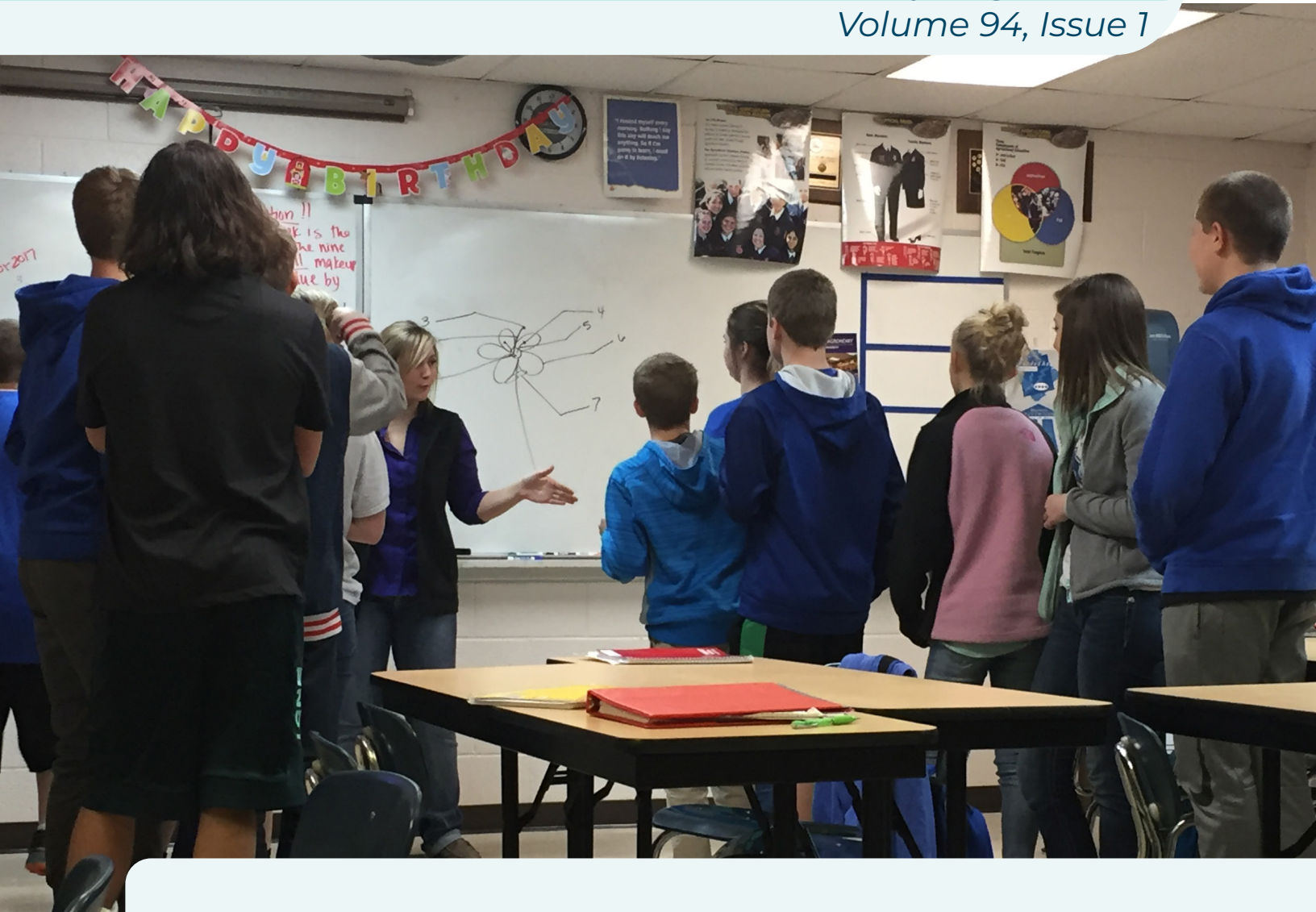


The Agricultural **EDUCATION** MAGAZINE

July/August 2021
Volume 94, Issue 1



**Inclusive Pedagogy to
Assist 21st Century
Agricultural Education**

All Are Welcome Here!

by Gaea Hock

We are kicking off Volume 94 of this magazine with a very timely and important topic: Creating a more inclusive classroom so all students can benefit from agricultural education.

My daughter was in Pre-K this past year and one of the many joys (for me) was looking through the monthly Scholastic Book Club flyers. One of the many books I purchased was *All Are Welcome* by Alexandra Penfold and Suzanne Kaufman. It is about a school in which all people are welcomed, valued, and appreciated.

As a teacher educator I work to prepare future agricultural educators to be effective teachers. One of the many lessons I share with them involves building positive relationships and rapport with their students. My advice includes getting to know student names quickly, asking students to complete information sheets, attending school events, meeting parents/guardians, and creating a safe learning space for students to learn and grow. These practices are not new or revolutionary. We have been doing them for years and the best teachers recognize the importance of positive student-teacher-parent relationships.

As I prepared to write my editor comments for this issue, I wanted to get a clearer idea of what it means to create an inclusive classroom. I located a few articles that contained advice such as:

- Learn your students' names (and how to correctly pronounce them)
- Budget time for relationship maintenance
- Engage in one-on-one meetings/conversations
- Interact with the parents

– Let your students get to know you

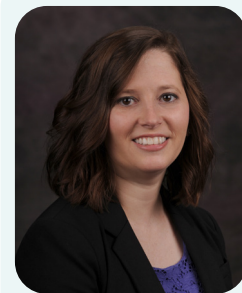
All the items above are practices good teachers are already doing. Now is the time to “level up” to be more empathetic, change how we talk about certain subjects, and critically analyze current traditions.

As we reflect on the past year, we are granted the unique opportunity to examine our activities and determine which should remain and which should be adjusted/removed. Consider your community service and service-learning opportunities. What areas are missing? Could you reach out to new groups you haven't previously worked with to establish a more impactful event to help create a more inclusive program? What fundraising programs are outdated and culturally insensitive? Are there better ways to secure the funds necessary to conduct your program of activities? What topics are you teaching in your classroom that could be viewed from multiple perspectives? Are there FFA competition events that would more fully meet your students needs, interests, and career aspirations?

One of the best practices of high-quality teachers is constant reflection and growth. Use this issue as an opportunity to critically reflect on how you are working to create an inclusive classroom, program, school, and community. Young people need mentors in their lives who will help them navigate the challenges of “growing up.” How can you be a caring and supportive adult for ALL students?



The articles contained in this issue will help you evaluate what you are already doing well and the areas you can improve in to create a welcoming space for all students. Change is not easy, but this last year has illustrated the many ways we can rise to the challenge and keep moving forward. Creating a program where all students feel welcomed and valued will yield results beyond your expectations. It may not be easy, but it will be worth it.



Dr. Gaea Hock is an Associate Professor of Agricultural Education at Kansas State University and Editor of The Agricultural Education Magazine.



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Agricultural Education for ALL

by Tiffany Drape

“It’s time to move beyond basics and create your own plan, be accountable, and state what you will do to create inclusive learning environments for all students.”

Public education is one of the longest running experiments in the United States, and agricultural education is no exception. This country was built on land that did not belong to us by people who did not ask to be here while displacing and exterminating Indigenous Peoples with little regard. Integrating these historical precedents into our curriculum and programming may be uncomfortable, but it’s all such an important part of our nation’s history. To continue to ignore these truths is to choose to remain complicit in the injustices we see. We cannot change what happened, but we can affect what happens next. From what we teach to who we work with in our communities, inclusive pedagogy is possible. Operating to center the margins in our programs is one way agricultural education can create inclusive learning environments to move our field into the next century.

“Adapt or die, Tiffany.” A good friend said this to me years ago. How appropriate it remains today. We pride ourselves on programming that is adaptable and flexible to meet the needs of our students and the communities in which we live and work. Now, we have the opportunity to adapt to build more inclusive programs, teach a more inclusive curriculum, implement inclusive teaching practices, and attract even

more students to our programs and perhaps agriculture careers.

Implementing inclusive pedagogy is like eating an elephant. You can only eat one bite at a time. You can’t do it all at once. Adapting your program will take time too. You will make mistakes. There will be pushback. Inclusion isn’t just race or religion. It encompasses neurotypical, ableism, technology, access, closed captioning, IEP modifications, language, and so much more. While it may feel like an insurmountable feat, it’s important to remember to take one bite at a time.

This issue brings perspective from community-based, middle school, high school, and post-secondary educators who all have a common goal: to create more inclusive learning environments in agricultural education. Each is working toward this common goal. Each focuses on a different population. Each shares their successes, and failures, and hopes to help you along your own journey to inclusive pedagogy. Reach out to these authors if you’d like. They’re committed to inclusive pedagogy.

Our country is in a season of reckoning. We are reckoning with hundreds of years of inequitable systems, effects of a pandemic, and reckoning with issues around access to education. The work is hard. It forces us to look in the mirror and acknowledge our own

shortcomings, our privilege, and that our way isn’t the only way or the best way.

It’s not enough to educate yourself. It’s time to move beyond basics and create your own plan, be accountable, and state what you will do to create inclusive learning environments for all students. Agricultural education should be for ALL, and there’s work to be done. This set of articles encompasses expertise from classrooms, from the field, and from community outreach. It has been a privilege to work with talented, caring educators.



Tiffany is a research assistant professor in the department of agricultural leadership and community education at Virginia Tech. She investigates issues around equity and inclusion in agriculture and the life sciences.

Developing More Inclusive and More Effective Agriscience Instruction Through Insights from Education Research

by Craig Kohn

Academic standards at the state and national level are generally an important determinant of what is taught in classrooms. However, as one of the technical writers of the national AFNR academic standards (NCAE, 2015), I can attest that these standards were not designed to fully address all aspects of instruction. During my time as an agriscience instructor, it was particularly evident that the AFNR standards did not provide guidance for developing instruction that is meaningful and relevant for all students regardless of personal background. Nevertheless, education research is increasingly recognizing the importance of attending to diversity, equity, and inclusion for enabling informed reasoning and decision-making (NRC, 2012). In this article, I will use insights taken directly from peer-reviewed educational research publications to provide strategies for creating more inclusive pedagogy while simultaneously enabling more robust learning outcomes in AFNR contexts.

Strategy 1 – Acknowledge All Students Can Learn:

The first step for creating inclusive pedagogy is for educators to consider their own assumptions about students' abilities. Comprehensive investigations of classroom learning (e.g., NRC, 2000) demonstrate that in the overwhelming majority of cases, all students are capable of learning complex subject matter. In most cases, student difficulties with subject matter are primarily due to avoidable factors. Exam-

ples include: an excess emphasis on memorizing vocabulary, lack of relevance to students' lives, improper pacing, insufficient scaffolding, and overly rigid assessments. Educators can enhance student performances by avoiding narrow assumptions about students based on their background and maintaining rigorous expectations for all students (Nisbett, 2009).

Strategy 2 – Balance Access to Authentic Opportunities:

Students often have disparate access to learning opportunities outside the classroom, including varying access to industry professionals and to authentic learning environments. These disparities can exacerbate disparities in academic achievement (NRC, 2012). For example, if students with personal experiences in agriculture are generally more likely to achieve higher grades in a given agriscience course simply because of their background, this is likely inconsistent with instruction that is fully inclusive.

As a former agriscience instructor, I personally found that SAE's were an excellent opportunity to lessen some of these kinds of disparities. A network of local industry professionals who can provide meaningful placement opportunities in relevant authentic environments can lessen achievement gaps in agriscience contexts. Instructors need to be mindful however that students may have interests that require collaborations beyond the local community and outside production agriculture. Similarly, out-of-

class learning opportunities may not be feasible for some students; pairing opportunities such as school-based enterprise and department internships with virtual SAEs can also support more equitable learning outcomes.

