use decisions, animal-safety considerations, and the role of infrastructure in effective herd management.
3. Establishment of Permanent Student Learning Laboratories
    a. Completion of the fence now provides a secure, functional space that will serve as a long-term outdoor learning laboratory. The improved pasture will support future lessons in grazing management, soil and forage evaluation, rotational practices, animal behavior, and ongoing fence maintenance. This permanent infrastructure enhances our program's ability to deliver consistent, experiential agricultural education.
4. Implementation of Sustainable and Current Agricultural Practices
    a. Throughout the installation process, students were introduced to sustainable fencing methods and materials designed for longevity, reduced maintenance, and minimal environmental impact. They learned how proper pasture boundaries support responsible land stewardship, protect natural resources, and align with modern agricultural standards for efficient and ethical food-animal production.
5. Preparation of Students for Agricultural Careers Across the Curriculum
    a. By participating in the planning, problem-solving, and execution of the project, students developed transferrable skills relevant to multiple agricultural pathways—including animal science, agronomy, agricultural mechanics, and farm management. The project created opportunities for students to experience career-aligned tasks and better understand expectations within the agricultural workforce.

Student outcomes

- Learning Outcome: Students demonstrated safe and effective use of hand and power tools during the fence construction process.

    - Linked Standard: Agricultural Mechanics I – 3.02 Apply safe work practices when setting up, adjusting, using hand and power tools.
    - Impact: Students gained real-world practice setting up and operating drills, post-hole augers, saws, and fastening tools while adhering to safety protocols. This reinforced hazard awareness, personal protective equipment usage, and proper tool-handling techniques, resulting in increased student confidence and fewer safety corrections needed during shop and lab activities.
- Learning Outcome: Students applied principles of fence design, materials selection, and construction techniques to build a functional agricultural fence system.
    - Linked Standard: Agricultural Mechanics I – 4.09 Understand principles and materials for constructing fences using various materials.
    - Impact: Through hands-on participation in layout, post-placement, bracing, and wire installation, students demonstrated understanding of structural integrity, material suitability, and agricultural best practices. The experience strengthened their ability to evaluate fencing needs for different livestock and land conditions—knowledge directly transferable to agricultural employment settings.
- Learning Outcome: Students operated tractors and power equipment safely and with purpose during site preparation and fence installation.
    - Linked Standard: Agricultural Mechanics II – 5.03 Apply principles and procedures for the safe use of tractors and power equipment.
    - Impact: Students practiced maneuvering tractors for post-hole digging, material transport, and pasture preparation under supervised conditions. This reinforced safe-start procedures, equipment inspection, proper hitching, and controlled operation, all of which are critical for workplace-readiness in agricultural production and mechanics fields.
- Learning Outcome: Students assessed and planned livestock facility requirements to meet the needs of the cattle housed on campus.
    - Linked Standard: Animal Science II – 7.01 Apply the process to identify facility requirements based on species, geographic location, and life stage.
    - Impact: While constructing the fence, students discussed stocking density, animal behavior, shade/shelter needs, and perimeter security. They evaluated how proper fencing supports animal welfare, rotational grazing, and long-term land management. This real-world application deepened their understanding of designing and maintaining species-appropriate facilities.

Impacts of grant program

- Strengthened Agricultural Education Program Through Enhanced Hands-On Learning:
    - The installation of the new fence created a permanent, functional outdoor laboratory that expands students' opportunities for experiential learning in animal science, agricultural mechanics, and land management. This infrastructure will continue supporting cross-curricular instruction for years to come.
- Improved School Campus Safety and Animal Welfare:
    - The new, secure fencing system ensures safer handling and containment of livestock on school property. This enhances student safety during hands-on activities and supports the humane management of the school's cattle herd, reinforcing responsible agricultural practices.
- Increased Student Engagement and Interest in Agricultural Careers:
    - Through participation in the fence project, students gained real-world skills that align with agriculture-related career pathways. The authentic work experience has increased student motivation and enthusiasm for pursuing agricultural degrees and professions.

- Strengthened School–Community Relationships:
    - The visible improvement to the campus agricultural facilities demonstrates the school's commitment to high-quality agricultural education. Community members, local producers, and industry partners have expressed support and interest in future collaborations and student learning opportunities.
- Long-Term Sustainability and Responsible Land Stewardship:
    - By constructing durable, environmentally responsible fencing, the program supports sustainable pasture management and improved rotational grazing opportunities. This benefits not only the school's land facilities but also contributes to the community's understanding of modern sustainable agricultural practices.

Grant amount awarded (in $)
16,522.17

Amount spent to date (in $)
16,522.17

Amount spent from other sources to date (in $)
1,056.17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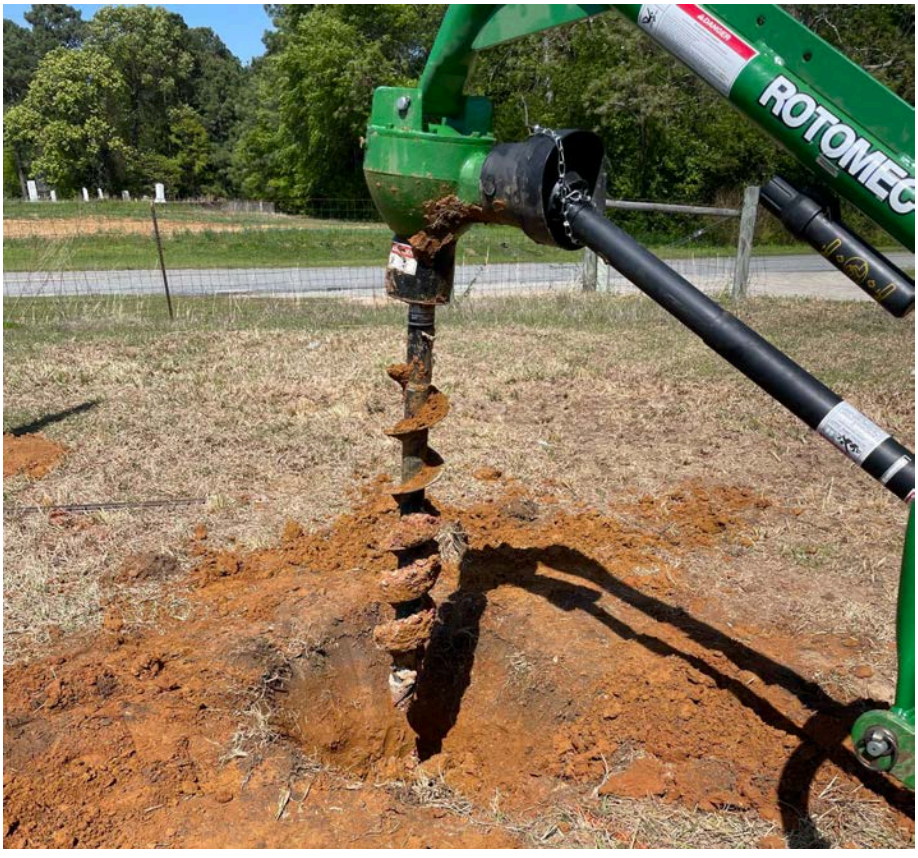
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Program Name
Monroe High School

