Distance Education in Agricultural Economics

SUMMARY OF SURVEY RESULTS

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Study Objective

The objective of this study was to provide a 2006 snapshot of the role of distance education (DE) within agricultural economics departments. The study

- developed an inventory of DE offerings by agricultural economics and/or agribusiness departments across the United States,
- measured perceived challenges to offering DE,
- assessed strategies for use, and
- ascertained departments’ plans for future DE offerings.

The role of DE across the spectrum of undergraduate courses, graduate courses, and extension programs was explicitly considered.

Data Collection and Analysis

In September of 2006, 90 department heads of agricultural economics and/or agribusiness departments across the U.S. were sent a mail survey. Approximately one week later a reminder note was sent. The following week a second survey was sent to all those who had not yet responded. A total of 49 surveys were returned for a response rate of 54.4 percent. The survey covered a range of topics including: current and projected distance course offerings and extension programming; general views on DE; users of the DE offerings; abandonment of DE offerings; adequacy of financial resources and technical support; faculty perceptions of DE; reward systems for authoring and offering distance materials; student learning through distance formats; and departmental strategies for using DE.

Results

Distance Courses in Undergraduate or Graduate Curriculum

<table>
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<tr>
<th>Yes</th>
<th>59.8%</th>
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<tr>
<td>No</td>
<td>40.2%</td>
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- Total students enrolled in distance courses=1,707 students across all departments
- Average enrollment across distance courses per school= 63.2 students/school
- % of schools with 50 or fewer students enrolled in distance courses=70.4%
- Total number of distance courses=85
- Average number of distance courses per department=2.9 courses/department
- Average number of students per distance course=21.9 students/course
Distance courses are taught at all levels, however, over 50 percent are taught at the senior and graduate levels.

The most commonly offered course topics are agribusiness management, marketing, introductory courses, and quantitative methods. However, a fairly wide variety of topic areas are covered through distance courses.

The most prevalently used method of delivery is asynchronous Web format, with pre-recorded lectures on video or slides with audio. Many courses also use emails, chat rooms, or discussion threads as supplements for class discussion. A few used two way interactive video as a delivery method.

Distance courses are taught to both on- and off-campus students and students in the departments’ degree programs as well as those not in the departments’ degree programs.
About 62 percent of the department heads stated that their institution did not charge special technology fees per credit hour on distance courses (N=42). Of the 38 percent of the institutions that did charge fees, some or all of the fees were returned to the department about half of the time.

Marketing of distance courses occurred by word of mouth, existing continuing education marketing efforts, webpages, and student registration booklets or timetable schedules. A lesser number of the departments used more aggressive marketing methods, such as visiting trade shows, visiting companies, brochure or flyer mailings, posters, and emails to students and advisors.

- Figure 4. Plan to Expand/Initiate Distance Course Offerings (N=47)

- Just over 53 percent planned to expand or initiate distance courses.
- Among those planning to expand, plans are to expand courses at the
  - Undergraduate level =77.3%
  - M.S. level=59.1%
  - Ph.D. level=<10%.
- Among those with plans to expand, most (63.6 percent) plan to expand only in selected courses rather than an entire degree program.
- Commonly cited reasons for not expanding or offering DE courses included lack of faculty interest, not enough resources, and lack of demand for distance courses.

- Most commonly cited reasons for abandoning distance courses
  - loss of the faculty member or members who were teaching a distance course,
  - financial constraints were too high,
  - department found that most students using the courses were on campus, or
  - courses had insufficient enrollment.

- Figure 5. Abandoned One or More Distance Course Offerings (N=49)

- Yes 18.4%
- No 81.6%

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- Marketing of distance courses occurred by word of mouth, existing continuing education marketing efforts, webpages, and student registration booklets or timetable schedules. A lesser number of the departments used more aggressive marketing methods, such as visiting trade shows, visiting companies, brochure or flyer mailings, posters, and emails to students and advisors.
Distance Extension Programming

- Of the thirty departments with extension faculty, about half stated they offered distance extension programming. The total number of estimated users was 23,663, with an average of 2,151 users per program (N=11).
- Topic areas covered: farm and business management, risk management, marketing, economic development, and in-service training.
- The targeted client groups included farmers, business owners or managers, extension agents, government agency personnel, and local leaders.
- Delivery methods included the Internet and two way interactive video, with the use of two way interactive video being more predominant than in academic instruction.
- The distance-based extension programs are marketed through extension agents/field staff, during conferences or workshops, list serves, mailing lists, newspapers, brochures and websites.
- Among the departments with distance extension programming, 78.6 percent indicated they had out of state users of these materials (N=14).