Strategy 3 – Ensure Relevance to Students' Lives:

Instruction that is unresponsive to students' individual backgrounds adversely affects their engagement with course content (Rogoff, 2003). This concern is particularly relevant to agricultural education - while the consumption of food is universally relevant, the production of food certainly is not. Instruction that directly relates to the individual lived experiences of students will also yield more productive reasoning and sense-making, resulting in more advanced cognitive skill development (NRC, 2012). This requires a balance between subject matter content and student interests.

As an example, I collaborated with instructors to develop a "Career and Community Connections" lesson for use at the end of weekly units to improve instructional relevance. Students first form interest groups to identify connections between the subject matter and their future careers. They then discuss how the course content aligns or conflicts with their SAE experiences and prior life experiences. This provides an opportunity to show the relevance of subject matter to students' lives while providing opportunities for evidence-based argumentation to respectfully reconcile any ideo-

logical conflicts. This approach can also provide insights that enable the instructor to tailor future instruction around the interests and goals of students. For example, students in a natural resources course who also express an interest in veterinary careers might benefit from opportunities for deeper investigations into adverse health effects from specific pollutants or the spread of infectious diseases as a result of invasive species.

Strategy 4 – Employ Strategies for Scientific Language:

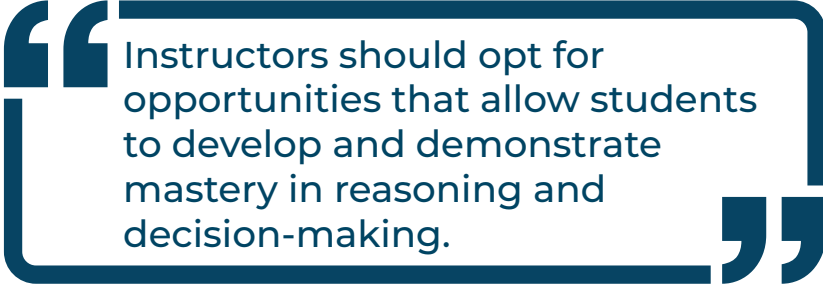
Scientific vocabulary can be a significant barrier for some students and can exacerbate achievement gaps. Furthermore, memorization of vocabulary is largely ineffective for improving reasoning, critical thinking, and decision-making (Groves, 1995; Harmon et al., 2005). Allowing students to use informal language and/or native language to express their ideas and reasoning before gradually incorporating disciplinary-specific terms can reduce unnecessary barriers while strengthening student learning outcomes (Brown, 2006). An instructor should gradually incorporate vocabulary only after students demonstrate initial comprehension of the core ideas these terms represent.

Ultimately, scientific language should be used in a manner that facilitates meaningful student engagement with phenomena. Any unnecessary vocabulary that creates barriers to comprehension should be avoided. For example, if a student can easily name all the parts of a chloroplast but cannot explain how plants produce their own food, it would be productive to reduce the number of terms and shift the emphasis more towards reasoning and sense-making.

Strategy 5 – Develop Student Identities as Learners:

Educators should be attentive to the important role of identity in enabling inclusive pedagogy. This includes both the identities students bring into the classroom as well as the sense of identity created and supported by instruction. Learning depends not only on proficiency in the subject matter, but also on students' capacities to perceive themselves as competent learners (NRC, 2012).

This consideration is particularly applicable to labs and investigations in agriscience courses. So-called “cookbook” labs (where students achieve a predictable uniform outcome by precisely following rote instructions) reinforces disparities and lessens inclusiveness (Kang & Zinger, 2019). On the other



Instructors should opt for opportunities that allow students to develop and demonstrate mastery in reasoning and decision-making.

hand, scaffolded approaches to investigations that allow students to choose relevant topics and co-design their methods are more responsive to diverse student backgrounds and supports more robust learning outcomes (Windschitl, 2017). Similarly, reducing course content in order to provide students with opportunities to design authentic long-term group projects (i.e., “learn by doing”) can enhance students' self-perceptions as competent learners.

To be clear, not all hands-on activities are pedagogically productive. Instructors should opt for opportunities that allow students to develop and demonstrate mastery in reasoning and decision-making. Examples might include: designing and implement-

ing a small landscaping project on school grounds and defending their work using principles of design; developing evidence-based proposals to improve the biodiversity and carrying capacity of a local ecosystem; or allowing students to use school gardens to demonstrate their understanding of production strategies that balance productivity, profitability, and sustainability.

Opportunities through FFA and through SAEs can also be powerful opportunities for students to develop their identities as competent learners in a subject area. As an instructor, I encouraged my students and FFA members to form intra-curricular “teams” based on their interests and aspirations (such as a tractor restoration team, a greenhouse management team, a department animal care team, etc.). I then guided students in developing partnerships with local professionals, businesses, and agencies to enhance their opportunities to gain relevant knowledge and skills. The

students' resulting motivation usually far exceeded what I could achieve through classroom instruction, and the expertise they developed through their collaborations provided much more meaningful career preparation.

Strategy 6 – Utilize Inclusive Assessment:

Traditional tests like multiple choice exams and essays often fail to accurately gauge what students have learned. These tests can also disproportionately impair the performance of students whose first language is not English and intensify the “stereotype threat,” or the internalization of identity-based assumptions about levels of innate ability (Steele, 2010). Scientists and industry professionals rarely demonstrate their knowledge and ability through high-stakes per-

performances. Rather, they use collaborations and iterative drafts to refine their work before finalizing their findings and conclusions.

Likewise, authentic forms of iterative assessment that allow for collaboration and revision to achieve mastery can more effectively prepare students for their future careers while improving pedagogical inclusiveness. For example, an instructor might use a detailed grading rubric to draw students' attention to specific areas that need improvement and intentionally plan opportunities for students to "revise and resubmit." Similarly, offering multiple options for assessment formats can reduce barriers to student achievement. Ultimately, assessments should elicit students' capacities for reasoning and problem-solving in authentic contexts instead of merely categorizing students based on their mastery of facts and vocabulary. This necessitates shifting the emphasis of instruction and assessment from "learning about" to "figuring out."

Conclusion.

Developing fully inclusive pedagogical environments requires a much more extensive effort than the strategies described here. However, these strategies can be viewed as a starting point because they can simultaneously improve both the inclusiveness and the effectiveness of classroom instruction. In my collaborations with teachers to develop NGSS-aligned agriscience curriculum (www.factsnsf.org), we found these strategies can reduce achievement gaps and bolster performances for students from all backgrounds (Kohn, 2020). In fact, our case study teachers reported students who previously struggled in other agriscience courses often benefited the most from these strategies. This suggests that efforts to create more inclusive pedagogy in agriscience classrooms can result in wide-ranging benefits for all students.

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With a Faith Born Not of Words, but of Deeds: Becoming an Inclusive Agricultural Educator

by Dr. Sarah E. LaRose, Ayanna Ashaki Bledsoe, & Dr. B. Allen Talbert

The work we do today as Agricultural Educators cultivates the future of tomorrow. If we are to contribute towards building a society that embraces diversity, seeks to bring equity to unjust situations, and includes the voices of an array of different perspectives, then we must consider how our actions today influence the future of tomorrow. So, what actions can we take? A good starting point is to examine your own beliefs, evaluate your classroom practices, and assess how your inclusive actions are implemented across your Agricultural Education program. These efforts can help your program better prepare your students to be positive change agents before and after graduation, and truly make agricultural education a place for all.

Who am I and what do I believe?

Before we can begin to address the issues facing our students both in and outside the classroom, we must take time to do some self-reflection and introspection. Just as our classrooms are a microcosm of our society, so are we. When we reach adulthood, we have a sense of who we are and who we want to be. So how does our understanding of ourselves influence our teaching?

Teaching is not a neutral practice. Embedded in our teaching are viewpoints, opinions, and perspectives. Central to our teaching mission is to make sure those items align with the needs of our students. To understand how our teaching lands on students we

must reflect upon and assess our work with a critical lens.

Knowing oneself is the critical first step to promoting Diversity, Equity, and Inclusion (DEI). An analogy that has proven useful in better understanding this self-discovery process is the iceberg (Figure 1). When we engage with people, we generally engage with elements above the waterline. However, it is the elements below the waterline that give context to the traits above. The elements below the waterline are the nonvisible and intangible components of who we are (beliefs, values, morals, familial background). The elements below and above the waterline influence implicitly and sometimes explicitly, how we educate our students. Recognizing the relationship between iceberg elements is important; if we do not understand what is below the waterline, we cannot truly understand who we are,

how we teach, and the impact of how we educate.

Here are a few tools to help you explore your own iceberg:

- Implicit Association Test (<https://implicit.harvard.edu/implicit/takeatest.html>): Using this tool is an excellent first step in understanding how we think. Better understanding the “thinking behind our thinking” illuminates some of the unintended influences on our teaching, allowing for us to be better aware of own biases.
- Intercultural Effectiveness Scale (<https://www.globesmart.com/products/intercultural-effectiveness-scale/>): The Intercultural Effectiveness Scale is a tool that evaluates skills necessary for effective interaction with individuals from different backgrounds. This assessment offers a



Figure 1. The Diversity Iceberg (Winters, 2013).

personalized action plan for improvement and strategies for further development.

- Scaffolded Antiracist Resources (<https://tinyurl.com/yaoczcxze>): A collection of resources for White educators on their journey to becoming antiracist.

What do my instructional decisions communicate?

If you were to ask most teachers what they teach, they likely would respond with what subject they teach: Agriculture. What if we shifted our perspective and thought about who we teach: Students. Students absorb more than the content; they learn about themselves, how to navigate challenging times, and how to work as a member of a team. Students are learning both what we explicitly teach, and what we implicitly model. This is what is referred to as the “hidden curriculum,” or what the “unwritten, unofficial, and often unintended lessons, values, and perspectives that students learn in school” (Great Schools Partnership, 2015). It is essential teachers examine how their instruction might be communicating a hidden curriculum. For example, when incorporating FFA into your instruction, is it only related to competitive events like CDEs and LDEs? If the only exposure your students have to FFA is through competitive events, you might be inadvertently communicating that the only way to be an involved FFA member is to compete. We know that FFA seeks to develop all students’ potential for premier leadership, personal growth, and career success, but do our instructional practices actually reflect this? When looking to examine your own classroom practices, it is helpful to reflect on topics included in your curriculum, cultural perspectives you include, your classroom expectations and management, and teaching strategies.

Consider what topics you’re including in your instruction: whose version of agriculture are you teaching? Is it strictly from the perspective of large-scale conventional agricultural production methods, or are you also including organic production, small-scale producers, the farm-to-table movement, or topics of food justice? Are we exploring the racialized history of American agriculture and discussing solutions for how we can move forward? What decisions are you making in your teaching that push your students out of their comfort zones and expand how they see themselves in relation to the world?

Here are some tools to help you examine your classroom practices:

- The Globally Competent Learning Continuum (<http://globallearning.ascd.org/lp/editions/global-continuum/home.html>): This self-reflection tool helps educators develop globally competent teaching practices, providing educators with a tool to assess their own dispositions, knowledge, and skills. There are also sample videos, readings, and lesson plans provided to help support your growth as a globally competent teacher.
- The Social Justice Syllabus Design Tool: A First Step in Doing Social Justice Pedagogy (<https://journals.shareok.org/jcscore/article/view/87>): While this tool was developed for use at the postsecondary setting, it presents thought-provoking questions to evaluate your classroom environment and course content.
- University of Michigan Inventory of Inclusive Teaching Strategies (<https://sites.lsa.umich.edu/inclusive-teaching/inventory-of-inclusive-teaching-strategies/>): A list of strategies to build an inclusive classroom. Includes a reflection tool to help you assess your current teaching practices.

