



Research Impacts 2021

Growing Together: Agricultural and Environmental Education

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The Importance of Collaboration

Our world is facing critical environmental issues such as climate change, deforestation, and limited access to clean water. Environmental education increases public knowledge of these complex environmental issues and encourages individuals to play a role in solving them. Unfortunately, agriculture often receives limited attention in environmental education programming even though it intersects with nearly every environmental challenge we face. Farmers must adapt to shifting temperatures and weather patterns, available farmland is shrinking as urban areas expand, and resources must be carefully managed as we work to create equitable access to nutritious and culturally-appropriate food.

One way that educators can promote sustainable agriculture is by encouraging collaboration between environmental and agricultural education. Though researchers and practitioners in these fields often operate separately, they have a lot to learn from one another. For example, agricultural educators have expertise in making informed decisions concerning natural resource management in the context of running a business and meeting the needs of a growing population.

This expertise could be valuable for environmental educators, who sometimes struggle to address the realities of tradeoffs between long-term sustainability and more immediate outcomes like profit and crop yield. Conversely, environmental educators excel in communicating environmental topics to broad audiences and in fostering a deeper connection to nature among students. These skills could help agricultural educators in their efforts to move away from a vocational training mindset and towards broader public engagement.

**Increased collaboration
between environmental
and agricultural
education will aid in
achieving shared goals
and overcoming shared
obstacles.**



Promoting Diversity, Equity, & Inclusion Together

Both agricultural and environmental education face difficulties in recruiting and retaining diverse educators and program participants. Despite ongoing efforts, neither field has historically been successful at including people of color, LGBTQ+ communities, people with disabilities, and other marginalized communities in their work. Often, limited diversity is attributed to insufficient knowledge or interest among marginalized communities, supposedly preventing engagement with environmental and agricultural issues. Ascribing limited participation to the deficiencies of students and their families is known as a deficit thinking model. Deficit thinking is harmful because by placing the blame on those who have been excluded, it ignores or minimizes the structural barriers that limit participation for some communities.

In a study conducted among North Carolina families about agricultural literacy (knowledge, attitudes, and behaviors related to systems of food and fiber production), we found evidence to contradict deficit thinking models. Our results show that factors like race, gender, and household income did not predict youth agricultural literacy. Instead, youth of color, from low-income families, or from urban areas were just as interested and knowledgeable about agriculture as populations typically associated with agriculture - white youth, those with affluent parents, and those in rural areas. These results stress that educators should not assume that people who are generally less visible in educational programming are not interested in agriculture and the environment. Instead, educators should ensure that curricula and programming reach underrepresented communities through relevant and engaging communication strategies. This is an excellent opportunity for environmental and agricultural educators to join forces to broaden their audiences and expand their message.

The Role of Relationships in Agricultural Literacy

Another key finding concerns the importance of interpersonal relationships in predicting youth agricultural literacy. First, youth who personally know farmers are more likely to care about and support agriculture. Secondly, youth who regularly share what they learn with their parents are more likely to be interested in agriculture and support it through their behavior, no matter how parents think and feel about agriculture. Thus, to increase engagement, educators should give children opportunities to interact directly with farmers (e.g. farm field trips) and encourage them to share what they learn with their parents through interactive assignments and extracurricular participation.



Key Points

1. Agricultural and environmental educators can learn from one another and should look for opportunities to work together.
2. Educators should design practices aimed at reaching new communities, rather than assuming a lack of interest in agriculture and the environment.
3. Encouraging communication between parents and children boosts youth agricultural literacy, regardless of parent agricultural literacy levels.
4. Providing opportunities for youth to meet farmers helps build their agricultural literacy.