Syllabus 2004

Distance Education Training for Distance Education Trainers: The *Roadmap to Effective Distance Education Instructional Design* Project

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Background

More than a technological infrastructure is necessary to effectively encourage and train faculty members to teach at a distance. Other components, primarily focused on providing institutional support to assist a faculty member's development, such as teaching incentives, instructional design support, and technology training, have been shown to be necessary in creating successful distance education training and development programs (Berge, 2001). Spotts (1999) indicated that if instructors are expected to use instructional technologies, they need technical support and training.

Instructional designers and technology specialists need to be knowledgeable about not only the latest technology, but also the educational methods to use that technology (Telg, 1995; Irani & Telg, 2001). A study of 14 land-grant universities (Irani & Telg, 2001) found that 64.3% of instructional designers involved with distance education course development had no prior training or knowledge of distance education instructional design methods before working at their universities. Respondents said they had learned distance education instructional design methods while "on the job." Instructional designers must be adequately prepared in order to assist faculty, so that faculty can effectively teach distance courses.

In response to this need, six universities —the University of Florida, Texas A&M University, Texas Tech University, the University of Idaho, the University of Missouri-St. Louis, and Iowa State University—collaborated on a project titled *Roadmap to Effective Distance Education Instructional Design*. This project was to develop effective materials and innovative approaches to better prepare instructional designers at universities with agricultural academic programs to support distance education teaching programs. The project development team partnered with the Association for Communication Excellence (ACE) and the American Distance Education Consortium (ADEC). This "train-the-trainer" approach provided distance education instructional designers with skills and knowledge to more effectively help faculty members develop distance education courses. The remainder of this article will focus on the development phases—research design, implementation, and evaluation—that were undertaken.

Development Process

Research Design

A needs assessment survey was sent to ACE and ADEC member listservs, to identify key characteristics of this virtual training project. Respondents were generally interested in participating, saw the project as useful, said they would have the time to complete the training program, wanted to be certified as effective instructional designers, and preferred asynchronous delivery methods. Respondents wrote they were most in need of training in the areas of instructional design and development. Most said they had had some technology and software training, but instructional design principles were self-taught. Much of the program's design was based on this needs assessment.

Implementation

The implementation phase consisted of content development, marketing, and content delivery. The project team developed six content modules, called *destinations* to go with the *Roadmap* theme. (See Table 1.) Content was designed and delivered in WebCT™.

Table 1: Destination Timetable and Collaborating Institutions

Destination	Timing/lead institution
Orientation	September 2003 (one week) University of Florida
Adult Learning and Effective Distance Education Teaching Principles	September 2003 University of Florida
First-time Course Development	October 2003 University of Florida
Technology Issues in Training	November 2003 Iowa State University
Advanced Teaching Methods	February 2004 University of Idaho
Assessment and Evaluation	March 2004 University of Missouri-St. Louis
Program Administration	April 2004 Texas A&M University / Texas Tech University

As the content was being developed, a marketing campaign was undertaken to promote the *Roadmap* program using the ACE and ADEC listservs. A total of 106 people, representing 26 institutions, participated in *Roadmap*. (See Table 2.) Since all development and delivery costs were underwritten, participants took the course at no charge. Those completing all requirements received a certificate of completion from Texas A&M's Office of Distance Education.

Table 2: Universities or Institutions Represented by Participants	
Alabama A&M University	Penn State University
Association of Southern Region Extension Directors	Texas A&M University
Auburn University	Texas Tech University
Cornell University	University of Arkansas
Florida A&M University	University of Arizona
Indiana Higher Education Telecommunication System	University of California-Davis
Iowa State University	University of Florida
Kansas State University	University of Idaho
Mississippi State University	University of Maine
New Mexico State University	University of Maryland
North Carolina State University	University of Minnesota
North Dakota State University	University of Missouri
Ohio State University	University of Wisconsin-Madison
Oregon State University	West Virginia University

A one-week orientation session was conducted that exposed participants to the types of technology used in later destinations. Content then was delivered on a monthly basis, except for a two-month break during the holidays in December and January. Each destination featured synchronous (chats) or asynchronous (streaming video, narrated PowerPoint™ presentations, threaded discussions) delivery methods to provide participants with examples of how to deliver educational materials in various means. Web-based training materials were provided to the participants to use in the training of their own faculty members. At the conclusion of each destination, participants were asked to complete a ***microproject*** —a short assignment designed to show that the participants understood and could apply the content that was presented.

Evaluation

The two components of the evaluation phase – participant evaluation (including certification) and program evaluation – were conducted several times throughout the project. During the orientation, participants indicated their perceptions of how well they knew about or had mastered six core distance education instructional design competencies, identified in previous research (Dooley & Lindner, 2002). (See Table 3.) The destinations' microprojects reflected each core competency. Fifty participants completed all six microprojects, fulfilling the certificate requirement. At the end of *Roadmap*, most participants self-reported they had an increase in competency levels through their participation in the program.