Project Title
Monroe Tractor

Status of Project
Completed

Activities completed to achieve stated goals
Students were able to learn tractor safety and how to safely operate a tractor. FFA members competed in the Federation Tractor Driving competition, where they went through a skills course while pulling a trailer. We did not receive our tractor until the beginning of November, so our plans this spring and summer are to work on creating garden beds for vegetables and flowers, and other miscellaneous projects around the school.

Student outcomes
- Tractor Safety
- Tractor Maintenance
- Tractor operation - with a trailer
- Work-Based and Experimental Learning

Impacts of grant program
- Improved Employability skills
- Improved knowledge of large equipment
- Introduced driving skills
- Encouraged hands-on learning, which led to increased participation

Grant amount awarded (in $)
29,900.00

Amount spent to date (in $)
29,897.82

Amount spent from other sources to date (in $)
0.00


Kubota
L4802

Program Name
Mount Pleasant High School

Project Title
Livestock Transportation Vehicle

Status of Project
Completed

Activities completed to achieve stated goals
Due to delays in funding being dispersed and then spent by our county, the truck was not obtained in time to utilize for our 2024 livestock show season as proposed in the grant application. The Ford F350 has been instrumental in the following activities: hauling livestock feed by the pallet load, pulling a trailer to take animals and students to our county-wide GROW Cabarrus Agribusiness Days event, and pulling a trailer to take animals and students to a livestock showmanship clinic.

Student outcomes
- Students planned the feed order through our local vendor based on animal life stages and their respective needs. The truck makes larger feed orders possible due to its hauling capacity.
- Students exhibited leadership skills during Agribusiness Days as they taught over 1000 6th-grade students from across the county using sheep and goats hauled by Mount Pleasant High School.
- Students also received increased access to animal science curriculum as they attended a livestock showmanship clinic with their program animals.

Impacts of grant program
- Long-term sustainability of the Mount Pleasant High School agricultural education program has been achieved by avoiding wear and tear on the advisors' personal vehicles.
- Feed purchasing and hauling have been greatly improved.
- Community events such as our FFA Alumni BBQ and GROW Cabarrus event are made possible by the truck providing transportation of supplies and livestock.

Grant amount awarded (in $)
79,683.00

Amount spent to date (in $)
74,792.45

Amount spent from other sources to date (in $)
0.00


Cabarrus
County Schools

Program Name
North Carolina School for the Deaf

Project Title
Signs of Horticulture Advancement

Status of Project
Completed

Activities completed to achieve stated goals
Improvements were made to the Green Works Utility vehicle, including adding a roll cage, roof, windshield, seatbelts, and mirrors. We have constructed ten new raised beds, and we have set up and utilized four new Gardyn Hydroponic towers, growing a variety of fruits, vegetables, flowers, and herbs. We have used grow lights and Bato hydroponic components to set up a new hydroponic system and establish a "Green Room" classroom space for indoor hydroponic growing of microgreens and other plants. We also improved outdoor growing areas by having resources such a retractable hoses and outdoor sinks.

Student outcomes
All of the following course standards and objectives were met as a result of the project.

- 3.02 Explain factors that influence plant growth and development.
    - Students engaged in planting in a variety of different media as a result of the project, and explored the necessary components needed to sustain plant life.
- 4.02 Apply the process to identify optimum soil and media for plant growth.
    - Students engaged in the activity when prepping and maintaining raised beds for a variety of different crops and flowering plants.
- 4.03 Apply the process to identify essential nutrients needed for plant growth.
    - Along with applying the necessary nutrients to conventionally grown plants, students identified the importance of nutrients and how to control them in hydroponically grown plants.
- 6.01-6.02 Execute sexual and asexual plant propagation methods.
    - Students engaged in both propagation methods when working in the raised beds and hydroponic systems.
- 7.01-7.02 Compare garden, greenhouse, and nursery production practices and execute plant production practices.
    - Students have access to all materials purchased from this project and can use them to navigate and access all outdoor garden areas, high tunnel, and learning labs. As well as work in and improve the indoor "Green Room" learning lab, build and maintain, and harvest from multiple raised bed gardens, and explore multiple methods of hydroponic and aquaponic growing.

Impacts of grant program

- All staff, students, and their families have access to fruits, vegetables, herbs, and flowers, grown hydroponically in the classroom, and some produce harvested from raised beds. The hydroponic towers are easily accessed by students and staff at all times. We provide store equivalent produce containers for individuals to pick and harvest what they need.
- Three new learning labs/learning areas were created. "Green Room"- a separate classroom dedicated to hydroponic growing, raised bed garden, hydroponic tower center (separate from the green room).

- Provided a safer, more accessible, updated utility vehicle that is utilized by students and staff to make agricultural activities, planting, and production easier and safer.

Grant amount awarded (in $)
9,385.00

Amount spent to date (in $)
9,385.00

Amount spent from other sources to date (in $)
0.00

Program Name
North Forsyth High School

Project Title
North Forsyth: Regrowing AG

Status of Project
In Progress

Activities completed to achieve stated goals
The North Forsyth High School program has grown exponentially. The program grew from six students enrolled to over one hundred. The students held their first spring plant sale. They have been able to observe chickens hatching and growing. Many students participated in FFA for the first time.