How do I integrate inclusive practices across my Agricultural Education Program?

A complete Agricultural Education program includes not only classroom and laboratory instruction, but instruction in leadership through FFA, and applied learning experiences through SAE. How are you managing the program as a whole to ensure that values of diversity, equity, and inclusion are evident throughout?

Look at everything with a critical eye for bias or exclusion. Look at photos in teaching materials and FFA. We often exclude without meaning to. We celebrate our students’ accomplishments, but forget to look critically at who isn’t in the photos or teaching materials.

- Do photos show gender bias by only displaying traditional occupations for males and females?
- Who is in FFA photos? More importantly, who is missing?
- Are prominently displayed pictures of FFA award recipients only of White students?

Your agricultural education advisory committee, boosters, or other groups in your community can be beneficial in assisting in the creation of relationships with community members from diverse aspects of agriculture, viewpoints, and demographics. This is a good next step after making your program visibly welcoming and inclusive. This step involves a deeper level of commitment on your part as the agriculture teacher. When inviting community members to be a part of your advisory committee, you must be committed to listening to diverse opinions and be willing to implement actions based on their input. Having a space at the table for diverse community members is a start, however, it is critical to actively involve them, and to acknowledge the work to be done is challenging.

Potentially the most difficult step is to be open to doing activities and events in an entirely

different way from the past. Do the CDEs participated in send a message of inclusion or one of only production agriculture FFA members are welcome? Do the music, social and recreational activities, and special features at FFA meetings and events say only rural, White FFA members are welcome? Do the words and actions of the FFA members, and possibly advisors, say only cisgender, heterosexual, Christian students are welcome?

Here are some resources that can help you explore ways to address your program management:

- Agricultural Education for All Learning Series (<https://www.naae.org/profdevelopment/onlineseries.cfm>): A series of webinar recordings hosted by NAAE, designed to help SBAE teachers become inclusive educators.
- Are your Diversity Strategies Missing the Mark? Nine Ways to get it Right (<https://www.cultofpedagogy.com/diversity-strategies/>): Blog post and podcast from popular education blog Cult of Pedagogy that outlines actionable strategies to implement in your teaching today.
- Learning for Justice (<https://www.learningforjustice.org/>): Posters, lessons, videos, and the Teaching Tolerance magazine are professional development and classroom resources to address racism, prejudice, and promote social justice.

Conclusion

If we are to propel Agricultural Education into a more inclusive space, we must first begin with ourselves. We must begin to take action by seriously reflecting on our own biases and values, classroom practices, and program management practices. The future of agriculture and Agricultural Education depends on us. How will future generations of agriculturalists look back on our actions today?

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Building Equity in our Classrooms through Universal Design Approaches

by Jason Headrick, Ph.D.

I first learned about universal design in an education class in graduate school at the University of Nebraska-Lincoln and the discussion left me wondering why we did not see the concept applied more. I love examples and think this one helps to set the tone. I am assuming that today, in one way or another, you have encountered a door. This door probably had a traditional round doorknob on it. But have you stopped to think about the ability of others to open that door using that knob? Children or those with some disability may not be able to open that door given their abilities. Captain Hook certainly would have difficulty with it (Nesmith, 2016). So instead of a rounded knob, the progression of knobs might take us to a door lever/handle. But this might be difficult for individuals in wheelchairs or parents with strollers. These discoveries led to the development of the automatic sliding door that we see in shopping malls or grocery stores. Those doors can be used by a variety of people with any ability level. That is the idea behind universal design. As penned by one of the original researchers of the concept, Ron Mace, "Universal design is design that's usable by all people, to the greatest extent possible, without the need for adaptation or specialized design."

We want to see our students succeed, regardless of background, ability, socioeconomic status, sexual orientation, race and a multitude of other identifiers. We might be able to see the struggles and injustices our students go through. We become aware of their home life and their performance in other class-



es. When we encounter these students, we might think about ways to make everyone equal in our classes. Perhaps, instead of trying to just make our classrooms equal, we should focus on building equity in our classrooms. The idea of equity in education centers around the term fairness. Inequities can be present with biased or unfair policies, practices, assignments, programs, or situations that might result in differences in educational outcomes, performance, or success for our students. These are not usually out of intent, but typically result from outdated policies or norms, and often, have provided an easy solution to a past challenge.

There is a lot of discussion on equality and equity, especially as we have experienced COVID and in-person versus virtual learning. Some students had the resources to be successful and some did not. It was (is) difficult to ensure all students had the same access to materials, resources, and even the technology required to par-

ticipate in virtual learning. To begin thinking about equity in our classrooms and the larger picture, we can consider the ideas behind universal design. The idea behind universal design in an educational system allows us to think critically about the assignments, pedagogy, and procedures we have in place and how fair they are for all of our students- regardless of ability. Thinking critically about our work as educators and how we teach can pay off big dividends in the end.

The above example helps us to consider that perhaps not all of our methods and plans in the classroom come from an idea of automatic sliding academic doors. It can indeed take some work to think about how to use the concepts of universal design in our teaching. Self-reflection on our own teaching can help us identify ways we might feel a disconnect in our work with the abilities of our students. We can review the scores on assignments and correct any chal-

lenging questions or misleading language. My favorite approach is asking my students what they think and letting them suggest ways to improve the pedagogy or creating alternatives to the assignments used in the past. Of course, it is hard to receive critiques, but the feedback helps you see the world from their perspective. It is invaluable to hear from your students how they might struggle or ways that they applaud your preparation. Some preparation work on the front end can help with lessening the work that comes at the end for educators. Individualized learning plans may not go away, but your efforts could help improve the success of your students during the school year.

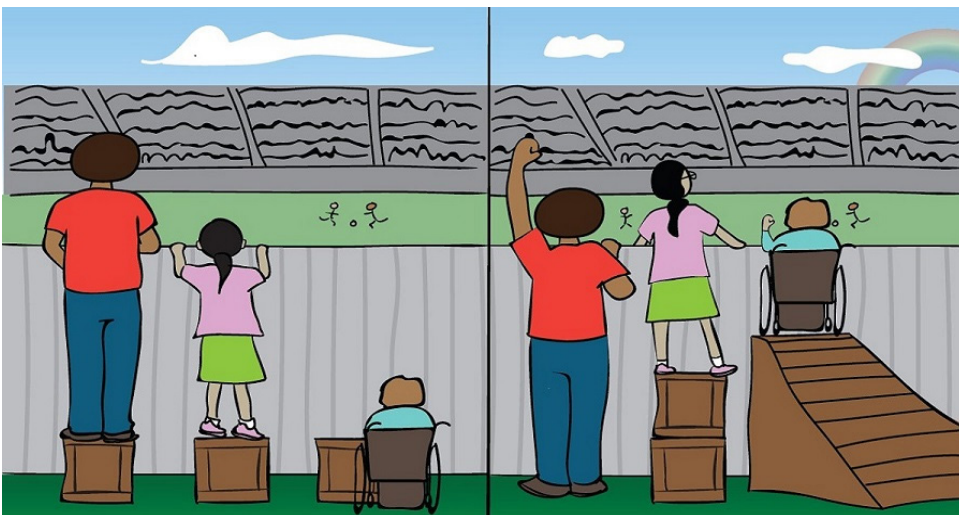
What are some strategies you can use to incorporate universal design into your teaching? One of the easiest things I have done is to add descriptive text to photos on powerpoints or in documents. For students who might have trouble processing the image, some computer programs read the description to them as they scroll over the photo. Adding closed captioning to Zoom or videos that you share in the classroom can be important for students who are visual, auditory, or textual learners. Reading comprehension is another challenge. It can be very hard for students to read text when they do not know the requirements or purpose of the reading assignment. To help with comprehension and make discussion much richer, provide

students with a series of questions to ask themselves while reading. For me, this approach has helped raise the confidence level in the classroom and has broadened the voices of those who participate in the discussion.

Focused learning helps with some of the learning objectives set for the lesson and helps your students be more confident in their class preparation. I added supplemental materials to the assignments list that help build the knowledge toward the topic. These include videos, podcasts, art, television shows, music, and even movies to help guide the conversation and improve practical application. While agricultural leadership is not the main actor in forms of popular media, the over-



Self-reflection on our own teaching can help us identify ways we might feel a disconnect in our work with the abilities of our students.



(TOP) Disney uses universal design in creating an equitable experience for park visitors. Sink levels and placement, as pictured, help visitors' needs to be accommodated and get back to the fun!

(BOTTOM) Equality can make us feel like everyone is pointed in the same direction, but providing equity makes the path visible for everyone as individuals.

all content of leadership is visible and this allows my students to gain practical application skills on top of the contextual ones. While I recognize that not every student in my class navigates the content the same way and my offerings have some restrictions, I am making an effort to reach them across learning levels and in ways that might spark increased participation and equity in what I provide and expect as an instructor.

There are a number of resources for instructors to learn more about universal design and how to consider its use in your instruction. There are also lots of places we can see how the concept has been applied across agriculture and could prove to be beneficial as you think about your approaches to labs or more physical lessons you are demonstrating in the classroom. A few suggested resources:

1. *Why We Need Universal Design* (YouTube Video). Nesmith, M. (2016, October). TedX Conferences. <https://www.youtube.com/watch?v=bVdPNWMCyZY>.
2. *Universal Design for Learning: Creating a Learning Environment that Challenges and Engages All Students* (Learning Module) presented by Vanderbilt University: <https://iris.peabody.vanderbilt.edu/module/udl/#content>.
3. *Reaching All Students: A Resource for Teaching in STEM*: <https://wmich.edu/sites/default/files/attachments/reachingallstudents.pdf>
4. *Agribility: Cultivating Accessible Agriculture*: agribility.org.
5. *Examples from a College Course*: <https://scholarworks.iu.edu/journals/index.php/josotl/article/view/2151/2058>.

No doubt some of you reading this article may have your own applications of universal design in

your classroom. I believe we need to have focused conversations on what can be done within the agricultural education field and how we can share the lessons of our classrooms across a broader audience. When we consider universal design in an agricultural education classroom, our minds may automatically go to students who have a documented disability. But consider how this idea impacts other segments of students. Maybe you have a student with undiagnosed ADHD, speech or language challenges (including English as a second language), or even students who are academically gifted. Do our assignments, exams, and projects help each of those students put their best work forward and demonstrate how they understand what they are learning? Universal design is an approach that levels the access to learning for our students and helps them remove boundaries and barriers that might be in place. A more confident and successful student not only transforms the individual, but has the ability to transform your classroom and influence the good you can do (and are already doing) in your school and community. By allowing ALL of our students to flourish, we are setting a forward path for our students to be more confident and skilled leaders in the agricultural industry.



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AgriCULTURAL Pedagogies 2.0: Creating an Inclusive Environment for All!

by Briana Holness, Demikia Surgeon Taylor, Chastity Warren English, Chantel Simpson,
and Dexter Wakefield

Alston and Williams (2004) noted “AgriCULTURAL” was a term they created to describe the importance of educating all students in an agricultural program about the contributions of ethnic minorities to agriculture. Most educators invested in agricultural education develop their programs on their beliefs on how learning should take place for their students. Several essential ideas are needed to educate students about the technical content presented and shaped within any educational setting. Agricultural education programs provide students with leadership opportunities, personal growth, and career success through three major components: classroom and laboratory instruction, Supervised Agricultural Experiences (SAE), and FFA (National FFA Organization, 2019). There are currently several lenses used to shape the understanding and conversation of cultural differences within a classroom. What does the concept of culturally relevant pedagogy genuinely mean, and why should we care as agricultural educators?

