

**Wichita Falls Independent School District
Ag Science Advisory Committee Meeting
Tuesday June 7, 2016
10 a.m. Education Center Room 301**

CALL TO ORDER

Michelle Wood, WFISD's CTE Coordinator, called the Ag Science Advisory Committee Meeting to order at 10 a.m.

PARTICIPANTS

Michelle Wood, CTE Coordinator
Amber Perry West, Rider ag teacher
Katrena Mitchell, CWF Animal Services
Carrie Tucker, House of Fur
Synthia Kirby, Carrigan Principal
Amanda Alacuny (check spelling)
Stephen Davis, WFISD ag teacher
Daniel K. Nix, City of Wichita Falls
Ann Work Goodrich, WFISD communications specialist

BUSINESS

The group elected a chair (Katrena Mitchell) and a Secretary (Carrie Tucker) to direct the meeting. A WFISD employee may not hold these positions, according to rules put forth by the Perkins Grant, which sponsored the meeting.

OVERVIEW

Michelle Wood explained that the purpose of the meeting was to tap community input on ag science careers so that the district can create a program that pairs well with community needs. The district is seeking feedback so that the course offerings will create graduates that will be hired locally and will have the background that employers need and want.

COURSE SEQUENCING

Mrs. Wood explained that career choices begin in 8th grade when students are exposed to a career survey called Career Cruising that suggests to them 40 possible careers, according to their likes and dislikes.

They are asked to then choose from one of five endorsement areas that are “pretty broad,” said Mrs. Wood. Of the 5 endorsement areas, CTE classes have a presence in Business and Industry, Public Service, and STEM. The Agriculture track falls within Business & Industry endorsements.

“They are not picking a job for the rest of their life,” said Mrs. Wood. “They are picking an area they would like to explore.”

They are given a list of career skills and asked, “Which looks interesting to you? Do you like to work with your hands? Do you like welding? Do you like to work with animals?” We follow their answers backwards to help them choose an endorsement and the track within it.

In their freshman year, students interested in ag will all take the Principles of Agriculture Science class, which gives a broad overview of all the opportunities within ag.

In 10th grade, they narrow their choices a little more by choosing from 3 categories: plants, animals, and metals/mechanics. Depending on which category they prefer, they’ll take a class in Principles of Floral Design, Small Animal Management/Equine Science/Livestock production or Vet Med Applications and Advanced Animal Science, or Ag Mechanics & Metal, which focuses on welding, engines and repair.

In their senior year, they will work at a practicum in Ag to get hands-on experience in their chosen interests.

“Next year is the first year we will have done it this way,” said Mrs. Wood. Ag classes used to be at Rider High School only; this year the ag principles class is available at all campuses.

ENROLLMENT

Next year, Wichita Falls High School will offer two sections of ag for 50 kids; Rider has 50 kids enrolled; Hirschi will have 25 students taking ag.

Floral design has had a pretty good enrollment: one section of 24 to 25 students.

Some ag classes have declined in enrollment this year because of travel times. To take one class, students have to schedule 2 periods to cover the travel time, and some are unwilling to do that. But by offering the class to students at all campuses, it opens the program up to new students.

Right now, 7 students have signed up for Horticulture, which is the 11th grade class that follows Floral Design. However, that class will probably be canceled for next year since the number is so low. “As we grow, we’ll have more expressed interest in that,” said Mrs. Wood.

Next year there will be two sections of the class Small Animal Management and Equine Science, which will be divided in half. Thirty kids are enrolled there. “This will be the first time students are allowed to go to the ag farm during the day,” said Mrs. Wood.

Ag Mechanics has 12 to 13 students enrolled.

Ag Facilities is open only to Rider students now.

“We’re reworking all the ag programs,” said Mrs. Wood. “It seems like the numbers are declining but really they are shifting.”

The district has now created a program with prerequisites...something new to students. Before, all classes were electives, and students could take whatever elective they wanted. Now the district is trying to create pathways that will raise up students who have the same foundation of knowledge...so they must take the classes in the prescribed order.

“There’s some give and take. We have to grow with it,” said Mrs. Wood.

