Greetings from Dr. Torres

The fall semester on the campus of the University of Arizona started with a bang. We have been incredibly busy with teaching, advising, research and community service. As we progress through this semester and look forward to the spring semester, we continue to hold our mission, preparing students to become effective and well-trained teachers who instruct the next generation of secondary high school Agricultural Education students, as a priority while expanding the career opportunities for CALS students in other curriculum options. These options include: Agricultural Leadership and Communication, Agricultural Systems Management (a Yuma-based program), and Agricultural Technology Management.

We have four emphasis areas with endless possibilities for students interested in careers within agricultural education. If you have any questions, please call the office at (520) 621-1523. Thank you for your support!

Arizona Project WET by Kerry Schwartz

Hi, I’m Kerry Schwartz, an Extension Specialist with the Department of Agricultural Education. You don’t see me as much because I’m based off-campus at the Water Resources Research Center, which is much more accessible to teachers, parents and the community. That said, the work that I do is congruent with and complimentary to the agricultural education approach. Like Ag Ed, I focus on conceptual understanding and applied learning. I work statewide, delivering natural resource programming to Arizonans through the supervision of personnel located in four extension offices. I am also the Director of the Arizona Project WET (APW) water education program, transferring knowledge focused on hydro-literacy and 21st Century learning to teachers, educators, K-12 students and community volunteers.

Arizona Project WET is known for effective teacher professional development that models best instructional practices and uses unbiased contemporary science. We model project-based-learning approaches to achieve STEM subject integration and embed scientific and engineering practices into instruction. We also conduct direct student outreach that engages students in learning and engages community members in K-12 education. (Continue on page 2)

Field Trip to Imuris, Mexico

Dr. Ed Franklin and a group of student teachers traveled to Imuris, Mexico where they taught hydroponics to high school students at Preparatoria Vocational College of Technology and Agriculture.

This was a wonderful teaching experience for the students as they embraced a different culture. Please read more on page 3.
Arizona Project WET (Continued)

Working with partners statewide, Arizona Project WET is helping to develop the capacity within the K-12 school system to graduate creative and critical thinkers with the knowledge to manage and sustain interconnected local and regional natural resources and the ability to solve problems related to these resources. For instance, real world experiences have incentivized students to make a difference in their communities; students who’ve implemented APW’s School Water Audit Program have conserved over 12 million gallons of water annually.

Through an interdisciplinary approach, students participating in the Water Investigations Program (WIP) are learning about the natural systems within the larger hydrologic cycle, the human constructed water distribution system and the connections between urban water use and water in Arizona's rivers and riparian systems. The WIP covers three thematic units, starting with the Water Resources & Supply Unit that focuses on understanding Arizona’s natural systems and the urban water distribution system. Students investigate the properties of water and explore earth systems through interactive lessons and physical models. They take a critical look at the history of water in our arid state and see the interconnection between all of our water resources.

The second thematic unit, Water Use, engages students in a water audit of their school that teaches good scientific practice. Students teach their parents to audit their bathroom faucets at home and install water efficient aerators that save their families water and money! This unit provides a fundamental understanding of all the ways water is used in daily life and challenges students to ask questions and propose solutions to conserve water.

The WIP concludes with the Riparian Areas and Biodiversity Unit, which leads to a field study in a local riparian area or preserve. After a year of learning to develop testable questions, students are challenged to design and conduct their own riparian area investigations, ranging from testing water quality parameters to inventorying plant and animal species diversity. The WIP culminates with a Student Symposium at a local Community College or University. This event challenges students to synthesize the salient points from each unit using evidence to make and support claims and design creative solutions based on sound reasoning.