Alston, English, Faulkner, Johnson and Hilton (2008) noted that diversity concepts must be consistently interwoven into the agricultural education classroom in formal and informal settings. According to Ladson-Billings (1995), culturally relevant pedagogy is built upon three criteria: (a) students must experience academic achievement, (b) students must develop cultural com-

petence, and (c) students must develop a critical consciousness through which they challenge the status quo of the current social order. Recently, the National FFA Organization developed the initiative “Agricultural Education for All” that supports every student’s advancement and development in the FFA (National FFA Organization, 2021). National FFA understands that all students should have the opportunity to participate in an agricultural education program as their authentic selves.

“Preservation of one’s own culture does not require contempt or disrespect for other cultures.”

Therefore, in 2021 we wanted to revisit this concept of AgriCULTURAL and suggest possible culturally relevant 2.0 strategies agricultural education teachers can incorporate into their classrooms to benefit all their students. When thinking about diversity, educators should acknowledge the complexities of how individuals can identify themselves. The diversity of learners can be identified in several ways, such as (1) race, (2) social class, (3) ethnicity, (4) religion, (5) gender, and (6) ability. Students come to us as they are. When educators accept students as their authentic selves, a safe place for learning is created to help students thrive and accomplish academic success. As noted by the U.S. Department of Education (2021), racial and socioeconomic diversity benefits com-

munities, schools, and children from all backgrounds. Today’s students need to be prepared to succeed with a more diverse and global workforce than ever before.

There are several strategies educators can use to implement culturally relevant pedagogy within their classroom. In this article, we will focus on the following three strategies: (1) mini-research projects, (2) chapter collaborations, and (3) career exploration. Teachers can incorporate cultural awareness into their curriculum. In the first strategy, mini-research projects can focus on diverse people in agriculture or linked to cultural relevance. Students enjoy learning about different cultures, and minority students appreciate when their teachers are

culturally aware. When assigning a mini-research project, have students complete these projects in teams or groups. Teachers can implement projects involving food, plants, or animal origins by providing students with a list and tracing each item’s origin, finding commonality. Not only would students learn about the contributions of diverse groups, but they develop skills involving critical thinking, research, communication, and teamwork. Chapter collaborations are the second strategy and involve teachers participating in “buddy chapters” across the state or country. Teachers will choose an FFA chapter that has a different student demographic makeup than their chapter. Chapters could collaborate by developing meaningful experiences virtually or through service-learning proj-

ects. These interactions will allow students to create a social network and learn about the backgrounds of their peers. According to Woods (2004), service-learning also helps students participate in learning environments that contribute to a greater diversity of experience and socialization than if they congregate in traditional classrooms with others much like themselves.

In the third strategy, teachers can coordinate and schedule opportunities for career exploration. Career exploration can include: inviting guest speakers, provide virtual demonstrations to the class, or job shadowing and internship opportunities. Teachers can invite and coordinate students with minority agricultural professionals in marketing, farming, engineering, and medicine. This strategy will allow for students to see agriculture through another lens and to better understand their own culture and differences within the community. Agriculture teachers need to create a diverse partnership with community members to mirror their diversity and inclusion efforts. Diversity inclusion mirrors a practical, human development approach to educational well-being and social well-being (LaVergne et al., 2011). The idea is to expose students to different people and ideas than usual. Students will realize quickly we are more alike than different.

In conclusion, let us remember the words of Cesar Chavez, Mexican-American Activist, "Preservation of one's own culture does not require contempt or disrespect for other cultures." (Hammond, 2014). Culturally relevant teaching strategies are possible and strongly encouraged to be incorporated by agricultural education teachers. The increasingly collaborative nature of education has created a favorable climate for developing and implementing inclusive and culturally relevant strategies within the classroom. Mini-projects provide hands-on

experiential learning activities with applications to "real-world" problems, extending student development from the classroom to the local community. Chapter collaborations offer students the opportunity to develop interpersonal skills, network, and learn about community perspectives outside of their own. Lastly, each of these strategies provides opportunities for career exploration and demonstrates how to navigate the world as a beginning professional within a professional setting. As our nation continues to diversify, students must have these exposures and experiences to enhance their skill-sets as they enter the workforce and work to meet the needs of our world's increasing population.

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Culturally Responsive Pedagogies in Agricultural Education: Why are we here?

by Dexter B. Wakefield and Chasity Warren English

As I listen to the gavel strike the podium as my president speaks before the members, I often wonder, “Why am I here?” Is it to practice brotherhood, honor agricultural opportunities and responsibilities, or is it to develop those qualities of leadership to which an agricultural professional should possess or be able to TEACH effectively?

What is culturally responsive pedagogy? It is the ability to successfully teach students who come from cultures other than your own. Research shows teachers often, though unknowingly, show schools are not welcoming places for cultural differences. Schools at times inadvertently make students feel uncomfortable or unwelcome (Garcia, 2001; Taylor & Whittaker, 2003). There are fears and pains associated with moving toward providing and having the tools to include inclusive pedagogies in teacher education. I would challenge the societal views of inclusive pedagogy in most teacher education programs. Many factors can affect the instructional environment, one of which is the communication channels between students and teachers that impact inclusive learning environments (National Education Association, 2014).

Inclusive pedagogy already exists within the learner’s communication repertoire – regardless where someone hails from – granted with varying degrees of sophistication and mastery from a learned environment or behavior. Perhaps the educator’s role, in this case, is to creatively take what the student already has

experienced and knows and build on this existing knowledge? It has been our experience; people rarely lack the “how to” (passive state) – what they do lack is the “want to” (active state). Once a “want to” attitude is activated, the “how to” quickly falls into place. Waiting for publishers and books to come out to address an exact need within agriculture seems rather fruitless. The National Council for Accreditation of Teacher Education (NCATE) states: “teachers must be prepared to identify diverse students’ strengths, weaknesses, aspirations, limitations, and special needs” (Moore, 2015).

Today’s classroom must celebrate diversity and encourage inclusive pedagogy to blend into every school’s curriculum. There are many benefits in doing so – it allows us to expand our vision and be proactive in constructing the kind of lives we value and see the contradictions both in our society and in others (Merriam & Brockett, 2007). The United States has become more culturally and linguistically diverse (Faltis, 2006). Since the 1980s, the population has grown at nine percent per year, creating a significant increase in Hispanic, Asian, Pacific Islander, Native American, and multiracial people (Files, 2005). These demographic changes have significantly impacted America’s public schools, which have grown to an enrollment of over 50 million students and contain multiple races, cultures, and other diversity types (Feller, 2005). Given this factor, diverse students are likely to experience conflicts if schools are not sensitive to their culture, language, family background, religion, sexual orienta-

tion, and learning styles (Short and Echevarria, 2005).

Pang and Sablan (1998) best described the importance of cultural pedagogies in pre-service teacher education by saying, “many pre-service, as well as in-service teachers, are ambivalent about their ability to teach ethnically diverse children, and their feelings of efficacy seem to decline from the pre-service to the in-service stage.” Given that one out of four jobs in America is agricultural-related, more emphasis needs to be placed on creating and implementing inclusiveness opportunities through inclusive pedagogical training. When teaching students with a background other than their own, we recommend teachers make every effort to learn each student’s unique background by being conscious that a student’s cognitive development is based on their learned experiences (Sleeter, 2001).

Many secondary agricultural educators’ social and academic expectations are greatly based on mainstream and middle-class culture to which they have experienced (Alston, English, Faulkner, Johnson, & Hilton, 2008). A report published by the National Center for Education Statistics (2014), noted that for the first time in U.S. public schools’ history, most students would come from minority groups. Though the face of students in agricultural education is changing, more than 90% of classroom teachers throughout the country are White (Johnson, 2002; National Education Association, 1997), and desire to teach in the “rural” type of program they experienced in high school

(Vincent, Henry & Anderson, 2012). Though there is a demographic shift of students in agricultural education, teachers tend to resort back to their comparable backgrounds (Werner, 1993), questioning if they are adequately trained in cultural pedagogies through pre-service training.

Additional inclusion areas in educator preparation where more emphasis should be applied are socioeconomics, religion, students with disabilities, and students classified as Lesbian, Gay, Bisexual, or Transgender. According to U.S. Centers for Disease Control (2017), roughly 1.3 million kids, or 8% of high school students, describe themselves as lesbian, gay, or bisexual. Individuals representing this population often experience high rates of discrimination and harassment, but are not usually protected by school policies. For teachers to effectively instruct these students, they should know how to identify intervention methods and instructional methods.

Prior studies by Baggett and Chinoda (1994) indicated that agriculture teachers were deficient in the proper pre-service knowledge of teaching students with different abilities or exceptional children. Consequent studies by Sorenson, Tarpley, and Warnick (2005) concluded that agricultural teachers are not competent in instructing children with needs effectively or possess an understanding of the Individuals with Disabilities Education Act (IDEA). "Teaching tolerance and appreciation of difference is not, of course, limited to ethnic, regional, sexual orientation, or language differences but includes differences of all types, including disabilities" (Hallahan, Kauffman, & Pullen, 2009, p. 103). Socioeconomic status is another major factor that should be considered when designing an all-inclusive learning environment. In the United States, over 20% of children live in poverty, with those

percentages being higher for African Americans (30%), Latino (38%), and children with disabilities (28%) (Madrack, 2002; Park, Turnbull, & Turbull, 2002). When working within a field such as Agricultural and Extension Education these demographics can significantly impact programming efforts and interpersonal relations between colleagues, students, and related clientele.

So, where do we go from here?

"Inclusive education is about embracing all, making a commitment to do whatever it takes to provide each student in the community—and each citizen in a democracy—an inalienable right to belong, not to be excluded. Inclusion assumes that living and learning together is a better way that benefits everyone, not just children who are labeled as having a difference" (Falvey, Givner & Kimm, 1995, p.8).

Teachers need to take an honest look at their attitude and current practices while initiating inclusive practices in teacher education (Montgomery, 2001). The teacher should consider the following levels of advice:

1. Conduct a self-assessment – Assess your relationship with your students, constructively embrace diversity and create an environment that responds to student's needs.
2. Use a range of culturally sensitive instructional methods and materials – The topics can be drawn from the students' lived experiences and interests.
3. Provide explicit, strategic instruction – This shows students what, why, how, and when to complete certain tasks. An excellent example of this is instructional scaffolding. This strategy allows students to work independently to accomplish

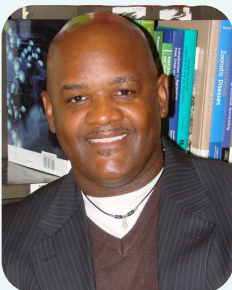
tasks while being provided with instructional support.

4. Classroom climate – Establish a classroom atmosphere that respects individuals and their cultures, that is, culturally inclusive bulletin boards, books that represent diverse audiences, and writings that provide students with opportunities to share written and oral reports about their heritage.
5. Assessment – Employ student self-assessment and teacher self-evaluation to better understand cultural relevance in the teaching and learning process.
6. Collaboration- Develop relationships with diverse families while creating instructional programs that broaden all students' learning opportunities.