Table 3: Core Competencies and Characteristics	
Core competency	**Characteristics of competency**
Adult Learning & Teaching at a Distance	Learning theory Learning styles Methods for teaching adults Motivation Characteristics of distance learners Differences between distance and traditional environments Overview of effective distance teaching practices
Instructional Design & Course Development	Needs assessment Writing objectives Choosing content and methods Choosing delivery strategies Assessment Roles of a development team Best practices
Delivery Strategies for Teaching at a Distance & Instructional Technology Resources	Web delivery/learning management systems Equipment/hardware (including video, CD-ROM/DVD) Communication tools Software (including course management systems, graphics) Expertise Technical support Funding
Advanced Interaction Methods & Accessibility	Threaded discussions/chats as tools for communication Interactive teaching strategies Types of disabilities Legislation Considerations and options for designers
Planning and Conducting Evaluation & Evaluation Analysis and Reporting	Purposes Formative and summative evaluation Evaluation methods (surveys, focus groups, rubrics) Challenges of collecting data online Analyzing data Reporting results
Administrative Issues & Training and Support	Principles of best practices Marketing Copyright Training of faculty and students Student support services

Program evaluation data was collected at multiple times. A formative evaluation was conducted of course participants at the end of the orientation module to gauge their time expectations, rationale for participating, and expectations for course outcomes. Respondents said they were participating in the course to improve their skills and develop professionally. They noted that they wanted to be able to apply what they learned to real-world situations.

Focus groups were conducted with course participants at three of the collaborating institutions at various times. The suggestions provided by focus group participants were incorporated into later destinations.

After the first three destinations were delivered in the *Roadmap* sequence, participants were asked, via e-mail, to describe what expectations they had at the beginning of the *Roadmap* course and whether the course was meeting their expectations. Several respondents said they expected to learn from *being* a student in a distance education course. They were used to designing and delivering instruction, not receiving it. One respondent said, "Being on the receiving end of this course has given me a new perspective on what a student goes through – both the good and bad." Several respondents reported using copies of the materials as handouts to give to faculty and in workshops. Summative evaluation results showed participants were pleased with the overall program.

Collaborative Efforts Among Institutions

Throughout the project, collaborating institutions communicated frequently, primarily through e-mail. However, the project team met one hour monthly via desktop videoconferencing to discuss development issues. In addition to frequent communication among partnering institutions, the project development team also communicated with *Roadmap* participants. The project team maintained frequent e-mail and discussion board communication with the participants.

Benchmarked Indicators

Project team members tracked what students did in completing the training program and assessed the adequacy of content, facilitation, and technical support, in order to identify indicators that influenced the effectiveness and quality of the online program. The following indicators also may be termed "best practices."

Know your audience. Through a variety of assessment methods, the project development team got acquainted with participants before the start of the program.

Make explicit the tie between learning objectives and assignments. Assignments were designed to engage participants in the specific content of each destination, while encouraging practice and application to individual learning needs.

Foster interaction. The project team spent considerable initial time winnowing materials to essential, practice-based content and assignments for this busy group of professionals.

Consider how the length of training affects completion rates. The project development team noted that attrition increased as the training program extended, especially beyond one semester. Self-paced training programs might be worthwhile to test in the future.

Consider the audience's motivational goals. Receiving the Certificate in Distance Education through Texas A&M University was most participants' motivation to complete the program.

Recommendations

The project development team offers these insights and recommendations for others interested in conducting similar collaborative multi-institutional projects:

Start early. As soon as plans are developed and responsibilities are assigned among team members, get started. Don't wait.

Communicate frequently. The e-mail and videoconference communications among collaborators and face-to-face meetings were essential to the project's success.

Hire a project coordinator whose responsibility is to maintain communication, oversee the project development, and be the "point person" for participants' questions.

Start small if you've never collaborated with five other universities.

Continually improve the project. The team is in the process of redesigning *Roadmap* into 11 modules, possibly for a fee or for distance education academic course content.

Search for ways to use the project beyond "just" the agreed-upon deliverables. The project development team is using the materials in their own universities for training and teaching, and presenting the information in papers and conferences.

Conclusions

Participation in this project allowed instructional designers to be more adequately prepared to assist faculty, who in turn, can teach distance courses more effectively. Interest already has been generated with instructional designers and distance education specialists outside of the land-grant university system who want to participate in future offerings of *Roadmap.*

Based on this collaborative effort of six universities with well-recognized and respected distance education programs, *Roadmap to Effective Distance Education Instructional Design* will raise the level of the type of work done by distance education instructional designers. The certification process will continue to play a major role in helping distance education instructional designers raise their own stature for the positions they hold at their respective universities. Overall, this project will better prepare instructional designers at land-grant universities to support their universities' distance education teaching programs.

References

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