The Career Cruising survey that students do in 8th grade is done online and can be done with parents at home so that a student can make a four-year plan, planning out all his classes and getting parent buy-in.

“We’re trying to put the ownership and planning in the laps of kids,” said Mrs. Wood.

CURRICULUM

WFISD’s ag curriculum will be based on the University of Northern Texas ag curriculum. This summer, the district is paying for curriculum development. Stephen Davis (a participant in this meeting) has agreed to write it. The district curriculum will then be posted online for everyone to see, and it will be used as the basic foundation class for all ag students. This way, every student will be getting the same foundational principals, no matter what school he takes his coursework at.

Amber Perry West said that her Floral Design curriculum also is based on the TEKS, the list of things to teach that are required by the state. "I go by the TEKS for everything. I start at the top and go down," she said.

She uses an online curriculum and uses a Floral Design book that she likes. She also uses certification requirements to guide her teaching. She presents terms, skills, and hands-on projects that will be required for certification.

In the Horticulture class, she also goes by the TEKS and finds curriculum to match what the state is requiring she teach.

The Small Animal Management class includes Canine Care and Training, grooming, care, how to handle bites, and dog handling training.

Equine science: This class hasn't been created yet.

Livestock Production class: Covers management and care of livestock and facilities.

Vet med: The class helps a student earn a Vet Assistant certification. One student earned the certification in 2016.

The Advanced Animal Science class covers large animals and their body systems.

Ag mechanics class covers electrical, wiring, plumbing, concrete, and includes a heavy emphasis on welding. They are taught to weld properly and do projects. Right now, they are working on a dump trailer.

Certifications that ag students can earn: Dog handling, equine assistant, water certification.

When the district can get the numbers of interested students, it will offer Advanced Plants and Soil Science.

Daniel Nix said at MSU, students look at such classes expecting them to be easy. But actually, they are the start of the Environmental Science degree program. It would help if the high school programs could lead into the MSU degree.

Ms. West said a current problem with her juniors and seniors is that they have taken all the ag courses offered.

They need to see more interest in the plant side of ag, said Ms. West. A section on aquaponics drew much interest among students and has much potential, she said. After a tour to Smith's Gardentown, some students said, "Yes, I might want to take horticulture."

Mrs. Wood said students don't know what ag can get them. "They don't think beyond farming," she said. We don't have to have a big greenhouse to do it, she said.

Mr. Nix said it could be a 2-, 3- or 4-year track.

The district simply needs to see the interest among students, said Mrs. Wood.

Mr. Nix said students could earn a wastewater certification...and that it could be a skill that would fall under the STEM track.

Synthia Kirby said a lot of tracks, skills and certifications could fall under different endorsements. But the state sets the guidelines for what falls where. For example, nursing could have been classified under STEM or under Public Services.

Mr. Nix said classes on drinking water could go to the health science track instead of ag.

Mrs. Wood said the district needs to “expose them to things they never knew they always wanted.” Our goal is to introduce them to things they didn’t know about, she said.

Mr. Nix said he was surprised to see that students in culinary arts at Texas Tech sent their hotel and restaurant students to spend time in the ag department, where they learned to cut meat in a meat lab.

Stephen Davis said it would be good for WFISD to have a meat lab.

Mr. Nix said restaurant students “go through the whole kill sequence” as they learn to prepare meat.

Mrs. Wood said in the CTE Center, the restaurant courses will be near the ag courses. It will be nice to have everything in the same building so coursework can overlap.

Mr. Davis and Mr. Nix said Texas Tech and Texas A&M and Tarleton “all have a meat lab” for students. Chicken processing is also a new thing, said Mr. Nix.

STUDENT ORGANIZATIONS

FFA – the district is changing from a Rider High School FFA to a WFISD chapter

Competitions and camps keep students and staff busy all year, said Mr. Davis. There is an area leadership camp next week, then an FFA officer retreat. During the school year there is the state fair, a leadership contest, stock shows, CDCs, public speaking opportunities and conventions. There are activities “12 months a year that we take kids to,” he said.

Floral competitions are sponsored by FFA.

Mr. Davis said there are a host of other contests in landscape development, poultry, horse judging, ag mechanics, vet tech, floral, etc. Students usually train for three each.

