Journal of Agricultural Education
Volume 46, Number 4, pp. 83-95
DOI: 10.5032/jae.2005.04083

EVALUATION OF THE DISTANCE EDUCATION DEGREE PROGRAM AVAILABLE TO STUDENTS THROUGH THE COLLEGE OF AGRICULTURAL AND LIFE SCIENCES

Jodie L. Mink, Special Projects Coordinator
Lori L. Moore, Assistant Professor
University of Idaho

Abstract

The purpose of this study was to evaluate the distance education degree program available to students in the College of Agricultural and Life Sciences at the University of Idaho. Using quantitative methods, it was found that students were satisfied with the off-campus degree program. Students were satisfied with aspects such as academic preparation, class transferability, academic advising, and the overall quality of education. Students were less satisfied with the variety and the number of courses offered. Participants recommended that more emphasis be placed in the curriculum in the areas of production agriculture, agricultural marketing, and decision making/critical thinking, but that the same emphasis should be placed in the areas of sciences and mathematics. Participants indicated that place bound due to family, flexibility of classes, and place bound due to job were the major factors influencing their decision to complete the distance degree program. Overall, participants indicated that they would enroll again in the Agricultural Science and Technology distance degree program.

Introduction

Distance education has seen increases in enrollments, course offerings, and availability over the past 10 years. According to the National Center for Education Statistics (2003), 56% of all two and four year institutions offered distance education courses for the 2000-2001 academic year, and of those, 34% had degrees designed to be completed totally at a distance. In 1994, the College of Agricultural and Life Sciences (CALS) at the University of Idaho recognized the importance of extending a degree program to distance learners. This college has since offered the third and fourth years of a Bachelor of Science degree in Agricultural Science and Technology (AST) at a distance. This cooperative program builds on the College of Southern Idaho's Associate of Arts degree in Agribusiness and is designed for students who want a broad education with emphasis in agriculture. This distance degree program relies on a variety of methods for course delivery including videotape series, interactive compressed video, web-based courses, and on-site instruction from regular or affiliated faculty located close to the distance site.

As distance education becomes a more acceptable delivery method for courses and degrees, colleges must be able to build and maintain strong programs (Martin & Cheek, 2004; Roberts, Moore, & Dyer, 2005). Schumann and Casey (1984) suggested that in this era of high technology, it is imperative that universities continually evaluate programs and curricula so that students will have access to an education of the highest quality. Murphy (1997) proposed that students enrolled in an institution's programs should be offered the same opportunities, and meet the same requirements, regardless of location or delivery method. He added that though much more difficult to establish and maintain, the future success in distance education lies in offering effective programs, not courses and that students at distance campuses should have reasonable

and adequate access to the student services that help to support their learning.

Conceptual Framework

Jackson and Bowen (1993) proposed a conceptual model for effectively planning and delivering agricultural distance education programs (Figure 1). Their model related to three aspects of distance education: the components of distance education, the process of distance education, and the product of distance education. Using this model as the framework for investigation, this study focused on the process of the distance delivered program, especially Phase 5: Follow-up/Evaluation. A review of relevant literature provided the basis for the inclusion of concepts in the evaluation instrument used for follow-up purposes.

