

<b>Title:</b>	<b>Supporting Agricultural Education Students as Beginning Farmers and Ranchers</b>		
<b>Sponsoring Agency</b>	NIFA	<b>Project Status</b>	COMPLETE
<b>Funding Source</b>	Non Formula	<b>Reporting Frequency</b>	Annual
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<b>Submitted By</b>	Katie Sisk	<b>Date Submitted to NIFA</b>	11/20/2014

**Program Code:** BFRDP

**Program Name:** Beginning Farmer and Rancher

**Project Director**

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**Recipient Organization**

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**Performing Department**

Agricultural Economics

**Co-Project Directors**

Jackman, Jay  
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**Departments**

{NO DATA ENTERED}  
Department of Agricultural Eco

**Non-Technical Summary**

Farming has evolved from primarily a production activity to managing a complex business and business management training is often not emphasized enough at an early stage. Based on evidence from the Census of Agriculture, only 45% of beginning farmers survive the first 9 years. Often once ingrained in an occupation like production agriculture individuals become too busy to pursue meaningful education opportunities. Given that approximately one million high school students are enrolled in agricultural education reaching these individuals at this juncture provides a logical window for training. Our objective is to create and disseminate training and decision aids targeted to high school/college students who plan to enter farming and ranching. The rationale is that preparing high school agricultural students with foundational business management skills along with common production training will help them make better financial and risk management decisions and improve their chances for long-term success. The specific objectives of the project are: 1) Create tools to introduce the complex concepts of risk and financial analysis. 2) Develop a curriculum for farm business management and whole farm planning. 3) Disseminate the curriculum to high schools with agriculture programs. The team leading this project is uniquely qualified to develop and deliver high-quality, effective training material. The PI's from Mississippi State and Oklahoma State all have farming backgrounds and have worked with beginning farmers and ranchers on a regular basis and Dr. Jay Jackman, as the director of the National Association of Agricultural Educators (NAAE), regularly leads the development of agriculture education material for high school instructors.

**Accomplishments**

**Major goals of the project**

The long-term goal is to provide the most effective training, education, and decision aids needed to improve profitability and reduce the risk for beginning farmers and ranchers. Our objective in this proposal is to create and disseminate training and decision aids targeted to high school students who plan to enter farming and ranching. Specific goals are: 1) Create tools to introduce the complex concepts of risk and financial analysis. 2) Develop a curriculum for farm business management and whole farm planning. 3) Disseminate the curriculum to high schools with agriculture programs.

**What was accomplished under these goals?**

Accomplishments of Goal #1:

The BFRDP Farm Business Management Curriculum provides resources for instructional planning, delivery, and assessment within the secondary agriculture classroom. Teachers are provided with tools and support to improve their own understanding

of the content; the materials as developed allow teachers to learn along with students if necessary. The Farm Business Management Curriculum fills a gap in curriculum materials currently available to agricultural education teachers and provides them with tools to introduce complex financial management concepts to their students. The BFRDP Farm Business Planning Curriculum can enhance secondary agriculture program offerings by providing instruction and materials that meet the needs of the agriculture workforce.

#### Accomplishments of Goal #2:

The BFRDP Farm Business Planning Curriculum materials provide teachers with consistent, easy to read and navigate lessons. Activities included in the BFRDP Farm Business Planning Curriculum materials are student-centered to engage students in the learning process. Lessons "make sense" as reported by workshop participants via workshop evaluation survey responses. However, they were less favorable in how they rated the ease of navigating through the materials. Only 43.8% indicated the materials are easy to navigate while 50.0% felt they were only somewhat easy to navigate. Writing is clear and technical at times, but given the nature of the content is understandable. As measured by the Flesch-Kincaid Grade Level tool, the average grade level for all materials is 10.5. Average grade level for student activity sheets is 9.2.

The scope and sequence for each lesson provides the opportunity for students to build upon previous learning. The problem solving structure of the activities will engage students and there is also a case study that is built upon through each lesson in the unit. The unit, as a whole, meets a need for agricultural educators to align their programs with national/state AFNR and Common Core academic standards.

#### Accomplishments of Goal #3:

Curriculum were presented to participants at the National Association of Agricultural Educators annual meeting. All material developed continues to made available to agricultural educators via the National Association of Agricultural Educators and the grant project team.

#### What opportunities for training and professional development has the project provided?

The curricula were presented to agricultural educators by way of a full day, hands-on workshop and then a condensed seminar at the annaul meeting of the National Association of Agricultural Educators. Professional development credit was provided for the pre-conference workshop.