Mr. Nix said students would benefit from a fish hatchery and aqua culture studies.

Mrs. Wood said they could also add wildlife management. However, the district is trying to find that happy balance between courses and options that students WANT and that the community can sustain and use. For example, she knows students would be interested in marine biology, but we don't live near the coast and the jobs for that field would be nil here. “It's not a great career option for here,” she said.

Mr. Nix joked that would be true for a study of whales.

Mrs. Kirby joked that you could study it “virtually.” The group laughed.

“We need to capitalize on the area and the things that are needs,” said Mrs. Wood.

Mr. Nix said it is possible to grow certain species of plants here that are not native to this area but sell and transfer them elsewhere. Also, forestry work is underway in the Wichita Mountains, he said.

SUPPLIES

Mrs. Wood said she has ordered new welders for the new CTE Center. They are 3-process welders.

She also ordered kennels and metal tables for Floral Design classes. “Your trash is our treasure,” she said, urging advisory members to remember the school district when they are cleaning out or tidying up. The schools can often use things that businesses are ready to toss.

Mr. Nix said he’d like the WFISD to look into purchasing the property SW of the Ag barn, a mesquite field now, and clear it and put in an irrigation pivot. “My thinking is this is a perfect area for a pivot (irrigation system),” he said. You have 360 degree access to 20 million free gallons of water. Everything you grow with the pivot you can sell and put those funds back into WFISD. All that money would roll back into Ag. You can grow vegetables and a variety of crops, he said.

Mrs. Wood said that if any moves were made, it would probably be to the CTE Center or nearby.

Students have only two hours a day in class, she said. “We love animals, but we don’t want to own them, because there’s no one to care for them at night or during the summers,” she said.

Crops also must be harvested at weird times that don’t always align with the school calendar.

Mr. Nix said he'd like to tailor the program to its strengths. "I'd hate to see the ag farm go away," he said.

Mr. Davis said 90 percent of ag farms are used after hours.

Mrs. Wood said there are more opportunities to use an ag farm if it is close to the CTE Center where students congregate during the day.

Mr. Nix warned that you will lose that free water that is currently available to the school district at the ag farm.

Carrie Tucker said she was a student in the ag program when she was in high school and remembers meeting at the ag farm for an hour and a half during the day. That was back when schools were on the block schedule and had extended time for such visits.

Mrs. West said students today have 45 minutes in a class period. They are done at 2:54 p.m. for the day. Most can't stay late...they have to catch a bus to go home.

Mr. Nix was also a student of the Rider ag program. He recalled that he only went to the ag farm then for a quick demonstration, such as a castration, and then they would reassemble after school to do their own castrations.

Mrs. Wood said times have changed so much that students coming into ag programs often aren't raised to know about castrating a bull. They don't know such things are done; they don't know what calf fries are. They say they want to be a vet because that's all they've ever heard of.

She wants to expose them to all the other things that ag offers...not to trick them into learning about other things but to expose them to a broad range of things. Kids just don't come into ag with the breadth of knowledge they used to.

Mrs. Kirby agreed that there are many low socio-economic kids in ag programs. "To go back to the ag farm after school is difficult for them," she said, because they have to catch buses to get home.

Mr. Nix said he would like students to study water conservation and to be part of a program that pays for itself.

Mr. Davis said it would cost \$90 to run a dozer to clear the mesquite off the WFISD property and \$20,000 to install a pivot. Then they'd need seed and fertilizer...quite an investment.

Mrs. Kirby said she was an assistant principal at Rider and has heard discussions about this for at least the past seven years. Clearing the mesquite definitely needs to be done, she said. "I hate mesquite parasites," she said. It would be more valuable and useful if it were cleared, and it "needs to be done," she said.

Mrs. Wood wondered if the district could find a grant that would pay for the mesquite clearing.

Mr. Nix said the district could probably get one from the USDA, since there are mesquite clearing grants for this region. He recommended speaking with Judy Ligon.

Mr. Davis said he's a rancher south of Clay County and that it is hard to get hold of money for projects.

Mr. Nix said there are a couple of different programs to check into for money.