Student outcomes
- 1.02 - Distinguish between the various programs and services offered by the FFA
- 2.01 - Analyze the organizational structure of committees and relevant hierarchies within the FFA.
    - Students established an FFA chapter for the first time in over ten years.
- 13.02 - Analyze plants to identify secondary and micronutrient deficiencies.
    - Students planted seeds and monitored the needs of the plants. They held their first spring plant sale.

Impacts of grant program
- Enhanced Hands-On Learning Opportunities
    - Students gain access to modern agricultural tools, equipment, and technology (e.g., hydroponics systems, greenhouses, soil testing kits).
    - This promotes experiential learning, allowing students to apply classroom concepts in real-world agricultural settings.
- Career Pathway Development
    - Students graduate with industry-recognized skills, making them more competitive for jobs.
- Sustainable Practices and Community Impact
    - Schools can implement projects like school gardens, composting programs, or farm-to-table initiatives.
    - These projects teach sustainability, improve food literacy, and often provide fresh produce for school cafeterias or local food banks, benefiting the wider community.

Grant amount awarded (in $)
25,546.25

Amount spent to date (in $)
743.33

Amount spent from other sources to date (in $)
10,000.00

Program Name
North Iredell High School

Project Title
Natural Resources Experiential Learning Equipment

Status of Project
Completed

Activities completed to achieve stated goals
We have purchased and received the grain drill and portable sawmill. Currently, the grain drill is being used by students in their SAE projects to complete land restoration and pasture improvements. The sawmill has been used in natural resources classes to mill lumber for the agricultural mechanics program and for forestry timber calculations. We have also showcased both pieces of equipment to nearly 2,000 people in our community to highlight student SAE projects and local career options.

Student outcomes
- Students have learned to operate the sawmill safely
- Students are using the mill to provide lumber for the agricultural education program and their SAE projects.
- Students are using the drill as an integral part of their SAE projects.

Impacts of grant program
- This grant has helped our program gain community support from local businesses that are excited to see natural resources and forestry being taught in public schools.
- The grant has provided us with the resources to mill lumber at a fraction of the cost of purchasing lumber for our agricultural mechanics program, saving the county money.
- This grant has allowed us to introduce students to more careers available in agriculture and adequately prepare them to safely operate the machinery that they will be expected to use in the industry.

Grant amount awarded (in $)
75,769.69

Amount spent to date (in $)
75,769.69

Amount spent from other sources to date (in $)
248.17

Program Name
Northwest Cabarrus High School

Project Title
Work Truck Acquisition

Status of Project
In Progress

Activities completed to achieve stated goals

- Stated Goal: "Northwest Cabarrus High School FFA program wants to double the experiential learning student opportunities for the academic year of 2024-2025 by obtaining a heavy-duty work truck to pull the livestock trailer filled with animals housed on campus".
- We obtained the truck at the school on November 13, 2024. Advisors have been able to get hay, feed, etc, with the FFA truck instead of their personal vehicles. Additionally, Mrs Hendley has been able to transport horses to and from the school for the students to have hands-on labs with the Equine Science I and II classes at the school property and at the Cabarrus County Saddle Club.

Student outcomes

- Animal Handling & Transportation Safety: Students will demonstrate proper loading, unloading, and securing techniques to safely transport livestock. Equine Science I - Unit 4.00: Understand equine behavior as it relates to safety. Unit 6.00: Apply equine maintenance. Equine Science II - Unit 9.00: Apply principles of equine handling, safety, and training.
    - Impact: There were 41 students in all of my equine science classes who benefited from this experience.
- Equipment Operation & Vehicle Safety: Students will gain hands-on experience in safely operating a truck and trailer for livestock transport. Students will complete a pre-trip inspection checklist to ensure vehicle and trailer readiness.
- NC FFA Truck & Tractor Driving Competition: Six students within the Northwest Cabarrus High School FFA chapter were able to practice for the CDE.
- Equine Handling & Riding Skills: Students will improve their ability to safely handle, lead, and mount horses. Students will practice correct riding posture, rein control, and maneuvering through patterns, jumps, or obstacles. Students will participate in riding events, gaining experience in competition settings with the Cabarrus County Saddle Club. Equine Science I - Unit 8.00: Apply tack and equipment skills to equine. Unit 9.00: Apply equitation techniques. Equine Science II - Unit 9.00: Apply principles of equine handling, safety, and training. Unit 10.00: Apply principles of equitation and showmanship.
    - Impact: On average, ten students would attend the Cabarrus County Saddle Club events to work on their animal handling and showing techniques. At the school, forty-one students were able to benefit from the experience every week.

Impacts of grant program

- Enhanced Agricultural Education & SAE Support: Allows students to transport livestock safely to shows, competitions, and veterinary visits. Supports supervised agricultural experience (SAE) projects by providing reliable transportation for supplies, feed, and animals.
- Increased Student Opportunities: Expands hands-on learning experiences in livestock management, horticulture, and mechanics. Enables students to participate in off-site agricultural learning experiences, field trips, and industry events.

- Community Engagement & Outreach: Facilitates participation in local saddle club events, community service projects, and outreach events. Strengthens relationships with industry professionals and organizations through transportation to networking events. Additionally, iCEV came to the school to highlight the impact of the agriculture program and the equine program at the school. By having the truck, these opportunities arose.

Grant amount awarded (in $)
93,652.00

Amount spent to date (in $)
74,792.45

Amount spent from other sources to date (in $)
0.00

Program Name
Pender High School

Project Title
Experiential Learning Facility for Animals

Status of Project
Completed

Activities completed to achieve stated goals
- Kubota MX 6000 Tractor with a loader was purchased
- 24x30 building constructed
- Bale spear for tractor purchased
- Fans Purchased
- Building Permit obtained
- Electricity in the building is installed

Student outcomes
- Aligns with the Agricultural Mechanics II curriculum standard 5 in applying preventive maintenance practices and safe tractor operation - fifty-one students to date
- Agricultural Mechanics II students obtained their National Safe Tractor and Machinery Operation Certification - six students to date.
- Animal Science II curriculum in standards 6 and 7 aims to maintain healthy animals and apply best management practices for food animal handling and housing. Fifty students impacted to date.

Impacts of grant program
- The project on learning safe tractor procedures has impacted fifty-six students and five community partners to date, with the purchase of the tractor.
- The agricultural education program had seen a significantly increased awareness in the school and community as a result of the ribbon-cutting ceremony for the new livestock facility.
- Multiple community partners have offered donations of animals and supplies since the program's visibility has been shared on Facebook and other platforms.

