



Agricultural Sciences Advisory Committee

Summary of Advisory Committee Meeting Minutes

Date: 4/26/22

Time: 12:00-1:30 PM

Location: Zoom & AG213

Attendees

Industry Members:

- Josh Schmidt-Ag Country
- Sly Krautkramer-Swidorski Equipment Inc.
- Melissa Heise-Swidorski Equipment Inc.
- Chad Glaze-Vine Vest North Inc
- Hans Brietenmoser-Dairy farmer
- Ed Sabey-Provision Partners
- Kevin Sommer-Service Motors Company

NTC Team:

- Greg Cisewski-Dean, School of Agricultural Sciences, Utilities & Transportation
- Bobbi Lee, Learning Coordinator, School of Agricultural Sciences, Utilities & Transportation
- Chris Langenhahn, Farm Manager
- Stephen Krueger, NTC Faculty
- Katie VanDerGeest-Agricultural Sciences Development Manager
- Elizabeth Hillebrand, Farm Veterinarian
- Charl VanDerNest-NTC Faculty

Other:

- Betsy Leonard-WTCS, Education Director
- Heather Schlessor-UW Extension



Welcome & Introductions

Chad Glaze, Committee chair, welcomed everyone to the meeting and thanked them for attending. Everyone in attendance introduced themselves.

Update and highlights from last Meeting

- Approval of minutes from last meeting – December 14, 2021. No changes were made. Minutes were approved.

College-Wide Initiatives

Greg Cisewski, Dean of the School of Agricultural Sciences, Utilities & Transportation, shared the following:

- NTC's mission is to provide high quality, learner and employer focused, educational pathways committed to enriching lives and strengthening the economy. The strategic plan emphasizes the use of Industry 4.0, which is a philosophy to continuously improve the college. The driving factors are Education 4.0, Industry 4.0, and College 4.0.
- Education 4.0 is how we teach and what we teach. We want to increase accessibility so more students have access to education than ever before, and we do that through new types of programming and through the use of high technology. We want to incorporate skills for the future which can be challenging because the technical skills for the future are not always known. However, if we incorporate skills like problem solving and critical thinking into all of our programs then students should be well prepared. The other piece we know needs to be part of all of our programs is data analysis. Data is important in all industries. We help students understand what big data is and what it means to them in their chosen career field.
- Industry 4.0 – We are looking into things like smart manufacturing and we are creating a smart manufacturing lab, or lights out manufacturing lab, which will be utilized beginning in fall of 2022. Next, we plan to move into the realm of healthcare and how we can input new industry 4.0 through high technology. We already have simulations and we are collecting data, so we are looking at how to move toward improving that even more by moving into automation and AI. We want to make sure we are prepared when the industry itself moves into those realms, ensuring our graduates are ready to work in the healthcare field. The following year we will move into the Agriculture and Transportation areas. We are already doing a lot with robotics at the farm and with digital pieces in the truck driving industry. We want to continue to enhance these programs and keep up with changes.
- College 4.0 – At NTC we want to make sure we are analyzing and improving our processes. This involves what we teach and how we teach it in our classes. It also involves the college as a business and how we are utilizing industry 4.0 to serve our customers the best we can. More



than ever, students are looking to the web and mobile experiences. Students want the digital experience and expect it, so user experience is important to ensure we are serving students in the way they expect to be served. Our user experience also needs to incorporate data collection for decision making about which processes can be automated. For example, our advisors are doing a lot of class registration because our user experience isn't there. We want our advisors and faculty to have the time to do the things only they can do. By automating some things they are currently doing, they will have more time to focus on things (only they can do) like assisting students with career planning and talking through life situations.

- NTC 4.0 Organizational Changes – Dr. Jeannie Worden is our new president who started in her new position on July 1, 2021. She was very thoughtful and intentional about taking time to make sure we had all the resources in place to carry out some of these Industry 4.0 initiatives. In order to facilitate that, we implemented a new School of Learning Technologies within our learning division. Dianne Carroll has moved from a faculty role to the Associate Dean in the School of Learning Technologies. She is still part of the Marketing program and will oversee the Administrative Professional and Business Technology programs, and oversee our instructional designers. The School of Business, Community Services & Virtual College is now the School of Business.
- COVID Protocols – We are continuing to require masks for all staff and students regardless of vaccination status. We're trying to keep on track with CDC guidelines so there is potential for that to change soon. We are trying to social distance as much as we can in classrooms and meeting rooms. There are some lab spaces where that is challenging so we make sure all other protocols are followed if they are not able to socially distance. Temperature scans and hand sanitizing are still required when anyone enters the campus buildings. ***Update-masks and social distancing is no longer required at NTC.
- Student Support – This is a reminder of some important resources and support for our students as supporting our students has never been more important than it is right now. We still have our student food pantry Timberwolf Table, unlimited access to mental health therapy and crisis counseling through the Virtual Care Group, and Timberwolf Learning Commons houses resources like the Library, Academic Resources Center, and IT Help Desk. The "It's In Our Jeans" employee giving campaign continues to provide funding for student scholarships. The NTC Foundation continues to offer scholarships for students each semester funded by donations from employees, businesses, and community members.

Summary—Include a brief statement(s) of topics and action items

- A. **Industry Trends-** Everyone is seeing more technology; technology is in everything now. There is also a different group of workforce out there, there is not the work ethic that there used to be and it is a challenge to find workers for the hours they are needing. There are a lot of studies about generational differences, but Covid had a lot to do with it too. With the flexibility of working from home, workers are looking for that now. However, they can't do that in a retail business. Currently running into an issue with



younger employees-short attention span, paying attention, being present, being able to retain information. Have had some issues with phone usage, asked some employees to leave their phone in the car as they are on the phone all the time. There is a lack of people to hire. Most students are hired before they are even done with school and there are not enough people out there that want to work in the ag field. A lot of companies are being forced to offer housing, food, transportation, and other benefits in order to get people, might have to get them their CDL as well. We do have that program here at the college up in Merrill. Not sure if this is something that is needed in the Crop Science program, currently looking into it.

