The University of Florida's Distance Education Faculty Training Program: A Case Study

Tracy Irani
irani@ufl.edu

Ricky Telg
rtelg@mail.ifas.ufl.edu

Nick T. Place
nplace@mail.ifas.ufl.edu

Department of Agricultural Education and Communication
University of Florida
Gainesville, FL 32611

Abstract

The number of faculty innovators on the cutting edge of using technology in the classroom has grown in recent years. However, many faculty members have limited background in the high-end technologies and instructional design expertise typically needed to develop more technologically sophisticated course projects. The University of Florida's College of Agricultural and Life Sciences recently completed a project to address the need of developing training materials for faculty who teach or plan to teach distance education courses. The "Distance Education Faculty Training Program" (DEFT), a collaborative effort of instructional designers, professors, and communication specialists, resulted. The objective of this paper was to describe the evolution and development of this project, which resulted in the production of a self-paced interactive training program showing faculty how to develop an effective distance education course.

Background

As one of the tenets of their mission to provide life-long learning, land-grant universities and other agricultural institutions have been at the forefront in developing extensive infrastructures to facilitate distance education delivery of courses to a diverse community of learners, both traditional and non-traditional (Miller & Pilcher, 1999). Most of these academic programs involve technological delivery of distance education coursework in a variety of majors at both the graduate and undergraduate levels using such tools as teleconferencing, videotape, and the Web. However, technological infrastructure is not enough to ensure success in the distance education environment.

Research indicates that new teaching techniques are necessary in the distance education environment, and training is essential for instructors to be able to use these new techniques (Thach, 1993; Willis, 1993; Wolcott, 1993). King (1999) said distance education training helps provide faculty with a "reservoir of ideas" to teach and encourage critical thinking skills in students (p. 170). Research also indicates that faculty need technical support and training in instructional technologies (Spotts, 1999). Such training improves not only distance education courses but also traditional courses (Moskal, Martin, & Foshee, 1997).

Interactive or "hands-on" training and experience prior to the beginning of a new course enable instructors to become much more comfortable and confident with the context of distance learning. Additionally, it provides an opportunity to try out course materials and techniques prior to actual implementation. Moore and Thompson (1997) have stated that since a technologically mediated course is "only as effective as its instructor and/or facilitator there must be adequate guidance and support for faculty in selecting and implementing appropriate teaching behaviors and techniques" (p. 40). They listed a number of skills that a distance educator should utilize: providing structure, providing socio-emotional support, establishing a democratic atmosphere, creating a sense of shared space, modeling appropriate behavior, clarifying material, and maintaining an appropriate pace. Numerous principles such as establishing rapport, meeting learner needs, providing a supportive learning environment, and using variety in educational approaches have been shown to positively affect learning (Place, 2001).

Nevertheless, the physical separation that exists in distance education requires that instructors plan, present, interact, and perform in ways that are significantly different from traditional face-to-face instruction. This would tend to support the argument

that providing training for faculty who will teach at a distance is critically important. But what should a distance education faculty training program look like? What topics should be covered, and how should training be conducted? This case study details how the University of Florida's College of Agricultural and Life Sciences developed a self-paced, interactive program to train faculty who will teach distance education courses.

Method

Professors in the University of Florida's College of Agricultural and Life Sciences (UF/CALS) have access to a variety of technological tools to teach distance education courses, including Web-based applications, a two-way videoconferencing system, and multimedia. In early 2001, UF/CALS faculty and instructional designers began to develop an online, interactive training program for faculty teaching distance education courses. The idea of a training and development program had been suggested in the Institute of Food and Agricultural Sciences' (IFAS) Distance Education Task Force Report (Telg, et. al, 1997). Although individual faculty training courses, primarily focused on technology training, were available at both the college and the university level, a structured training plan had not been developed. The project's primary objective was to develop a comprehensive distance education training program, focused on faculty development for the college. A secondary objective was to develop enhanced support information for distance education students.

The products generated from this project included the following:

• Three studies to determine how a UF/CALS faculty training program should be structured. Research findings of these studies are outlined below.