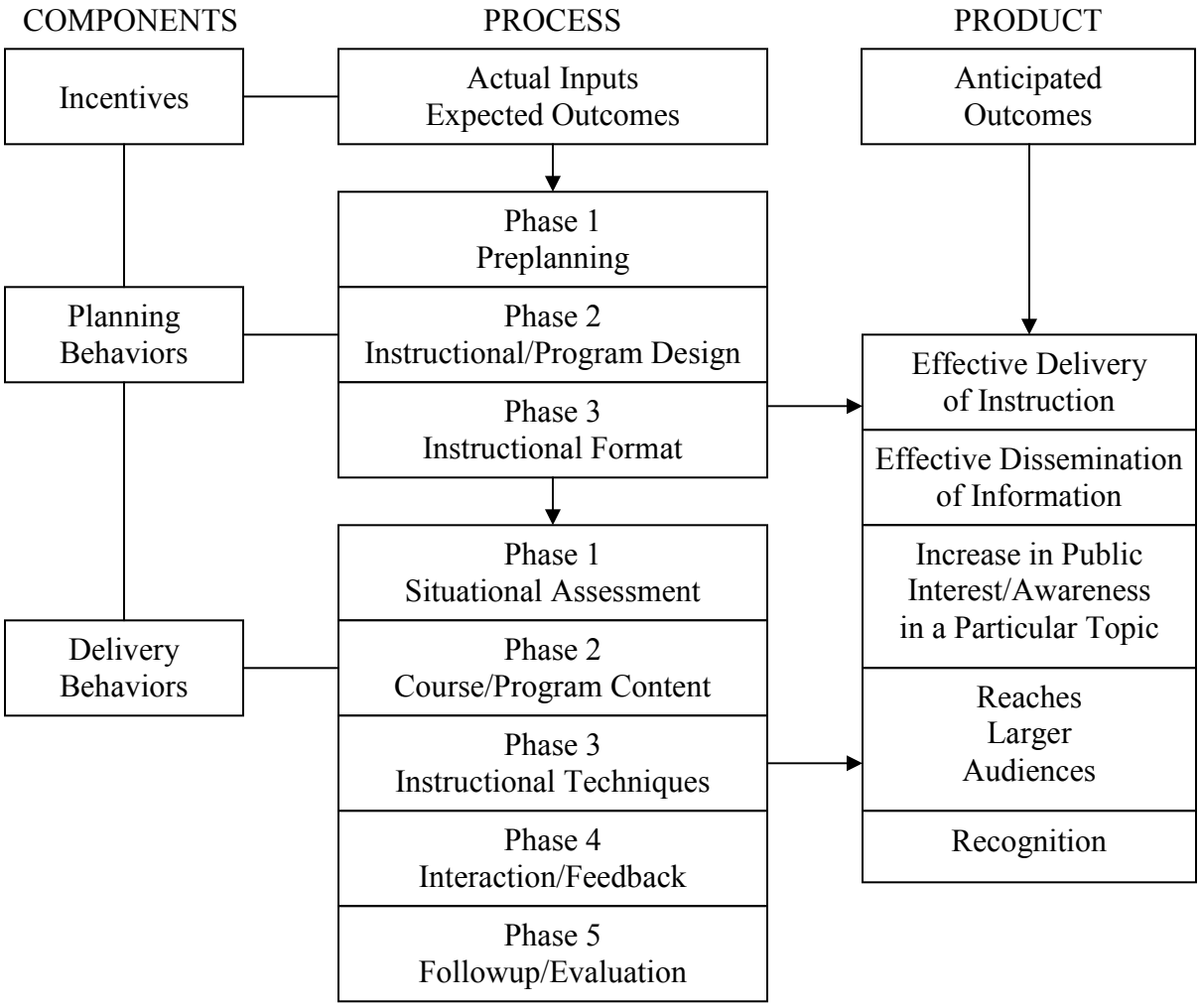

Figure 1. Conceptual Model for Planning and Delivering Distance Education Programs *Note.* From "A Conceptual Model for Effectively Planning and Delivering Distance Education Courses and Programs in Agriculture," by G. B. Jackson and B. E. Bowen, 1993, *Proceedings of the 20th Annual National Agricultural Education Research Meeting*, *20*, 149-155. Reprinted with permission of the author.

There is considerably less research and evaluation of complete distance degree programs than evaluations of individual courses (Martin & Cheek, 2004). In the introduction of their report, Kelsey, Lindner, and Dooley (2002) commented, "Much research is available on student satisfaction with specific distance education courses, but little is known about student satisfaction with a complete program delivered off-campus" (p. 26). Roberts, Irani, Lundy and Telg (2004) reported that a large percentage of distance education evaluations focus on the instructors. Roberts et al. (2004) commented, "The implication for programmatic evaluation is the need to take a more holistic approach to evaluating distance education" (p. 9). The authors further stated that in addition to evaluating instructors, it is important to evaluate delivery and support service areas. "Without the opportunity to evaluate these other areas, distance education students may express their dissatisfaction toward support services, and the like in their evaluations of instructors" (Roberts et al., 2004, p. 9).

