

Modernizing Agriculture Technician Education in Appalachian Northeast Georgia (MATE-ANG) **ANNUAL REPORT**

November 2021

MATE-ANG

addresses the local agriculture industry's critical need for technicians with hands-on technical and soft skills.

PROJECT PURPOSE

This project responds to the growing demand for agriculture (ag) technicians as the Northeast Georgia ag industry expands. The region witnessed several farm and ag equipment manufacturers break ground for new facilities in 2019. This project intends to discover how the community, through its colleges, can engage the ag industry and Appalachian families and students in developing ag technicians and breaking the poverty cycle.

OUR GOALS

1

Develop **HANDS-ON, DIVERSIFIED CURRICULA** specific to the needs of Northeast Georgia's ag industry

OBJECTIVE 1.1

Create curricula for Agribusiness and Modern Diversified Agriculture

YEAR 1 ACHIEVEMENTS

Completed the syllabus, course calendar, curriculum and lab manual for an Agribusiness Marketing course

2

Recruit and retain **APPALACHIAN STUDENTS** for the agriculture programs at NGTC

OBJECTIVE 2.1

Form 5 collaborations with ag employers to provide opportunities for pre-professional experiences for students by 2023

YEAR 1 ACHIEVEMENTS

- Formed 6 collaborations with ag employers
- Developed the Internship Handbook
- Recruited 12 new students

OBJECTIVE 2.2

Recruit 30 new students by collaborating with 6 family organizations by 2023

PROMISING PRACTICES, TOOLS, STRATEGIES OR SOLUTIONS

YEAR 1: Developed real-world, experiential learning labs for students at the new Ag Research Station on campus

- **Industry-led student research:** The regional resource conservation development council provided specialty equipment, materials and supplies for student research (forage production, soil health reclamation) and technical assistance (build soil fertility with cover crops).
- **Experiential learning and paying it forward to the community:** A seed company donated seeds for a 1-acre milpa garden. Students planned, planted and harvested more than 2,500 pounds of vegetables and donated 90% to a local food bank.

IMPACTS OR POTENTIAL IMPACTS

- **Other disciplines:** Collaborating with the Biology Department to help students contextualize genetics concepts
- **Human resources development:** Facilitating discussions with local poultry companies about building a state-of-the-art poultry production facility on campus for field supervisors to train growers and for students to develop operational skills in programmable logic controllers
- **Teaching and educational experiences:** Building an ag facility capable of teaching beyond concept level; in designing, implementing and presenting their research projects to local community and ag organizations, students developed communication skills for technology concept transfer
- **Leveraging resources:** Asked the local ag industry and other entities to collaborate with students to obtain real-world data about their products and services; these conversations also led to funding sources for the Teaching Pavilion at the new Ag Research Station and for updated technology (DRONES)

EXTERNAL EVALUATION REPORT

November 2021

EVALUATION QUESTIONS

- 1** To what extent does **MATE-ANG** meet the needs of the ag industry in Northeast Georgia?
 - Formed an advisory committee composed of employers from predominant local ag industries (poultry, beef cattle, vineyards, sustainable ag farms, ag equipment, feed and seed)
- 2** To what extent are **INDUSTRY PARTNERS** engaged in and benefiting from **MATE-ANG'S** development and implementation?
 - Collaborated with the advisory committee and other local ag employers to develop stronger, more comprehensive ag degree and diploma programs (curriculum development, guest speakers, internships, hands-on experiences)
- 3** What is **MATE-ANG'S** impact on the ag programs' recruitment, enrollment and retention?
 - Target: 8 new ag students
 - Actuals: 12 new ag students despite the challenges of marketing to a largely sheltered-in-place student audience
- 4** To what extent are **NGTC'S FACULTY AND STAFF** involved in **MATE-ANG'S** development, implementation and management to ensure its success?
 - Participated in professional learning opportunities leading to strong instructional support for students: unmanned aerial systems, aquaponics, hydroponics and wildland fire

EVALUATOR'S CONCLUSION

"The NGTC faculty, staff and support team developed partnerships and relationships to develop and guide the program in one direction and work on the other side to inform and support families and students as they made decisions to continue to a post-secondary educational environment. This occurred while experiencing a consistently changing educational environment that was, and continues to be, unprecedented and unpredictable...A poverty simulation experience for NGTC faculty and staff as well as advisory committee members and business partners would support professional learning in the challenges of living with generational poverty in Appalachia...[and provides] an opportunity to participate in a role-playing experience as a member of a family living in poverty."

HOST INSTITUTION AND INVESTIGATORS

- North Georgia Technical College, 1500 Highway 197 N, Clarkesville, GA 30523
- Award Amount: \$299,795.00
- Project Dates: October 1, 2020 - September 30, 2023 (estimated)
- Project Category: Agricultural and Environmental
- Project Website: <https://northgatech.edu/nsfagriproject>
- Principal Investigator: Wayne Randall (wayne.randall@northgatech.edu or 706-754-7791)
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