Now that the gavel has struck its mark and we as agricultural educators have spoken out loud in unison, the answer to "Why are we here?." We are here because we believe in agriculture with a faith born not of words, but deeds even though the better things we have come to enjoy have come from the struggles of former years.

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Enhancing the Agricultural Science Classroom by Eliminating Microaggressions

by Caleb M. Hickman and Dr. Stacy K. Vincent

“You can’t do that, you’re not from a farm.”

“When I look at you, I don’t see color.”

“He can’t compete, he can’t afford an FFA jacket.”

“Why can’t you act more manly.”

“Girls shouldn’t do this, let’s get one of the boys.”

“To compete, you need to wear a skirt and straighten your hair.”

The year 2020 will go down in history books as a year of controversy, chaos, and sadness. While reading and trying to rationalize this challenging year, there is one common theme that I have noticed: individuals using microaggressions in daily conversations. Unfortunately, microaggressions occur regularly in agricultural science education. Educators must understand microaggressions and are aware of the harm they have on students enrolled in agricultural science.

Merriam-Webster Dictionary defines microaggressions as “a comment or action that subtly and often unconsciously or unintentionally expresses a prejudiced attitude toward a member of a marginalized group (such as racial minorities).” Throughout my studies on microaggressions, I have discovered that microaggressions impact six prominent groups. The categories include socioeconomic status, disability, gender, sexual orientation, race, and religion. Minority groups must have representation in the agricultural science classroom, and teachers must include students who vary from themselves effectively. Ag-

ricultural science educators need to ensure that everyone has a place in agriculture and that their students’ beliefs are understood and recognized. Therefore, I took a deep dive into examples of microaggressions that these groups face and insight into how agricultural science teachers can combat microaggressions.

Socioeconomic status

When it comes to socioeconomic status, an array of microaggressions may occur, and it is the teacher’s responsibility to make sure we provide an equal opportunity for all. For example, teachers may assign a project that requires the purchase of supplies, though some families do not have the money to spend. For agricultural science educators, this project may be a supervised agricultural experience (SAE). SAEs are a part of the three-component model, but students in one’s program may not be able to afford starting or maintaining a SAE. Therefore, one must provide accommodations for these students to ensure they are treated equally compared to their peers. School farms, community members, and local farmers could help students with their SAEs. Reach-

ing out to others will help to eliminate the divide when it comes to socioeconomic status.

The subtle act of setting low expectations for students from particular groups or neighborhoods is another microaggression teachers unconsciously may do while teaching. Teachers must realize that students notice these actions. Therefore, students may not participate in class and may test classroom management strategies. For myself, I learn my students’ names as soon as possible and actively notice who I call on each day and work to set the same expectations for students. Once a teacher is mindful that they are participating in this microaggression, it is simple to correct this behavior.

Disability

Students with disabilities express that microinvalidation is a microaggression they face (Gonzales et al., 2015). To fully understand this microaggression, we must define microinvalidations. Microinvalidations are actions that exclude, negate, or nullify the psychological thoughts, feelings, or experiences of individuals who belong to a marginalized population and/or

individuals who have a disability (Sue et al., 2008). Students with physical and mental disabilities may feel they do not belong in the classroom based on their disability.

Microinvalidations do not allow students with a disability to feel included in one's classroom. Therefore, when teachers decide to have students complete group work, teachers must accommodate students with disabilities. If they are not a part of the activity, they feel invalidated. It is our job to make sure that they come to class and are engaged in learning.

Gender

Gender microaggressions are relatively simple to identify, and they are one of the most frequent forms of microaggressions. As teachers, we demonstrate surprise when a boy has good handwriting or prefers theater to sports or when a girl is good at calculus and engineering (Wormeli, 2019). We must be careful when comparing individuals that identify as male and female. The stereotypes that surround male and female traits need to end. As teachers, we need to foster relationships that allow us to connect with our students. With that said, I encourage teachers to listen to their students' interests. Teachers must encourage students' passions no matter the historical gender association that activity may lie.

Additionally, teachers must eliminate the stigmas that surround floriculture and agricultural mechanics. The stigma that floriculture is feminine and agricultural mechanics is masculine must end. We need students to be excited to be involved in agriculture, and if students who identify as male want to take floriculture, encourage them to enroll in the course. Concurrently, encourage students who identify as female to enroll in agricultural mechanics. The stigma surrounding females in an agricultural mechanic course can cause them

to feel unwelcomed in the shop. In these situations, I encourage teachers to politely have a conversation with students about this microaggression towards females.

Sexual orientation

There are several microaggressions against the lesbian, gay, bisexual, transgender, queer, intersex, and asexual plus (LGBTQIA+) community. LGBTQIA+ youth face daily challenges in middle and high school hallways. A prime example is when someone says, "That is gay." For someone in the community, this invalidates their sexuality, and it is telling that individual they are lesser of a person. Therefore, one must stop this rhetoric from taking place, and if a teacher hears these words, it must be discussed and eradicated out of the classroom.

Not using one's proper pronouns is an example of a microaggression (Pulice-Farrow et al., 2017). Therefore, an educator needs to ensure they are asking their students for their pronouns. That means that everyone in the class needs to share their pronouns to ensure transgender individuals feel welcomed in the classroom. For myself, I create name tents at the beginning of the year. In each corner of my paper, I draw pictures to represent who I am and include my preferred pronouns. An activity as simple as a name tent may go a long way, making students feel comfortable in one's classroom.

Race

Racial microaggressions are brief verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or harmful racial insults toward people of color (Sue et al., 2007). For example, if someone says, "I do not see color," that is a microaggression. The individual who made this comment is dismissing the prevalence of racism. Therefore, people of color may not feel welcomed or feel validated as a person.

In the classroom, teachers and students must embrace peoples' race. Color adds depth to one's classroom. Once someone states, "Everyone can succeed in this society if they work hard enough." That means people of color are perceived as lazy and/or incompetent and need to work harder. Therefore, these microaggressions need to end. Students need to see successful agricultural professionals who look like them.

Religion

Religion and the way teachers and students discuss religion in the classroom may present microaggressions. Therefore, an educator must understand the microaggressions present when religion is a topic of discussion in one's classroom. First, as teachers, we may vent in the teacher's lounge about how it is challenging to discern between students' cultures, declaring, "Muslim, Hindu – They're all the same" (Wormeli, 2019). Muslims and Hindus are not the same. Teachers need to make sure their peers and their students understand what they are talking about before speaking.

Additionally, when hosting banquets or events, be aware of how invocations are perceived. Advisors must be conscious of the religions students practice (if any) before creating an insensitive situation during an FFA banquet or event.

Conclusion

As educators, we interact with students who vary from us. As agricultural science educators, we can work together to eliminate microaggression that occurs in our classrooms, our schools, and communities.

I am frequently asked how are we going to sustain the growing population? Here is my answer: make people feel welcome in the agricultural industry.

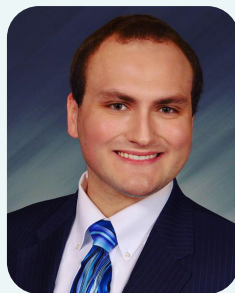
We all share one goal collectively to prepare students for careers, college, and life after grad-

uation. Microaggressions may cause educators not to teach to the best of their abilities. Understanding the meaning behind the phrases and actions that we use and realizing the harm they have on students is essential in providing students with a well-rounded educational experience. Therefore, our pedagogies must reflect all students and provide an environment where students' ideas are appreciated and embraced.

I am hopeful we can provide students with the most inclusive educational experience that they deserve. By understanding microaggressions, we can give all students hope by eliminating the fear that microaggressions cause in our classrooms, schools, and communities.

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Promising Practices for Creating Inclusive Agriculture Programs

by Michael Martin and Katie Hartmann

We believe that an inclusive pedagogy in school-based agricultural education must address the historical and current inequities in agriculture and agricultural education. We realize that this could be new and uncomfortable for some teachers and students, and that some will be resistant to this discussion. Nonetheless, you cannot plant a new crop without some tillage of the field. Similarly, you cannot create more inclusive agricultural education without explicitly addressing what made or makes it exclusive to begin with. In this article, we lay out some inclusive teaching and programmatic strategies, which both explore the exclusive nature of agriculture as well as open the door for more inclusivity.

Idea #1 – Explore how the United States was Colonized through Agriculture

Agriculturalists have typically not wanted to engage in the challenging discussion of how the United States historically utilized agriculture to colonize. The histories of Indigenous peoples having their land stolen for agricultural settlements and the enslavement of people of color as a forced or cheap agricultural labor source seems to be situated as artifacts of generic United States history rather than something which directly involved agriculture. Colonists set out to assimilate Indigenous peoples into Western customs and culture in various ways, including through agricultural methods. Providing agricultural support to Indigenous communities through United

States policy served to assimilate by requiring Indigenous people to utilize European systems of agriculture (Harris, 2004). Additionally, eliminating traditional agricultural systems and foodways (for example, the elimination of the buffalo) also forced Indigenous peoples to rely on colonists for food and agricultural support (Dunbar-Ortiz, 2015). Colonization of the peoples, land, and agricultural commodities went hand in hand.

We must not ignore these parts of agricultural history for several reasons. First and fore-

“Colonization of the peoples, land, and agricultural commodities went hand in hand.”

most, denial through avoidance may lead students of color feeling that their history and context is irrelevant in agricultural education. Students of color may see the agriculture program as a place where only white histories are affirmed. This leads to the second issue which emerges from ignoring the historical reality of how agriculture in the United States contributed to colonization of people of color. A system of whiteness is continually reaffirmed in agricultural education by ignoring how white people utilized agriculture in systems of oppression. The agriculture program becomes a place about white people and for the preservation of the dominance of white people. Importantly, we must not ignore that people of color have rich agricultural histories of their

own, contributed in important and meaningful ways to the overall history of agriculture, and are still being exploited as cheap labor in our food system, often suffering terrible health, social, and economic consequences in the process.

This history of colonization and its connections to agriculture can be taught explicitly as stand-alone units and also incorporated into the larger narrative of the history of agriculture. Also, traditional foodways and agricultural systems can be taught alongside

Eurocentric systems, emphasizing the history, but also the continued importance of these systems for their culture, various worldviews, and ability to solve current agricultural problems. For example, in the case of Indigenous

agriculturalists, it is important to incorporate Indigenous worldviews and agricultural systems into the curriculum alongside Western worldviews. This can be done through the inclusion of Indigenous Knowledge, Traditional Knowledge, or Traditional Ecological Knowledge, as it is often referred to in various educational contexts. Traditional Knowledge emphasizes the holistic, relational values in Indigenous cultures, and the connectedness between people, communities, and the natural world (Latulippe, 2015). The concept of “Two-Eyed Seeing” is one way that educators have incorporated Traditional Knowledge into their practice (Michie et al., 2018). This approach attempts to weave Indigenous and Western knowledges together within the curricula to take advantage of

multiple perspectives. When this can be achieved, the strengths of both Traditional Knowledge and Western knowledge can be utilized to their greatest benefit, and in recognition that they are both complete knowledge systems side by side. Because this approach requires an understanding of both Indigenous and non-Indigenous ways of knowing, Two-Eyed Seeing requires input from Indigenous Knowledge Holders to make sure that efforts remain true (Bartlett et al., 2012).

Idea #2 – Explore the FFA Creed from the Student’s Perspective

The FFA Creed is an integral part of the FFA. The Creed affirms the agricultural and personal values which the FFA finds ideal within its members. Typically, freshmen agriculture students memorize the five-paragraph speech and recite it for their agriculture teacher. If the FFA member is competing in the FFA Creed Speaking Leadership Development Event, then the member would have to recite the FFA Creed and answer a few questions. In some cases, agriculture teachers may require freshmen agriculture students to answer questions or write short essays about the meaning of the Creed.