Despite limited data concerning student satisfaction with complete distance degree programs, some institutions are making efforts to follow-up with students (Martin & Cheek, 2004). Follow-up studies are a valuable technique for providing informative data to higher education, which can be utilized in improving the various aspects of a program (Erikson, 1947). Such studies often seek to measure the relationship between the training students received at the institution and the expertise needed for their occupational placement. This measurement is usually done by seeking judgments from the former students (Reich, 1973). According to Taylor (1977), no educational or higher education institution should be stalemated due to the lack of current data on their former graduates. Taylor further stated that through the follow-up study of graduates, a department may learn its own successes, strengths and weaknesses, and possibly gain insight from these former students for curriculum improvements, as well as other needed information. If the feedback indicates areas where improvements are needed, then program innovations and modifications could be developed. Identifying possible deficiencies could greatly enhance the probability of succeeding in future years (Peterson, 1971).

Distance degree programs have become more of an educational option for learners. Colleges and universities have recognized the need to reach off-campus clientele. Roberts et al. (2005) documented that the majority of research conducted on distance education in agricultural and extension education has focused on perceptions of various partners, with the majority of that research centered on faculty perceptions. A better understanding of complete off-campus degree programs according to students is needed to allow colleges and universities to make the appropriate decisions regarding distance education opportunities.

Purposes and Objectives

This study was part of a larger study designed to assess student perceptions regarding participation in an off-campus AST distance degree program. The specific objectives of this study were to:

1. Describe student perceptions regarding factors related to enrolling in the distance program.
2. Describe factors related to the cooperative program between the community college and the university.
3. Determine if more or less emphasis is needed in curricula areas to strengthen the AST off-campus degree program according to the perceptions of program participants.
4. Describe student perceptions regarding factors related to completing the distance degree.
5. Describe student perceptions related to their level of satisfaction with the off-campus CALS degree program.

Methods and Procedures

Population and Sample

The population for this study consisted of all degree seeking persons, completers and non-completers, who had taken courses in the distance program from fall 1994

through spring 2002, excluding individuals who had participated in only in-service credits or non-agriculture related courses and students pursuing off-campus master's degrees. Non-degree seeking students who had taken 15 or more agriculture-based semester credits were included in the survey. Eighty-three past and current students were identified and included in the study.

Instrumentation

One survey questionnaire was used to collect data for this study. The survey questionnaire was designed by the researchers based on a review of the literature (Jackson & Bowen, 1993; Roberts et al., 2004). The authors of previous studies found in their review of literature that instruments often used in evaluation include a series of Likert-type questions and may include optional open-ended questions. Roberts et al. (2004) further suggested that institutional context and commitment, curriculum and instruction, faculty support, student support and evaluation and assessment are included in the evaluation process of a distance degree program. The questionnaire used for this study included a total of 24 questions: four multi-part Likert-type questions, 17 closed-ended questions with comment opportunities, and three open-ended questions. The four multi-part Likert-type questions were designed to gather information related to general program factors, advising areas, cooperative program areas, and curriculum areas. Content and face validity of the questionnaire were established by an expert panel.

Data Collection and Analysis

The survey questionnaire, stamped return envelope, and a cover letter describing the study were sent to all 83 participants by mail. Surveys were coded with an identification number and participants were removed from the database once completed surveys were received. Approximately four weeks after the initial package was mailed, replacement packets were sent to all non-respondents. Six weeks after the replacement packets were mailed, a third and final attempt was made to contact all non-responders. Sixty-five questionnaires were completed and returned for a total response rate of 78.3%.

Appropriate statistics for this descriptive study were used, including frequencies, percents, Friedman's Mean Rank (FMR), and summaries. Due to the ordinal nature of the scales used to collect data in this study, FMR, a non-parametric rank-based procedure similar to analysis of variance, was used to more accurately describe the data.

Early and late responders were compared for statistical differences in order to address nonresponse error (Ary, Jacobs, & Razavieh, 1996; Lindner, Murphy, & Briers, 2001; Miller & Smith, 1983). No statistical differences between early responders and late responders were found.

To facilitate an easier understanding of results without losing meaningfulness of responses pertaining to the cooperative program areas, general program factors, and advising areas, some response categories were combined. Within each of these areas, participants responded to questions on a scale from 1 = Excellent to 5 = Poor. The responses "Excellent" and "Good" were combined to create the response "Above Average" while the responses of "Fair" and "Poor" were combined to create the response "Below Average." The "Average" response was left the same. Data in these areas were recoded on a scale from 1=Above Average to 3=Below Average. Data obtained from questions pertaining to curriculum areas was gathered and analyzed on a scale ranging from 1=More Emphasis to 3=Less Emphasis.

