Incentives and Obstacles Influencing Higher Education Faculty and Administrators to Teach Via Distance

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Abstract

This study examined incentives that encourage faculty to develop educational opportunities via distance and obstacles that discourage them from doing so. The primary incentives centered on intrinsic or personal rewards. These rewards included opportunities to provide innovative instruction and apply new teaching techniques as well as self-gratification, fulfilling a personal desire to teach, recognition of their work, and peer recognition. Other incentives included extending educational opportunities beyond the traditional institutional walls so place-bound students have access and release time for faculty preparation. The major perceived obstacles related to time requirements, developing effective technology skills, and assistance and support needs. Monetary awards for faculty and the cost to the student were seen as neither incentives nor obstacles. Faculty were divided on how they saw distance teaching affecting their yearly evaluation process and their promotion/tenure needs; about 40% saw it as an incentive, while about 30% saw it as an obstacle.

Introduction

Advancements in telecommunications technologies have created opportunities whereby educators in higher education institutions can expand the educational process beyond the traditional classroom and deliver instruction and training to geographically diverse audiences locally, nationally, and even internationally. Consequently, distance education programs have rapidly expanded. These advancements in telecommunications and rapid growth in distance education programs have led to a formal definition of distance education as being "the acquisition of knowledge and skills through mediated information and instruction, encompassing all technologies and other forms of learning at a distance" (United States Distance Learning Association 1998). This integration of telecommunications technologies into a distance teaching and learning process reflects a shift in the classroom-based paradigm that educators have used for many years.

While the educational model for delivering instruction broadens, technologies continue to advance, educational delivery methods continue to expand and audiences become more diversified. In this changing environment, faculty remain a key element in the teaching and learning process. Olcott and Wright (1995) indicate that the responsibility for instructional quality and control, the improvement of learning and the aggregate effectiveness of distance education still rests with the faculty. Ultimately, it is the faculty who need to be aware of diverse technologies and delivery methods available for distance education so they can incorporate them into their teaching and learning strategies. To use distance learning strategies, faculty may need to alter teaching styles used within the "traditional classroom," and develop new skills to effectively reach the distant learner. Dillon and Walsh (1992) and Clark (1993) both observe that faculty using distance education technology face a variety of challenges when adapting their teaching styles to a framework compatible with the distance learning environment. In 1992 the Corporation for Public Broadcasting reported to Congress that faculty need to understand the relationship between learning, interactivity and technology, as well as how to operate the technology.

If higher education institutions include distance delivery in their strategic plans, faculty concerns about teaching via distance need to be considered as distance delivered educational programs are developed and implemented. Carl (1991) noted that some educators resist distance teaching because they are concerned that distance courses will significantly increase an already heavy workload. Distance teaching may require more time for advanced planning. In addition, class enrollments can increase significantly. Other reasons faculty may resist participating in distance teaching relate to a perceived lack of institutional support and training; inadequate compensation and incentive structures; loss of autonomy and control of the curriculum; lack of technical training and support; and lack of release time for planning (Clark 1993; Olcott and Wright 1995).

For faculty to accept distance education as a viable means of instruction, higher education institutions must listen to faculty concerns so the institution can understand and confront the factors that contribute to faculty hesitation in developing distance learning material. Dede (1990) states that once the prohibiting forces are confronted, distance education strategies can then empower both the students and faculty where there is active student-constructed learning and adventurous, risk-taking teaching.

Therefore, this study **identified what faculty and administrators perceive as being incentives that encourage them to develop educational opportunities via distance, and obstacles that discourage them from doing so.** In addition, it identified whether there are differences in the way the incentives and obstacles are viewed by faculty holding different ranks, as well as those teaching or expecting to teach via distance. It also identified if there were differences in faculty according to teaching experience, tenure status, and level of courses taught.

Methodology

To study incentives that encourage faculty to teach via distance and obstacles that prevent them from doing so, two colleges in one mid-west land-grant university were selected. Over the past decade, these two colleges have emphasized developing distance education opportunities, and their strategic plans now call for expanding the effort. First, personal interviews with the colleges' administrators identified what they felt were faculty concerns about delivering education via distance. The administrator responses were then used to develop an instrument to survey teaching faculty and administrators about the potential incentives and obstacles to distance teaching.