There is a lack of supplies and a lack of innovation due to that shortage. The next 18-24 months it is not going to get any better and have to focus on what we can build with what we have. Some expect it to be worse in 2023, but not sure why. The problem is not parts, it is people in the manufacturing plants. Not enough people to work and actually make the parts. When you have job openings people don't apply or people apply that are not qualified. The college is trying to reach out to more than just the ag programs at high schools, trying to reach the whole high school.

- B. Workforce Training-If you see something you would like us to put on a training for, please let us know. It was mentioned that offering a technology based program- electrical, hydraulic, mapping would be good. There is a Precision Ag Equipment certificate-designed to go on top of the 1 year TD for the Diesel program and consists of 3 classes in summer. Greg will be talking to the diesel students tomorrow to see if we can get any students interested. Our goal is to get these people the advanced skills to understand this technology. Committee thought that was good and could even be expanded with mapping, data collection, how to read the data you are collecting. We currently have a partner that flies our fields with a drone to give us data to take back to the machinery. Milking equipment, feeding equipment. That is exciting to kids. Autonomy. Electric Vehicles (EV). In our discussions with WPS and We Energies about electric tractors and vehicles it was brought up that the electric grid is not strong enough to handle the load. The benefit is not the "clean" energy, it is the performance. Methane is also coming in the next few years, hopefully Swiderski will have one methane tractor this summer. They have an electric skid steer right now. There is no hydraulic fluid, no liquid in that machine at all. It is limited to 4 hours of use at a time.
- C. Program Information
 - 1. Student Club-PAS State & National Competition, Dairy Challenge
 - i. PAS-Midwest dairy challenge was held in Ft. Wayne, IN and we took 9 students. For the 1st year being there we did well. All the answers were correct, they just did not have the financial information to back it up. Next year almost all the students want to go back to redeem themselves.

Competitions like this are a huge tool to help with retention. Half of the students are coming back to take another degree so they can compete. State PAS was held virtually, they didn't want to take the chance in February that things would be shut down. We had 25 students that competed for state and 22 placed. We took 16 students to national PAS in Minneapolis. We received a sponsorship from Growmark of \$800 to help with the cost. They held a job fair and there was a real lack of industry people there to interview them. We had a total of 4 folks from industry with 400 students from all over the United States. Is there a possibility of people helping with interviews next year? National PAS is looking for industry people to help in Des Moines next year. They are also looking for sponsors. While we were in Minneapolis there was a conference for Genex and we got Genex to supply the judges for a competition and then the sponsor would get a table so students could come and talk to them. Industry then can come and eat with students and instructors, it is good way to network. Industry from our area has not heard about it before, except from one of our students that works for Swiderski. Betsy and Greg are part of a sub-committee focusing on how do we get more people into ag education, how do we make a bridge to get them to the tech college. FFA to PAS needs a bridge.

2. Crop Science projects- Tapped maple trees this year, really interesting, students learned a lot. Does forestry need to be part of the crop science program?
3. Test plots- & greenhouse-few different activities. 1st year for the greenhouse, it is currently full of flowers for the PAS club, the baskets are already all sold. We are working on our pollinator plots, test plots, cameras for cover crop growth. Signs from the road have logos.
4. Recruitment has been tricky with covid restrictions. Dual credit works best. Dual credit day has students coming to the farm and students get to see what we do here and students come back. The next dual credit day is Tuesday May 3rd and we will be doing a 2 hour experience, ½ hour activities at 4 stations. The greenhouse is a big draw. Students can go out on UTV and look at the orchards and plots. We will have over 100 students on Tuesday. In May alone there are 9 events and there will be a summer school event every week in June and July. We have individual requests as well. Dual credit targeted to students that are taking our classes in high school, is that something that industry could come to? We did have a career fair this spring for NTC students that was well attended.
5. Build your Future-We are working with Wausau Area Builders Association (WABA), hoping to get at least 600 students to the farm. AG, Diesel, EPD, Gas, Construction,



manufacturing will all be participating and there will be hands on opportunities.

Looking to target freshman and sophomores. There will also be NRCS people and a field day event as well. There will be people going to different stations, lunch and t-shirts for students as well. All of you will be invited to have equipment or a booth.

6. Vet Tech building renovations-We have finished most of the renovations on the vet tech building. Faculty have been using parts of it, it is not 100% ready yet.
7. Garden to Market Technical Diploma- This program will start in Spring 2023 and is grant funded. We will start looking for faculty this summer. The greenhouse is part of it and we are also getting a grow pod with lights and hanging plants, etc.
8. Higher Learning Commission was here at the beginning of March. HLC accredits the college. The farm is considered a “regional campus” and needs to be consistent with our main campus.
9. Farm Technology Days-July 12-14th.
10. Farm update-Currently waiting for spring to come, road limits are going out Thursday. Manure will be next. Swiderski was out this morning working on our corn planter, we appreciate that. We are having issues with shortages just like everyone else. Door on coverall is broken and it will be 6 to 8 weeks for parts.

Grants

- A. NRCS Internship Grant-interview is tomorrow
- B. NRCS Grant-part of the USDA. Test plots, pollinator plots, cover crops, manure timing. Possible water conservation studies in the future.

Next meeting— December 13th at 12:00 noon.