Results/Findings

Objective one sought to describe student perceptions regarding factors related to enrolling in the distance degree program. Table 1 displays the four provided factors and the participants' rating via frequency distribution. Students indicated that future employment goals/salary increases (61.5%, n = 40) was the most pertinent factor related to their decision to enroll in the distance degree program. Personal enrichment/benefits (49.2%, n = 32) followed the employment/salary category. Current job requirement (13.8%, n = 9) and

advancement in current job/salary increases (13.8%, n = 9) were less important factors related to enrollment. Other factors that students indicated were specific knowledge of a crop area, family/personal reasons, knowledge to continue the farming/ranching operation, and availability. Participants that responded to this question as 'other' indicated that while they did not enroll in the AST four-year degree program, they merely utilized the distance courses to complete degrees in horticulture, agricultural education – agricultural industry management and communication option, and plant sciences.

Table 1
Participants' Indication of Provided Factors Relating to Their Decision to Enroll

Provided Factors	*N*	%
Future Employment Goals, Salary Increases	40	61.5
Personal Enrichment or Benefits	32	49.2
Current Job Requirement	9	13.8
Advancement in Current job, Salary Increases	9	13.8
Other	6	9.2

Note. Respondents were able to select more than one factor.

Objective two sought to describe factors related to the cooperative program between the community college and the university. Because the cooperative distance education program was designed as a 2+2 program that assists community college agri-business students in completing a Bachelor of Science degree in agriculture, it was important to determine if the majority of the study participants have/had used the community college to obtain their lower division required course work. Sixty-one total participants responded to the question, with 70% of the respondents indicating that they had utilized the cooperative agreement and had completed their lower division course work at the community college. The remainder of the participants who responded to the question utilized lower-division course work from a variety of colleges and universities.

Students who utilized the community college's undergraduate coursework were asked to rate six factors concerning the cooperative degree program between the community college and the university. Twenty-eight participants responded. Table 2 displays the six cooperative degree program areas, the participants rating via frequency distribution, and the six cooperative program areas ranked in order of rating. Participants rated the category area of academic preparation (*FMR* = 3.07) highest, followed by class transferability (*FMR* = 3.18), advising efforts from the university (*FMR* = 3.29), 2 + 2 base program (*FM R*= 3.69), academic advising by community college faculty (*FMR* = 3.71), and degree programs offered (*FMR* = 4.36). Academic Preparation rated highest among the cooperative program area categories. The majority of participants felt that academic preparation was above average (87.5%, n = 42), while 10.4% (n = 5) felt it was average, and 2.1% (n = 1) felt it was below average. The degree programs offered was rated the lowest. Within this program area, 57.1% (n = 28) rated it above average, 24.5% (n = 12) rated it average, and 18.4% (n = 9) rated it below average.

Table 2
Participant's Rating of the Areas of the Cooperative Degree Program Between the Community Colleges' Agriculture Department and the University's CALS

Cooperative Program Areas	Value Labels[a]	*N*	%	Rank	FMR
Academic Preparation	1	42	87.5	1	3.07
	2	5	10.4		
	3	1	2.1		
Class Transferability	1	43	89.6	2	3.18
	2	2	4.2		
	3	3	6.3		
Academic Advising - University	1	40	83.3	3	3.29
	2	8	16.7		
	3	0	0.0		
2+2 Program Base[b]	1	23	79.3	4	3.39
	2	6	20.7		
	3	0	0.0		
Academic Advising - Community College	1	36	75.0	5	3.71
	2	8	16.7		
	3	4	8.3		
Degree Programs Offered	1	28	57.1	6	4.36
	2	12	24.5		
	3	9	18.4		

[a] Value Label: 1 = Above Average, 2 = Average, 3 = Below Average.
[b] Many respondents indicated they did not understand the wording of the 2+2 program base.