Step One – Administrator Interviews

One hour personal interviews were conducted with 16 administrators. They were asked what they perceived as the concerns and issues faculty face when teaching distance courses. Responses were

tape recorded to verify accuracy in the note-taking process. Responses where then subjectively grouped according to common themes by the primary researcher. Groupings were independently verified by a second researcher. These groupings showed that administrators felt faculty concerns about teaching via distance related to:

> ***Time.*** The time requirements needed for preparation and delivery of distance courses was a major concern. In addition, there were concerns that time devoted to research will be sacrificed to accommodate distance teaching expectations.
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> ***Cost.*** Cost factors related to course development, instruction, and transmission; technology hardware and use; technical staff and graduate assistant support; and increased costs to the students.
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> ***Instructional design***. Concerns focused around faculty receiving technological assistance and training for designing courses, and then how to offer these courses via both face-to-face and distance methods on a parallel basis.
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> ***Instructor-student relationships.*** The emphasis was on whether there would be a decrease of personal contact with students, thus inhibiting the ability to get a feel for the students' capabilities.
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> ***Reward structure.*** The primary issue centered on faculty receiving credit for the work associated with distance delivery, which included both acknowledgment by peers and recognition through promotion and tenure processes.
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> ***Degree programs.*** Lack of an overall plan for distance education programs where distance courses are being offered sporadically rather than as part of a specific curriculum was noted as an issue. It was also questioned whether degree programs through distance education should be limited to Masters level courses only.
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> ***Policy.*** Concerns focused on a lack of an institutional policy for marketing courses and establishing a uniform cost structure for classes and credit transfer. Concerns were also expressed that the gray area between continuing education and academic classes needs clarification.
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> ***Training.*** Types of, and accessibility to faculty training centered around using the technology and designing the instruction for distance delivery.

Step Two – Faculty Survey

Instrument development. Using the administrators' comments about faculty concerns along with concerns identified in a literature review, a mail survey instrument was developed. Nineteen items were listed that could be ranked as incentives or obstacles for teaching via distance. A modified Likert scale was used to rank each item as a primary or secondary incentive, primary or secondary obstacle, or neither an incentive nor obstacle. The instrument was evaluated by five faculty members to assess its appropriateness for rating incentives and obstacles to teaching via distance. The instrument was revised and then pre-tested with 20 faculty members engaged in distance education delivery in other colleges at the university. This group completed the instrument and critiqued it for readability, structure, and form. Based on their responses, the instrument was again revised.

Subjects. The target population was 207 faculty teaching academic courses including those who serve in administrative positions, and 30 administrators in the College of Agricultural Sciences and Natural Resources and in two colleges in a mid-west University. The two colleges selected were those that included faculty with Cooperative Extension appointments. The entire group was

surveyed.

Data collection. The instrument was distributed through campus mail in spring of 1997. The first mailing included a cover letter describing the purpose of the study, the importance of participating in the study, length of time required for completing the instrument and a brief statement concerning the confidentiality of the participants. A self-addressed return envelope was also provided. Ten days after the initial mailing, a follow-up post card was sent to thank those participants who had completed the instrument, and to remind the others to return the instrument. Twenty days following the initial mailing, another instrument, cover letter, and self-addressed envelope were mailed to those who failed to return the first survey. A code number was placed on the instruments for tracking non-responders. It was removed from the completed instrument after it was received. The instrument was returned by 67% of the faculty and 77% of the administrators.

Data analysis and interpretation. Data were entered into a file for analysis using the Statistical Analysis System (SAS). Percentages were calculated for all variables. Percentages were used to translate whether faculty and administrators considered the 19 items to be incentives, obstacles, or neither. Under each variable, the percentages for primary and secondary incentives were collapsed into one category, and the percentages for primary or secondary obstacles were collapsed into one category. The following scale was used for interpreting the participants' responses:

- Variables identified as an incentive, an obstacle, or neither an incentive nor an obstacle by 55% or more of the respondents were classified as incentives, obstacles, or neither incentives nor obstacles respectively.
- Variables identified as an incentive, an obstacle, or neither an incentive nor an obstacle by 45-54% of the respondents were classified as leaning toward being incentives, obstacles or neither incentives nor obstacles respectively.
- Variables identified as an incentive, an obstacle, or neither an incentive nor an obstacle by 44% or less of the respondents were classified as not discernible for being incentives, obstacles, or neither incentives nor obstacles respectively.

