

Portfolio Planning and Development to Assess Learning Outcomes in Agribusiness Management

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Abstract: The Assessment Plan for Agribusiness Management includes has six goals, and each goal has two student learning outcomes. The assessment of twelve student learning outcomes for any program is a challenge. After considering alternative assessment models, the Agribusiness faculty are formulating a freshman-to-senior step-wise portfolio development program that would be required of all agribusiness management majors.*

The SMSU Agribusiness Management Assessment Plan is currently comprised of these elements:

- ✚ An integrated set of six Agribusiness (AGBU) Management Program **Goals**, and their associated Student Learning Outcomes (SLO's).
- ✚ An AGBU Plan for Assessment of Student Learning (**PASL**), placed into a matrix format. The plan is comprised of program goals, SLO's, courses, assessment methods, and evaluations of what has been done, and what are the next steps.
- ✚ An **AGBU Curriculum Map** that identifies how required and elective courses address program goals and SLO's at Introductory (I) and Advanced (A) levels.
- ✚ A **Plan of Action** for identifying the steps that the AGBU faculty are currently taking, and the additional work that the AGBU will perform. The plan of action is aimed at creating a fully-functional program assessment plan that produces continuous improvement in student learning and program effectiveness.

**See also endnotes at the back of this document for further explanations and references.*

SMSU Agribusiness Management Program Goals and SLO'sⁱ

Goal 1. To develop analytical skills relevant to agribusiness management (*Analytical Skills*)

o **Student Learning Outcome 1.1**

❖ Demonstrate an ability to apply economic principles to problems of farms, ranches, and other institutions in the food and fiber industries.

o **Student Learning Outcome 1.2**

❖ Demonstrate technological skills used in quantitative analysis, such as ability to perform statistical analysis using spreadsheet.

Goal 2. To develop an understanding of ethical, socially responsible, and sustainable behavior (*Ethics*)

o **Student Learning Outcome 2.1**

❖ Demonstrate an understanding of the role of civic responsibility, including corporate and cooperative governance.

o **Student Learning Outcome 2.2**

❖ Demonstrate an ability to exercise judgment of environmental impacts of agribusiness decisions.

Goal 3. To develop effective leadership and management skills (*Leadership & Management*)

o **Student Learning Outcome 3.1**

❖ Produce a project through working as a team.

o **Student Learning Outcome 3.2**

❖ Develop a business plan or case study on an agribusiness topic.

Goal 4. To effectively evaluate and communicate agribusiness information (*Information Literacy & Communication*)

o **Student Learning Outcome 4.1**

❖ Effectively use appropriate data sources to obtain information on the agricultural and food sectors.

o **Student Learning Outcome 4.2**

❖ Communicate the results of literature reviews, experiments, and production data both orally and in writing.

Goal 5. To improve students' understanding and appreciation of broader issues relevant to agribusiness (*Expanding Perspectives*)

o **Student Learning Outcome 5.1**

❖ Demonstrate an awareness of global issues relevant to agribusiness and agricultural development.

o **Student Learning Outcome 5.2**

❖ Demonstrate an appreciation for diversity in agribusiness employees, customers, and producers.

Goal 6. To develop critical thinking and problem solving skills (*Critical Thinking*)

o **Student Learning Outcome 6.1**

❖ Demonstrate an ability to apply the scientific method in an area relevant to agribusiness and economics.

o **Student Learning Outcome 6.2**

❖ Be able to propose and assess economic policy solutions to agricultural and food issues.

Guidelines and Alternative Methods for Assessing Goals and Student Learning Outcomes

Guidelines: Prompted and supported by an SMSU Assessment Mini-Grant, the Agribusiness faculty have been meeting regularly to develop and implement our assessment plan. As a result of our discussions, the Agribusiness faculty have adopted the following guidelines for assessment:

- Assessment should provide **beneficial feedback to both students and faculty** on the outcomes of agribusiness management major.
- Assessment should occur at the **course level and at the program level.**
- Assessment should be an **intentional and developmental process** that begins at the freshman level of the program and continues through to the senior-level.