Grant amount awarded (in $)
99,161.58

Amount spent to date (in $)
99,161.58

Amount spent from other sources to date (in $)
1,089.56


Kubota
LA1065

Program Name
Perquimans County High School

Project Title
Growing Success

Status of Project
Completed

Activities completed to achieve stated goals

- Contract for Greenhouse completed with the board of education approval on 3-25-24
- NC Agricultural Education Grants Contract signed on 4-11-24
- Money for the Grant was received on July 12, 2024
- Greenhouse Company PO set up July 23, 2024
- Concrete Pad Quotes August 2024-Sept 2024
- Secured Building Permit from the Town of Hertford 9-19-24
- Concrete Pad was Poured Nov 5, 2024 (Had to complete site prep work)
- Greenhouse Construction Dec 12, 2024
- Electrical, Water, and gas hook-up completed in March
- 4/3/25 Final Walk-through with Stuppy Greenhouse Company

Student outcomes
Due to the delay in the greenhouse completion, our greenhouse was not completed before the 2025 growing season began. With an April finish date of the project, we have been able to achieve some student outcomes:

1. Project goal and objective 1: Enhance learning opportunities for students enrolled in the Horticulture Program at Perquimans County High School: Fifty students have gained hands-on experiences to date.
2. Project goal and objective 2: Students will continuously build their understanding of horticultural practices through course stands in the horticulture program: Students in our Spring semester attained 100% proficiency in Horticulture II.
3. Project goal and objective 3: The greenhouse facility will provide work-based learning opportunities for students: Gave twenty-five students the experience to hone their durable skills and develop collaboration and personal responsibility.

Impacts of grant program

1. Increased hands-on experience for students in horticulture classes because there was no facility on campus prior to this project.
2. Proficiency Scores: The scores for performance-based measurements proficiency rate were 100% to support education effectiveness and knowledge transfer of the curriculum.
3. Starter plants were seeded in the greenhouse and will be placed outside in the raised beds for the summer food program to provide fresh produce.

Grant amount awarded (in $)
98,797.43

Amount spent to date (in $)
98,797.43

Amount spent from other sources to date (in $)
21,108.50

Program Name
Polk County High School

Project Title
Turf It Up

Status of Project
Completed

Activities completed to achieve stated goals
Our purchase order for our grant was placed on August 12, 2024, and processed through John Deere's Government Contracts. We received our 950M zero-turn mower with bagger on November 6, 2024. It was delivered by Salesman Brian O'Shields.

Student outcomes
- Agriculture Production 2 Unit 20.01-20.02
    - Students have learned how to safely operate a commercial zero-turn mower.
    - Students have learned how to obtain information from the owner's manual regarding servicing and maintaining the mower.
- Horticulture II Landscape Construction Unit 2 and Unit 6.02
    - Students have learned how to operate the deck setting on the mower based on the type of turf that needs to be cut.

Impacts of grant program
- This mower has provided us with a modern and safe piece of machinery to help maintain our school farm and vineyard.
- The mower is a mirror image of commercial lawn equipment used in the landscape industry and gives students the opportunity to learn how to safely operate the machinery efficiently.
- Our agricultural education program is not dependent on our maintenance department to provide machinery to help maintain our school farm and vineyard. We now have a piece of safe and more reliable machinery.

Grant amount awarded (in $)
15,000.00

Amount spent to date (in $)
15,000.00

Amount spent from other sources to date (in $)
2,592.19


PCHS
POLK COUNTY
SCHOOL FARM
"A Gift from our Community"
Est. 2006

Program Name
Riverside High School

Project Title
MarCo Innovative Greenhouse

Status of Project
Completed

Activities completed to achieve stated goals
With the addition of our greenhouse, we were able to add Horticulture I to our class selection. Students can participate in experiential learning to drive home the discussion, as well as participate in our upcoming plant sale

Student outcomes
- 4.00 Apply knowledge of environmental conditions for plant growth.
    - Students were able to compare the growth of seeds in our classroom to seeds grown in the greenhouse. The temperature, watering, and sunlight played a large role in the difference in growth and sturdiness of the seeds.
- 5.02 Apply the process to identify common plants grown in North Carolina using plant identification practices.
    - Students were able to have more plants that are in our greenhouse to be able to identify and care for.
- 6.00 Apply common plant propagation techniques.
    - Students were able to use the greenhouse to execute asexual and sexual propagation methods with seeds, snake plants, aloe, and spider plants. This also contributes to 5.02, as well as completing their performance-based measurements.

Impacts of grant program
- The community has begun to show interest in our program through our upcoming plant sale, as well as noticing the greenhouse.
- Students have another avenue to explore agriculture through signing up for Horticulture I classes. We have enough interest to be able to add a Horticulture II class next semester, as well as continue Horticulture I.
- Other classes have visited the greenhouse to complete lessons, such as our Math II class planting seeds to calculate germination rates and our Honors Biomedical Technology class using the seeds we planted to discuss genetically modified organisms and how they impact agriculture.

Grant amount awarded (in $)
96,724.86

Amount spent to date (in $)
96,724.86

Amount spent from other sources to date (in $)
246.64

Program Name
South Granville High School

Project Title
Livestock Barn

Status of Project
In progress

Activities completed to achieve stated goals
I am excited to say the project is completed! We have a new structure installed with power and plumbing. Our general contractor installed the foundation and organized the installment of the metal building. He then made sure the facility had all the necessary electrical and plumbing.

Student outcomes
- The students learned the process of getting a commercial facility built. (Overview of inspection process/ Plans/Observe actual construction)
- The students have been able to use the facility to help provide hands-on opportunities.
- The students have helped create pens within the facility to be able to house students' show animals and SAE projects.
- The facility gives a safe place to demonstrate and conduct labs such as one on animal handling techniques and behavior.
- For example, for standard 7.01 (understanding animal behavioral) we conduct a lab where students monitor animals behavior for a predetermined amount of time. They are better able to explain what they see and why.
- Another example, we had an animal who was limping and we were able to put the animal on stand in the facility where students could diagnose and treat the sheep with ease.

