

## Student-Conducted Farmer Video Interviews

### Introduction

High school agricultural education teachers have expressed concern about the lack of easily accessible educational materials dealing with contemporary topics in sustainable agriculture. There are numerous textbooks and monographs available for farmers and students at the college level, including the highly practical resources available from the Sustainable Agriculture Research and Education (SARE) book series on soil fertility (Magdoff and van Es, 2010), cover crops (Bowman et al., 2007) and building a farm business (DiGiacomo et al., 2003), among others. Although these are full of color photos and easily accessible graphs and tables, they are still in the print media category. Many of today's students, accustomed to personal electronic devices and instant access to entertaining (and hopefully educational) video material are more apt to use information from newer formats. As one student said, perhaps in jest, "If it is not online, for me it does not exist." So we determined to meet high school students where they are.

The regional SARE grant committee agreed with our assessment and a modest proposal was approved to develop accessible sustainable agriculture teaching materials for high school students. With the help of experienced Nebraska high school teachers, we selected topics that would supplement their current modules in courses and raise interest by virtually 'bringing farmers into the classroom'. To add interest for the high school agriculture classes, students were selected to do the interviews. Questions were carefully edited by a member of the SARE grant team (Jenn Simons) and professionally produced by information technology experts at the University of Nebraska-Lincoln. Here are the methods used and results of the project.

### Methods

Ten important topics were chosen for development of videos to use in high school classrooms. Topics were determined by the project coordinators in cooperation with experienced high school agricultural education teachers. To make the material more engaging for classroom use, the teachers helped choose farmers who were willing to discuss their operations and what they were doing in a specific topic area and students were chosen to conduct the interviews.

Farmers were scheduled for video-taped interviews on their farms and UNL professionals were hired to do the filming of the interviews. Students prepared

and practiced a list of questions before the interviews started, with the support of project coordinators and their teachers. Each interview lasted for 45 minutes to one hour and was edited down to five-minute segments by the team (Jenn Simons) with attention to system details that would be of greatest interest in the high school classroom. These ten videos are available at the Plant and Soil Science eLibrary (PASSEL) at University of Nebraska – Lincoln ([passel.unl.edu/](http://passel.unl.edu/)) and then search sustainable ag videos).

With so much additional interview material beyond the initial five-minute segments, it was determined that further editing could create ten additional cross-cutting topic modules by integrating and combining short sections from several farmer interviews. These topic-oriented cross-interview segments were also edited (by Jenn Simons) and produced by the IT department at UNL. When completed, the 20 videos, along with other references and teaching materials, were posted on the PASSEL web site as well as the Nebraska Agricultural Education educator site ([www.neafed.org/curriculum.html](http://www.neafed.org/curriculum.html)). The edited videos as well as the ten original 45-60-minute interview videos are now available in public domain for high school and college teachers across the U.S. and wherever else they might be used. To assess the practical value of these modules in the classroom, a survey of agricultural educators in Nebraska was conducted in late 2014 to determine the usefulness of these videos in their teaching.

### Results

Quoting from the web site, "Sustainability ... can be a messy concept, so why did we choose to use it in this project?" We visited ten farmers across Eastern Nebraska and paired with nearby high schools to interview these farmers about their operations. As a result, we ended up with ten different views of agriculture -- ten different examples of what 'sustainability' looks like in practice. The ten edited videos covering specific topics of interest to students in Nebraska and elsewhere are now available. These topics are:

- Vegetable production and cheese making
- Biodynamic farming system
- Diverse dairy operation
- Crop/animal integration
- Grass-fed beef
- Seed saving

- Future agricultural systems
- Shelterbelts
- Cheese making
- Grains processing

Then we combined short clips from these prior interviews into broad issue-based topics in another ten video lessons:

- Holistic thinking
- Niche marketing
- Macroeconomics
- Innovation and entrepreneurship
- Biodiversity
- Insects, weeds and diseases
- Soil health
- Community ties
- Passion
- Labor

All videos are enriched by a discussion document including background information on the featured farm, the farm's website, teaching objectives, discussion questions and an aerial image of the farm's exact location. The full interviews (30-45 minutes) from each farm are also available for longer, independent assignments. An outline of the full interview is included in the discussion document for easy reference to applicable sections.