Arizona Project WET is assisting Arizona schools in embedding Science and Engineering Practices and STEM subjects into their instruction through the use of project based learning that challenges students to solve real world problems. Together Arizona Project WET and the Department of Agricultural Education are moving the bar; producing graduates at all levels equipped to think critically.
Experience May 2013
Washington Collegiate Agriculture Leadership

- Work with American Farm Bureau Training and Leadership Development Staff to become a better advocate for agriculture
- Visit Arizona congressional leaders
- Visit Mount Vernon and Monticello to explore the impact of early governmental involvement in agriculture
- Engage with United States Department of Agriculture staff

Informational meetings:
- Tuesday, February 7, 2012, 4:30 pm, Room 104 Saguaro
- Wednesday, February 8, 2012, 4:30 pm, Room 104 Saguaro
- Thursday, February 7, 2012, 4:30 pm

A limited number of active University of Arizona students will be chosen by application. Small stipends will be provided to assist with costs.

Contact Dr. Ryan Foor at rfoor@arizona.edu with questions.

Tentatively May 12-18, 2013
Imuris, Mexico by Dr. Ed Franklin

We had seven preservice students present four 20-minute micro-lessons, concurrently, to approximately 160 high school and middle school agriculture students and faculty, and invited local growers at the CBETA in Imuris. We traveled to the Municipal Palace and met briefly with the newly-elected Mayor and his staff, including a newly appointed Cultural Director. When we arrived at the school, all of the students and faculty were lined up around their central ramada. We were escorted to the stage and invited to sit and enjoy a folklorico dance presentation by the Imuris students. Following the teaching experience, we were escorted to a ranch situated along a nearby river where we were treated to a wonderful lunch of carne asada with refreshment and music. The Mayor and his staff joined us for lunch. Each student was presented with a certificate of appreciation by the Mayor and school director. Visiting with a couple of the faculty, we asked for their students’ reactions, one student told his teacher he enjoyed it, "the subject was practical, simple to perform, and they could easily set up a system." We ended the day touring the area, escorted by two members of the local police force (they led in the vehicle with lights on...). We asked for other topics they would be interested in having presented. It appears the plant science, hydroponics, field crops, or food safety topics would be appreciated.

Student Teacher Comments

The experience was absolutely amazing! I had a fabulous time and was so glad that I was able to go on the trip. It truly was a once in a lifetime opportunity and feel so blessed to have gone down to teach in Imuris. They were so grateful and responsive to everything we had to say or teach. I was super nervous at first because I did not know what to expect when we got there, however I did feel comfortable that Dr. Franklin and other faculty had been down there before and seemed to only have positive things to say. Overall, I had a fabulous time and would absolutely love to do it again. The trip definitely helped me with my teaching skills because it opened my eyes to something I had not really thought of before. In my future classes, I will have students where there will be some type of barrier between us. Whether it is language, family, culture, experiences or learning styles; students will not always understand what you teach and you will have to find a way to make it a positive learning experience for them. In this case we had a translator, which was super helpful for the language barrier, but it made me realize that it is important for me to think about barriers in my classroom and how I will overcome them. It also gave me an appreciation for the Imuris students who were so excited for us to come and teach even though they knew it would be difficult. I have always had an interest in international agriculture education but this made it real for me and made me want to try and do something further.

The trip to Imuris was well outside my comfort zone, but the outcome of the day could not have been more beneficial or enlightening. The entire cohort was received with open arms into a country that has a reputation tarnished by drug trafficking and extreme acts of violence. The people of Imuris showed no sign of hatred or animosity towards any of us, instead we were treated like friends. We were exposed to the Mexican culture and education system, all while enjoying great food and exceptional hospitality.

I took a lot of valuable knowledge from the project. It really made me feel what an English language learner goes through when they can’t speak the dominant language in the classroom. I learned more ways to communicate with students then just talking, such as hand motions, realia and sound effects. I also learned that when you open your mind and heart to an opportunity such as this amazing awards can come from it. The experience helped a lot in developing my classroom teaching skills. I truly felt that I learned to be more patient and to look at situations from other people’s point of views. I feel like this trip helped me to embrace other cultures and to try to find ways to connect with students that may not speak the same language or have different backgrounds.
VISION
To be a leader in Agricultural Education by providing a better quality of life through agricultural technology management and formal and non-formal education for our students, the people of Arizona, and society.

MISSION
To serve a diverse population through teaching, application, integration and discovery in agriculture, education and applied science and technology leading to successful careers in Agricultural Education, and related businesses and industries.

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