**Figure 6. Plan to Expand Distance Extension Programming**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Percentage</td>
<td>32.1%</td>
<td>67.9%</td>
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- Less than one-third indicated they had plans to expand or initiate distance extension programming.
- Very few department heads indicated their departments had abandoned any distance extension programming.
- About 79 percent stated that their institutions did not charge extra fees for distance extension program workshops or materials (N=38).
Views on Faculty Resources and Distance Education

Figure 7. Department Heads’ Views Regarding Faculty Resources and Distance Education

(N=37)

- Strongly Agree
- Agree
- No Opinion
- Disagree
- Strongly Disagree

- Department has sufficient faculty resources to integrate distance education technology
- Development of distance education materials is taken into account in tenure/promotion decisions
- Institution offers faculty compensation for distance education development/delivery
- Faculty are accepting of distance education
- Faculty are aware of new distance delivery alternatives and technologies
- Faculty time costs to develop/deliver distance extension educational materials are high relative to traditional materials
- Faculty time costs to develop/deliver distance courses are high relative to traditional courses

Department heads
- most strongly agreed with the statements that faculty time costs of developing and delivering both distance courses and distance extension materials are high relative to the costs of developing and delivering traditional courses and traditional extension materials, and
- most strongly disagreed with statements that their institution offers faculty compensation for DE development/delivery, takes the development of DE materials into account in tenure/promotion decisions, or that their department has sufficient faculty resources to integrate DE technology.
** Views on Technology Support and Distance Education **

Figure 8. Department Heads’ Views Regarding Technology Support and Distance Education

- [ ] My institution has sufficient protection of intellectual property associated with development of distance instructional materials
- [ ] My institution has sufficient support staff to assist with and maintain distance education materials
- [ ] My institution has sufficient technology supporting authoring and maintenance of distance education materials
- [ ] My institution has sufficient technology support for students to participate in distance courses

Department heads

- moderately agreed that their institutions provided sufficient technology support for students to participate in distance courses and for authoring and maintaining DE materials, and
- were largely neutral or undecided as to whether their institution provided either sufficient support staff to assist with the development and maintenance of DE materials or adequate protection of intellectual property associated with the development of distance instructional materials.
Department heads

- were in moderate agreement with statements about future expansion of distance offerings in extension programs and undergraduate programs and about the usefulness of a consortium of distance academic and outreach programs,
- moderately agreed that web-based distance delivery is more appropriate for field or specialty classes than core curriculum classes,
- slightly disagreed with the statement that distance graduate course offerings from their department would increase in the future and that web based DE delivery is more appropriate for graduate than undergraduate courses, and
- did not agree that their departments had either effective marketing programs for DE courses or programming or strategic plans for implementing DE.

Views on Strategies for Use of Distance Education

- My department has developed a strategic plan for incorporating distance education into its academic curriculum and/or extension programming
- My department has effective programs for marketing distance courses and educational materials
- Web based distance education delivery is more appropriate for graduate than undergraduate courses
- Distance graduate course offerings from my department will increase in the future
- A consortia of distance courses offered across a group of institutions would be more efficient than each institution developing them independently
- Web-based distance education delivery is more appropriate for field or specialty classes than core curriculum classes
- Distance undergraduate course offerings from my department will increase in the future
- A consortia of distance extension educational programs offered across a group of institutions would be more efficient than each institution developing distance extension programming independently
- My department’s distance extension program offerings for clients will increase in the future
Clients served by extension programming have sufficient technology literacy to participate in distance extension workshops.

Enrollment in distance education for-credit courses tends to include more off-campus or non-traditional students.

Students at my institution have sufficient technology literacy to participate in distance courses.

Department heads generally agreed that students at their institutions have sufficient technological literacy to participate in distance courses, and only marginally agreed that enrollment in DE for-credit courses tends to include more off-campus or non-traditional students and that clients served by extension programming have sufficient technological literacy to participate in distance extension workshops.
Views On Financial Resources and Distance Education

Figure 11. Department Heads’ Views on Financial Resources and Distance Education

![Bar chart showing department heads' views on financial resources and distance education.]

- My department has sufficient budget to develop distance educational materials
- Faculty in my department have used internal and/or external grants to develop distance educational materials
- Financial resources to fund distance education at my institution will likely increase in the future

Department heads
- indicated that their departments did not have a sufficient budget for developing DE materials, and
- were generally neutral as to whether financial resources to fund DE at their institution were likely to increase in the future and as to whether faculty in their department have used internal and/or external grants to develop DE materials.
Department Characteristics and Distance Education

- Average number of faculty members involved in DE=2.8 faculty (N=48).
- Among all departments, the average share of faculty involved in DE is 16.5 percent (N=48).
- Among departments with distance programs, average share is 22.6 percent (N=35).
- The average numbers of faculty, teaching FTE’s, undergraduate majors, graduate students, and undergraduates/teaching FTE were compared across whether the department offered distance courses. No significant differences were found at the 95 percent confidence level except for graduate student numbers. Departments offering distance courses had smaller average numbers (30.9 graduate students) and those not offering distance courses (54.8 students).
- The average numbers of faculty and extension FTE’s were compared across whether the department offered distance extension programming. The departments with distance extension programming had larger average faculty numbers (25.3 faculty members) than those that did not (16.9 faculty members). Similarly, the departments with distance extension programming had a larger average number of extension FTE’s (7.0 FTE’s) than those that did not (3.2 FTE’s).
- No significant differences in these departmental characteristics were found across plans to expand or initiate distance courses or distance extension programming.