Agribusiness Learning Outcomes
Project: Background

Annual WAEA Meetings
June 2013
Monterey, CA
Origins

- Evaluation of Undergraduate Teaching Programs
  - Attempt to identify strengths of ABM programs
- Greg Perry and Penny Diebel developed a 25 question assessment that sampled from variety of subjects
- In 2008 administered assessment at four schools
  - Oregon State, Eastern Oregon, Colorado State, Kansas State
Origins

- What was learned:
  - Assessment results did differ by university
  - Choice of vocabulary in questions was important
  - Use of multiple choice tests to evaluate learning is controversial
  - To do this right, we needed to identify common learning outcomes by subject area and examine weightings between areas
The Agribusiness Learning Outcomes Project

• Develop a common set of learning outcomes to create recommendations and comparatives for agribusiness management program leaders and faculty

• Initiated by:
  • Penny Diebel, Oregon State
  • Scott Downey, Purdue
  • Michael Gunderson, Florida (now Purdue)
  • Greg Perry, Oregon State (now Colorado State)
The Agribusiness Learning Outcomes Project

Endeavoring Participants:

- Bill Adamson, SDSU
- Penny Diebel, OSU
- Scott Downey, Purdue
- Ted Feitshans, NCU
- Marshall Frasier, CSU
- Michael Gunderson, Purdue
- Lindsey Higgins, CalPoly
- Dayton Maxwell, SUNY-Cobls.
- Patrick O’Rourke, ISU
- Hikaru Peterson, KSU
- Greg Perry, CSU
- Michael Wetzstein, UGA
- Norbert Wilson, Auburn
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- AAEA foundation and industry grants
- Piloted at Colorado State, December 2011 (part of comprehensive program review)
- National workshop in conjunction with Western Education and Research on Agribusiness (WERA-72) at Purdue University, June 2012
The Agribusiness Learning Outcomes: CSU Workshop

- Part of Curriculum Review process
- Pilot process
  - Faculty - Industry - Alumni
  - Background Presentations
  - Present Knowledge Areas
  - Discussion/Prioritization
- Adjust process – Discussion intensive, broad sharing, strong opinions
  - Addition of time allocation survey
The Agribusiness Learning Outcomes: Purdue Workshop

Industry Participants

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<tr>
<th>Name</th>
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<tr>
<td>Jamie</td>
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<td>Phil</td>
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Academic Participants

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The Agribusiness Learning Outcomes: Purdue Workshop

• Critical vocabulary
  • Learning Outcome (LO): expresses desired characteristics of students as a result of a student’s study or other guided efforts, preference for action / measurable characteristics
  • Knowledge Area: specific topic area of study, such as finance
  • Knowledge Area Outcomes: actions a student should be able to perform successfully as a result of a course(s), measurable actions
  • Program: a set of courses, such as an agribusiness major
  • Program Outcomes: actions a student should be able to perform successfully as a result of completing a program
The Agribusiness Learning Outcomes: Purdue Workshop

- Purpose was to develop a report to summarize:
  - number of classroom hours devoted to each subject for various agribusiness programs
  - common themes or specific subject matter covered during this classroom time
  - learning outcomes that reflect common course content in ABM classes
The Agribusiness Learning Outcomes: Purdue Workshop

- Breakout sessions with faculty and industry representatives
  - Knowledge/Topic Groups
    - present background homework
    - create Learning Outcomes for each Knowledge Area
  - “Trade Show” Presentations
  - Discussion of Program Learning Outcomes
  - Prioritization
  - Expanded Discussion on Experiential Learning
Knowledge Outcomes

“Successful graduates in agribusiness will be able to …”

- Business Knowledge Areas
  - Finance (7 outcomes)
  - Marketing (5)
  - Management (6)
  - Strategy (4)
  - Human Resources (6)

- Economics Knowledge Areas
  - Microeconomics (5)
  - Macroeconomics (6)

- Policy Knowledge Areas
  - Law (6)
  - Agricultural Policy (5)
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Knowledge Outcomes
“Successful graduates in agribusiness will be able to . . .”

• Foundation Skill Knowledge Areas
  • Writing/Communication (5 outcomes)
  • Math and Quantitative (2)
  • Computer/Media Communication (4)
  • Experiential Education (4)
  • International (2)
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Program Outcomes
“Successful graduates in agribusiness will display …”

- Professionalism
- Technical Competence
- Problem-solving Skills
- Communication Skills
- Leadership
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Agribusiness Learning Outcomes Project

Where Do We Go Next?
Business Knowledge Areas: Finance

- Explain and perform financial and managerial accounting procedures.
- Calculate and understand financial statements and tax returns, then communicate that information to others.
- Apply financial analysis tools, including ratios and trend analysis.
- Understand the structure, costs and access to capital, including use of debt, bond financing and external investments.
- Understand the tradeoff between risk and return.
- Analyze and evaluate investments and expected returns, including pro forma, NPV, and IRR.
- Calculate and interpret partial, whole business and enterprise budgets.
Business Knowledge Areas: Marketing