Impacts of grant program
- Enhance students' awareness projects within the animal science industry.
- Used as a lab area to provide hands-on opportunities in Animal Science I and II class.
- This project drastically improves the area where students can conduct supervised agricultural experience projects on campus.

Grant amount awarded (in $)
100,000.00

Amount spent to date (in $)
100,000.00

Amount spent from other sources to date (in $)
0.00


South Granville FFA
FFA

Program Name
South Rowan High School

Project Title
Land Laboratory Equipment For Research

Status of Project
Completed

Activities completed to achieve stated goals
The equipment was ordered, delivered, and paid for by Rowan Salisbury Schools. All equipment has been assembled, and four beds have been pulled currently.

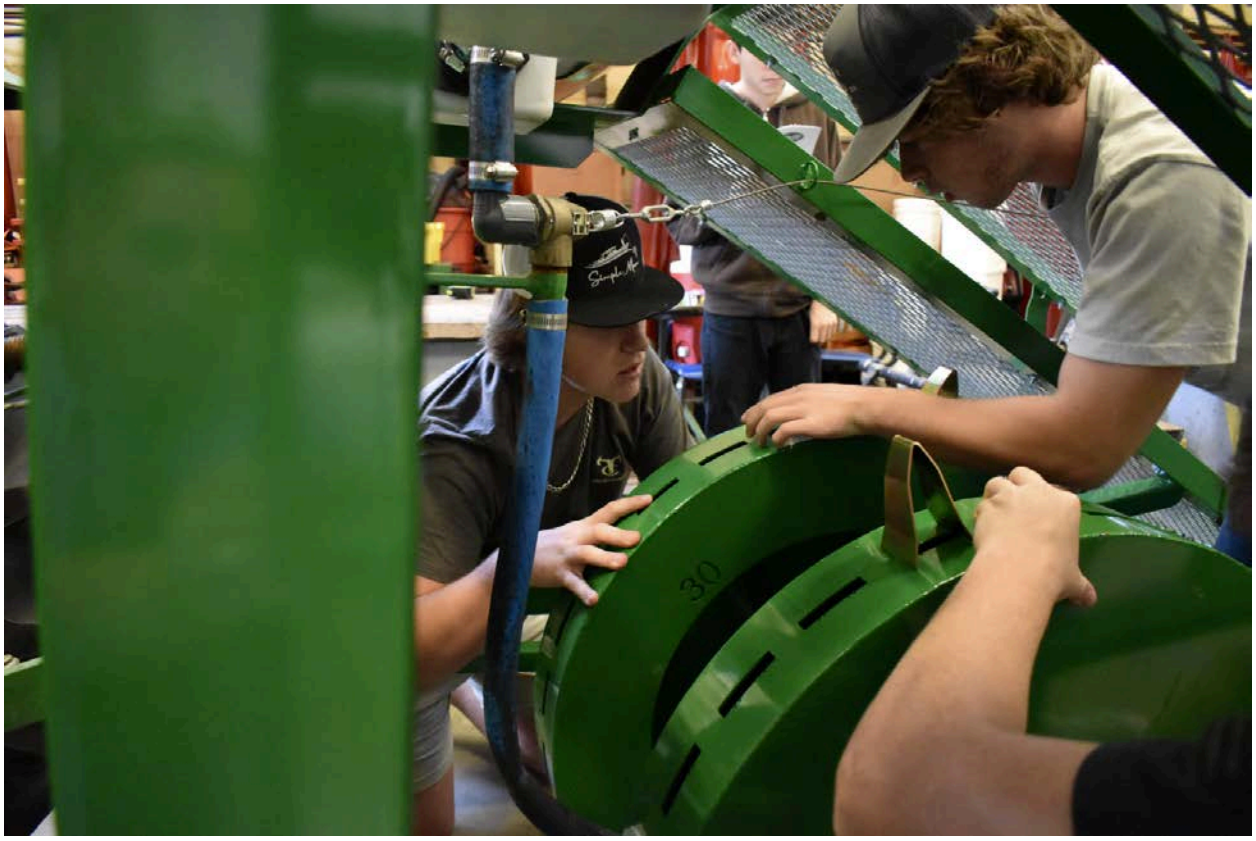
Student outcomes
- Students were able to follow plans to assemble the equipment.
- Students were able to troubleshoot the equipment set up to create the desired beds needed for strawberry production.
- Students were able to participate in planting strawberries using the transplanter, which will create uniform spacing.

Impacts of grant program
- Students will be able to pull beds identical to the beds used in industry to produce vegetable crops.
- This equipment will also allow students to plant vegetable crops with precision spacing to produce the highest quality crop possible.
- This equipment will install drip tape so irrigation needs for the planted crops can receive water and nutrients.

Grant amount awarded (in $)
10,908.65

Amount spent to date (in $)
10,908.65

Amount spent from other sources to date (in $)
0.20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Program Name
South Stokes High School

Project Title
Project Green Thumb

Status of Project
Completed

Activities completed to achieve stated goals
The old greenhouse was removed with electrical, plumbing, and gas disconnects. A fence on one side was disassembled. Concrete footings and a pad were installed. The greenhouse was ordered and assembled by Atlas Greenhouse. District maintenance department staff oversaw the new connections of all electrical, plumbing, and gas connections. A warranty claim was made and fulfilled due to a bad transformer. All inspections have been passed. The greenhouse is complete! However, there are two additional warranty claims in progress for a leaking seal and a missing cooling cell float. The ADA-compliant landing pads and ramps are scheduled for installation on December 1, 2025.

Student outcomes
- AP41 Horticulture I, Standard 2.00: Apply work-based and experiential learning in horticulture.
    - Students are seeing one big agricultural expansion that the agriculture program at South Stokes High School is going through. This has provided a great example to guide students as they work on their individual SAE projects.
- AP41 Horticulture I, Standard 7.00: Apply plant production in horticulture.
    - Students gained firsthand knowledge about the considerations involved in planning features for a new greenhouse and how they relate to plant production processes.
- AU10 Foundations of Agriculture, Standard 3.00: Understand the plant industry.
    - Students have learned about the basic horticultural and agronomic principles and practices, and how they would apply to plant production when using specific tools like the new greenhouse.