Each member of the agribusiness faculty is collecting course-level assessment information to determine student progress towards individual course goals and overall program goals.

Alternative Methods for Program-Level Assessment: SMSU's Agribusiness (AGBU) faculty discussed the following options for program-level assessment:

- Modify the AGBU Capstone Course to encompass comprehensive program assessment
- Create, implement and interpret the results of a “comprehensive exit exam”.
- Compile the results of individual course-level assessments in a selected number of required courses within the major.
- Develop a step-wise approach to portfolio analysis within the major.

Why did the Agribusiness Faculty choose a step-wise portfolio approach to program-level assessment? ⁱⁱ

- We were dissatisfied with the **shortcomings of the other assessment alternatives:**
 - The integrity of the intended role of the capstone course would be compromised if it became the primary vehicle for program assessment.
 - There is no “off the shelf” national comprehensive exit exam for agribusiness management programs; and it is unclear that such an exam provides real benefits to the students themselves; as a faculty, we were aiming for a developmental process where students would be aware of what assessment is and why it is being done, and a one-time test does not meet this expectation.
 - Developing a consistent methodology for properly synthesizing information from a variety of course assessments into one overall program evaluation was seen as a task that would involve a massive amount of effort to achieve questionable results.

- **Challenges and benefits of a step-wise approach to portfolio assessment**
 - **Challenges:**
 - At this time, our faculty have no particular expertise in portfolio analysis – we still have “work to do” to learn the methods and apply them effectively.
 - We were uncertain of how we would find the time and resources to properly evaluate the portfolios.
 - We are wary of the tendency to focus too much on the structure of the portfolio (the layout, navigation, and design), when the true purpose of the portfolio is to measure the “content and results” of the artifacts and work-products that are the backbone of a portfolio.

- **Benefits of a step-wise approach to portfolio assessment:**
 - AGBU students and faculty would have a first-hand role in developing and using the portfolio to determine progress in student learning.
 - We could construct two 1-credit courses; one at the freshman level and the other at the senior-level to guide the portfolio development process.
 - New technologies are becoming more easily accessed and economical to facilitate the construction of “e-portfolios”. The technologies will help students and faculty focus more time on the content of the portfolio, rather than the design and layout of the portfolio.

What are the next steps in creating a step-wise portfolio approach for program-level assessment in Agribusiness Management? ⁱⁱⁱ

- **Reviewing the literature on portfolio assessment, and determine a model that will work best to create a beneficial assessment cycle of goal-setting, data-collection, evaluation and program improvement.**
- **Designing a freshman-level one-credit course to introduce the goals, content and development of their individual program portfolios.**
- **Designing a senior-level one-credit (or 2-credit) course where senior students will complete their final portfolio products, and offer a presentation based on the content of their portfolio.**
- **Use the official curriculum process to make changes in the AGBU major to incorporate these courses dedicated to program assessment.**

Endnotes

ⁱ The AGBU program goals and SLO's are consistent with SMSU's Mission and Goals. In particular, our six goals are logically connected to SMSU's commitment to "*prepare students to meet the complex challenges of this century as engaged citizens in their local and global communities.*" Our AGBU goals for critical thinking, an expanding perspective, ethics, leadership, analysis and communication are essential to prepare students for the societal challenges that lie ahead.

The AGBU faculty linked the goals of our agribusiness management program to SMSU's Liberal Education Program (LEP). SMSU's LEP includes goals for diversity, communication and global awareness. Our AGBU program builds on those LEP foundations; we expect our students to develop these skills to a more advanced level within the agribusiness management program.

ⁱⁱ Hatfield, Susan. **Assessing your Program-Level Assessment Plan**. Idea Paper #45, The Idea Center, www.theideacenter.org, Manhattan, KS. 2009.

ⁱⁱⁱ Davis, Stephen, Sangnyeol Jung and Gerald Toland. **Report on the SMSU Agribusiness Management Program Assessment Plan**. SMSU Assessment Mini-Grant Program For the Funding Cycle Ending June 30, 2012. September 4, 2012.