From a survey conducted in December 2014, we assessed the value of the videos for teachers. More than 40 agricultural education teachers in Nebraska (30% of all vocational agriculture teachers) responded to the survey, representing more than 2500 students reached each year. Half of these educators had been teaching for more than 10 years; additionally, half of respondents were younger teachers (<35 years old). While 80% of these teachers felt sustainable agriculture was important, more than 40% agreed that there were not enough materials to teach sustainable agriculture or room in their curriculum to include more on sustainable agriculture. However, more than 80% of respondents agreed that the modules were a valuable way to introduce sustainable agriculture, engaging, easy to use and appropriate to be integrated into their future materials. There was general praise for the choice of topics and value of the interviews featured in the modules and a majority felt students were interested in and would adopt ideas from the modules in the future. More complete analysis will of these results will be prepared for publication.

### **Conclusions**

Based on the feedback from teachers, we deem this project a success. The farmers were highly interested in participating and the agricultural education teachers were enthusiastic about identifying students who were able to conduct the interviews. The students themselves were delighted to miss class for half a day and did a credible job of preparing questions and conducting the interviews. We sincerely appreciate the professional production capabilities of the information technology

specialists and urge others who embark on such a project to take advantage of the relevant facilities and people in their organizations. We conclude that this is a valuable way to bring farmers into the classroom and build credibility in farming experiences among students in high school agricultural education classes.

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### **Working with the Agricultural Diversity of College Students**

An agriculture undergraduate student confided in me a comment she had heard from an agriculture instructor at my institution: "The West was not won by organics." The joke was not well received by the student, who favored organic and free-range agriculture. They felt marginalized from that point forward. This teaching-tips article will provide a basic overview of the issues involved in agricultural diversity along with some tips on how to work with diverse agriculture college students.

### Introduction

Diversity in agriculture can include a variety of ideas. Many think of diversity in education as involving issues of race, ethnicity, gender, sexuality, etc. as well as the field of multicultural education (i.e., Banks and Banks, 2010; Vang, 2010). These are important areas of diversity in agriculture; however, there is also diversity of ideas, which can include a variety of agriculture topics. Many in agriculture can recognize these ideas and the conflicting values attached to each: organic agriculture, chemical agriculture, free-range agriculture, community-supported agriculture, confinements, small-scale farming and family farms, to name a handful of them (i.e., Conway, 2012; Miller and Conko, 2004; Murphy, 2004; Rodale, 2010; Vallianatos, 2006). These issues are important in agriculture and shape how people talk about agriculture. I am not suggesting that an instructor needs to be an expert and advocate for positions within these various topics; rather, the tips listed below require an instructor to be more of a moderator than an expert. The goal is to create a classroom community of respect that will lead to learning between students beyond the walls of the classroom or lecture hall.

### Procedure

These tips are written in a list format to keep the ideas succinct.

1. Refrain from making derogatory jokes, remarks and slurs. This includes comments about agricultural beliefs and practices.
2. Take a few minutes at the start of the course to explain what your agricultural values are (for example, family farming or conventional). Explain to your class that your viewpoints come from this position and you do not mean to offend anyone who might have conflicting values.
3. Lay out discussion ground rules for everyone in class that emphasize individuality and respect. I say something to the effect of, "Everyone has an opinion and it should be respected. You can respectfully agree or disagree with it."
4. Encourage students to share their own viewpoints, even if they contradict yours.
5. When students begin to have a discussion that presents conflicting agricultural ideas, be sure to guide the discussion in a positive direction. Comments such as, "You both bring up interesting points..." can help keep the room civil. Do not take sides and stop any conversations which become disrespectful.
6. If you notice that only one side of an argument is being discussed, offer an argument agriculture from another viewpoint for discussion.
7. Do not call on students for their opinions on potentially controversial topics unless you know they are willing to share.
8. Always try to emphasize the difference between emotional arguments and factual arguments. These two concepts can be confused in a

discussion. Remind students that the difference between the two is important.

9. Do not overvalue or undervalue emotional and factual arguments. It is often difficult for people to separate the two types of arguments. Honestly and respectfully demonstrate the difference between the two. Remember, emotional arguments can be sometimes irrational; yet, they also form the backbone of our identities in agriculture.
10. I prefer to spend the first day of class having students share their ideas and values about agriculture with their classmates. I think this is really important in an agricultural education class, because our field is completely socially-centered. I often bring food or take my students for chips and salsa for the discussion. I want them to feel comfortable with their classmates. I try to elicit their opinions on hot agricultural topics in a conversational style. For me, this particular activity is very important. This activity applies many of the tips from above. It also does not hide from the conflicts within agriculture. Students leave that first day of class feeling more at ease with the class and their classmates.

