



**THE COLLABORATIVE FOR
THE COMMON GOOD**
WINGATE UNIVERSITY

AGRICULTURAL IMMERSION EXPERIENCE

Planning and Impact Report



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Introduction

In fall 2020, the NC Hunger Corps VISTA member with the Collaborative for the Common Good requested funding from Carolina Farm Credit for an Agricultural Immersion Experience (AIE) educational program for local middle school students. After being granted funding, the HungerCorps VISTA member began collaborating with community and Wingate University partners to plan the AIE. This series of day-camps would focus on educating students through educational programming involving the food system, microbiology, and natural resources. After many setbacks and delays due to the COVID-19 pandemic, the 2021-2022 Hunger Corps VISTA member planned and executed a series of 3 day-camps and brought 40 middle school students from Eastern Union County to Wingate University. These students engaged in programming focused on plants and agriculture, ranching and wildlife, and microbiology, and COVID-19.



Planning

Program Goals

The 2020-2021 Hunger Corps VISTA member met with potential partners in February 2021. Attendees included Crystal Starkes, Marcus McFarland, Breanna Walker, Erika Niland, Hannah Fraser, Cathay Wright, and Andrew Baucom. The AIE was originally planned to encompass 9 weeks during Summer 2021. The following goals were established for the series of day-camps:

1. Immersing rising 8th graders into the agricultural community (15-20 kids per day)
2. Connecting the activities to career options in the ag field
3. Connecting activities to the 8th-grade curriculum
4. Increasing students knowledge of health, nutrition, food waste, green energy, water systems, ecosystems, and farming
5. Providing mentorship from high school or college students so that the campers can prepare for high school and learn about what college has to offer
6. Engaging the campers through the presentation of capstone projects of what they've learned

COVID-19 Impact

Due to setbacks, the uncertainty of the COVID-19 pandemic, and planning delays, the AIE was pushed to Fall 2021. Those planning were concerned about maintaining a safe environment for all students and facilitators involved in the summer camp. Furthermore, due to the rise of new variants of the virus, the planners were unsure how the pandemic would impact the range of activities and the number of students that would come to the camp.

Therefore, while the AIE was originally a 9-week program, the initiative became 3 non-consecutive day camps in Fall 2021. Because of the length of a VISTA member's term, the program and all planning fell to the new VISTA member, who assumed the role in August 2021.

Partners

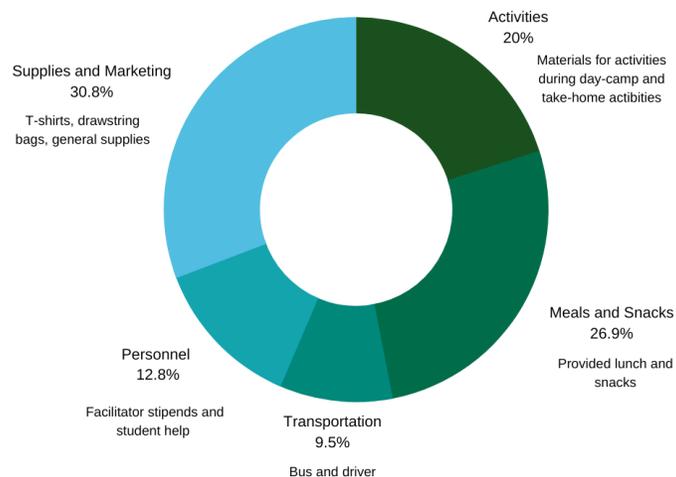
Using transition resources from the previous VISTA member, the following organizations were identified as potential partners. These partners helped with the facilitation of activities and lessons, provided lunch, or assisted with another aspect of the AIE.

1. NC State Cooperative Extension
2. Natural Resource Conservation Services
3. DabHar farms
4. Chartwells
5. ALIEN
6. Biology Club
7. Wingate Biology Department
8. School of Pharmacy
9. Wingate Athletics
10. East Union Middle School
11. Heart for Monroe
12. Food Council of Union County



Budget

To host the AIE, the Collaborative for the Common Good was awarded \$5,000. The graph below illustrates the areas in which the funding was spent. Please review this document for a [Detailed Review of Expenditures](#).



Overview of Activities

Each day camp would be from 10 AM to 3 PM, with lunch and snacks provided. T-shirts and drawstring bags were provided and students signed up for each day independently of the others. Originally, the CCG partnered with East Union Middle School to market the event and provide transportation. However, on two days, there were only a few students signed up, so the VISTA and Heart for Monroe published the sign-up link on social media, as well. We decided to utilize the Wingate Community Garden as a central drop-off and pick-up point. On arrival, each student received a bag with snacks and take-home materials. The students were welcome to eat the snacks throughout the day, and the take-home materials were designed so that students could continue learning about agriculture at home. Because many families in eastern Union County experience food insecurity, the CCG provided every student with a meal at the Wingate University Cafeteria. We also prioritized providing the students with take-home snacks including popcorn, fresh fruit, and protein bars.

Smarty Plants (September 25th)

Our inaugural day kicked off at 10 AM. The CCG hosted 12 students from Union County Day School and East Union Middle School in the community garden to learn about soil science, our garden, and the benefits of spending time outdoors. The Wingate Baseball team joined the students for lunch.

The Community Garden

To begin, the VISTA member presented the community garden to the students. Many students were unfamiliar with



community gardens, so the VISTA explained the purpose of the garden and each plant that was growing. Then, the VISTA member invited all students to take part in building a new pollinator area. The VISTA demonstrated how to plant each flower, and students were able to choose what they wanted to plant. They were encouraged to discuss how they



wanted to design their bed, and after planting, the VISTA discussed how to properly water and care for the plants. Then, the students harvested carrots alongside the VISTA, and they were encouraged to try the carrots. They discussed the color, texture, and flavor differences between fresh carrots and store-bought carrots.