• An interactive Web site and CD-ROM detailing the instructional design and technological elements necessary to develop an effective distance education course. The site and CD-ROM also include video segments from instructors who have taught distance education classes. The Web site for the project titled the Distance Education Faculty Training (DEFT) Program is found at http://training.ifas.ufl.edu/deft.

• A training plan for suggested courses/workshops for faculty to learn more about distance education topics.

The purpose of this study was to utilize a case study approach to describe and document the DEFT project elements and findings, in an attempt to explore its evolution and provide a model for development of similar programs at other institutions engaged in distance education. As such, the methodology utilized was an exploratory case study research design that combined field analysis and data collection in the form of preliminary survey data (Berg, 2001).

Survey Research Procedures

Specific project elements evolved from the findings of three descriptive survey studies conducted in spring 2000. Essentially needs assessments, the three studies were conducted in an attempt to benchmark other land-grant institutions' practices and to gather information from institutional stakeholders (UF/CALS faculty and students), in order to develop a training program at UF. The following groups were surveyed: distance education developers in colleges of agriculture, on- and off-campus UF/CALS faculty, and students enrolled in UF/CALS distance education courses.

The distance education students (n = 32) were studied to determine what they liked/disliked about the distance education experience. Results from the student survey helped in the design of the DEFT. But they were of major relevance in the development of a project, titled the "Virtual Swamp," that helps distance education students succeed in a virtual learning environment. Summaries of the findings from the distance education developers and UF/CALS faculty studies follow.

Results from Distance Education Developers at Colleges of Agriculture

Distance education developers in colleges of agriculture at other land-grant universities (n = 14 institutions) were surveyed to determine how they conduct faculty development/training. Results from this study included the following:

• The primary form that distance education training takes is a formal, regularly scheduled prescribed course or set of training materials. Training also takes the form of informal, "brown-bag-style" meetings and a combination of formal, informal, and self-paced (CD-ROM-, Web-, or video-based) programs.

• Program content consists of instructional design methods, training on the use of particular technologies, and training on the use of specific software. Technology training emphasizes computer multimedia, digital photography, and videoconferencing. Software training focuses on presentation software (PowerPoint) and Internet-related functions: Web page development/editing, Web course tools (WebCT and Blackboard), and interactive online elements (chat rooms and electronic bulletin boards). More than half of the respondents noted that the most important technology or software for faculty to master is Web course tools.

• All respondents noted that if faculty members at their universities choose to teach a distance education course, they are not required to take distance education training prior to teaching the course; training is voluntary.

• Respondents indicated that their institutions provide incentives for faculty who teach distance

education courses. Incentives include monetary compensation, teaching assistant support (during the development of and implementation of a distance education course), release time (reduced course load) to develop a distance education course, software and hardware.

• Respondents indicated that training has resulted in improved teaching methods and better interaction with students being taught at a distance.

Results of UF/CALS Faculty

On- and off-campus UF/CALS faculty (n = 65) were surveyed to determine what they want to know in terms of distance education theory, practice and technology and what distance education/technology-related training they would like to receive. Some of the findings from this study include the following:

• Faculty would like training sessions that occur occasionally and are held over several weeks or are self-directed. Few wanted daylong or full-week sessions. Faculty members not on the main university campus overwhelmingly said that they would prefer a self-paced training program, by CD-ROM, the Web, or videotape.

• Faculty indicated that training should include instructional design, technology use, and software use. When asked which technology or software was most important for faculty to master, respondents indicated that Web-related software was most important. Faculty members said, if given an option, they would prefer to receive graduate assistant support as an incentive to completing distance education training.

The DEFT Program A Self-Paced Faculty Training Tool

From the results of the UF/CALS survey, it was recognized that faculty workload demands and time considerations would be a key challenge in terms of developing an effective training program that faculty could utilize efficiently. Initially, meetings with project team participants resulted in the idea of developing self-paced training that faculty could access at their own time and pace, supplemented by voluntary face-to-face training which could be taken at the faculty members' discretion. For maximum utility and faculty access, it was decided that both CD-ROM and Web versions of the instructional materials would be developed.

The DEFT Program was built on a previous text-based faculty distance education handbook, which had been written and revised by the co-authors over the past five years. Project development was divided between the faculty co-authors who wrote and updated the existing text materials, and the Institute of Food and Agricultural Sciences' Communication Services' Distance Education Unit, which handled technical development.