Objective three sought to determine if more or less emphasis is needed in curricula areas according to the perceptions of program participants. Participants were asked to rate nine academic curricula areas to better understand the students' opinions regarding if more or less emphasis is needed in curricula areas to strengthen the off-campus program. Table 3 displays the nine academic curricula areas, the participants' rating via frequency distribution, and the nine factors ranked in order of rating. Participants rated the category area of production agriculture (*FMR* = 4.07) highest, followed by agricultural marketing (*FMR* = 4.16), decision-making and critical thinking (*FMR* = 4.60), accounting, business and economics (*FMR* = 4.78), foreign languages (*FMR* = 5.22), oral communication and public speaking (*FMR* = 5.33), written communications (*FMR* = 5.43), chemistry and biology (sciences) (*FMR* = 5.47), and mathematics (*FMR* = 5.94).

Table 3
Participants' Indication of Future Emphasis on the Curricula Areas in the AST Degree Program

Curriculum Areas	Value Labels [a]	*N*	%	Rank	FMR
Production Agriculture	1	30	48.4	1	4.07
	2	31	50.0		
	3	1	1.6		
Agricultural Marketing	1	30	48.4	2	4.16
	2	30	48.4		
	3	2	3.2		
Decision-Making, Critical Thinking	1	25	41.0	3	4.60
	2	34	55.7		
	3	2	3.3		
Accounting, Business, Economics	1	21	35.0	4	4.78
	2	37	61.7		
	3	2	3.3		
Foreign Languages	1	19	31.1	5	5.22
	2	35	57.4		
	3	7	11.5		
Oral Communications, Public Speaking	1	16	26.2	6	5.33
	2	38	62.3		
	3	7	11.5		
Written Communications	1	13	21.3	7	5.43
	2	46	75.4		
	3	2	3.3		
Chemistry, Biology (Sciences)	1	12	19.7	8	5.47
	2	47	77.0		
	3	2	3.3		
Mathematics	1	6	9.8	9	5.94
	2	51	83.6		
	3	4	6.6		

[a] Value Label: 1 = More Emphasis, 2 = The Same Emphasis, 3 = Less Emphasis.

Production agriculture was rated the highest among the academic areas. Almost half of the participants felt that production agriculture should have more emphasis (48.4%, *n* = 30), while 50% (*n* = 32) felt the same emphasis should exist and 1.6% (*n* = 1) participants feelt that less emphasis should exist. Mathematics received the lowest emphasis rating. Within this curricular area, 9.8% (*n* = 6) felt more emphasis should be present, 83.6% (*n* = 51) felt similar emphasis should remain, and 6.6% (*n* = 4) felt mathematics should have less emphasis. Additional curricular areas suggested by participants for potential increased emphasis include: horticulture,

landscape, landscape irrigation, "farm" Spanish, international business, economics and marketing, additional plant science courses, and more specialty courses similar to plant pathology.

Objective four sought to describe student perceptions regarding factors related to completing the distance degree. To better understand the completion rates associated with the distance education degree program, participants were asked if they had completed their degree. The CALS has been able to graduate approximately 50% of the students who have been enrolled in the program. Participants who had completed their AST degree at the off-campus location were asked which of the provided factors affected their decision to stay (Table 4). Participants were allowed to select more than one answer and place-bound due to family (36.9%, n = 24) and flexibility of classes (35.4%, n = 23) shared as leading reasons for participants to complete their educational objectives at a distance. Place-bound due to a current job (27.7%, n = 18) was the only other factor selected consistently. When asked if the degree program offered, or the classes offered, were a determining factor, students' responses indicated that the specific AST degree was not a significant reason to remain at the distance site (7.7%, n = 5). Other responses included that students thought the off-campus program was convenient and that students did not have to re-locate out of the area to complete. One student indicated all four options were equally important.

Table 4
Participants' Indication of Provided Factors that Influenced Their Decision to Complete the AST Degree at the Off-campus Location

Factors	*N*	%
Place-Bound Because of Family	24	36.9
Flexibility of Classes (Evening, Videotape, Web)	23	35.4
Place-Bound Because of Job	18	27.7
Degree Program/Classes Offered	5	7.7
Other	2	3.1

Note. Students who graduated from the off-campus programs provided this data. Respondents were able to select more than one factor.