Soil Science

The students watched a demonstration led by a soil scientist from the Natural Resource Conservation Service. The facilitator performed two demonstrations: a rain simulation and an erosion comparison. Students were able to watch the impact the simulated rain had on the erosion of land, based on cover types (forest, pasture, no-till, high production farm).



Students were able to discuss what they were seeing in the simulation, and the soil scientist discussed the importance of conservation and the impacts of agricultural practices on the environment.

ALIEN

Dr. Nick DeLangie taught the students about the biological benefits of spending time outside. The students walked the nature trail around the Wingate University lake. After walking the trail, the students were organized into teams and built huts using natural materials. He taught the students the basics of how to build a hut using just sticks and leaves. This allowed the students to not only learn about natural materials but also build teamwork and leadership skills.



Outcomes

We provided each student with a hot meal and many snacks that they could take home at the end of the day. We also provided students with additional resources that they could use to continue learning about topics related to agriculture. See the brochure [here](#).

Herd Nerds (October 26th)

At the request of East Union Middle School and DabHar Farms, the CCG was able to offer the “Herd Nerds” day-camp during the week to reach more students. 18 students attended the “Herd Nerds” day camp.

Bat Science

Harley Linton, a member of the Wingate Biology Club, presented to the students on bats. The students learned the importance of bats in pollinating and protecting many of the plants we rely on. After the presentation, the students were able to taste-test many of the different foods that bats pollinate.

Farm Tour

The students toured DabHar farm, a sustainable farm in Union County. The owners led the tour and discussed all areas of farm life: ranching and animal husbandry, growing organic produce, and living on a farm. The goal was to empower students in having their own garden and to demonstrate to them that anyone can grow their food for themselves. The students asked many questions and were even able to hold ducks, chickens, and pet cows.



Time	Activity
10 am	Meet us at Wingate Lake to learn about fishing and the negative effects of overfishing
11 am	Hands-on experiments to learn about water in Union County and chemical water treatment
12 pm	Have lunch with Wingate Sports Teams at our campus cafeteria
1 pm	Tour DabHar Farm and learn about life on a farm
2 pm	Hands-on activities to learn about ranching and animal care
3 pm	Pick-Up at Wingate Community Garden to return home

Outcomes

We provided each student with a hot meal and many snacks that they could take home at the end of the day. At the end of the day, students returned to school with new knowledge of sustainable farming and ranching and first-hand connections and understandings of the food system in Union County. We also provided students with additional resources that they could use to continue learning about topics related to agriculture. See the brochure [here](#).

Germ-Terminators (November 6th)

The CCG hosted the final AIE day camp on a Saturday due to the availability of laboratories. 12 students attended the “Germ-Terminators” day camp. Students came from many different schools. The Wingate Golf team joined the students at lunch.

Cheek Cells

Renee Hastings, a professor in the Biology Department, hosted the students in one of the labs. Students learned the basics of using a compound microscope and lab etiquette. Students used these new skills to analyze cheek cells. Led by Prof. Hastings, students swabbed the inside of their cheeks and viewed their cheek cells using dye and the microscope. Students learned about cell biology through viewing these cells through the microscope.

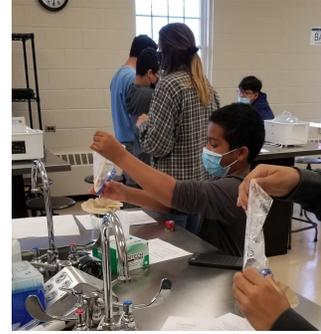


The brochure is green with white text. At the top left is a circular logo for 'Agricultural Immersion Experience 2021' featuring a landscape with a sun, trees, and a field. To the right of the logo, the text reads 'Germ Terminators' in a large, bold font, followed by 'November 6th, 2021' and 'Open to all middle schoolers.' Below this, it says 'Join us at Wingate University from 10 AM to 3 PM for our free day camp!' and lists three bullet points: 'Explore our campus labs', 'Free lunch with our sports teams', and 'Learn about DNA and germs'. At the bottom, it provides an email address: 'Email Neely at n.griggs@wingate.edu with questions.' There is a 'Sign-up here!' text with a black arrow pointing to a QR code. Logos for AmeriCorps, Wingate University, and Farm Credit Services are at the bottom left.



Banana DNA Extraction

Students used various laboratory equipment to extract DNA from bananas. They were able to keep their extractions. Led by Prof. Hastings, the students learned about DNA structure and replication through this interactive activity.



COVID-19 Education

Graduate students presented information on COVID-19, the vaccine, and the misconceptions about the virus. The middle school students were engaged with several Kahoot games, which was great for keeping the students involved with the information.

Outcomes

We provided each student with a hot meal and many snacks that they could take home at the end of the day. Students left with new knowledge about laboratory equipment, cells, and DNA. We also provided students with additional resources that they could use to continue learning about topics related to agriculture. See the brochure [here](#).

Next Steps

Overall, the CCG was able to host over 40 students in the garden and other activities thanks to the funding provided by Carolina Farm Credit. The AIE is the inaugural event for the new Wingate Community Garden, and we hope to continue making it a space for educational programming and connecting students to the local food system and community.

We have developed a foundation to continue providing local students with educational programming in the Wingate Community Garden. Because of COVID-19 and barriers this past semester, we were not able to carry out all of our original plans. Therefore, we have exceptional opportunities to work with the City of Monroe, NC State Extension Cooperative, and Wingate Athletics and Biology Departments to continue offering programming in the Spring 2022 semester.

Heart for Monroe's Men and Women in the Making and several pastors in the Monroe area have also expressed interest in partnering with the CCG to involve their students in the AIE programming.