### Assessment

I have conducted both formal and informal assessments of my classes after having used the tips listed above. The course and instructor ratings are high, 4.29-5.00 out of 5.00. My research team has conducted focus groups and interviews with my students about their experiences in the class and virtually all comments have been positive. These generally high marks must be understood within the context of the course. I want to make the students feel uncomfortable and challenge their ideas. The high marks that students give the course after this experience testify to the usefulness of these tips.

I want to share two remarks from students which testify to the learning that occurs in the courses when we bring diversity of agricultural values to the center. A nonconventional agriculture student remarked how she had never heard of grain cooperatives. She found them amazing and quite progressive. She gained respect for this important segment of conventional agriculture. Likewise, a conventional agriculture student had entered my class convinced that using even one acre of ground for something other than food or commodity production was a waste. During the semester, he learned about a student's passion for growing lavender as well as the uses and profitability of the plant. At the end of the semester this conventional student told me that he would never grow lavender, but that he now sees the potential for cultivating for such crops. Both of these students, on either end of the agricultural value spectrum, gained an appreciation for the other side, which is all we can hope for in our modern and ever-changing agriculture systems.

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## Connecting Undergraduates to Dairy, Farm to Fork

### Introduction

It is no surprise that people have become disconnected from the origins of food as the number of farms in the United States has steadily declined for almost a century and significantly declined since 2007. As the number of farms decreased, options for food prepared outside of the home have dramatically increased including an abundance of fast-food restaurants, take-out options from restaurants, convenience foods and commercially prepared frozen meals. These options have consequently displaced home prepared meals using locally produced whole foods. As a result, we live in society lacking basic food literacy and some believe this change has contributed to the obesity epidemic. One of the learning outcomes of the undergraduate course Food Literacy at Utah State University is for students to define food systems and sustainability. The goal is to give students the opportunity to reconnect with the origins of the food they consume, while aiming to dispel myths about food from farm to fork.

### Procedure

Collaborations were made with a representative from the Dairy Council of Utah/Nevada to arrange a fieldtrip for undergraduates enrolled in Food Literacy. The fieldtrip includes a bus ride to tour one of the largest

local dairy farms in Cache County, Utah, followed by a presentation and sampling of dairy products at the dairy processing plant Gossner Foods in Logan, Utah. The farm tour is scheduled as one of the weekly three-hour labs as part of the Food Literacy course.

On the bus ride to the dairy farm, the representative from the Dairy Council educates the students on the dairy farm's background, practices and owners. She then allows students to ask any questions they have about dairy farming and milk such as the benefits and drawbacks of pasteurized milk versus raw milk consumption and hormones in milk. At the dairy farm, students tour a carousel milk parlor, view milk tanks and cooling systems, interact with calves and take a hayride viewing different barns housing various age-groups and stages (pregnant and not milking) of dairy cows. Students learn about how the dairy cows are tracked digitally, which assists with peak nutrition from their nutritionist allowing for optimal milk production, prevention of antibiotics in the milk supply and monitoring of the health status of each individual dairy cow. Students are given time to ask any questions to the dairy farmers guiding the tour about the dairy farm and processing procedures.

Following the tour of the dairy farm students are bused to Gossner Foods' dairy processing plant, which is about 10 minutes' distance from the farm. They then are educated on how milk from local farms, including the one student visited, is processed at the plant. Students watch a video presentation highlighting the history of the plant and the many local farmers that supply the milk to produce their high-quality cheese, ultra-high temperature processed milk and delicious ice cream. Students are then given time to ask the Gossner presenter any questions they may have. If the cheese production line is running, the students are able to watch workers package and box the cheese. At the conclusion of the processing plant visit students enjoy sampling a variety of Gossner milk products.

### Assessment

The Food Literacy course has now participated in the dairy farm tour for four semesters. Each semester students are surveyed on whether they would recommend the tour for future students and nearly the entire class responds in agreement. One student said, "Being able to see the process of farm to fork is extremely eye opening" and another student, "I knew farming was a lot of work, but there is a lot I never thought of." The majority of students indicated that the dairy farm tour gave them a more positive perception of dairy foods and farming as shown by this students' comment of surprise by the "strict process to ensure safety and quality."

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