

## The Best Places To Learn About

# AG

Agricultural education has seen a boom as enrollment skyrockets and educators adapt with the times. Here are five of our favorite programs.

BY CLAIRE VATH

ONCE AGAIN, WE SCoured FARM COUNTRY IN SEARCH OF GREAT AGRICULTURAL EDUCATION PROGRAMS AND FOUND HORDES OF THEM. That should hardly be surprising given the strong backing of rural communities who are trying to hold onto their agricultural upbringings while introducing “subdivision kids” to the practicalities of applied agriculture in daily classroom activity.

We talked to those in the trenches, including agricultural education councils like the National Association of Agricultural Educators, and of course the ag ed teachers, many of whom have come up through the same programs and watched them evolve. This is a great testament to the strength of the programs.

In the classroom, FFA is a force to be reckoned with, and has long been forward-thinking in its diversification of curriculum. The National FFA Organization was founded in 1928 and today has 7,429 chapters with a 2008 membership of 506,199.

In fact, last year the National FFA Convention topped more than 54,000 students in attendance. That’s a whole lot of blue jackets in one place.

And while studies show that the number of family farms is shrinking, there’s a lot of good news in agricultural education: The programs are growing ... and growing. The classes are wildly popular.

We’ve said it before: Studies show that agriculture students and farm kids score well in science because of their real-world experiences, and that’s one of the biggest strengths of these programs. They make sense in a very real-world way.

Here we’ve spotlighted five very different agricultural education programs, what they’re doing right and what other schools can learn from them. The best part is the programs and the students are brimming with potential. Their futures are burning bright.



“As ag educators,” says Forest Lake ag teacher Mike Miron (pictured with student Carter Lee), “our opportunity is great and our challenge is huge.”

### SERVICE LEARNING: Forest Lake High School

When Amanda Melhorn walked into her agriculture classroom the first day of school, she took her place behind the teacher’s desk. The 2004 Forest Lake High School graduate was starting her first year as an agriculture teacher in a rural Colorado town. And she was the first-ever female ag teacher, to boot. “That was different for them,” she recalls.

Though she lacked a traditional farm background, Amanda was drawn to the program at her Forest Lake, Minn., high school due to her interest in wildlife management. That interest grew, and when she got to the University of Minnesota, she signed up to major in agricultural education and stuck with it, though she admits it wasn’t without its challenges.

“Being a nontraditional student, I had to do things like dehorning cattle,” she laughs, “which didn’t come as natural to me.”

After college, Melhorn’s first step back into the classroom was as a long-term substitute at her alma mater, teaching alongside those who had once taught her. One of those teachers was Mike Miron.



PHOTO: STEVE WOIT

When Miron, who grew up as a farm kid, enrolled in ag ed classes at Forest Lake himself, he realized it was more of a learning experience than he'd anticipated.

"Because of the diversity of the program and the vastness of choice, I was able to explore so many different facets of agriculture," he says. "Even as a farm kid, I didn't know all those choices existed."

It's those choices he and his colleagues, longtime teachers Bob Marzolf and Veronica Ward, have continued to impart to their students. Miron says his program also tries to help the 500 or so students transition from high school and help the community at the same time. "We really try to engage in service learning that gets them out into the greater community," he says. "It gets the students working alongside community leaders and trying to create that bridge between education and using that knowledge to help someone else. When they see that their knowledge can impact others in a positive way, it's a powerful experience."

Another boon of the program is that the courses meet state science and economic credit requirements.

Popular classes at Forest Lake include wildlife management, floral design, companion animal science, greenhouse classes and equine science.

Miron and his colleagues recognize that agriculture is a changing field. "Unless you're part of it, you may not understand those advancements," he says. "Even if you're in the field, you sometimes take that research for granted."

But, he adds, ag is a practical way to apply the sciences. "We have an application for all those different technologies. As ag educators," he concludes, "our opportunity is great and our challenge is huge."

### **PIONEERS: Jessamine Career and Technology Center**

Jessamine Career and Technology Center, in Nicholasville, Ky., is where east meets west. It sits smack dab between the two high schools in the county—East Jessamine County High School and West Jessamine—and it's not your traditional school.

