**Supporting Evidence:**

Through the collaboration-building efforts of the State College Agricultural Education program with Penn State University, there have been two research publications generated and the sharing of ideas at national conferences. Below are the abstracts that were published, the outline of the planter box project, as well as a sample poster that was presented.

**Developing and Building Community Connections: Utilizing Grant Funding to Support Student Teachers, Cooperating Centers and Communities**

John C. Ewing, Daniel D. Foster, Paul Heasley, & Tracy S. Hoover

The Pennsylvania State University and State College High School

This project engaged a series of stakeholders along an experiential and pedagogically sound continuum that begins and ends with a class of students being prepared to teach high school agricultural education and advise FFA members at the secondary level. Three teacher educators and one high school agricultural education instructor secured grant funding through the university’s College of Agricultural Sciences to support this project. The proposal was designed in such a way that the funding received would be redistributed to the department’s student teachers following submittal of a grant proposal by the student teacher. The entire project included; instruction that was integrated across six Agricultural and Extension Education courses, hands-on construction of a product [planter boxes in this case] for the student teacher, grant writing by the student teacher, implementation of the unit at their student teaching site, and ultimately placement of the planter boxes in the community, which provided a service to the community by the agricultural education program. Prior to implementing this project in their own schools, the student teachers were able to secure funds through the previously mentioned grant program. Thus, the student teachers received practice in; designing curriculum, building the planter boxes, grant writing, helping their own students learn the mechanical skills necessary to build the planter boxes, and experience in completing community service. Projects such as these are valuable in building connections between agricultural education programs and the communities in which they operate.

**Developing and Building Community Connections: Planter Box Outline**

Deadline : The Sooner the better… [December 11, 2009]

Courses Impacted: AEE 350; AEE 412; AEE 413; AEE 495

Objectives

*The student teacher will be able to:*

1. Utilize available asynchronous learning technologies to create a Community Based Unit of Instruction for Spring 2010 Student Teaching.
2. Facilitate the creation of create planter boxes made from treated lumber, that can be used in landscaping, as an apartment/limited space container garden, for use in elementary schools as a mini-garden, or one that can be elevated for use by individuals who have limited mobility, e.g. elderly or disabled.
3. Complete an essential assignment for student teaching evaluation.

**Three Phase Timeline**

***Phase I – Develop the Plan***

* October & November
  + Develop Unit of Instruction as Cohort of Student Teachers via ANGEL and other group selected methods in AEE 412.
  + Build Example Planter in AEE 350.
  + Develop strategies for working with community stakeholders in AEE 413.
* December 11, 2009
  + Present Community Based Unit of Instruction Plan and your   
    UNIQUE CONTRIBUTION in developing it as part of AEE 412 Final Presentation.

***Phase II – Deliver the Plan***

* Spring 2010
  + Submit mini-request for funding for supplies to complete the project (Approximately $200)
  + Revise as needed and Deliver Unit of Instruction at Cooperating Center

***Phase III – Evaluate the Plan***

* April 30th, 2010
  + Turn in Community Based Unit of Instruction with incorporated local resources and a two – three page description of how you contacted, accessed and utilized community resources, facilities, individuals and/or equipment as part of your student teaching assignment. Photo documentation highly recommended.

Challenges to review as a Team in Phase I!

* Does your unit of instruction and plan include experiential ***hands-on instruction*** that is pedagogically sound?
* Does your unit of instruction lead to a positive difference being made in the community in which your students live and work? Are ***service leadership*** skills being **explicitly** developed?

Challenges to each individual in Phase II!

* Has this project been integrated throughout the total agricultural education program delivery model (ie Classroom Instruction, FFA, and SAE)?
* Does every student have the opportunity to feel like that made a positive difference in their community?
* Have local partnership been sought out to expand potential impact in community? Have you engaged other community stakeholders in this unit of instruction (ie advisory boards, parent groups, etc).

Challenges to each individual in Phase III!

* Have you thoughtfully and productive reflected on this experience?
* Have you captured compelling evidence via testimony or photographs to justify this program continuing?

AEE Department 2010 Request for proposals: Spring 2010 Student Teachers may submit a Request for Proposals (rfp) for funds to build planter boxes during their student teaching experiences. The information below outlines the process for applying for a mini-grant to support the construction of the planter boxes.