The DEFT Program was designed to be a comprehensive training tool for faculty engaged in teaching at a distance. The information was arranged in a modular format, so faculty could access and complete the components most needed in their distance education development. (See Figure 1.) Specific content areas included:

- Instructional/course design
- Course development
- Distance education technologies
- Copyright issues
- Library resources and campus help
- Suggested training courses available around campus
- Videoconferencing network handbook for site facilitators

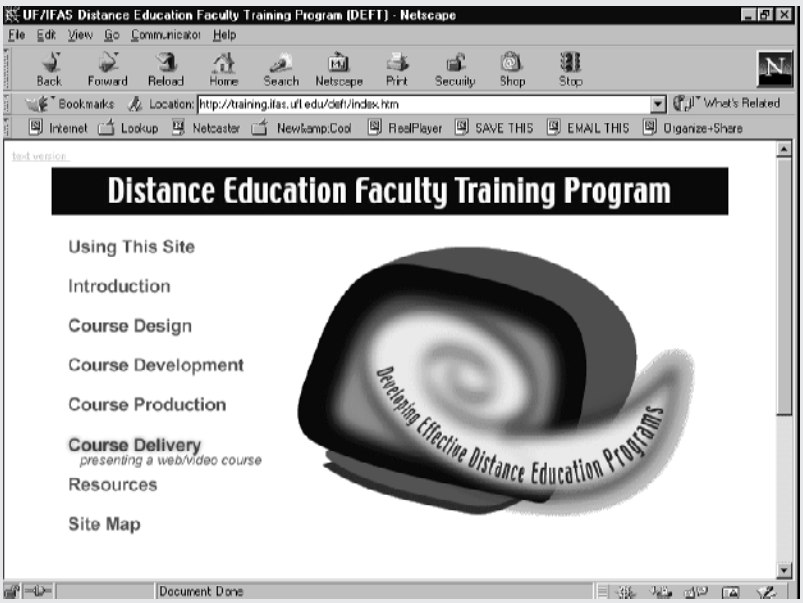

Figure 1

Interactive course "shell" format. The project team members agreed the training materials should be designed in interactive modules, so faculty could have a "finished shell" of a course template when they completed the training. The DEFT Program layout, therefore, was designed with online form boxes, so faculty members taking the training could input data (course goals and objectives, media planned for the course) as they interacted with the online materials and then have the data sent to them electronically. (See Figure 2.)

Recipes for Success. The Recipes for Success were adapted from the text-based faculty handbook.

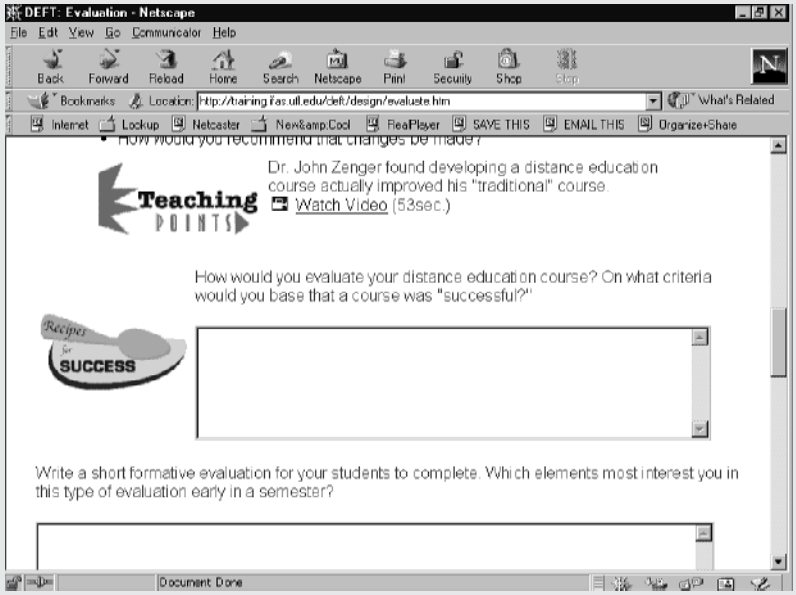

Figure 2

Initially developed in the handbook as a series of questions to which faculty could "fill in the blanks" with their answers, the interactive format of the DEFT Program allowed for this technique to be realized even more successfully. Faculty users could respond to the set of interactive questions with their answers, which would be collected into an online database that could be compiled and disseminated later to the faculty members via electronic mail, or printed out in hard copy form.

