

**MORE POWER!!! [*Grunt, grunt*]**  
**Another Tool for the Pre-Service Toolbox**

***Poster Abstract***

Edward Franklin  
University of Arizona

**Introduction**

Pre-service teacher education students are introduced to and encouraged to develop a wide array of teaching tools to add to their instructional arsenal. Due to the diversity of our curriculum, variability of delivery methods is essential to the success of student learning. Educational reform initiatives (A Nation at Risk, 1983; The Unfinished Agenda, 1984) have called for educators to develop methods for students to learn more effectively and efficiently. Responding to the need of increasing “science literacy”, agricultural education accepted the challenge of integrating science concepts into the agriculture classroom. However, adopting to change has been a slow process. Whent (1992) reported that agriculture teachers were reluctant to adopting the concept of science integration into existing agriculture programs for fear of threatening the program. Although Thompson (1998) recommended that undergraduate students should receive instruction on how to integrate science into the agriculture classroom. The National FFA Organization has recognized the importance of agriscience and has adopted programs to promote scientific agriculture in secondary agricultural education (Duval, 1988).

The agriscience fair as a career development event has gained acceptance in various states and at the national level. This activity recognizes students studying the application of scientific principles and new technologies. To reach the national level, students must participate at the state level.

**Methodology**

Idea of conducting a state level Agri-Science Fair at the Oklahoma State FFA Convention was discussed with approved by the state FFA advisor. A service-learning grant was obtained to provide funding for the project to cover the costs of duplicating fliers, and entry information, mailing expenses, travel, and awards. Lab time was dedicated to teaching the concept of integrating agriscience activities into the traditional agriculture classroom. The agriscience fair activity was introduced to the students and their role and participation was presented. Pre-service students enrolled in AGED 3203 would serve to mentor high school students interested in developing an agriscience project. A web page was developed to provide information and ideas to agriculture teachers and FFA members. Two high school agriculture programs accepted an invitation to have AGED 3203 students visit their classes and conduct presentations on developing agriscience fair activities. The national FFA guidelines were adopted for the state level competition. Entry forms and guidelines were mailed out to all agriculture programs in the state. Service learning funds paid for transportation costs, printing & postage and awards. AGED 3203 students practiced developing their own topics into agriscience fair activities utilizing the steps of scientific investigation. Presentations were made during lab

times and peer evaluations were conducted. A web page was created with various links to existing science fair sites to provide ideas and answer questions.

### **Results**

Eight student entries were received. As a part of their final exam activity, AGED 3203 students interviewed each agriscience fair participant and evaluated the seven displays. As a follow up, all AGED 3203 students prepared reflection papers describing the individual entries and their strengths and weaknesses. Suggestions for improving each research project were solicited as well as methods for individual future teachers to integrate such an activity into their own agriculture programs. FFA participants were presented with plaques during a special session of the state convention. 38 agriculture teachers attended a workshop for developing agriscience fair projects during the 1999 summer conference for agricultural education instructors. The activity will be continued as regular career development event for the Oklahoma State FFA Association. Six Oklahoma entrees competed at the national agriscience fair at the National FFA Convention in Louisville, Kentucky. Four entries from Oklahoma placed in the top three of their respective categories and divisions.

### **Implications**

Agricultural education teacher training institutions should look to adopt the agriscience fair activity or offer to conduct it for their state associations and utilize it as an experiential activity for pre-service training of future agriculture educators. What better way to train a future teacher to prepare students for such an activity than to immerse them into the process of organizing, conducting and evaluating a university-sponsored event.

### **Future Plans**

The state association and the university agricultural education department plan to continue to conduct the agriscience fair as part of the state FFA convention activities. Efforts to secure external funding for award sponsorship to provide assistance for student travel to the National FFA Convention and the national Agriscience Fair are underway.

### **References**

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