**Criteria for proposal**

* The proposal must clearly demonstrate how the proposed project will benefit youth and a community based agency/organization. A plan of when and how this activity fits into the curriculum and the student teacher’s assigned courses must be present.
* Grants must include a 1 page letter of support from the cooperating teacher, along with appropriate information in which payment can be sent and received for the school district. Funds must be allocated to the school district not an individual. Also, include the complete mailing address for the school and name of appropriate contact person.
* A copy of the organization’s tax-exempt letter must be included with the proposal.
* Grant size will be **$195** to cover the cost of materials for 3 planter boxes; the student teacher is responsible for securing flowers/vegetables for inclusion in the planter boxes.
* Grantees must keep record of all grant expenses through receipts, invoices, etc.
* The deadline for proposals is 5:00 pm on February 5, 2010.
* The proposal must not exceed 2 pages (accompanying materials are allowed).
* The proposal must use a 12 point font, Times New Roman, and 1-inch margins.
* Grant proposals may be sent electronically to [jce122@psu.edu](mailto:jce122@psu.edu); Dr. John Ewing

**Final Report**

Students must submit a final report by April 26, 2010 that includes the following information

* Lesson plan used to develop the planter boxes (if modified from the one developed in AEE 350/412)
* Rubric used and scores awarded (remove student names)
* Photos of completed planter boxes
* Receipts, expenses, and other information on donations for additional supplies and materials
* Evidence of distribution of the boxes to non-profit entities in local community
* Signed photo release, if applicable, if students appear in photos

**A Collaborative Experience: Partnering with a Local Agricultural Education Program to Provide Teaching Opportunities for Pre-service Teacher Candidates**

**Introduction and need for the innovation:**

Agricultural education has espoused experiential learning as a means to provide for meaningful learning (Andreasen, 2004). Teacher preparation units often use microteaching sessions as a means to prepare candidates. While micro-teaching may require teacher candidates to use information and skills important to teaching (Allen & Eve, 1968), some of the “real-life” experiences are missed in micro-teaching situations. Examples of “real-life” experiences which are not experienced in a micro-teaching session include classroom management issues, planning for more than one forty-minute class, and the inability to act upon reflections of where future class sessions should be directed based upon the outcome of that particular lesson.

To address the need for a more “real-life” teaching experience for their pre-service teacher candidates, the Department of Agricultural and Extension Education at The Pennsylvania State University formed a partnership with the State College Area High School’s agricultural education program. Through the partnership, teacher candidates are exposed to a *real* program with *real* students; the major goal of the venture.

**How it works:**

The teaching experience is “housed” as an assignment in an existing Agricultural and Extension Education course in the department. Teacher candidates have the opportunity to prepare and teach class for at least three consecutive days in the high school agriculture program. Students choose from one of five topic areas (due to the need to address topics currently being taught at the high school program). The areas from which students can choose are; Agricultural Science, Companion/Pet Science, Horticulture, Wildlife, or Agricultural Mechanics (specifically, Small Engines). Once teacher candidates select their topic area, they must submit a brief outline to the course instructor, as well as the high school instructor, to ensure the lesson can be financially supported and that it enriches the content of the course.

After teacher candidates receive approval of their topic area, they must develop lesson plans for each of the three days, which they will teach. The teacher candidates must be certain that materials for the lessons are available in the department, or that supplies can be purchased for the lesson. Teaching dates and times are coordinated between the teacher candidate, university instructor, and the high school agriculture instructor. The day prior to beginning their three consecutive days of teaching, candidates observe the class which they will be instructing. The candidate is responsible for teaching the class for the next three days. Immediately following each class session, the teacher candidate meets with either the university instructor or the high school agriculture instructor to reflect on the experience (Posner, 2005) and brainstorm ideas for improvement for the next day’s lesson. One of the three class sessions is videotaped. The candidate must watch the session and critique their teaching.

**Results to date and implications:**

The three-day teaching episode experience is in the third year of implementation. Teacher candidates are reflecting on each lesson that they teach, but more importantly are guided through the reflection process and developing ideas, which they can implement the very next day; an advantage that may not be available through traditional micro-teaching. The lessons are taught to high school students, but there is some comfort afforded to the candidate due to the fact that the high school instructor is present should he be needed.

**Future plans and advice to others:**

Forming a partnership of this magnitude with a local agriculture program has benefits for both the university and the local high school. The high school agricultural education program, and the students in the program, benefit from the enrichment-type topics which are taught by the teacher candidates. The university benefits by having an avenue for teacher candidates to secure “real-life” experience in the classroom. Before initiating such a partnership, both the university instructor and the high school agriculture instructor must agree on the format and goals of the project.

Future plans include continuing with the three day version of the teaching. Other programs may decide to implement a full week program, if the course timeline allows for this structure. Also, it is recommended that all three class sessions be videotaped. Through the videotapes, teacher candidates can critique themselves and see what students were hearing, seeing, and doing during the lesson. By videotaping all three sessions, the candidate can also see improvements which were made following the reflection exercise.

**Costs and resources required:**

DVD Camcorder $535.00

DVD’s (1 per student - $3.00 each) $ 90.00

Consumable supplies for teaching $200.00

Total $825.00

**References:**

Allen, D. W., & Eve, A. W. (1968). Microteaching. *Theory into Practice,* *7*(5), 181-185.

Andreasen, R. J. (2004). Integrating experiential learning into college of agriculture

capstone courses: Implications and applications for practitioners. *NACTA Journal, 48*(1), 52-57.

Posner, G. J. (2005). *Field experience: A guide to reflective teaching*. (6th ed.). New York: Pearson Education, Inc.