Impacts of grant program
- The enthusiasm within the agricultural education program at South Stokes continues as the teacher, students, and FFA members eagerly await the completion of the greenhouse. Students and FFA members who helped with the demo of the old greenhouse were especially enthusiastic.
- The school and district have been impacted financially as they did not have the funds to purchase and install a new greenhouse at the school. The grant has been well received with much appreciation to the state and the FFA!
- The community has stepped up with many offerings of help from free labor, a dumpster donation, and financial donations through the South Stokes High School FFA Alumni Association.
- Sawyer Ferguson, the agricultural education teacher at South Stokes, has been seeking grant opportunities to help fund supplies and materials to get the new greenhouse in operation from day 1. On 3/21/25, she was awarded $3,900 sponsored by Nutrien Ag Solutions to help support the FFA chapter.

Grant amount awarded (in $)
100,000.00

Amount spent to date (in $)
100,000.00

Amount spent from other sources to date (in $)
20,562.25

Program Name
Southern Nash High School

Project Title
Agricultural Accessibility Opportunities

Status of Project
Completed

Activities completed to achieve stated goals

- The truck was used six times to pick up livestock feed locally for our sheep and driven to Sampson County for our dairy heifer feed.
- The truck hauled horses from Mrs. Manning's home barn to our school pasture.
- The truck was used to haul materials to the Wilson County Fair for our chapter fair booth.
- The truck and trailer were used for our homecoming parade float.
- The truck was used for a trailer release demonstration for Animal Science I students.
- The truck was used to pick up a new flatbed trailer.
- The truck was used for the Truck Driving CDE for chapter practice.
- The truck was used for hauling sheep and sheep showing equipment to the NC State Fair.
- The trailer was used to pick up lumber for school projects.
- A trailer was used to haul plants and materials around our schools.
- The trailer was used to store lumber during an agricultural mechanics project.

Student outcomes

- Students used the truck for practice for the Truck Driving Career Development Event (1.0 Animal Science I) (1.0 Equine Science I)/Understand best management practices in animal science (7.0 Animal Science I)
    - Students learned driving skills, such as how to hitch up and release a trailer, load equipment properly on the flatbed trailer, and back up and park a trailer properly
- Students' livestock (sheep) was hauled to the NC State Fair for competition (4.02, 8.01 Animal Science II)
    - Safely transported horses from their home barn to be used at our Southern Nash animal facility for equine classes.
- Equine Equipment & Facilities Module (Equine II - Equine Management Certification)
    - Obtained lab materials from local suppliers for student use. (6.00 Equine) (4.00 Agricultural Mechanics) (5.00 Horticulture II Landscaping)
- Safely transported school livestock and student livestock to competition events, veterinary clinics, and food processing facilities using our livestock trailer (4.02, 8.01 Animal Science II)

Impacts of grant program

- More efficient use of time and chapter resources.
- Easily accessible equipment when needed.
- Reduction in personal equipment being used for school/chapter activities.

Grant amount awarded (in $)
61,670.28

Amount spent to date (in $)
61,661.20

Amount spent from other sources to date (in $)
0.00

Program Name
Sun Valley High School

Project Title
Sun Valley Gator

Status of Project
Completed

Activities completed to achieve stated goals
Purchased a John Deere Gator HPX615E to be utilized by the agriculture department

Student outcomes
- Students learned the basic operation of small gasoline engines: Obj. 5.01 Understand principles of operation and troubleshooting techniques for air-cooled and water-cooled engines.
- Students learned how to check the engine oil level and tire pressures before using the gator: Obj. 5.02 Apply preventative maintenance procedures to service small engine-powered tools, equipment, tractors, and attachments.
- Students learned how to safely maneuver a trailer through an obstacle course behind the gator and to back the trailer into a simulated shed structure: Obj. 5.03 Apply principles and procedures for the safe use of tractors and power equipment.

Impacts of grant program
- Students have had the opportunity to learn through hands-on activities in mechanics utilizing the Gator.
- FFA members have utilized the Gator to help transport materials collected in our hurricane relief drive from sporting events over to our sorting area.
- Horticulture students have used the Gator to help establish raised beds for vegetable production and to haul away plant pruning debris during campus cleanups.

Grant amount awarded (in $)
15,630.44

Amount spent to date (in $)
15,630.44

Amount spent from other sources to date (in $)
615.75

Program Name
Vance County High School

Project Title
Vance County Greenhouse

Status of Project
In Progress

Activities completed to achieve stated goals
The project is going to the Vance County Schools Board of Education for approval on 10/7/2024.

Student outcomes
- 1.00 Apply leadership and durable skills
    - Students have been able to provide leadership as one of the major skill competencies for this project by utilizing their critical thinking skills to inform ideas for the use of the greenhouse and effective solutions for the challenges that have already been faced in the planning stage, while awaiting board approval.
- 1.00 Apply leadership and durable skills
    - Students have been able to engage in dialogue with peers regarding best practices, leadership, and high-level communication skills.

Impacts of grant program
- Student Collaboration: Provided opportunities for students to improve discourse skills.
- Student Communication: Enhanced opportunities for students to communicate.

Grant amount awarded (in $)
80,941.63

Amount spent to date (in $)
0.00

Amount spent from other sources to date (in $)
0.00


CRUSHED STONE DONATED BY

Program Name
Wake County Public Schools

Project Title
Expanding Hands-On Learning Opportunities

Status of Project
In Progress

Activities completed to achieve stated goals
Activities that were completed to achieve the agricultural education program improvements include preparatory work to construct a new greenhouse at Millbrook High School, create an animal science outdoor learning facility and indoor program improvements for Apex Friendship High School, and create an outdoor animal science facility at Rolesville High School. All of these improvements will allow for student learning beyond the normal classroom. Millbrook High School had architectural drawings, utility work, surveying, and construction of a new greenhouse. Apex Friendship purchased equipment and facilities to expand and enhance the animal science and veterinary assisting program, and Rolesville added several structures as well as supporting equipment to their program.