The center, only in its fourth year, is the agricultural education hub for the county. Unlike a traditional trade school, the center was developed to teach careers that include agricultural concentrations like agribiology. Students are bused over from the two high schools throughout the day.

As the agricultural landscape in the county has shifted, and with the encroachment of Lexington 10 miles north, there are only a handful of students whose parents farm full-time.

Alex Tingle is one of the handful. "My involvement in agriculture as a young child with my grandfather got me interested," says the West Jessamine junior, who also serves as FFA chapter president. "Listening to my dad and brother talk about their experiences as FFA members also greatly influenced my interest in the program."

Like Tingle, ag teacher Christi Hack was an exception to the rule. She says her background mimics what's going on in the county today. "Both my parents had jobs in town and farmed when they could," she says. "There's still a lot of ag in the county; beef and horses are huge here. We have a lot of tobacco too, but most [people] are farming part-time."

While most of her students are two or three generations away from the farm, this allows Hack and her colleagues the opportunity to give the 309 students they see every day an ag background.

And they're not just teaching the traditional ag. The center is a pilot site for CASE (Curriculum for Agricultural Science Education), a program that aims to put ag back in schools by developing a neat package of curricula, activities, teacher's notes and training to incorporate these classes into suburban and urban areas ([www.case4learning.org](http://www.case4learning.org)).

"The National Council for Agricultural





**Forest Lake High School agriculture teacher Mike Miron works with students Mike Clemens and Rosalyn Nelson during class.** PHOTO: STEVE WOIT

Education is focused on transforming agricultural education for a changing world,” says the organization’s Nancy Trivette. “CASE will help us do that.”

Hack is piloting two of the classes in her own school to give the program feedback on how things work and to add notes to the initiative. “To think about going into Lexington or Louisville with a traditional principles ag program just isn’t going to fly,” says Hack. “But if we can amp up the science and say, ‘Hey! If you latch onto this, it’ll boost test scores,’ we stand a better chance of building into more science rigor and inquiry-based teaching.”

And the students’ experience seems to be positive. For a while, enrollment had been dropping, but recently the numbers have skyrocketed, and that has Hack and her colleagues excited.

“The reality in Kentucky is kids either have to go into debt or be in the family business already,” she says. “Ag careers here look very different than they did years ago.”

### **INVESTING IN AGRICULTURE: James Madison High School**

James Madison High School may fit into the “everything’s bigger in Texas” cliché: It’s a massive school with under-construction state-of-the-art agriculture education facilities, but that’s not why the student enrollment in its program is so enormous. Ag ed director John Mack believes the diversity of classes is key.

And student Tori Patterson can attest to that. “I’m taking a meats processing class, where we learn the anatomy of different livestock and process their carcasses,” she says. “I’m also in wildlife and range

management, where we learn about our local wildlife and help to positively influence our community.”

The program offers six majors, with the most popular being large and small animal science, as well as veterinary medicine. Students are able to assist in spaying and neutering, administering vaccines and shadowing vets who come to help.

The surprising thing about the breadth of the program is that it’s located a mere 15 miles from downtown San Antonio, yet there’s a staff of seven ag teachers, a live-in farm supervisor, 15 acres of land for the program and a \$24.5 million bond in place to rebuild the agriculture facilities.

Sophomore Tori Patterson was hooked when she first laid eyes on the school.

“The first time I pulled through the gates to help my cousin feed her swine, I was surprised at the things I saw,” says Patterson. “I had no idea that in San Antonio there were barns filled with animals you could raise.”

What began as a small program in 1976 with around 30 students was considered progressive then. The ag teacher “was using terms like agribusiness before that term even really existed,” says Mack, who’s been at the school for 24 years.

And the facilities are beyond impressive. That wasn’t always the case, though. “Before this we had metal buildings and a hodgepodge of portables,” continues Mack. “Anything good came strictly out of the energy of the students, parents and teachers.”

At press time the new LEED-certified agriculture building was under construction. Final plans include 60,000 square feet of instructional building, a large and small animal vet clinic, numerous labs, livestock barns, a greenhouse, a 750-seat arena and ponds.

