Positioning A Value Added Entrepreneurship Course in A New College Curriculum: A CFANS Example

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The paper will describe the evolution of a value added entrepreneurship course from its inception to its current status as a permanent course in the Department of Applied Economics at the University of Minnesota. This effort occurred initially as the result of a single semester leave in the fall of 2004. The author returned to find that a regular course taught in the fall had been scheduled for instruction in spring semester instead of the fall semester offering. It was decided to try an experimental course in value added entrepreneurship for that fall semester of 2005. Students were recruited for this pilot offering. A total of five students were enrolled for this initial course. The decision was made to enlist a corporate sponsor to provide a subject for this project-based course. The first project involved research for an organic apple cider business. Mr. Harry Hoch was already connected with University horticulturalists, but needed to evaluate the feasibility of a organic apple cider processing facility. The class provided a venue to investigate this new idea. Harry Hoch was also aware that several of his neighbors-also apple producers were interested in also organic conversion. Harry’s idea was that his facility could also process his neighbor’s apple into organic cider.

The class investigated both the cost of a new processing facility with key data coming from a working cider processing facility at Cornell University with assistance from equipment vendors. The second part of this project was to determine the size of the market for organic apple cider. Consumer surveys were used to answer this question. A final draft business plan was delivered to the Cooperative Development Service-USDA-which was the designated lender for the new facility.
Five other projects became the industry collaborators for the next five years until it was decided to move the class to permanent status in the Department of Applied Economics.

Curriculum Changes in CFANS

As the experimental course in value added entrepreneurship was being developed, a major effort was underway to merge and modify programs within COAFES (College of Ag., Food and Environmental Sciences). These University-wide changes were summarized in President Bruinick’s statement- *Transforming the University*. This document suggested the merger of the College of Human Ecology into the larger College of Education. Also, the College of Natural Resources was merged with the COAFES (College of Agriculture, Food & Environmental Sciences) to create a new college- the College of Food, Agriculture and Natural Resources (CFANS). It was expected that curriculum revisions and new departmental alignments would follow the mergers. The units were created: Environmental, Food, Plant Science, Animal Science and a self-standing unit consisting of Applied Economics and Agricultural Education. These new divisions would be headed by a divisional head and collaboration across the subject areas was expected.

Current CFANS Curriculum Change

The current efforts in CFANS consist of examining all courses and programs with the goal of creating a curriculum and majors that are in concert with major needs of employers and society. These needed changes include a focus on diversity of the student population, streamlining majors to eliminate unnecessary prerequisites for course,
developing experiential courses which would be the new mark of excellence in instruction for our colleges. Supporting documents and references for this change are included in Appendix A2 & B. An initial study- Scholarship Reconsidered: Priorities of the Professionate- formed the basis for other investigations of the future curriculum, Nils Hasselmo wrote an article – “Rethinking Undergraduate Professional Education for the 21st Century. Robert Goodman also contributed – The Challenges for Professional Education in Agriculture. Both articles were in the National Association of Land Grant Colleges and Universities publications.

The CFANS Strategic Plan

The recent efforts have culminated in a procedure to craft a Strategic Plan for Undergraduate Education. Task forces were developed in five areas. The reports of these task forces are now being reviewed by the Associate Dean for Instruction in CFANS. The author served on a Capacity task force. The author was also on single semester leave studying cost and efficiency measures for existing course and programs. Part of the accomplishments for the single semester leave was to perform Data Envelopment Analysis on Instructional Costs from different departments. The results of this analysis indicated significant differences in O&M costs with the top three departments having an efficiency score from .8 to .92. These results are now being used to refine the strategic plan.

The most recent aspect of the strategic plan is to have all majors submit a letter of intent to propose a revised or new major. The only proposal submitted thus far is a Organic Food major which is an interdisciplinary effort from the departments of food science, horticulture and agronomy.
Positioning the Value Added Entrepreneurship Course in the “New Curriculum”

The ECAS description of the proposed Value Added Entrepreneurship course is included in Appendix A1. This new course will fulfill two requirements as required in the new curriculum. The first requirement involves that new courses feature experiential approaches to education. This new course involves research and collaborative components with project sponsors. The heightened student engagement causes the Value Added Entrepreneurship course to be in alignment with the new curricular goals. The second requirement of courses in the new curriculum is that each department have clearly identified “capstone” courses—senior level courses which integrate and apply knowledge from other courses within a program of study. These two positioning strategies were used as the course was reviewed by the CFANS curriculum committee.


The CFANS curriculum committee voted to approve the proposed Value Added Entrepreneurship course during Spring Semester of 2011. The permanent course as modified will be offered during fall semester of 2011. The author will teach the new course to a larger group of students. Multiple projects will be used for this new course offering. These projects will be solicited from industry clients and selected according to student interests. The author has an inventory of proposed projects from previous course offerings as an experimental course.
The Value Added Course (ApEc 3551) in Retrospect

The lessons learned from this effort to create a permanent course offering are many and varied. The first is that Value Added Entrepreneurship must have a fit within the department that features this offering. As the course was being proposed and revised, early questions dealt with the fit with the Department of Applied Economics and perceived academic rigor of the course. These questions were resolved by dialogue and tracing the history of the Department of Applied Economics. The early history of the Department shows a strong focus on farm management, the precursor to today’s focus on value added agriculture. The dialogue with faculty dispelled the concern about academic rigor by showing the nature of previous completed projects and their acceptance by lenders in financing these projects. Questions from the CFANS curriculum committee concerned prerequisites and costs of collaborations. Both questions were answered during the deliberation regarding the course.