- Understand, interpret, utilize and evaluate market research.
- Anticipate the impact of interactions between macro market forces, with emphasis on commodities.
- Utilize basic marketing principles (5 P’s, segment, brand, and so forth) to understand company and market interfaces (branding).
- Understand how firms co-create value for agribusiness customers.
- Select appropriate marketing tools and use them to make decisions.
Business Knowledge Areas: Management

- Learn the fundamentals of commodity markets, trading and risk.
- Understand how firms manage inventory along the supply chains.
- Appreciate the uniqueness of production agriculture and its role in both society and the world.
- Analyze, plan, implement, and control a management challenge.
- Manage change in the business, industry and economy.
- Organize and lead projects, as well as understanding when and how to use experts.
Business Knowledge Areas: Strategy

- Assess the current position and environment of a business/entity, and identify and evaluate opportunities and consequences of a challenging problem.
- Develop a vision, mission, and direction, accounting for uncertainty.
- Frame strategic questions for a business, gather and evaluate information, and use sound analysis to make and support decisions.
- Allocate and structure resources to accomplish goals, including capital, people and change management.
Business Knowledge Areas: Human Resources

- Demonstrate the ability to interview and be interviewed. Also be able to recognize, recruit and develop talent.
- Understand unique aspects of agriculture labor and regulations.
- Develop an ability to manage employees with work-related problems.
- Understand the roles of benefits, compensation and recognition in retention and productivity of employees.
- Anticipate and plan for workforce changes (succession, development, growth and attrition).
- Understand and be able to use basic negotiation skills.
Economics Knowledge Areas: Microeconomics

- Explain the derivation of supply and demand functions based on consumer and producer decision-making.
- Explain the importance of market prices as signals for allocating scarce resources.
- Effectively compare and contrast a centralized and decentralized decision for maximizing social welfare.
- Demonstrate the connections between the economic concepts and business decisions, emphasizing marginal analysis, comparative advantage, and opportunity cost.
- Identify the tradeoffs between economic efficiency and equity.
Economics Knowledge Areas: Macroeconomics

- List and explain macroeconomic indicators commonly used in the business press and business forecasting.
- Illustrate the linkages between fiscal and monetary policy and international trade.
- Explain the stages of the business cycle and relationships to:
  - aggregate demand aggregate supply changes to maintain stable prices and employment.
  - a cyclical budget deficit and a structural budget deficit.
- Identify the government’s role in sustainable economic growth.
- Describe the relationship between national savings and international capital flows and balance of payments.
- Describe the impact on agriculture to domestic and international macroeconomic shocks.
Policy Knowledge Areas: Law

- List the components of the legal system and instruments, in terms of how they work in agricultural business.
- List and explain the key areas of law governing agriculture.
- Identify legal issues sufficient to communicate with legal counsel.
- Explain how farm business organization structured, created, and transferred.
- Demonstrate best practices of preventative law within a regulated environment
- Identify best practices of corporate ethics.
Policy Knowledge Areas:
Agricultural Policy

- Employ economic theory to analyze current agricultural and food issues and policy (providing a directed or self-selected list of topics depending on interest and expertise of faculty and students).
  - Such as: Immigration, Farm Bill, Biofuels, Sustainability …
- Illustrate how the economic implications of policy are translated into regulations and legislation
- Illustrate the economic consequences of policy alternatives.
- Identify the linkages among agricultural production, natural resource, and environmental issues.
- Identify the relationship between policy decisions and food safety.
- Identify and analyze the role of multiple stakeholders in the policy process.
Foundation Knowledge Areas: Writing/Communication

- Identify, critically evaluate, and cite sources.
- Interpret and synthesize information for practical usage.
- Demonstrate proficiency in business professional writing for appropriate audiences.
- Demonstrate proficiency in business professional presentations for appropriate audiences.
- Demonstrate proficiency in business professional interpersonal communication, including interview, one-to-one, team and small group situations.
Foundation Knowledge Areas: Math and Quantitative

- Demonstrate command of: algebra, statistics, graphical analysis, calculus.
- Practical application of algebra, statistics, calculus to agribusiness decisions and utilize modeling for problem solving.
Foundation Knowledge Areas: Computer/Media Communication

- Develop an “intermediate” level of MS Word, PowerPoint, and Excel skill.
- Apply computer skills to agribusiness concepts and critical applications.
- Demonstrate capacity to evaluate and implement existing and new technologies.
Foundation Knowledge Areas: Experiential Education
(Highly valued and encouraged but not required)

- Internships
  - Strengthen interpersonal communication skills.
  - Practice critical thinking.
  - Develop workplace professionalism.
  - Learn about workplace/business ethics.

- International
  - Cultivate cultural awareness.
  - Cultivate respectful interpersonal communication.
Foundation Knowledge Areas: Professionalism

- Develop professionalism in regard to computer use and skills including:
  - Appropriately use of phone, texting, email and social media.
- Recognize and appropriately handling of sensitive material.
- Demonstrate proficiency in business professional writing, for appropriate audiences. presentations for appropriate audiences, interpersonal communication, including interview, one-to-one, team and small group situations.
- Develop a knowledge of workplace professionalism.
- Learn about workplace/business ethics.