“Every inch is a teachable moment. Everything has a story,” says Mack. There are solar water heating pumps through slabs to heat the livestock barns, a wind generator, rainwater collection system and in-vessel composting.

What’s more surprising is that the program comprises roughly 650 students, with no more than about 5% coming from an ag background.

More good news is that the state of Texas is taking progressive steps to rewrite curriculum. The new state-approved curriculum will reaffirm what agricultural education teachers have known for years: Hands-on math and science classes are more effective than traditional courses.

“This opportunity can impact student performance like we’ve never had before,” says Mack. “I think the quality of the programs, our ability to apply them and being able to take more of these courses for college credit is a win-win for students. We’re regaining strength by bringing back the basics.” ►



**Forest Lake High School ag teacher Bob Marzolf with students in the school's greenhouse. Diversity in agriculture curriculum keeps the program popular.** PHOTO: STEVE WOIT

### FIRST GENERATIONS: Bertie County Early High School

There are several interesting trends at Bertie County Early High School. First, the county is about 75% agriculture. But, until four years ago, there hadn't been an agricultural education program there since the mid-1980s. Second, only about three or four of the 53 students in the program have parents in an ag-related industry, and of the students, most will be the first generation to go to college.

The biggest trend, says ag education teacher Jim Guard, "is that we're the majority female and two-thirds of the students are African-American."

While the school is new, Jim Guard is in his 17th year of teaching agricultural education, and he followed in his father's footsteps. "My dad taught for 31 years," Guard says proudly. And though he's been in the education profession most of his career, Guard is excited about the promise of the program at Bertie, which is located in Windsor, N.C.

"We are part of the North Carolina New Schools Project, which falls under the Bill Gates Foundation umbrella," he says, explaining that the students may earn up to two years of college credit tuition-free from the school.

"These are kids who have high GPAs," Guard says. "They're big into animal science—and not just small animals—and heavy with the veterinary medicine as well as engineering, in biotech/DNA areas."

Guard has worked tirelessly to hold the interest of students, and a 100% FFA chapter speaks volumes. "We're using SAEs [supervised agricultural experiments] to teach entrepreneurship skills," he says. "The key is getting the kids to realize ag is more than just production."

The big problem in the county right now, Guard believes, is that their best and brightest leave the northeast area of North Carolina and never come back.

"They don't think they can make a living in rural areas," he says. "We're trying to show them that there are careers in their own backyard by visiting businesses and bringing in other people."

### AG EDUCATORS: East Richland High School

Although East Richland High School is situated amid farmland in Olney, Ill.—the county is home to traditional cash crops, hogs and cattle—ag teacher Mark Steber estimates that around 90% of the agricultural education students don't come from the farm.

But, in his 18 years teaching agriculture classes, he's had six former students go on to teach agricultural education themselves, which is a good number considering interest in agriculture as a career is shifting.

One of those former students, herself in her 11th year of teaching, is Kim Portz, agriculture teacher at Marissa Junior/Senior High School in Illinois. "My freshman year of high school was his [Steber's] first year of teaching," Portz recalls. "He has been a role model to me ever since and is the main reason I became an agriculture teacher/FFA adviser."

Another plus for the program is that it's an elective; all the students choose to be there. One reason Steber believes that many of his students have been interested in pursuing ag-related fields is the diversity in the curriculum East Richland offers.

"We offer about 14 different courses that alternate from year to year," he says. "Right now we're teaching an ag business management class; next year we'll be teaching marketing and sales."

With that diversity comes change, and as the school's program has been around since the 1920s—even before FFA—it's seen its fair share of change. Students now are "very technologically driven," says Steber. "They haven't known the world without the Internet."

Another reason for the program's success, Portz believes, is Steber's teaching style and his ability to relate to his students. "He has the ability to reach each and every student," she says. "Students don't always learn the same way, and he understands that."

And for Mark Steber, it's students like Kim Portz who keep him motivated to teach. "Most students will tell you that they enjoy a class or course because the instructor motivates, inspires or challenges them," he says.

"I believe this is also true for teachers. In each class, there are always positive students that motivate the instructor to teach to their utmost potential. There is nothing better than having an energetic and positive group of willing participants." ●