Summary & Conclusions

The development of this new course was well-timed as it follows the trend toward value added enterprises in agriculture and the recent movement toward curricular redesign. The authors also benefited greatly from the experience in offering the course on an experimental basis which allowed revisions in instructional design and focus. The effort was worthwhile and beneficial to both the CFANS collegiate unit and the Department of Applied Economics.
References


Entrepreneurship Fundamentals for Value-Added Rural Businesses

ApEc 3551
Fall Semester, 2011

Instructor: Ward E. Nefstead
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Phone: 612-625-7228
Email: nefst002@umn.edu

Class Hours: Tuesdays, 3-6 p.m.

Credits: 3

Class Description:

This class will involve the process of starting a new business or organization. It deals with entrepreneurship broadly defined as:” activities related to the process, that someone follows who creates a new opportunity in business and assembles the resources necessary to exploit that opportunity- money, people and organization(Allen).” The class will involve creating a new value proposition in which people are willing to pay for this new product or service according to it’s perceived value. Starbucks is based upon a simple value proposition-” customers would enjoy an experience with a top grade coffee(upscaling coffee). “ Student will identify market niches and develop plans to exploit them. Student-run businesses may be created as well as self-standing independent businesses. Examples of each will be given.

Course Objectives(Arranged under Seven Undergraduate Learning Outcomes-CFANS) : Upon completion of the course, the student will be able to:

1. Can identify, define & solve problems
   “Understand the role of entrepreneurship in the U.S. economy”
2. Can locate and critically evaluate information
   “Conduct focus group, survey and other consumer/business information sources”
3. Have mastered a body of knowledge and mode of inquiry
   “Build a portfolio of materials /business plan to support new business concepts”
4. Understand the role of creativity, innovation, discovery and expression across disciplines
   “Develop and evaluate business concepts for “new” value added ag&rural businesses
Appendix A2

Mission
CFANS Undergraduate Programs facilitate lifelong intellectual and personal development of students through extraordinary interdisciplinary learning opportunities, rigorous and engaging education in applied sciences, enriching collegiate experiences, and responsive student services. We prepare learners for civic leadership and professions to sustainably manage and protect the health of our natural resources, food and agricultural systems, and communities in a multicultural world.

Vision
Our vision is for our communities, environment, agricultural and food systems to be cared for and sustained by well-educated, engaged citizens capable of using science to solve new and challenging problems. Students will acquire communication, business, critical thinking, technical, cross-cultural and collaboration skills through interdisciplinary applied science programs and other transformative learning opportunities to become lifelong learners. As alumni, they remain actively involved with successive generations of future leaders and a diverse array of collegiate programs and activities in service to jointly addressing real-world concerns. Further, our vision in undergraduate education, as a collegiate unit and community of scholars, is to be an institutional leader on agricultural and environmental issues for the University of Minnesota and to be recognized as an international leader in innovative education, academic excellence, and multicultural competence.

Values
We put students first, in the interest of facilitating extraordinary education, program innovation, a culturally and ethnically diverse collegiate community, and involved alumni. We demonstrate this through our dedication, creativity, accessibility, effectiveness, openness and extraordinary service. Ethics guides our work, including academic integrity, respect and equity with a strong commitment to environmental stewardship, sustainable agricultural production, social justice and multiculturalism. We value an organizational culture that supports personal and professional growth, collaborative leadership models, diversity of backgrounds and personalities, transparency, and continuous renewal. We are committed to providing the incentives, facilities, and development necessary to effectively implement our vision and programs.

This is hopefully a starting point to begin conversations....
Among faculty, staff, and students in your department and undergraduate programs
With the various strategic planning task forces
With your stakeholders, alumni/ friends, and others with a vested interest
With the college community through the First Thursday gatherings and meetings you attend
Task Force I: Structure of Majors, Minors and Academic Programs

Kevin Smith (Co-Chair) Agronomy and Plant Genetics
Tom Michaels (Co-Chair) Horticultural Science
Gary Cooper (Co-Chair) Applied Economics / Student Services
Ingrid Schneider Forest Resources
Thomas Burk Forest Resources
Joanne Slavin Food Science and Nutrition
Marcia Hathaway Animal Science

Summary of Charge:
This task force is one of three related to the Curriculum Revitalization Initiative. Its charge was to conduct a comprehensive and holistic review of CFANS majors and minors and recommend a structure of majors, minors and programs that will meet the following goals: (1) explicitly defined competencies, (2) increased relevance, (3) reduced redundancy, (4) ensured flexibility, (5) an interdisciplinary approach, and (6) measureable outcomes.

Six Recommendations (in no particular order):
1. The minimum number of students enrolled in any one CFANS major should be about 50 students.
2. Majors with low enrollment (under 50) should consider revision or consolidation with another major that shares similar coursework and professional intent to meet enrollment objectives in recommendation 1.
3. Teaching and advising resources should be planned and coordinated with greater support at the college level.
4. Majors with the potential to address a wide range of interdisciplinary concepts should be affiliated with multiple departments and incorporate the recommendations from Task Force II (Addressing Challenges of Interdisciplinary Majors, Minors and Programs).
5. After majors have been re-structured, the relevance of all minors should be reconsidered to ensure that they clearly complement the current list of majors. Several minors should be created that fulfill liberal education requirements in the context of a unified theme as recommended by the CLE.
6. A college committee should be assembled to investigate the potential of a “challenge curriculum” initiative, supported by the Bush Foundation, to contribute to the implementation of our college strategic plan.

Task Force I Recommendations

Preamble
Our primary educational goal in the college is to create valuable student learning experiences. The CFANS strategic planning efforts to improve undergraduate education are occurring at a time of changing student demographics, college resources, collegiate faculty and staff employment, and stakeholder needs. This task force believes that structural reorganization to the college’s majors, minors, and programs should consider...