The scale used to determine whether the variables were incentives, neither incentives nor obstacles, or obstacles formed an ordinal sequence. Therefore, the Cochran-Mantel-Haenszel Chi-square test (SAS User's Guide: Statistics, 1985) was used to determine if there was a difference in the linear trend (a) between faculty and administrators, (b) among the faculty teaching or having taught via distance, faculty expecting to teach via distance, and faculty never intending to teach via distance, (c) faculty who have taught for less than 10 years, 10 to 20 years, and more than 20 years, (d) tenured and non-tenured faculty, and (e) faculty exclusively teaching undergraduate classes and those exclusively teaching graduate classes. For the comparisons, the significance level was set at $p < .05$. However, results with $p > .05$ and $< .10$ were considered as approaching significance and identified as possible emerging trends.

Findings

When organized by appointment, senior faculty (full professors and administrators) represented 53% of the respondents. Associate and assistant professors represented 42%; instructors represented 5%. Slightly over one-fourth (26%) of the responding faculty had taught via distance. Another two-fifths (40%) expect to teach via distance in the future; one-third (34%) never expect to teach via distance. Almost half (46%) of the administrators expect to teach via distance in the future (see Table 1).

Table 1. Interest in Teaching Via Distance

Distance teaching experience	Faculty (n = 127)	Administrators (n=22)
Have taught	26 %	36 %
Expect to teach	40 %	46 %
Never expect to teach	34 %	18 %

Out of 61 faculty and administrators expecting to teach via distance, 34% expect to do so in two years, 46% within three to five years. The remaining 19% expect to teach via distance sometime after the next five years.

Items were classified as Incentive, Obstacle or Neither, based on the following scale:

55% or more = definitely fell into the incentive or obstacle category;
45-54% = leaned toward the incentive or obstacle category;
Less than 45% = unable to classify as an incentive or obstacle

Table 2 shows that administrators and teaching faculty ranked nine items as incentives, five as obstacles, and two as neither an incentive nor an obstacle.

Table 2. Incentives and Obstacles for Teaching Via Distance

Incentives	**%**	**Neither Incentive nor Obstacle**	**%**	**Obstacles**	**%**
Providing innovative instruction	83	Student Costs	53	Time requirement	69
Applying new teaching techniques	83	Monetary awards	48	Assistance or support needs	65
Self-gratification	77			Time taken from research	61
Fulfilling personal desire to teach	75			Training requirements	56
Recognition of work	71			Developing effective technology skills	55
Access to place-bound students	67				
Reduction of student travel time	58				
Release time	57				
Peer recognition	46				

Table 3 shows how two items failed to clearly emerge in any of the three categories.

Table 3. Items failing to emerge in any category

Yearly evaluation process	**%**	**Promotion/Tenure**	**%**
Incentive	44	Incentive	40

Neither	30	Neither	28
Obstacle	26	Obstacle	32

Incentives For Teaching Via Distance

Six of the nine items identified as incentives were relate to *intrinsic or personal rewards for the instructor*. They include:

- 'Providing innovative instruction'
- 'Applying new teaching techniques'
- 'Self-gratification'
- 'Fulfilling a personal desire to teach'
- 'Recognition of work'
- 'Peer recognition'

Two of the nine incentives were related to *extending the educational opportunity* beyond the traditional walls of the institution. They were:

- 'Access to place-bound students'
- 'Reduction of student travel time'

'Release time' was seen as an incentive by faculty because they saw the 'time requirement' as an obstacle.

While the administrators and the faculty tended to see nine of the items as incentives, there were differences in the way several of the subgroups viewed particular incentives. Faculty not intending to teach via distance were less likely to see 'fulfilling a personal desire to teach' ($x^2 = 12.49$; $df = 2$; $p < .05$) and 'self-gratification' ($x^2 = 5.82$; $df = 2$; $p > .05, < .10$) as incentives than were faculty teaching, having taught, or intending to teach via distance. Non-tenured faculty saw 'reduction of student travel time' ($x^2 = 6.33$; $df = 1$; $p < .05$) as being more of an incentive than did tenured faculty. Faculty teaching only undergraduate courses also tended to see 'reduction of student travel time' ($x^2 = 4.39$; $df = 1$; $p < .05$) as more of an incentive than did those teaching only graduate courses.

Obstacles To Teaching Via Distance

Four out of the five obstacles suggested that faculty tend to see distance education as a *time demanding activity that requires new skill development*. These four obstacles were:

- 'Time requirement'
- 'Time taken from research'
- 'Training requirements'
- 'Developing effective technology skills'

Faculty also viewed 'assistance or support needs' as an obstacle; this finding suggests that faculty need help with instructional design and technological delivery.