Objective five sought to describe perceptions related to satisfaction with the off-campus CALS degree program. Participants were asked to rate nine factors concerning the overall distance program. Table 5 displays the nine general program factors, the participants rating via frequency distribution, and the nine factors ranked in order of rating. Participants rated the category area of teaching reputation (*FMR* = 3.84) highest, followed by overall quality of education (*FMR* = 3.96), quality of courses (*FMR* = 4.14), academic advising (*FMR* = 4.47), cost (*FMR* = 4.51), student help services (*FMR* = 4.78), employment opportunities (*FMR* = 5.80), variety of courses (*FMR* = 6.74), and number of courses (*FMR* = 6.75). In the area of teaching reputation, the program area rated the highest by participants, the majority of participants felt that it was above average (88.9%, n = 56), while 11.1% (n = 7) felt it was average, and no one felt it was below average. In the area of number of courses, the area participants rated the lowest, 35.5% (n = 22) rated it below average, 33.9% (n = 21) rated it average, and 30.6% (n = 19) rated it above average.

Table 5
Participants' Rating of General Program Factors Related to the CALS Distance Education Program

General Program Factors	Value Labels[a]	*N*	%	Rank	FMR
Teaching Reputation	1	56	88.9	1	3.84
	2	7	11.1		
	3	0	0.0		
Overall Quality of Education	1	56	88.9	2	3.96
	2	5	7.9		
	3	2	3.2		
Quality of Courses	1	52	81.3	3	4.14
	2	10	15.6		
	3	2	3.1		
Academic Advising	1	50	79.3	4	4.47
	2	10	15.9		
	3	3	4.8		
Cost	1	47	74.6	5	4.51
	2	14	22.2		
	3	2	3.2		
Student Help Services	1	45	71.4	6	4.78
	2	13	20.6		
	3	5	7.9		
Employment Opportunities	1	29	50.0	7	5.80
	2	20	34.5		
	3	9	15.5		
Variety of Courses	1	20	31.8	8	6.74
	2	21	33.3		
	3	22	34.9		
Number of Courses	1	19	30.6	9	6.75
	2	21	33.9		
	3	22	35.5		

[a] Value Label: 1 = Above Average, 2 = Average, 3 = Below Average.

To gain additional information regarding specific advising efforts, participants were asked to rate four factors concerning advising at the off-campus location. Table 6 displays the four general advising factors, the participants rating via frequency distribution, and the four factors ranked in order of rating. Participants rated the category area of class scheduling (*FMR* = 2.37) highest, followed by academic advising (*FMR* = 2.49), personal counseling (*FMR* = 2.57), and curriculum planning (*FMR* = 2.57). Class scheduling was rated the highest among the four category areas. A

majority of participants felt that class scheduling was above average (90.6%, *n* = 58), while 4.7% (*n* = 3) felt it was average, and 4.7% (*n* = 3) felt it was below average. Personal counseling and curriculum planning were rated the lowest by participants. Within the personal counseling program area, 80.3% (*n* = 49) rated it above average, 13.1% (*n* = 8) rated it average, and 6.6% (*n* = 4) rated it below average. Within the curriculum planning program area, 82.8% (*n* = 53) rated it above average, 10.9% (*n* = 7) rated it average, and 6.3% (*n* = 4) rated it below average.

Table 6
Participants' Rating of Advising Areas Related to the CALS Distance Education Program

Advising Areas	Value Labels[a]	*N*	%	Rank	FMR
Class Scheduling	1	58	90.6	1	2.37
	2	3	4.7		
	3	3	4.7		
Academic Advising	1	53	82.8	2	2.49
	2	9	14.1		
	3	2	3.1		
Personal Counseling	1	49	80.3	3	2.57
	2	8	13.1		
	3	4	6.6		
Curriculum Planning	1	53	82.8	3	2.57
	2	7	10.9		
	3	4	6.3		

[a] Value Label: 1 = Above Average, 2 = Average, 3 = Below Average.

Conclusions and Implications

This research is the first data collected concerning the off-campus AST degree program at the University of Idaho. Understanding the perceptions of participants that have enrolled in or completed the distance degree program may change the AST degree program to better serve distance learners. Understanding the participants' perceptions will assist administrators and decision-makers in making valuable assessments regarding the CALS distance degree program.

The majority of program participants cited future employment goals, and associated salary increases, and personal enrichment as the most important factors related to their decision to enroll in the distance program. While significant to note, this finding cannot be specifically related to the AST degree program. Perhaps any off-campus degree program would draw students simply because of the ability to complete a degree and accomplish such objectives without relocating.

