Teaching Tips/Notes



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/ 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.neaged.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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