Realized Student Learning Outcomes in an Experientially-based Livestock Management and Marketing Course

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Outline

1. University Initiatives in EL
2. Departmental Struggles & Opportunities in Experiential Learning
3. Livestock Management & Marketing Course
4. Course Learning Outcomes
Murray State QEP

• “Bring Learning to Life”

• **Goal:** To Improve Experiential Learning Outcomes in University Programs

• 2014 – 2019

• Developed by Steering Committee in 2012 – 2013

• Identified as a need using data from:
  • NSSE, FSSE, Achievement Data, Supervisor Surveys, and Senior Surveys
Quality Enhancement Plan

• Experiential Education at Murray State

• Four Key Areas
  – Internships (B-)
  – Service Learning (B+)
  – Study Abroad (A-)
  – “Experience Rich Courses” (?)
Experience-rich Courses

**Criteria**

1. Involve application of knowledge in a real-life setting, resulting in a final product
2. Connect concepts from multiple courses in a meaningful way
3. Involve a third-party outside of the normal faculty-student interaction
4. Include at least 180 hours of experiential involvement
5. **Have clearly assessable learning outcomes**
6. **Every department must have one**
This Should be Easy in Animal Science...
We needed a new course

• “Livestock Management & Marketing”
• Capstone Course for Animal Science Students
• University handed over complete management control of the swine farm to the class

Disclaimer: Idea stolen in part from Iowa State University’s Ag 450 Farm
Course

• Experimental
• Limited to 15-student pilot for two consecutive semesters (Fall ’14 – Spring ‘15)
• Management Team: Facilities, Nutrition, Genetics, Student-worker management
• Marketing Team: Showpig/Seedstock Sales, Consumer-direct Food Product Merchandising, Advertising & Public Relations
Assessment of Learning Outcomes

• Not just good practice... Required by the QEP

Process/Methods

1. Pre-flection/Reflection (specifically required with university-wide prompts)
2. Electronic Instrument (~2/3 through term)
3. Focus Groups (immediately following final)
What are we learning and to what level?

1. Area of the content/experiences of students in the course
   - Animal Science, Ag Systems, Ag Business, Agronomy, etc.

2. Level (within Bloom’s Taxonomy) of experiences in the course
Areas of Experiences Described by Students

- **Ag Systems**: 34%
- **Ag Business**: 29%
- **Animal Science**: 19%
- **Non-Ag**: 13%
- **Other**: 5%
Levels of Experiences

**Knowledge**
- Knowledge: Localizing; Naming; Discovering; Observation; Recall of information;

**Comprehension**
- Comprehension: Demonstrating; Summarizing; Translating;

**Application**
- Application: Organizing, solving problems, using and applying knowledge;

**Analysis**
- Analysis: Recognizing trends; Identifying and analyzing patterns;

**Synthesis**
- Synthesis: Recomposing; Rethinking; Evolving outcomes; Solving; Judging;

**Evaluation**
- Evaluation: Assessing theories; Comparison of ideas;
Overall Trends

1. Reported experiences showed an **abundance of breadth**
2. Reported experiences showed a **potential lack of depth**
Selected Narratives

“We learned a ton of stuff, in fact I think I learned more in this class than all my other classes this semester combined... [PROMPT]... “I don’t really know what I learned. I didn’t really learn that much about pigs though.”

- Female, Senior in Animal Science
Selected Narratives

“The hardest part for me was probably leading the student workers, I felt really uncomfortable managing them. I had never done anything like that before. It was a real reality shock for me... I mean I ‘m going to be leading people like that for real in a few weeks.”

- Female Graduate Student, Business Administration
Selected Narratives

“Sometimes I think this class was the easiest in the world but other times I think it was the hardest. I really didn’t like not knowing what to expect each week.”

-Male, Junior in Animal Science
Selected Narratives

“My dad is going to come see our class. He can’t believe that I worked with an electrician, a plumber, and a welder all in the same week.”

-Female, Junior in Animal Science
Selected Narratives

“My lifelong dream has always been to be in production animal agriculture. This course has shown me that I don’t know nearly enough. There’s so much more than raising the animals. I had no idea that I had to know about electricity and welding and plumbing and concrete work and advertising and giving professional presentations and I don’t even know what else. I feel like I should go back and redo college, not be graduating next semester.”

-Male, Senior in Animal Science
I really hated this course to be honest. I didn’t understand why we had to do most of what we had to do. I was constantly worried about my grade. I don’t think I learned anything. Except maybe about the advertising stuff, I guess that was okay.”

-Female, Sophomore in Animal Science
Big Takeaways

1. Students made an abundance of new connections among content areas.

2. Content knowledge was suspect, especially if proper prerequisites weren’t taken.

3. Ag Systems & Ag Business infiltrated nearly all experiences

4. Written assessment remains a challenge
Questions?