While these activities engage the students with the content and meaning of the FFA Creed and, by extension, the values and ideology of the FFA, the students often do not have an opportunity to explore how their lives align with these values and ideology. We must recognize that the FFA Creed was written almost 100 years ago and situated in a context and value sets which are in most cases very different from most students in the United States today. If students who are underrepresented in agriculture education can’t see themselves reflected in the foundational components of the FFA, including the Creed, this can be exclusionary. Students need opportunities

to define how the FFA Creed aligns to their lives, along with the typical freshmen curriculum.

While the Creed remains an important part of classroom curricula, the ways that we encourage students to engage with the Creed can help to create an inclusionary classroom space. In addition to the traditional classroom exercises outlined above, students can also be asked to engage with the Creed through other, more modern and relevant lessons. For example, students can be asked to do an exercise where they write their own Creed, in the style of the existing one, but that pertains to them, their lives, and how they connect to agriculture.

Further, questions such as those below can be asked in the classroom, for students to discuss in groups, or as writing and reflection assignments:

- How do the values from the time that the Creed was written relate to the values of today? Have they changed? How?
- What does the Creed mean today?
- Would you update the Creed? Why and how?

Idea #3 – Encouraging students to conduct community- or socially-orientated Supervised Agricultural Experiences

Supervised Agricultural Experiences (SAEs) which are centered on agricultural production are one the founding principles of agricultural education. While historical changes have drastically reduced the number of youth who intend to enter a career of production agriculture, agricultural production-orientated SAEs

still have great importance in agricultural education tradition and practice. However, agricultural production SAEs limit the number of students who can participate in those experiences for a variety of reasons, including the relatively low number of production agricultural operations compared to the general population, the propensity of agricultural operations to be in rural areas, start-up costs involved with even small agricultural operations, and the white, conservative values which dominate production agriculture. We suggest that encouraging students to conduct community- or socially oriented SAEs could help develop a more inclusive agricultural education program.

Creating community or socially oriented SAEs is not as challenging as one might suspect. These SAE opportunities can be offered alongside agricultural production-orientated SAEs for all students to choose from. Community-centered SAE projects are experiences which are centered on community development. This could be as simple as building benches for the local park or conducting research on local water quality. The easiest way to make SAEs more socially oriented (i.e., school business enterprises or service learning) is to center the experiences on bigger issues that are important to the students and their community. This could include developing a community-based garden in the town or conducting educational activities for children. Importantly, these kinds of activities can be conceived as both SAEs and FFA activities, if you want to create synergy in the program.

Final Thoughts

We want to acknowledge the work that is happening across the county to create a more inclusive school-based agricultural education. These initiatives are happening at a variety of levels, including the National FFA Organization’s initiative of Agricultural Education

for All. These initiatives are important and great steps forward. The challenge is to enable and encourage agriculture teachers to incorporate these initiatives into their agriculture program. This short article serves to give teachers some examples for all components of their program. We hope that the agriculture teacher reading this article will adopt at least one of these suggestions and think critically about how their programs serves all students.

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Dr. Michael J. Martin's research explores how identities impact agricultural education formally and informally; specifically, the identities surrounding agriculture. Michael works at Iowa State University.



Dr. Katie Hartmann's research explores systems of inequality and access in formal and informal agricultural education settings; specifically, the inequitable access that Indigenous communities have to Cooperative Extension services and the lived experiences of Extension educators collaborating with Indigenous communities today. Katie works at Iowa State University.

We Believe in the Future: Where All Means ALL!

by Gary Briers, Nelson Coulter, Shelly Gunter, Kellie Seals, Glen Shinn, Kalyn Tate, and Andrew Wilson

With summer and Independence Day parades, July symbolizes new beginnings in America—individual freedoms, rights, and responsibilities. The FFA vice president reminds us that “The rising sun is the token of a new era in agriculture. If we follow the leadership of our president, we shall be led out of the darkness of selfishness and into the glorious sunlight of brotherhood and cooperation.” With a call for leadership, the vice president invites the ability to participate freely. Embedded in this call are four rallying points—relevant knowledge, participation in decisions, a self-governing classroom, and an optimum learning environment (Knight, 1999).

Creating better futures for students has always been the focus of right-minded educators and educational institutions. Never have the barriers of making that happen, particularly in rural settings, been so difficult. As if economic downturns, a pandemic, political division, and catastrophic weather events were not enough, the challenges of generational poverty remain. The image below underscores the significant challenges of creating and sustaining a highly educated and highly skilled workforce that stands a chance of lifting rural America out of its current downward spiral.

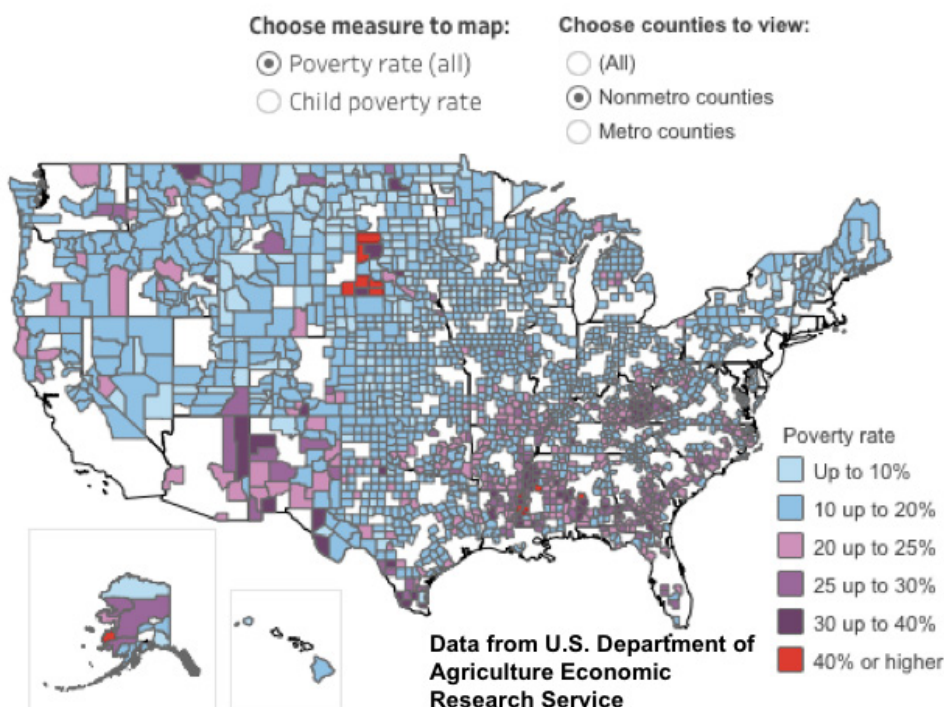
Inclusive pedagogy acknowledges that **important knowledge** is the knowledge students believe can be used to solve important problems” (Knight). Inclusive ped-

agogy builds on the FFA motto—“Learning to do, doing to learn, earning to live, living to serve.” Since 2001, Roscoe, Texas has persistently challenged K-12 tradition and created the Collegiate Edu-Nation network (CEN). Today, this transformation produces 100 percent high school completion. At the same time, 90 percent of the high school graduates earn associate degrees and industry-recognized certifications. Further, 80 percent of the graduates are expected to earn bachelor’s degrees or industry-recognized certificates within three years, while 70 percent are expected to earn postgraduate degrees or credentials—all with little or no student debt.

Achieving the ambitious learning outcomes stated above requires commitment, at all planning and deployment levels, to several core beliefs and values, including:

- Every student can and should have equitable opportunities to learn at high levels.
- Every student needs and deserves caring adult mentors/teachers to help them achieve at those high levels.
- Every school that serves rural students should implement a curriculum and programming designed specifically to guide students toward becoming successful young adults.

U.S. county poverty rates, 2014-18 average



Poverty rates in U.S. counties make educating a skilled workforce a continued challenge for educators (USDA ERS, 2019).

- Every rural community that holds such aspirations for their youth can achieve them only through collective commitment, active involvement, and purposeful participation in the decisions required to make those dreams a reality.

When agricultural education departments/FFA chapters build upon a solid foundation of a noble mindset, they will engage in a collective follow-through as the best recipe for success. This foundation of **important knowledge** is our first rallying point, and it includes shared beliefs and values that incorporate participation in decisions. Open meetings—and classrooms—follow American parliamentary law and lead to **participation in decisions** as a second point. Sometimes misunderstood, parliamentary rules provide a voice for minority views. Students learn to be responsible citizens in situations where they can exercise ever-increasing power and consider others' views as well in making decisions. Thus, they begin to understand citizenship responsibilities as actual citizens.

The third rallying point for inclusive pedagogy is a **self-governing classroom**. The vice president forecasts an inclusive pedagogy where "... we shall (ALL) be led

out of the darkness of selfishness and into the glorious sunlight of brotherhood and cooperation." Previously, schools were essentially authoritarian and governed by strict boundaries, controls, and power. Today's educational philosophy shifts to a more student-centered, project-based learning model that balances decision-making responsibilities between students and instructors requiring a different skill set. Knight describes a self-governing classroom that welcomes ALL students as equally valued members of the learning community. In this inclusive environment, students and teachers actively participate in discussions and make sure to listen to others' views.

Words matter—but their meanings change over time; take "college." In the 11th-century culture, the Università di Bologna, the first university, college meant civil law study. Fast-forwarding to 1650, Harvard College, the oldest American college, aimed to educate clergy. Today, public colleges and universities embrace an array of purposes from job-driven to life-driven ends. Nonetheless, inclusive pedagogy intends to provide **an optimum environment for learning** to equip ALL students for life's frontiers.

Likewise, in the 11th-century, work meant hard, physically demanding drudgery. Today, work includes physical, mental, and social efforts to produce value in society. An inclusive pedagogy (youth instruction), andragogy (adult instruction), and heutagogy (self-determined learning) foster a progressive transformation from teacher-directed to teacher-guided to self-governed learning using all available resources. Work today is done using previously unimaginable artificial intelligence (AI) interactions with Alexa, Siri, and Wilson smart-assistants. Texas experts say that in 12 years, 71 percent of workers will need a certificate or degree for the state to stay competitive in the global economy (60X30TX). Today, an affordable college degree and industry-recognized credentials prepare students for a life of opportunity, choice, and impact—and narrows the rural poverty gap.

To achieve the aspirations and expectations for inclusive pedagogy, we must recognize important knowledge, participate in decisions, encourage a self-governing classroom, and provide an optimum learning environment. This transformation shifts the mindset among students, teachers, and communi-





ties. Students and teachers work together to create a supportive environment that provides equal access to learning and allows ALL students to be fully present and feel equally valued.

At the same time, all stakeholders—students, teachers, and communities—must realize that this is “not your grandfather’s Oldsmobile.” A network of schools is remapping student success using key performance indicators that embrace the individual and individual differences as the source of inclusive pedagogy. When implemented, ALL students, whether different academically, socially, or cognitively feel welcomed, valued, challenged, and supported in their learning. Thus, they are much better prepared for a complex world. Paulo Freire (2018) concluded that this kind of social inclusion could replace the hopelessness experienced by many disadvantaged students. With that renewed hope comes a sense of security. The resulting effective and positive working relationships provide fruitful ground for self-governed education.