Student outcomes
- Millbrook High School students were engaged in student learning outcomes relative to the Horticulture I (Standards 4.01-4.04, 7.01-7.02) and Horticulture II (Standards 3.01-3.02). Students also learned about Agricultural Mechanics I (Standard 4.00) and Agricultural Mechanics II (Standards 6.00 and 7.00). Horticulture students were engaged in design and site prep for the new greenhouse. Agricultural mechanics students learned about the design, site prep, and initial work that it takes to construct a greenhouse, including principles related to masonry, plumbing, and construction.
- Apex Friendship High School students were engaged in student learning outcomes relative to Animal Science I (Standards 7.00), Veterinary Assisting (Standards 5.01-5.02, 8.01-8.02), Animal Science II - Companion Animals (Standards 6.01-6.02, 7.01-7.02), and Animal Science II - Food Animal (Standard 7.00). Students were engaged in the design and conceptual framework around the expansion of the animal science program - both inside the classroom and outside in the learning spaces. Students learned all aspects of animal husbandry, facility design, and animal selection.
- Rolesville High School students were engaged in similar student learning outcomes related to animal science standards. Rolesville High School students were engaged in student learning outcomes related to Animal Science I (Standards 4.00 and 7.00) and Animal Science II - Food Animal (Standard 7.00). Students were involved in the facility design, construction, and selection of animals for the site.
- Throughout all of these programs, students were engaged in standards related to leadership, employability skills, and work-based learning/experiential learning.

Impacts of grant program
- Millbrook High School has experienced an overall impact of awareness of the agricultural education program and the experiences that a new greenhouse will create for students within the program. Having to constantly repair the small, older greenhouse has hindered plant production simulations at the school. With the work being completed to construct a new greenhouse, students see the size of the new greenhouse and opportunities for future programming within the structure. They have also experienced working with several different community sponsors, as well

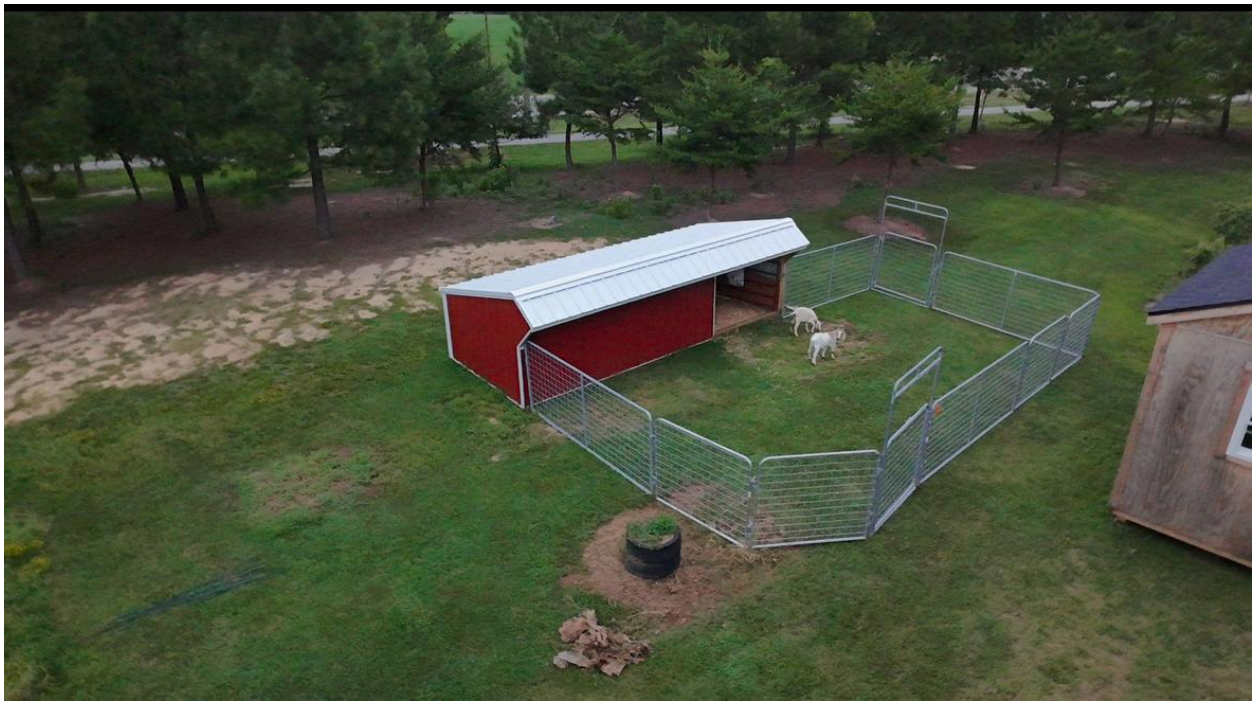
as Wake County Public School System's Staff (such as Facilities and Design staff) on the project. This is a replicated real-world application of the project.

- Apex Friendship High School has seen an overall increase in awareness and community support of the program. As evidenced in the video clip shared. The Mayor of Apex has made a point to showcase the growing animal science program and the need for the program in the local community.
- At Rolesville High School, the overall impact has been an awareness of and support for the agricultural education program. By having the opportunity to have animals on campus more frequently/regularly, as well as opportunities for students to show livestock who may have had transportation or time commitment issues previously, the impact has been measurable to students on the livestock show team, but also the students who helped construct and now maintain the facility.

Grant amount awarded (in $)
100,000.00

Amount spent to date (in $)
100,000.00

Amount spent from other sources to date (in $)
134,093.15




FRAGILE

Program Name
Waynesville Middle School

Project Title
Plant Micropropagation Lab Creation

Status of Project
Completed

Activities completed to achieve stated goals
We have purchased all of the equipment and have begun culturing carnivorous plants. Students have also completed a curriculum about tissue culturing, plant science, and laboratory and safety procedures. Students have also learned about marketing and agribusiness to sell our carnivorous plants once they mature.

Student outcomes
- Students have mastered the fundamentals (NCCTE.AU02.01.00) of the Advanced Agricultural Practices of Plant Tissue Culturing, by learning about plant anatomy, different types of growth mediums, and grow light systems.
- Students have also mastered the social & economic importance (NCCTE.AU02.02.00) of Plant Tissue Culturing, especially in developing countries that desperately need the production of disease-free, high-quality planting material, and rapid growth of uniform plants to address food insecurity.
- Students have mastered the concept that plant micropropagation offers a powerful tool for advancing environmental stewardship (NCCTE.AU0 2.04.00) when implemented with careful consideration and responsible practices. It can play a significant role in conservation, sustainable agriculture, and adaptation to environmental challenges by reducing energy consumption and conserving rare or even endangered plants.