When comparing faculty and administrator responses, the faculty were more likely to see 'developing effective technology skills' ($\chi^2 = 2.85$; $df = 1$; $p > .05, <.10$) as an obstacle than were administrators. Non-tenured faculty saw four items as being less of an obstacle than did tenured faculty. They were 'time taken from research' ($\chi^2 = 4.14$; $df = 1$; $p < .05$), 'training requirements' ($\chi^2 = 9.39$; $df = 1$; $p < .05$), 'assistance or support needs' ($\chi^2 = 5.45$; $df = 1$; $p < .05$), and 'developing effective technology skills' ($\chi^2 = 5.03$; $df = 1$; $p < .05$).

Neither Incentives Nor Obstacles to Teaching via Distance

Two items, 'student costs' and 'monetary awards,' emerged as neither an incentive nor an obstacle. While the whole group tended to view 'monetary awards' as neither an incentive nor an obstacle, administrators were more likely to see 'monetary awards' ($\chi^2 = 4.80$; $df = 1$; $p < .05$) as an incentive than were the teaching faculty. Faculty exclusively teaching undergraduate level courses were also more likely to view 'monetary awards' ($\chi^2 = 8.18$; $df = 1$; $p < .05$) as an incentive than were faculty exclusively teaching graduate level courses.

Items Failing to Emerge Into a Category

Two items, 'yearly evaluation process' and 'promotion/tenure,' failed to emerge in any of the three categories. Because the responses for these two items were bimodal, it appears that some faculty and administrators see teaching via distance as being supportive in the yearly evaluation or for promotion and tenure, while others see distance teaching as being unsupportive.

Challenges

Institutions that have incorporated developing more distance education as part of their strategic plans need to capitalize on the incentives that encourage faculty to teach via distance and minimize the obstacles that discourage or impede faculty. This creates a number of challenges when a large percentage of teaching faculty expect to take on the challenge of teaching via distance in the next few years. Implications for these challenges include:

Because faculty tend to be motivated by the ***intrinsic or personal rewards***, the system can use this motivation to encourage faculty to develop distance education strategies. However, the strong feelings about time requirements along with the need for assistance and support must be addressed to support faculty efforts as more distance delivery is implemented. Since junior faculty see financial rewards as more of an incentive, and time requirements and support needs as less of an obstacle, long-range planning needs to reflect a change in the support structure as distance delivery matures.

Processes should be identified and implemented which will adjust faculty workloads to accommodate the ***time requirements*** as faculty refine and implement distance delivered courses. This also includes the time required for training to develop skills related to technology that assists the distance delivery methods.

Strategies should continue to be developed to provide ***appropriate assistance and support*** to faculty for both instructional design and the distance delivery processes.

Research on adapting teaching strategies for distance delivery is needed to enhance understanding of workload adjustment issues along with assistance and support needs. Adaptive research also needs to include the budgetary impacts associated with the growing expectations for teaching and research responsibilities.

Faculty need to understand the ***reward system*** and how distance teaching impacts annual evaluations along with tenure and promotion. Promotion and tenure committees must clearly articulate their expectations to faculty within their departments. Junior faculty, in particular, need to clearly understand how distance teaching will affect them as they go up for promotion and tenure in the future.

Summary

In summary, the primary **incentives** that encourage faculty to adapt their teaching strategies to

deliver education via distance center on intrinsic or personal rewards. These include the opportunity to provide innovative instruction and apply new teaching techniques as well as self-gratification, fulfilling a personal desire to teach, recognition of their work, and peer recognition. Extending educational opportunities beyond the traditional walls of the institution so place-bound students have access and students can reduce travels time is also an incentive. Release time for preparation also is a motivator for faculty to teach via distance.

The major perceived **obstacles** relate to time requirements, developing effective technology skills, and assistance and support needs. Monetary awards for faculty and the cost to the student were seen as neither an incentive nor an obstacle. Faculty are divided on how they see distance teaching affecting their yearly evaluation process and their promotion/tenure needs; about 40% see it as an incentive while about 30% see it as an obstacle. For administration and faculty to effectively work together in the future to build curriculums that are offered through distance delivery, the incentives that encourage faculty to teach via distance can to be spotlighted and the obstacles that discourage faculty need to be diminished.

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