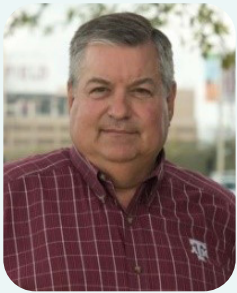
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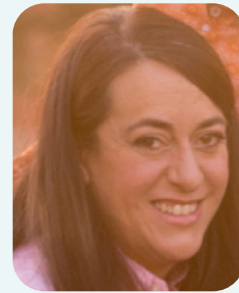
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Students Who Belong, Buy-In

by Eli Parham, Logan Layne, Ruth Ann Layne and Tori Summey

Take some time to answer the following questions based on your personal experiences:

1. What's a song you can play over and over again and never get tired of?
2. What's your favorite meal, and when was the first time you had it?
3. What's a movie that you think every person has to see at least once?
4. What's a tradition your family does every year that you look most forward to?
5. When giving directions, do you use cardinal directions, street names, intersections or landmarks?
6. What do you want to be remembered for?

When answering these questions, the themes of food, upbringing, values and more came up. They are just some of what makes up a person's culture. Culture is the expression of one's own nature, or their way of life and thinking in our everyday dealings in art, literature, religion, values, beliefs and enjoyments. All of these provide a sense of belonging or identity. Individual culture can lead to communities of culture, based on similar cultural aspects where individuals feel as if they belong within a group.

Ever heard the phrase "birds of a feather flock together?" Naturally, there will be individuals a person gravitates toward based on these cultural communities, and those who are naturally polarized for the same reason. According to Maslow's Hierarchy of Needs to motivate students and achieve higher levels of learning and participation, after learners' physiological needs and safety needs are met, learners need the feeling of love or belonging. The purpose of this article is to

illustrate how to recognize your culture and begin the thought process of creating a shared classroom culture, where all students bring their own individuality and are accepted, encouraged and comfortable.

Creating Buy-In

The first step towards inclusivity is self-reflection and open mindedness. By taking time to answer the questions above, you've begun to illuminate aspects of culture within your own life, but that doesn't serve to help your classroom interactions if you fail to apply that knowledge. Human connections are built off shared experiences. By understanding how your cultural background can hinder or help you connect with students, you can make a more concerted effort to help everyone feel included. For example, what was the moment you decided agriculture was for you? Were you motivated to join because of family and friends? Maybe you went to a small school and it was one of the few extracurricular activities for you to get involved in. Maybe you had an agriculture teacher who truly cared

about you beyond the classroom. Ask any agriculture teacher the same question, and while the answers may be vastly different, it is likely at one time or another the reason someone "bought in" to agriculture was because they felt like they had a place in it. Take the writers of this article for instance:

As an African American male from Atlanta, Georgia that was randomly placed in an Agriculture class, Eli did not think it was for him. When he went to Region Rally, where he met other FFA members who shared common interests with him and welcomed him to their group, he felt as if for the first time he belonged at an FFA event beyond his chapter meetings.

For Tori, joining FFA was a simple decision as it was one of the only extracurricular activities offered at her small Agribusiness and Equine centered charter school. She was motivated to join when she saw her usually shy and reserved sister grow into a confident leader through the program, and realized she didn't need to have an agricultural background to fit in.

As the daughter of two agriculture educators, Ruth Ann's involvement in her local agriculture education program and FFA chapter was pre-established on her first day as a high school student. However, she chose to continue her involvement when it became the common ground for her and her unique set of friends to enjoy themselves in and out of the classroom.

In Logan's hometown of Manning, South Carolina the FFA chapter was active in primary, elementary and middle school. From the PALS partnership, to planting trees for Arbor Day and 8th grade recruitment events; students including Logan grew up knowing what FFA was before ever stepping foot into high school. Being a part of the FFA chapter was easy, the part that sold Logan occurred when Coach Haynes pulled him into the office adjacent to the Parliamentary Procedure team his freshman year.

In short, someone or something made them feel like they belonged. The challenge of creating a shared classroom culture is not being everything for every student, but instead making every student feel as though they have a place and value within the classroom.

How can you create "buy in" moments for your students? What would make them feel wanted and welcomed? We offer practical tips on how to create a culture of inclusivity before and after your students enter the classroom.

Extending the Invitation

Creating a culture of inclusivity within your class may seem like a daunting task, but it works well if you start with your own vulnerabilities. When we are extended an invitation, we feel permission to accept without fear of embarrassment. Our hope is that you can extend an invitation of culture through your own acts of vulnera-

bility right now and in the future. By not only setting expectations for your students, but also modeling what they look like in action, you can better enforce those expectations in your class. It starts with you.

Think of this as setting the stage for what your classroom culture can become. What can you do to value the individuality and differences between students in your class? There are several ways to involve the cultural aspects of every student. For example, in the beginning of each semester, have students fill out a survey as their bell work. Ask students to share their favorite food and the type of music that makes them feel alive. You can add in other "getting to know you" questions too. This may seem like a simple task, but in the end it will give you a great place to start connecting with your students. Make your classroom a safe space where students know that every day, during bell work you will play someone's favorite music. No one can demean or diminish what is played and everyone's day will eventually come.

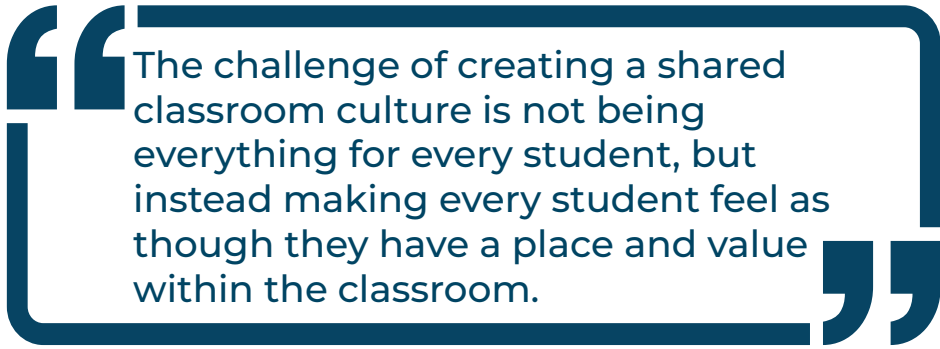
In an environment where a multitude of cultures are brought together; differences will be evident, and issues may occur. In the event that anyone feels as though they have been offended or treated unfairly, it is your responsibility to take action. Corrective action serves as the unbiased regulation of defending your students culture while making them feel welcome. Let's go back to that song example. If students begin to demean or diminish the song

being played, it's imperative that you remind students of your expectations and model the wanted behavior by encouraging open mindedness. While it is easier to write these moments off, follow through is important. Consistency while remaining firm but fair is the key to corrective action. There will inevitably be times when you miss the moment issues occur, but you will never miss the opportunity to make it right.

Moving forward, know that your work is good work, and a cycle of reflection is necessary for your actions to become great. Be prepared for the moments when mess ups happen. From personal experience, we have all mispronounced names or misidentified students in our classes. When those moments occur, it's important to give the class an opportunity to correct you. We have all experienced the discomfort of being wrong, but when we embrace corrective action, we empower students to bring their own individuality to our classrooms. Thoughtful responses to mistakes are signs of growth. By asking a student to correct you after something as simple as mispronouncing their name, you are creating a space where students feel valued, and vulnerability can be reciprocated.

It's Up To You

As educators, we have one of the most rewarding careers. We have the opportunity to impact the lives of every student who walks through our doors. That can only be accomplished if we make an effort ev-



The challenge of creating a shared classroom culture is not being everything for every student, but instead making every student feel as though they have a place and value within the classroom.

ery day to celebrate student individuality through acceptance and encouragement, even when it's uncomfortable.

Although it will be difficult, it is up to us to create an atmosphere where students from different races, ethnicities, religions, sexual orientations, home structures, socioeconomic statuses, geographical communities, etc., know they can be themselves and truly see the opportunities that agriculture has to offer. Will you be the person to create the classroom culture that your students deserve and need to realize agriculture is for them? It's up to you.

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AGSPOSURE: Co-Creation of Community Outreach for School Based Agriculture

by Courtney P. Brown

The idea of community outreach is nothing new to the world of School Based Agricultural Education (SBAE). Sharing the beauty of an industry we all love is critically important in efforts to increase agricultural literacy. With this in mind, there are many minority youth who live in communities denied the opportunity to engage with agriculture in the same way other students enrolled in SBAE programs do. I was one of those kids growing up, but somehow I found my way into agriculture and never looked back. Often, as one of the only African American students in most of my agriculture classes, I wanted to not only understand why that was, but also learn **what** could we as a discipline do to change this. Over the years I have become increasingly committed to diversifying the agriculture industry through efforts to increase agricultural exposure to minority youth through research and community outreach.

My commitment to connect minority communities with agriculture prompted me to establish AGSPOSURE Inc., an organization based in Oklahoma City, Oklahoma with the goal of using agriculture to address many of the issues affecting communities that have been purposefully left behind and not granted access to equitable access and funding. According to the United States Department of Agriculture, socially disadvantaged people are those whose members have been subject to racial or ethnic prejudice because of their identity as members of a group without regard to their individual qualities (USDA, 2020). When ana-

lyzing the decades of inequity and denial of access to these largely minority communities, there was an immediate need to provide support to help these groups grow and overcome challenges. AGSPOSURE would be our way of providing this support.

The first focus of AGSPOSURE was to form a youth program. We partnered with a local high school, who did not have an SBAE program in place to introduce our outreach efforts. The youth program was open to high-risk high school students located in an urban, underserved community in Oklahoma City. Membership was offered to any interested student for free. Students received handbooks, t-shirts and gardening kits. During this year-long program, students met monthly to learn about agriculture, personal and professional development, and embarking on social entrepreneurial projects. During their time in the program, students created action plans to provide a path to actively and effectively pursue their goals. Our membership is 100% African American, affirming that the interest in agriculture exists, but lacks infrastructure to be implemented as part of SBAE.

We alone cannot undue centuries of systemic and institutional policy that shunned African Americans from entering the agriculture industry or expand agricultural literacy. We do have the power as teachers of SBAE programs to create strategies to develop outreach efforts within these communities. As possible outsiders, it is important to evaluate their challenges and needs before entering and work with them to co-create programming tailored

to their needs and desires. Since many of these communities are marginalized, it is important to ask yourself, “*Why are you engaging with these groups? To only interact with them or would you like to empower them to solve the problems their communities face?*” It is equally important to ask yourself about the **why** behind it all. “*What is your motivation to engage with more diverse populations and what value do you stand to gain from these experiences?*” As we navigated through our youth program, we found two approaches to be successful in engaging our African American students who may have never considered agriculture as a viable career. We also found immense opportunities for the deeper benefits of creating a more culturally diverse environment within the industry.

Empower Minority Youth to Use Agriculture to Create Change Through Co-Creation

The notion of having a seat at the table is a great start, but there is a need to do more than just provide an opportunity to give input on how to improve the build of the table. The freedom to implement those suggestions is the key to empowering an individual.

Our youth members lived in a community that faced challenges such as food insecurity, unemployment, and lack of services. Our students were aware of the problems and wanted to do something about them. Paired with their instinctive desire to improve their communities, our approach to engaging them with the numerous ways in which agriculture could empower them to motivate them to change the communities they lived in.

During our monthly sessions we would spend time discussing plans and projects to address the needs they deemed most important. We tasked them with the responsibility of garnering the support of other students outside of the program. Co-creating the planning and creation process helped students increase their buy-in and motivation to execute an action plan. While service projects are not a new concept in agriculture programs, introducing the idea of agriculture through the implementation of a service driven project in areas that don't have existing programs is a great strategy to present agriculture to these students in a way they would see immediate benefit.

