

---

## Annual Report for Planning year 2010

---

### Unit: School of Agriculture

#### 3.3 Develop and implement a QEP that is focused on improving critical thinking/real world problem solving skills through the use of active learning strategies.

- To improve critical thinking/real-world problem solving skills of students in Agriculture by involving students in projects that involve group efforts in dealing with real world problems or case studies and the preparation of reports on their methods and results. Instructors will use this approach in several courses as appropriate.
  - ANSC 1200 incorporated a semester long service project for student groups. Each group was required to identify a project connected to the Animal Industry, arrange with the entity initiating the project to volunteer a minimum of 32 hours (divided among 4 students) over the semester. Journals, group meetings and a report on outcomes of the project were included in the assignment.
  - Students in UNIV 1020, AGR 1020, AGR 2920 (2950), AGR 3940, AGR 4920, AGR 4930, AGBE 4030, AGBE 4950, AGED 3010, AGET 4610, AGET 4950, AGRN 3100, AGRN4110, AGRN 4940 (4950), AGHT 4420, EVSA 6010 improved their communication s through oral presentations.
  - AGRN 4940, AGBE 4030, AGRN3230, AGRN 4940, AGHT 3400, and AGHT 3480 all require written reports and/or poster presentations.
  - The School of Agriculture's Ambassadors (8 students) developed oral presentation experience in welcoming visitors, providing tours, speaking at various School functions and serving as SOAR tutors for incoming freshmen.
  - Exit interviews with graduating seniors revealed many students gain leadership and public presentation skills while making presentations for events such as "Ag-in-th-Classroom," locally known as Farm Bureau Farm Days held annually at Hyder-Burks pavilion.
  - The leadership class, AGED 3010 continues to develop new methods and techniques of student presentation. Additionally, service projects are also included in the curriculum.
- To improve critical thinking/real-world problem solving skills of students in Agriculture by involving students in projects that involve real world problems and/or case studies that lead to preparation of written and oral reports on their methods and results
  - The following classes routinely incorporate problem solving activities in their curriculum along with a variety of cooperative learning-group techniques: AGR 4930, AGBE 4030, AGBE 4950, AGET 4950, AGRN 3100, AGRN 4110, AGRN 4940 (4950), AGHT 4420, EVSA 6010, AGBE 3400, AGRN 4100, and AGHT 3480. Examples of such activities include:
    - Group effort collecting and rebuilding necessary equipment for processing grain sorghum

- Ambassadors developing displays and fielding questions from Legislatures at “Ag on the Hill” Day in Nashville.
- As exit interviews of seniors continue to show student desire for even more hands-on opportunities, faculty are in process of developing a new course, “Experiential Agriculture” that will pair students with one of the three School farms and their chosen concentration area for a semester of real world supervised work experience.

## **Highlights and News Items**

### **Faculty Research**

- **Greene, B. B., & Baier, J. W., (2010).** *Study of the effect of genetic variability and the use of an organically approved miticide for control of Varroa in honey bees.* (Grant proposal submitted, and awarded for \$9,562.00)
- **Best, M. J. (2010)** *An Economic Analysis of Yield and Quality Differences Associated with Two Different High-Tunnel Production Techniques for Heirloom Tomatoes* (Faculty Research Grant, \$5000)
- **Airhart, D. L., & Anderson, M., (2010)** *Obesity Awareness and Attitudes.* (USDH Grant submitted for \$48,850.00 over two years—in process)
- **Best, M.J. , Stearman, G.K., Dodson, R. (2010).** *Developing a Local Food Shed by Utilizing Electronic Marketing and a Promotion and Education Program.* (USDA Specialty Crop Block grant—in process)
- **Branson, J. L., Stearman, G. K., Best, M. J., Frazier, D. C., Zagumny, L.L. (2010).** *Educational Transformation Prepares Graduates Through Experiential Learning in Sustainable Agriculture Production.* (USDA grant proposal submitted for \$133,500—in process)
- **Best, M. J., Vaught, L. (2010)** “*Management and Utilization of AASCARR University Farms*” (in process)
- **Best, M. J., G. K. Stearman (2010)** *Developing a Local Food Shed by Utilizing Electronic Marketing, a Promotion and Education Program and a New EBT Project in Tennessee’s Upper Cumberland Region.* (USDA FMPP grant—in process)

### **Books Published**

NA

### **Innovation resulting in savings, efficiency and/or improved outcomes**

- Revitalizing the Dairy Barn Loafing Shed for Agricultural Engineering—proposal submitted to Office of Vice-President of Business & Fiscal Affairs (Dr. Baier & Dr. Foster)
- Refurbishing the Dairy Barn for Student Housing, Computers and Office Space-- proposal submitted to Office of Vice-President of Business & Fiscal Affairs (Dr. Foster & Dr. Baier)
- Establishment of Agritourism Concentration, first program in Tennessee and among the first three nationally

- Reorganization of farm operational management systems to directly incorporate faculty, leading to more opportunities for student involvement in farm activities and operations through experiential education.
- Establishing Departmental Strategic Plan, including renovation of Advisory Board.

### **Faculty, Staff and Student Awards**

- **Dr. Janice Branson** named 2010 Distinguished Alumni for University of Tennessee's Biosystems Engineering and Soil Science Department.
- **Kristine Ely** (Junior), **Terra Kimes** (Junior) and **Joseph Summers** (Junior) were elected to the National Delta Tau Alpha (Agricultural Honorary) offices at the National meeting in Stephenville, Texas in March. Offices elected to respectively were Secretary, Vice-President for the Eastern Region, and Parliamentarian
- **Chelsea Doss** (Sophomore) elected National FFA Southern Region Vice President 2009-2010
- **Dr. Michael Best** received the Distinguished Professional Contribution Award from the Southern Economics Association Annual Meeting in Orlando, Florida-February 2010.

### **Community Service Activities**

- Hosted State FFA Agricultural Mechanics Career Development Event, February 23 (**Dr. Frazier**) and the State FFA Horticulture Career Development Event, April 10 (**Dr. Airhart**)
- Hosted the Tennessee Agritourism Association state board meeting, March (**Dr. Best & Dr. Foster**)
- Initiated video capture of personal interviews with Alumni and community individuals instrumental in the development of the School of Agriculture—*Heritage & History...Stories Remembered*—June 2010
- Hosting the Highland Apiary Society annual meeting to be held, July 8-10, at Tennessee Tech, Hyder-Burks Pavilion (**Dr. Greene**)
- Hosted the Farm Bureau Agriscience Academic Quiz Bowl for secondary students—December 2009