Impacts of grant program
- Approximately 330 middle school students have been impacted this year and will continue each year, with direct access and hands-on activities regarding tissue culturing.
- Approximately 3,500 to 4,000 members of the community have gained knowledge about tissue culturing through family members, science teachers, and classes in our school, and community participation in our annual Spring Plant Sale, which will showcase our carnivorous plants and orchids. One great unforeseen example was when Haywood County's 5th graders visited Waynesville Middle School two weeks ago. We showed them our carnivorous plants, and our students told them how we have grown them. We reached approximately 300 students.
- The financial impact for our school with this project will be a positive $4,000 annually, based on the price of the mother plants, which was $1,900 for a variety of 450 carnivorous plants for $4.22 per plant. These plants, once cloned and grown out, will easily be sold for twice this price for bulk.

Grant amount awarded (in $)
21,000.22

Amount spent to date (in $)
21,000.22

Amount spent from other sources to date (in $)
82.14

Program Name
West Rowan High School

Project Title
Operation Cleanup

Status of Project
Completed

Activities completed to achieve stated goals
The skid steer has become a vital part of the agriculture program. Students have performed preventative maintenance, such as greasing bearings and changing the oil. The parts washer has been installed in the agriculture shop, but has not become operational yet. It will be utilized in the next tractor restoration project, which is set to begin next semester.

Student outcomes
- Selected students have been taught to operate and run the skid steer. This has allowed our program to perform needed tasks, while students have been able to hone their skills.
- Students have learned how to change the oil and filter in the 235G skid steer.
- Students have learned how to operate the parts washer and understand the need to have clean parts for an engine rebuild.

Impacts of grant program
- It allows our program a needed tool to more easily complete necessary agricultural tasks such as cleaning out the barn, putting out hay, and other necessary tasks.
- It has become a learning tool for students to practice on and learn how to maintain a modern piece of equipment.
- The parts cleaner will allow our program the ability to clean old engine parts instead of sending them to another vendor.

Grant amount awarded (in $)
87,026.69

Amount spent to date (in $)
87,026.69

Amount spent from other sources to date (in $)
11,441.24


DEERE


DEERE

Program Name
Whiteville High School

Project Title
Growing the Next Generation

Status of Project
Completed

Activities completed to achieve stated goals
The Growing the Next Generation project is in the final stages, and the goal of installing a modern greenhouse at Whiteville High School is nearly complete.

1. Board of Education Approval
    - On October 14, the Whiteville City Schools Board of Education was presented with the full quote from Atlas Greenhouse Company for the 24'x48' Educational Greenhouse Kit for $86,253.98. The board approved this quote, and a purchase order was generated within the week, allowing the greenhouse to be officially ordered.
2. Pre-Installation Quotes
    - Several local contractors were contacted to give a final bid for the site prep work required before the installation of the greenhouse. The accepted estimate of $45,937.50 was granted to Axel McPherson Construction, Inc.
3. Installation Site Prep
    - Groundbreaking officially occurred in late December, and the site prep was completed by January 15, 2025. This included pouring the concrete foundation/footers, bringing in gravel, and setting up water and electrical hook-ups.
4. Greenhouse Installation
    - After site prep was completed by McPherson Construction, Atlas Greenhouse sent out an installation crew that began on February 3, 2025. The greenhouse installation was completed by February 10. The full payment of $86,253.98 was sent on February 20, 2025.
5. Electrical and Plumbing
    - Once the greenhouse was fully installed, the contractor returned to complete the electrical wiring and plumbing of the greenhouse. This step was finalized by March 7, 2025.
6. Natural Gas Hookup
    - The school system opted to tie into the natural gas line that runs directly behind the school property, adjacent to Highway 701. The gas company is currently awaiting DOT approval and permits to start the process.
7. Building Inspector & Certificate of Occupancy
    - At this time, the local building inspector has completed his initial inspection of the greenhouse. He has requested that several of the water and fertigation systems be clearly labeled with non-potable water signs as well as labels to designate the fertigation lines. We are unable to utilize the completed greenhouse until a certificate of occupancy has been granted.

Student outcomes
Students enrolled in the Horticulture courses offered during the spring semester:

- AP41 3.0: Understand plant biology and growth factors
    - 3.02: Explain factors that influence plant growth and development.

        - Although we have not been able to utilize the new greenhouse this growing season, students became familiar with plants that are best grown and started in a greenhouse. Students have been able to identify common bedding plants listed on the NC FFA Base Plant List and learned the processes of growing many of these plants in the greenhouse.
- AP41 4.0: Apply knowledge of environmental conditions for plant growth
- 4.01: Apply the process to identify environmental conditions needed for plant growth.
    - Students have had the opportunity to learn the functionality of the modern equipment within the greenhouse.
    - Students have learned the importance of proper watering methods when growing plants. The major components of the new irrigation system have been reviewed, and students were trained on how to set up the drip irrigation system.
    - Students have also reviewed the impact of proper temperatures when germinating seeds. Students learned the various methods for temperature control, such as the cooling cell and fans, and researched the purpose of the shade cloth. Students were also trained on how to use the temperature control panel.

Impacts of grant program
The Growing the Next Generation project is in the final stages of completion, and we are excited to start using the new facilities that have been erected using grant funds.

- Current impacts include:
    - Students enrolled in agriculture courses have the opportunity to learn hands-on interdisciplinary skills that will help them in additional classes such as biology, business, and environmental science
    - Although course registration is not yet completed, enrollment numbers are showing a 25% increase in interest in the horticulture courses offered at Whiteville High School
    - Utilizing a local contractor for the initial construction has helped maintain employment opportunities for two companies located in Columbus County - Axel McPherson Construction and Ashley Electric
    - Over 20 individuals have been directly employed and contributed to the construction of the new greenhouse facility, keeping nearly $50,000 within our local economy
- Within the next few months, we hope to transition all of the horticulture production processes into the new greenhouse at Whiteville High School. This transition will begin a new era in agriculture education at the school, with students learning up-to-date methods of plant production within a technological greenhouse facility. There is no doubt that this modernized greenhouse will help strengthen the relationship between the school and the community, with potential partnerships for local businesses and organizations related to agriculture.

Grant amount awarded (in $)
100,000.00

Amount spent to date (in $)
100,000.00

Amount spent from other sources to date (in $)
32,191.48


PARKING
FIRE LANE