



Tackling the Digital Divide in Agricultural Technology Education through Spring Garden Workshop

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Introduction

4-H Tech Changemakers program is a nationwide program that empowers teens as teachers of digital literacy and Internet safety and security. The goal is to increase the adoption and use of technology by adults in rural communities. (National 4-H Council, 2023).

The Ben Hill 4-H's Ag Tech Changemaker team consisted of 4 youth led by Ben Hill County ANR Agent Holly Anderson and Ben Hill County 4-H agent Laura Lee Hughes. Ben Hill County 4-H's Ag Tech Changemaker team members hosted a Spring Garden Workshop to educate community members on how they can incorporate technology into their garden planning. Participants indicated that they incorporated new skills learned from the workshop into their planning which resulted in high yields this season.

Response

Ben Hill County 4-H works towards supporting this goal through our Ag Tech Changemakers team. Students attended a training course in Tifton to learn more about available technology and how to teach producers in our local community about it.

Ben Hill Ag Tech team hosted a spring gardening workshop that was a big hit with residents from Ben Hill and surrounding counties. This workshop was more face-to-face and hands on for participants as compared to larger production meetings the team had presented at earlier in the season.

During the Spring Garden Workshop participants were able to learn about many topics instead of just one or two. Participants were fed a meal and then walked through different apps and techniques they could use every day in their backyard gardens.

The Weed and plant I.D. apps the 4-Hers taught were a big hit just as with previous production and civic club meetings. With more time and a smaller participant group the team was able to cover more topics than just plant id. Other topics covered during the workshop were QR codes, irrigation scheduling, vegetable disease I.D., and how to access planting date calendars.



Figure 7. shows successful harvest from a workshop participant
Figure 8. shows results from state wide surveys



Figure 1. & Figure 2. show Ben Hill County's Ag Tech Changemakers team attending technology training in Tifton, Ga.

Situation

Over 23.4 million people in the U.S. lack broadband internet access. (National 4-H Council, 2023). According to the Georgia Tech Research Institute Approximately 1.6 million adults in Georgia lack access to a high-speed internet connection. Adults and seniors being confident and feeling secure while using new technology is an issue as well.

With around two billion more mouths to feed worldwide by the year 2050, agriculture needs to become both more productive and sustainable simultaneously. "That requires increased investment and adoption of productivity-boosting technology and participation from young people and smallholder farmers" (Lim, 2022, para. 4). Many homeowners in our area have expressed their love for community gardens, personal gardens, and flower beds.

Ben Hill Extension believes that by providing workshops and presentations on agricultural technology programs to our community, we can provide assistance to meet this need.

National 4-H Council. (2023). 4-H Tech Changemakers. <https://4-h.org/programs/tech-changemakers>

Lim, X. (2022, April 8). How technology can help address challenges in agriculture. Eco. <https://www.eco-business.com/opinion/how-technology-can-help-address-challenges-in-agriculture/>



Figure 3. (top left) & Figure 6. (bottom right) show team members instructing participants at the Spring Garden Workshop

how to operate plant i.d. apps by using plant specimens obtained from the area.

Figures 4. (top right) & Figure 5. (bottom left) are slide examples used during the presentation

Results

After the Spring Garden workshop, 100% of attendees (18) indicated that they gained knowledge on a new topic, and 94% of attendees responded by saying they plan to incorporate a skill learned from the workshop into their spring garden.

Overall statewide statistics for Ag Tech Changemakers state that before the events, 77.4% of participants felt they had okay, low, or very low knowledge of the topic, and after the event, 73.1% of participants felt they had high or very high knowledge about the topic. 93.3% of participants agreed they learned new technology skills, 94.6% learned technology skills that can help with their work or life, 94.4% felt that the teens teaching were knowledgeable about the content areas, and 94.4% recommend that others take these sessions.

Testimonies From Participants:

"I just wanted reach out and let you know what a great job the 4-Hrs did on the Spring Garden Workshop! I learned so much about new technology that not only makes gardening easier but can also be huge source of new information. The things I learned at the workshop have greatly improved my garden this year. Keep up the good work!"

"The recent gardening class taught by Ag Tech Changemakers was outstanding. Not only was the presentation filled with beneficial visuals and handouts, but the way these students interacted to help participants understand and use the material made for a very productive class for those in attendance. I think the dedication and knowledge of these young people speak volumes for the future of Agriculture in our state. Congratulations to them on a job well done."



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