Strategies to Improve Experiential Learning Opportunities at a University Equine Center

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Experiential Learning

• John Dewey’s model of experiential learning
  – Emphasizes experience in the learning process
    • Different than other cognitive or behavioral learning processes

• Kolb continued this work
  – “…the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience.”

• Holistic approach to learning
  – Multivariate
  – Cognitive; behavioral; language/discussion; experiential; etc.
Kolb’s Cycle of Experiential Learning

Active Experimentation – testing new ideas; honing skills in a new experience

Concrete Experience – engaging directly in authentic situation

Abstract Conceptualization – distilling perceptions into abstract concepts

Reflective Observation – noticing what happened and relating to past experience and conceptual understandings
The Need

• Shift from farm/rural to urban and suburban

• Reese et al., 1987. NACTA. June 1987: 23 – 25
  – Univ. of Nebraska: 1980 – 1986
    • Student enrollment in Animal Science decreased by 10%
    • 86% Rural; 14% Urban
    • 92.5% Livestock or poultry experience
    • Interest in the field of study was leading influence

• 2016 – Iowa State Univ.; Animal Industry Report
  – 42% farm/rural; 32% small town/city; 26% urban
  – Primary species interests:
    • Companion 34%; Equine 19%; Beef 16%; Exotics 12%
    • Swine 8%; Dairy 6%; Sheep 2%; Goats 2%
Clemson University is no different...

- Suburban/Urban background – 60%
- Companion animal and equine interests
- Veterinary field is primary career goal
  - 77% of incoming freshman
- Alternative career options
The Strategy

• Hands-on laboratory courses
• Internships/Practica
• Immersion Projects
• Working student positions
• Special problems courses
• Undergraduate research
• Creative inquiry
Clemson University’s Equine Business

- Hands-on Techniques courses
  - Species specific
    - Handling techniques
    - Basic husbandry
      - health care assessment, management, welfare
      - products or industry applications
- General and Animal Science courses
- Equine Science courses
- Business Administration minor
Our recipe...

- STEM major
  - 3 concentrations
  - Common core
- Equine Business
  - Science; management; industry/horsemanship skills; business/entrepreneurial development
- Immersive
- Business minor
- Equine Industries minor
Methods

- Recognized diverse backgrounds, preparation and career interests
- Identified key staff positions needed
- Developed student employee tier system
- Refined resources
  - Herd size reduction
  - Developed/deleted programs
  - Infrastructure improvements
Curriculum Design

- Revised curriculum
  - Customizable by students
    - General competencies
      - Course options to fulfill
  - Electives
    - Minors; additional interest to create emphasis area
  - Additional course development opportunities
Co-Curricular Opportunities

• Students have diverse backgrounds
• Much interest in business aspects
  • Allied animal health industries
  • Sales/marketing
  • “Corporate” side of the industry
• Tailor course content, laboratory experiences, field trips and immersion projects to individual students
Personnel

- Faculty Director
- Redefined job descriptions
- Program Coordinator
- T/T Faculty; Lecturer
- Student employees → senior student
- Equestrian Team Coaches
Resources

• Facilities to support new/evolving programs
• Herd size reduction
  – “right size” to meet teaching, research and outreach
New Programs

• Open House – Student coordination
• IHSA and IEA riding teams; 4-H mentorship
• CLEAT – therapeutic riding program
• 4-H club
• Horsemen’s Association
• Student Boarding
• Equestrian Camps
• Working Student
• Extension Workshops
• Increased research projects
Results

• Increased student number served by 50%
• 100% of all EQUI students complete an immersion project
• 20% increase in direct career placement
• 5 years
Adequate Career Readiness

• Adequate hands-on handling experience
• Industry diversity and exposure
• Experiential learning/Immersion experience
• Simulate real-world scenarios

• Make it a teaching mission to provide experiences for students of all experiences