

Teaching Tips/Notes



Collaboration between University Faculty, State Education Staff, and High School Teachers to Create Instructional Material: The Creation of Secondary Agricultural Communications Curriculum

Introduction

Today's high school agricultural science programs are required to teach a breadth of disciplines related to agriculture. As a result, high school agriculture teachers have reported a need for instructional material and specific skill development enabling them to improve teaching (Calico et al, 2013; Roberts et al, 2006). Therefore, it is critical for university faculty, state staff members and high school teachers to build collaborative relationships to educate and prepare high school students for a future in, or as a supporter of, agriculture. By capitalizing on curiosity piqued through innovative technology presented to secondary students, teachers can present knowledge and skill development activities to engage students in more meaningful learning.

Procedure

The most recent National Research Agenda for agricultural education and communications identified priority areas important to visual communications curriculum and training in secondary education programs: (a) sufficient scientific and professional workforce that addresses the challenges of the 21st century (priority area three); (b) meaningful, engaged learning in all environments (priority area four); and (c) efficient and effective agricultural education programs (Doerfert, 2011). The need for agricultural communications curriculum is evident and supported by teachers and students (Calico et al., 2013). Quality instructional material made available to instructors will create interest and career opportunities in agricultural communications for students in the future (Doerfert, 2011).

As agricultural communications becomes a more prominent area of the industry, it is important for post-secondary institutions to work with secondary agricultural education programs to build student interest in agricultural communications. With collaboration from a secondary agricultural education teacher advisory board, comprised of Arkansas agriscience teachers, and the Arkansas Career and Technology Education Department, agricultural communications curriculum was developed by faculty and staff, with expertise in agricultural communications and agricultural education. Instructional materials incorporate the theory of constructivism and direct instruction along with both experiential and authentic learning to foster an engaging learner experience. Through class discussion, group projects and evaluation, students participated in research and presentation opportunities to gain real-world skills to create awareness for college and career opportunities post high school graduation (Calico, 2014).

Additionally, the graduate assistant responsible for curriculum development traveled to high school agricultural programs and educational cooperatives across the state recruiting for the Department of Agricultural Education, Communications and Technology at the University of Arkansas and facilitating inservice opportunities for teachers interested in learning more about the agricultural communications curriculum and skills needed to teach the agricultural communications curriculum material confidently.

Assessment

The collaborative effort between university faculty, state staff members, and secondary agriculture teachers to develop agricultural communication curriculum resulted in:

- An increase in student knowledge and skill development in areas of agricultural communications desired by employers in the field and necessary for success in pursuit of a degree in agricultural communication post high school graduation (Akers, 2001; Calico, 2014)

- An increase in secondary agriculture teacher's confidence and enthusiasm in teaching and promoting agricultural communications in their agricultural education program (Calico 2014).
- A working relationship between university faculty, state staff members, and secondary agriculture teachers. This relationship provides quality education for students in high school and a collegiate link for students interested in pursuing agricultural communications as a career of study post high school graduation.

Collaboration between university faculty, state staff members, and high school teachers should be utilized to create quality instructional material and resources for other non-traditional secondary agricultural courses. Expertise from faculty in university departments specific to the curriculum being developed should be contacted from collaborative efforts. An example of this is the Food Science course taught in numerous high school agriculture programs across Arkansas. Teachers currently rely on curriculum frameworks developed for Family and Consumer Science to teach the course. University faculty from the Food Science Departments at University of Arkansas should work to develop food science curriculum in collaboration with state staff and secondary agriculture teachers. There are many other applicable areas of study that would add value to the secondary school system both in and outside the state of Arkansas. We encourage all post-secondary agricultural faculty and departments to work with their high school agricultural programs to assist teachers with content specific curriculum development. This opportunity serves as both an educational and recruitment activity that can add value to post-secondary institutions across the U.S.

Additionally and in cooperation with the Department of Career and Technical Education, teacher inservice training should be scheduled to introduce secondary teachers to newly developed curriculum, software, and equipment, and to increase their confidence in teaching the content. Representatives from the collaborating university should continue to interact with secondary agriculture teachers and prospective students to further educate both students and teachers on opportunities within areas of agriculture they may not be familiar with.

References

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