#### How have the results been disseminated to communities of interest?

The outcomes of the grant project have been provided to the target audience and continues to be available from the National Association of Agricultural Educators and the grant project team.

#### What do you plan to do during the next reporting period to accomplish the goals?

{Nothing to report}

#### Participants

##### Actual FTE's for this Reporting Period

Role	Non-Students or faculty	Students within Staffing Roles			Computed Total by Role
		Undergraduate	Graduate	Post-Doctorate	
Scientist	1.5	0	0	0	1.5
Professional	0	0	0	0	0
Technical	0	0	0	0	0
Administrative	0	0	0	0	0
Other	0	0	0	0	0
Computed Total	1.5	0	0	0	1.5

#### Student Count by Classification of Instructional Programs (CIP) Code

{NO DATA ENTERED}

**Target Audience**

The primary target group for this project was high school agriculture students. Our effort to reach this group was accomplished by providing materials to the agricultural educators. Therefore, in the final year of the project our target audience were agricultural educators across the United States. We utilized the National Association of Agricultural Educators (NAAE) to provide "teach-the-teacher" workshops and materials to this group. The chief executive of NAAE, Dr. Jay Jackman, was a project co-director. These trainings were provided at the NAAE annual meeting and the outcomes of the project were presented to the agricultural educators in attendance at the event.

**Products**

{Nothing to report}

**Other Products****Product Type**

Educational Aids or Curricula

**Description**

Lesson 1. Enterprise Budgets (eight, 45-minute course periods)

As an introductory lesson to farm business planning this lesson introduces enterprise budgets and budget analysis. Students will complete activities to build their knowledge and understanding about types of revenue and expense, create a simple enterprise budget, and conduct breakeven analysis. This lesson concludes with Part 1 of the Case Study. The Case Study is a common thread among all three lessons in this unit.

Includes:

Presentations--

Cash vs. Non-Cash

Enterprise Budget Fundamentals

Activities--

1- Revenue versus Expense

2- Simple Budgets

3- Show some Depreciation

4- Breaking Even

5- Case Study, part 1

**Product Type**

Educational Aids or Curricula

**Description**

Lesson 2. Cash Flow Budgets (six, 45-minute course periods)

Cash flow budgets provide detail about periods when operating costs exceed revenues. Many time businesses will need extra cash to supplement periods of high expenses. Loans are one way to offset cash flow issues if they are estimated properly and timely. Other cash reserves may also factor into the feasibility of a project.

This lesson introduces cash flow budget components, such as cash expenses and revenues. Students will create a cash flow budget and analyze the condition of the business plan. They will also examine loans and calculate estimated interest costs for operating loans that factor into cash flow budget analysis.

Includes:

Presentations--

Cash Flow Budget Components

Principal and Interest

Activities--

1- Monitoring the Flow of Cash

2- Costs of a Loan

3- Case Study, part 2

**Product Type**

Educational Aids or Curricula

**Description**

Lesson 3. Healthy Balance (five, 45-minute course periods)

Creating a balance sheet assists a business owner in making decisions based on accurate accounting of assets and liabilities. Balance sheets examine net worth and these tools are used by financial lending organizations to assess the financial risk of an enterprise.

This lesson will teach students to assemble appropriate information to create a balance sheet. Once they practice creating a balance sheet, they will use this procedure to create balance sheets for the Case Study project and their own SAE projects.

Includes:

Presentations--

Measuring the Health of a Business

Analysis of Health

Activities--

1- Balancing Act

2- Case Study, part 3

3- Health Check

4- SAE Analysis

**Product Type**

Other

**Description**

The curricula were presented to agricultural educators by way of a full day, hands-on workshop and then a condensed seminar at the annual meeting of the National Association of Agricultural Educators. Professional development credit was provided for the pre-conference workshop.

**Product Type**

Evaluation Instruments

**Description**

Independent Evaluation report by Carol Hardbarger, PhD, Education Technology Consultant

Dr. Hardbarger's Bio: Professional program and project manager with 28+ years experience in large- and small-scale projects. Expertise in needs assessments through combined quantitative and qualitative research methodologies.

Specialized skills include coalition building, written and oral communications, proposal writing, and research and evaluation. I am interested in working with school districts, other consulting firms, and non-profit organizations to assist them in maximizing their resources utilization. Of particular interest is teacher professional development in the integration of technology to improve achievement.

**Changes/Problems**

{Nothing to report}