Ms. Tucker said at least people are figuring out how to work together with this CTE Center. "We are raised to be independent," she said.

Mr. Nix said a water background can be applicable elsewhere. There is no market to sell mesquite, he said. You could buy a used pivot for $\frac{3}{4}$ of the price of a new one, then grow sod. There is a big sod market in Lubbock, of all places. They grow sod, flowers and corn. "My point: You have access to free water. That's the key to make that go. Change the crops out. If you're building nitrates in the soil, switch to alfalfa or peanuts. Teach them something different."

When you think of Lubbock, you don't think of big fields of sod, he said, but there's a big market for it, and you just scrape it up, he said.

Mrs. Wood said the sod could be used, then, by our construction students when they build a Habitat house or it could be purchased by local homebuilders.

"It will pay for itself, trust me," said Mr. Nix.

Ms. Tucker said the district could sell the sod to the City of Wichita Falls to re-sod areas around town that have gone bare from the drought.

SPECIAL POPULATIONS

Mrs. Wood explained that the school district takes all students, no matter their disabilities.

There is also no bias. The district serves students with learning disabilities.

Ag tends to have more boys, she said, particularly on the mechanics side.

Mr. Davis said most ag programs are heavy in girls because they are willing to invest the time; boys often choose football over ag events. There is an increase of females in ag, he said, and more female ag teachers...as he pointed to the two sitting next to him in the meeting. "They're fixing to take over," he joked.

Mrs. West said boys are surprisingly good floral designers, catching on to concepts quickly and not afraid to create bold pieces. "Girls don't understand," she said.

Mr. Nix said women are "so detail-oriented that they make good water operators."

Mrs. West marveled over one boy, Will Shaw, who earned a third-place finish in floral design in competition because "he can just see things." Another teacher said he is also an amazing welder and fixes everything at his house. "He's Ross Shaw's kid," said one.

Mrs. Wood said the ag program will increase its number of disadvantaged youth as it expands to include Wichita Falls High School and Hirschi.

Mr. Davis said disadvantaged youth can't afford projects that make them money, like raising an animal and selling it.

Mrs. Wood said they can't afford the projects but they can take the classes and gain understanding of the processes. "We want CTE to be open to everyone," she said. "We want ALL to have opportunities." Passionate kids will get funding, she said.

Mr. Davis said show projects for ag students need to pair the right kid with the right project for it to be successful.

Mrs. Kirby said WFISD is 57.3 percent low socioeconomic.

Mr. Nix said there is a difference in raising show pigs versus raising feeder pigs.

Mr. Davis said annually he takes a science class out to his ranch. Time is always a factor.

Mr. Nix said it sounded like it was part timing, part transportation that was problematic. If they are raising their own food that they could take home to their moms and dads, it could be an incentive to be in the ag program, he said.

Mrs. Tucker said, "You can't grow a box." Many disadvantaged families don't eat fresh fruit and vegetables but depend on boxed or canned foods. They might not know what to do with fresh produce.

Mrs. Wood said, "Or if there is a mom and dad." Many students have little family influence in their lives.

Mrs. West said she always has her Floral Design students make projects around the holidays that they can take home. They are a big hit. They love to take anything and everything home, even if it's not their best work.

Mr. Nix said, "Their desire is to have something to take home."

Mrs. West said there is more that can be done. If they went to work at the Humane Society, they could write bios to help the dogs get adopted. They can help train dogs. "We need to look for projects where they can give back if they don't have money." She gave the example of one student who was making money when he got the job of taking care of a goat that belonged to someone recently put in a wheelchair.

Katrena Mitchell said the adopting wing of the Humane Center will be open at the end of the summer. She thought it was great that the ag program had gotten so diverse. "You're really trying to meet the needs of the community," she said. "Not everybody can afford show animals."

OTHER

Mrs. Wood gave a progress report on the CTE Center. Hampered by a week of rain and a sudden, freak rainstorm on Saturday June 4, the construction crew drilled the piers Monday, June 6. They have been pumping water out of the area. The slab will go in later this week (by June 10), she said.

The CTE Center is scheduled to open for Fall 2017.

The next advisory meeting will convene in September.

The meeting ended at 11:15 a.m.