In relation to the cooperative degree program between the university and the community college, respondents of the study were most pleased with academic preparation, class transferability, and academic advising from the university faculty. Students were less satisfied with academic advising by community college faculty and least satisfied with the number and variety of degree programs offered. In essence, students were dissatisfied with the fact that the AST degree was the only off-campus degree available to them through the CALS, but were very satisfied with university support in the completion of a degree. These findings support Murphy's (1997) assertion that strategic partnerships are important factors

in the sustainability of distance delivered degree programs.

Half of the participants recommended the same emphasis in production agriculture within the curriculum and almost half recommended more emphasis. Similar trends were noted in the area of agricultural marketing. A possible conclusion is that the rating of more emphasis in the production agriculture and agricultural marketing curriculum areas is related to the impact of students wanting more course selections in each of these areas, not simply additional credits in the degree program. In other words, students want more variety of courses and additional course offerings. To have a successful distance degree program, it must provide a balance between coursework that the students need and desire, along with providing flexibility in terms of course offerings, a weakness of the current distance education degree program.

Place-bound because of family and/or job and flexibility of classes shared as leading factors related to program participants completing their distance degree. The data indicated that students that enroll in the AST program off-campus most likely are not students that would enroll in an on-campus program. The majority of the participants surveyed were place-bound and had the opportunity to participate in a program simply because it was offered at a distance.

The completion rate of students that had participated in the distance degree program is an indicator of the success of the program. Over 50% of the survey participants had graduated from the program. While it would seem that a retention problem exists, further data indicated that some participants: (1) started with the university at the off-campus location and then transferred to on-campus in agriculture, (2) started with the off-campus location and transferred to on-campus in non-agricultural related field, and (3) transferred to another university. While these participants are not contributing to the graduation rate within the program, it is nevertheless encouraging that some of the non-completers are continuing to pursue four-year degrees. Furthermore, it must be noted that because this study involved all students who had been enrolled, some of the students in this study were still working towards the completion of their degree, and as a result, this graduation rate can be expected to increase.

Overall, students felt that the level of teaching reputation and overall quality of education was acceptable, but the small variety of courses and low number of courses offered weakened the distance education program. General program factors that ranked highly with respondents included teaching reputation, overall quality of the education, quality of courses and academic advising. Students were less satisfied in the areas of employment opportunities, variety of courses, and the number of courses offered at a distance. It must be noted that within the program factor labeled "number of courses," the questionnaire did not specify if number of courses were per year, per semester, or the entire program. Students might have answered this question differently if more specific information would have been provided.

Student responses were relatively consistent across all four advising areas, with Friedman's Mean Rank scores ranging from only 2.37 to 2.57. The category labeled 'class scheduling' seems to reflect better on the university's CALS' attempt to have flexible courses scheduled with a variety of media options, rather than the ability of the advisor to recommend scheduling options. The positive rating for the category area of class scheduling would reflect that students were pleased with the options that are available among compressed video, videotape, live and web-based courses. Students who had participated in the distance education program seemed satisfied with the level of advising across all areas to include academic, personal, and curriculum planning.

Murphy (1997) stressed the importance of student services. Murphy believed that distance students need to have both reasonable and adequate access to appropriate student services regardless of their location. Many of the distance students have traditionally utilized the community college for some student services, while other services, i.e., registrar, admissions, and financial aid, are provided only on-campus.

The off-campus center does not have an in-house admission, registrar, or financial aid representative. Surprisingly, distance students were not extremely displeased with the lack of student educational services. The data collected from the distance degree program participants supported the findings of Irani, Scherler, Harrington and Telg (2000) who reported that the helpfulness of the site coordinator/ facilitator, availability of academic advising, class enrollment procedures and registration procedures consistently ranks high in satisfaction levels.

A majority of the participants were pleased with the university's distance degree program that is delivered off-campus. Even though students were not satisfied with the single degree program being offered, the ability to complete a degree off-campus seemed to outweigh the dissatisfaction with the lack of variability. While many students might have preferred a plant science or animal science degree, the one available was far better than no degree program.

Recommendations

This study showed that the AST distance degree program offered through the CALS at the University of Idaho has definite strengths and should continue to provide services to students who utilize off-campus facilities and degree offerings. While the emphasis on certain curricular content areas, such as production agriculture and agricultural marketing, in terms of additional credit hour requirements is not recommended at this time, administrators and decision-makers associated with this distance program should investigate the possibility of increasing the type and number of courses offered within the program to the off-campus students.