Authentic Value of an Added Perspective—What's Your Motivation to Work with Minority Youth

What is driving our need to diversify the agriculture industry... growth in production or growth within self?

Diversifying the agriculture industry needs to account for the lived experiences of **all** our citizens and the consumers we serve. The primary value diversity would bring to agriculture is not to simply push forward capital growth. Although, this is certainly a benefit, the greater value of an added cultural perspective provides us with a much deeper and enriching experience. Many of the discussions we had during our youth session provided such insight into their world. The challenges they shared humbled me and made me even more committed to connecting them to opportunities in agriculture. How they saw the world based on their experiences prompted me to reevaluate my personal perspective and explore areas of self-growth. I know if they choose to pursue a career in agriculture I have no doubt they will be game changers, but I can't help but think about the immense impact they had on me through sharing their viewpoints.

All of my encounters with individuals of different cultures have enlightened me and changed me for the better. I would suggest that if educators approach diversity with the idea of growth and impact much broader than production, our industry would increase effectiveness in creating a more inclusive and welcoming environment for minorities.

The biggest takeaway from working with our youth members was the value they added to my life. My experience echoes many others and further proves that diversity within an industry is of mutual benefit to all parties involved. I see agriculture as part of the solution to many of the problems socially disadvantaged communities face. Furthermore, the implementation of more agriculturally related programs could help significantly change underserved and minority communities for the better through economic growth and more secure food accessibility. More partnerships between SBAE programs and minority communities could also broaden our scope as we strive to educate more people on the significance of our industry. Agriculture is so powerful, not only because of its responsibility to feed the world, but because of its ability to bring people together and uplift communities.

Reflect on the following questions. How many times have you made a determined effort to engage with a community different from your own? Have you considered working with a school who is not privileged in having an agriculture program but could benefit from what you could provide? You, as an SBAE educator, have the opportunity to bridge communities through your passion for agriculture and create a collaborative and enriching experience. Research some of your neighboring communities, get to know them, understand their needs, build relationships and take the initiative to foster the partnership.

If we expect to see more diversity within the agriculture industry we have to meet these diverse populations where they are. We must accept that we have persisted with the systemic inequities that continue to ignore these communities. We must introduce more agriculture programs into urban schools and continue to expand our own understanding and knowledge of these populations, their culture, their continued struggle, and the system that has put them into these categories. AGSPOSURE was our opportunity to work with minority youth in an influential and unique way. We saw success and are confident that SBAE teachers around the country can certainly do the same.

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Increasing Accessibility from Field to Classroom: Considerations from AgrAbility Virginia

by Garland Mason, Kim Niewolny, and Andy Seibel

To ensure the health, safety and wellness of farmers and their families, it is critical to create and sustain culturally appropriate services and programming related to promoting physical and mental health as well as safe operating practices to support agricultural communities and the individuals who live and work within them. Farm occupations have been consistently ranked by the Bureau of Labor Statistics (U.S. Department of Labor, Bureau of Labor Statistics, 2020) as among the most dangerous wherein injuries and permanent disability are not uncommon. Additionally, the average age of farmers has been on the rise, and with that comes illnesses and ailments common to aging such as impaired vision and arthritis. AgrAbility is a federally funded program operating in 28 states that directly focuses on increasing the accessibility and safety of farmers through education from field to classroom. AgrAbility especially helps farmers, farm workers, and farm families with illness, injury, or disability continue to farm through trainings, technical assistance, and assistive technologies. At AgrAbility Virginia, we strive to assist farmers and farm workers of all ages and abilities with injury prevention and mental health awareness, as well as assistive technologies that allow injured or disabled farmers to continue to farm safely by making decisions and choices on their own accord and according to their own needs. Further, we work to dispel the pervasive myths spread by

ableism—a form of discrimination or prejudice that is held against people with disabilities or those perceived to be disabled.

Ableism is a form of social discrimination against people with physical, social, emotional, and cognitive disabilities based on the belief that they are “less-er” than non-disabled people. To this end, ableism is based on the assumption that disabled people should be defined based on their disability (National Council on Independent Living, n.d.). Ableism is pervasive throughout the United States in a number of work and learning environments. The agriculture industry is not an exception due to the common misconception that able-bodiedness is a prerequisite to engage in agriculture. Disability, illness, and injury, as well as ableist rhetoric are common and agricultural education professionals are critical in helping to promote inclusion in the classroom. Importantly, agriculture teachers can play an active role in helping to dispel the myths of ableism in their everyday lessons and practices. They can also partner with their state’s AgrAbility program to help

educate their students about the ways those with illness, injury, or disability can continue to farm (or begin farming) while living independent lives.

Here in Virginia, agriculture is a major industry, as it is in many states. In Virginia, the average age of farmers continues to rise as it does all over the country. At present, the average age of farmers in Virginia is 58.5 (United States Department of Agriculture, National Agricultural Statistics Service, 2019) on par with the national average. At the same time, there are myriad barriers for new farmers attempting to gain access to the industry as is true in most of the country. As farmers age, they may experience the physical and emotional impacts of aging, as well as higher risk of injuries and wear-and-tear on their bodies as a result of the physically intensive labor involved in agricultural production. Similarly, new farmers may have injuries or disabilities. There is growing popularity among military veterans to pursue careers in agriculture, some of whom enter the agricultural workforce with physical and mental traumas. Last, all farmers

Education before an illness or injury occurs is a crucial prevention activity that agriculture teachers in the U.S. can incorporate into lesson plans to encourage health and vitality across the lifespan.

are exposed to extreme mental stressors imposed by a volatile economy and a changing climate that impact prices and yields. For both established and new farmers, it is important to support both the physical and mental health of all farmers to ensure their safety and wellbeing.

At AgrAbility Virginia, we work to provide culturally appropriate education about farm safety and farm stress to prevent farm accidents and to maintain mental health and resilience among farmers. We believe it is important to educate young people about the physical and mental health risks inherent to agricultural jobs. Education before an illness or injury occurs is a crucial prevention activity that agriculture teachers in the U.S. can incorporate into lesson plans to encourage health and vitality across the lifespan. We also need to do more to break down the stigma of mental health in the farming community. While it can be daunting, it is important to communicate that market volatility, unpredictable weather, and financial loss can amplify personal stress for farm families, and heighten the risk of chronic stress and depression. At the classroom level, empathy and openness to these and other systemic issues is key to abolishing this stigma. This can be challenging in agriculture because we often talk about rugged individualism, the 'pull yourself up by the bootstraps' attitude. As educators, we can do more to shift away from that kind of thinking to create a more inclusive and supportive environment for farmers and their families.

We offer a number of strategies for agricultural educators to teach students about disability, safety, and wellness. These strategies can help young people understand the risks inherent to an agricultural career, reinforce a culture of safety, and help dispel the myths provided by ableism. Strategies for agriculture teachers to incorporate a culture of care

and inclusivity include:

- Believe people when they disclose a disability in your classroom or agricultural community.
 - Always listen to and support farmers and farm family members when they request an accommodation.
 - Don't speak on behalf of a farmer with a disability unless they explicitly ask you to.
 - Reinforce aspects of integrated networks and resources available to farmers that increase awareness about who they are and what they do; provide examples for physical and mental health support and outreach.
 - Ensure you are including participants who are representative of the population served by AgrAbility (e.g., incorporating participants that are diverse in race, ethnicity, ability, age, and gender). For example, partner with Centers for Independent Learning for improved outreach and education designed and operated by people with disabilities.
 - When covering safety curriculum, teach students and young farmers how to safely operate equipment and maintain the physical environment with a sense of whole-person safety in mind. Under federal guidelines agriculture teachers can offer certification programs for youth to operate farm tractors. The curriculum can be found through Purdue University or Pennsylvania State University.
 - In addition to AgrAbility, partner with community organizations (e.g. County Farm Bureau, local Fire and Rescue, and Cooperative Extension) to teach and illustrate safe agricultural practices across the lifespan.
- Furthermore, agriculture teachers and agricultural pro-

gram leaders (for example, FFA and 4-H program leaders) can emphasize inclusion for people with disabilities in agriculture. Students with disabilities may be placed in agriculture education programs as an aspect of differentiated and mainstreamed education. Here, agricultural educators have a role to play in modeling inclusion and diversity in how these educators interact and engage with students with disabilities. By practicing affirmation and respect, agricultural educators can reinforce an inclusive mindset.

Further, livestock shows and other agricultural education events and venues have continually adapted to better serve students with disabilities, be they physical or emotional. In the past, these students may have been excluded out of concerns for safety or the increased resources that may have been involved with what are now considered reasonable accommodations. One suggestion is to include AgrAbility staff and farmer participants who have experienced injury, illness, or disability in such events as speakers, mentors, and judges to model inclusivity and affirm these individuals' value to the agricultural community, which further dismisses the myths pervasive within ableism. By incorporating AgrAbility staff and farmer participants, agricultural teachers can promote the work and resources provided by AgrAbility within the agricultural education network. This point of connectivity is vital to serving our community members well.

It is essential to practice inclusivity and dismiss ableism in agricultural communities and on the worksite. This can begin with the practices of agricultural education professionals who can help raise awareness about disability, injury, and illness in our agricultural communities. Moreover, agricultural education professionals can model inclusivity and educate

future farmers about the myths of ableism and how they may practice inclusion in their communities. A natural partner for these efforts is AgrAbility. Agricultural educators can check the National AgrAbility Project website for resources or to find out if there is a state or regional program in their area. An AgrAbility staff person in any state would be more than willing to partner with an agricultural education professional to help educate young people or those entering agriculture about safety measures and accessibility opportunities associated with an agricultural career.

Resources:

- The AgrAbility Virginia website has contact information, resources about on-farm safety, at-home safety, and mental health resources, as well as AgrAbility success stories. <http://www.agrabilityvirginia.org>
- The National AgrAbility Project website includes a toolbox of adaptive technologies, a trove of print and video resources on a variety of topics, and a directory of state AgrAbility programs. <http://www.agrability.org>
- The Occupational Safety & Health Administration website includes a page on youth in agriculture. <https://www.osha.gov/SLTC/youth/agriculture/other.html>

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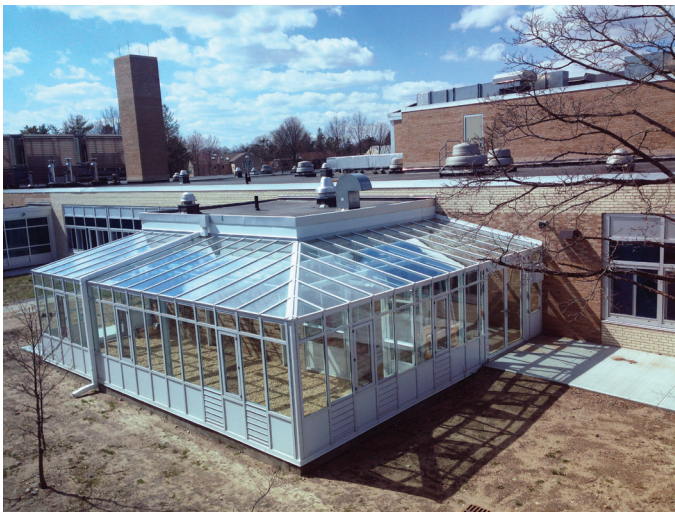
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Rice, Amber- January/February 2021	Vance, Kerri- July/August 2020	
Richards, Roobie- January/February 2021	Wang, Hui-Hui- July/August 2020	
Ricketts, John- July/August 2020	Warren, Sarah- September/October 2020	
	Webb, Randy- July/August 2020	

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