Teaching Points. The Teaching Points were developed as a set of digitized video clips showing interviews with fellow faculty colleagues who commented on their experiences with distance education, as well as provided guidance and tips for how to use the distance environment successfully.

Distribution and Reaction. CD-ROMs were made available to faculty who expressed an interest in teaching a course at a distance in late summer 2001. In addition to the self-paced training, a face-to-face training plan was developed. Faculty members are encouraged to take the courses listed on the DEFT site.

Initial reaction to the DEFT Program from college and university faculty and administrators has been favorable. Based on the reaction, a decision was made to implement the DEFT university-wide, an extension of the initial project. In addition, the university agreed to fund a second project to provide support services and information to all UF distance education students. This project's design, similar to the DEFT, incorporated Web and CD-ROM, as well as digital video "teliographies" of interviews with distance education students, links to support service information, and online registration forms. As in the DEFT project, the conceptual foundation was provided through analysis of the UF/CALS distance education students' survey results.

Conclusion and Discussion

The primary objective of this project was to develop training materials for UF/CALS faculty interested in developing distance education courses that would meet this need. That objective was met with the development and implementation of the DEFT Program. However, to adequately provide effective distance education courses to students, training materials and programs must be in a constant state of evaluation and improvement. New technologies call for continual updating of materials and in-depth and adequate training for users.

Based on the experience of researching and developing the DEFT Program, it seems clear that emphasis on training and support services, for both faculty and students, will continue to be an important need for institutions of higher learning engaged in distance education programs. Developing sound strategic planning and creative and innovative training and support services are, however, ongoing challenges that could undoubtedly benefit from the collaborative sharing of good ideas. Finding an effective and efficient forum for such cross-institutional collaboration could be a logical next step in terms of advancing the capacity for agricultural institutions to achieve programmatic success in their distance education efforts.

References

Berg, B.L. (2001). Qualitative research methods for the social sciences. Needham Heights, MA: Allyn & Bacon.

King, K.P. (1999). Unleashing technology in the classroom: What adult basic education teachers and organizations need to know. Adult Basic Education, 9(3), 162-175.

Miller, G., & Pilcher, C. (1999). Desired and assessed cognitive levels of instruction: Are college of agriculture courses taught on campus and at a distance comparable? Proceedings of the 26th National Agricultural Education Research Conference. (pp. 343-351). Orlando, FL.

Moskal, P., Martin, B., & Foshee, N. (1997). Educational technology and distance education in

Central Florida: An assessment of capabilities. The American Journal of Distance Education, 11(1), 6-22.

Moore, M., & Thompson, M. (1997). The Effects of Distance Learning (revised ed.). University Park, PA: American Center for the Study of Distance Education.

Place, N. (2001). Principles of Effective Extension Educational Programs. (EDIS publication no. AEC 361). Gainesville, FL: University of Florida / IFAS. Available online: http://edis.ifas.ufl.edu/WC042.

Spotts, T.H. (1999). Discriminating factors in faculty use of instructional technology in higher education. Educational Technology & Society, 2(4). Web document: http://ifets.gmd.de/periodical/vol_4_99/spotts.html

Telg, R., Cheek, J.G., Duke, E., Hill, K., Martsolf, D., Nehiley, J., Poucher, P., & Zazueta, F. (1997, July). Report of the Institute of Food and Agricultural Sciences' Distance Education Task Force. (College of Agriculture Academic Programs Publication Series No. 23). Gainesville, FL: University of Florida. (ERIC Document Reproduction Service No. ED 403 394)

Thach, L. (1993). Exploring the role of the deliverer in distance education. International Journal of Instructional Media, 20(4), 289-307.

Willis, B. (1993). Strategies for teaching at a distance. (Report No. ED 351008). Syracuse, NY: Syracuse University. (ERIC Document Reproduction Service No. EDO IR 92 8)

Wolcott, L. (1993). Faculty planning for distance education. The American Journal of Distance Education, 7(4), 26-35.