Because this study is the only study to have gathered data related to student perceptions of the entire distance degree program, several aspects of the program should be investigated in future studies. It is recommended that future studies explore student perceptions related to if they would have completed their bachelor's degree if the degree program had not be available at a distance. It is also recommended that studies be conducted to assess student perceptions related to the impact of the degree program on their personal and professional lives.

Additional research is also needed to identify the effectiveness of the distance degree program in relation to cost, and evaluate faculty and stakeholder perceptions. In addition, a more in-depth review of the off-campus degree should evaluate the necessity to remain identical to the on-campus degree. Martin and Cheek (2004) suggested that the focus of the off-campus degree should be utilizing the unique strengths and capabilities of the off-campus partners to develop a strong program, not necessarily an identical degree program to the on-campus equivalent.

Because this study only evaluated student perceptions related to the AST distance program at the University of Idaho, the results are not generalizable to other distance degree programs at other universities. Additional studies should be conducted to evaluate similar programs at other universities.

References

Ary, D., Jacobs, L. C., & Razavieh, A. (1996). *Introduction to research in education* (5th ed.). Fort Worth, TX: Harcourt Brace College Publishers.

Erikson, C. E. (1947). *A basic text for guidance workers*. New York: Prentice Hall, Inc.

Irani, T., Scherler, C., Harrington, M., & Telg, R. (2000). Overcoming barriers to learning in distance education: The effects of personality type and course perceptions on student performance. *Proceedings of the 27th Annual National Agricultural Education Research Conference, 27*, 434-447.

Jackson, G. B., & Bowen, B. E. (1993). A conceptual model for effectively planning and delivering distance education courses and programs in agriculture. *Proceedings of the 20th Annual National Agricultural Education Research Meeting, 20*, 149-155.

Kelsey, K. D., Lindner, J. R., & Dooley, K. E. (2002). Agricultural education at a distance: Let's hear from the students. *Journal of Agricultural Education*, *43*(4), 24-31.

Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education, 42*(4), 43-53.

Martin M. V., & Cheek, J. G. (2004) Off-campus degree programs: Lessons from Florida's experiences. *NACTA Journal, 48*(2), 42-45.

Miller, L. E., & Smith, K. L. (1983). Handling nonresponse issues. *Journal of Extension, 21*(5). Retrieved October 7, 2002 from http://www.joe.org/joe/1983september/83-5-a7.pdf

Murphy, T. H. (1997). Five factors to evaluate distance education programs. *NACTA Journal*, *42*(3), 6-11.

National Center for Education Statistics. (2003) Distance education at degree-granting postsecondary institutions: 2000-2001: 2003. Retrieved March 9, 2005, from http://nces.ed.gov/pubsearch/pubinfo/asp?pubid=2003017

Peterson, R. (1971). More clout for vocational education. *American Vocational Journal*, *46*, 25, 22-25.

Reich, C. M. (1973) Vocational specialization of occupational placement: A follow-up study. *The Vocational Guidance Quarterly*, *21*, 281-287.

Roberts, T. G., Irani, T., Lundy L. K., & Telg, R. (2004). Practices in student evaluation of distance education courses among land grand institutions. *Journal of Agricultural Education, 45*(3), 1-10.

Roberts, T. G., Moore, L. L., & Dyer, J. E. (2005) Distance education: A synthesis of research from agricultural and extension education. *NACTA Journal, 49*(1), 44-51.

Schumann, H, & Casey, J. (1984). Recent ag program graduates provide valid data base for programmatic decisions. *NACTA Journal*, *XXVIII*(2), 51-55.

Taylor, B. M. (1977). *A follow-up study of the graduate-completions of the Winona Technical Center*. Unpublished specialist's thesis, Mississippi State University, Starkville, MS.

JODIE L. MINK is a Special Projects Coordinator in the Department of Agricultural and Extension Education at the University of Idaho, 2799 Salubria Rd., Cambridge, ID 83610. E-mail: jmink@uidaho.edu.

LORI L. MOORE is an Assistant Professor in the Department of Agricultural and Extension Education at the University of Idaho, 1134 West Sixth Street, Moscow, ID 83844-2040. E-mail: lmoore@uidaho.edu.