Educators in higher education are increasingly being called upon to design, develop, and deliver courses via the World Wide Web. Although reasons for the strong push to develop online courses are varied, it is clear that the perceived need for such courses is steadily increasing. Also needed are prescriptions for creating courses that are dynamic, interactive, and timely. This paper describes the process of developing a masters-level instructional design course at Emporia State University (Kansas) for delivery online. Rationale behind the need for such a course, development procedures, successes/failures, and prescriptions for future developers are discussed. (Author/MES)
Taking ID On-line: Developing an On-line Instructional Design Course

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Abstract: Educators in higher education are increasingly being called upon to design, develop and deliver courses via the World Wide Web. Although reasons for the strong push to develop on-line courses are varied, it is clear that the perceived need for such courses is steadily increasing. Also needed are prescriptions for creating courses that are dynamic, interactive and timely. The purpose of this article was to explain, in detail, the process of developing a Masters-level instructional design course for delivery on-line. Rationale behind the need for such a course, development procedures, successes/failures, and prescriptions for future developers will be discussed.

Introduction

Increasingly, higher educators may find themselves in a new situation. They may be asked to design and develop courses for delivery via the World Wide Web. The reasons for increased pressure to develop these courses are varied. However, in an article by Gubernick and Ebeling, (1997) the authors suggest that quite possibly, universities will have to change as we know them. According to the authors, in 1994, Peterson's Guide listed only 93 schools that delivered instruction via the web. Just five years later, there are literally thousands of courses offered via the World Wide Web.

In order for universities to compete for students, administrators recognize the need for change. For example, Cagney (1997) suggests that no type of college or university will be spared from this trend. Even private universities could be threatened if their students can take a significant portion of their courses on-line.

In an article in the Chronicle of Higher Education, the author discusses the fact that even the "more elite" universities may be jumping on the bandwagon. Universities such as Yale, Rice, and Duke are considering offering distance courses ranging from continuing education courses for alumni to distance-based graduate courses to general courses to the public (Blumenstyk, 1997).

Background Information

The state from which the on-line course was delivered is in the top ten in terms of total area yet the population centers are scattered throughout the state. In addition, in order to meet the changing needs of...
students, the administration at the university has placed increase importance on the development of courses for delivery via the web. Faculty members who design and develop web-based courses have received grant money, may be able to receive release time in the future and it may have a positive influence on the process of tenure and promotion.

This author used the ADDIE model of Instructional Design to design and develop an Instructional Design course for on-line delivery beginning in the Summer of 1998. This is the first of the core courses in the Masters program to be delivered on-line. The dean of the college as well as the chair of the department were extremely supportive of the design of this course.

Analysis

The students who take courses Instructional Design are usually Masters students in an Instructional Technology program located in the mid-west. The course is also a requirement for certification in a Library and Information Systems program and an increasing number of those students have enrolled in the class. They are usually in-service or former K-12 teachers and have a range of technical expertise. This is a required course yet most students are self-motivated and enjoy learning about the systematic design of instruction. Specific technology to be used by students is not emphasized—students have designed instruction using print-based media, projected media and hypermedia.

This course presents a systematic method for the planning and development of instructional programs. In addition to examining the research supporting contemporary methods of instructional design, students will apply instructional design principles to the development of an instructional lesson.

Upon completion of this course, students will be able to demonstrate skills, which will assist them in becoming professionals who, are critical thinkers, creative planners, and effective practitioners. Each student will be expected to:

- Describe the basic components of instructional design.
- Summarize the research supporting the various elements of systematic instructional design principles.
- Develop an instructional plan that includes learner and task analysis, instructional design, instructional materials development, a strategic plan for the implementation, and a plan for formative analysis (Summer '98)
- Produce an instructional lesson according to the systematic plan developed (Summer '98)
Analyze and develop cases in Instructional Design (Fall '98)

Design

The design of this course took several months. This author began the conceptualization process of creating a web-based course in the fall of 1997. The biggest obstacle to this course was having enough material available on-line without running the risk of violating copyright laws. Fortunately, there were many sources available on-line. It is extremely important to stress that this author also believes it is important to ask permission to use these sites as a part of the class. The URL's for sources are available through the following website: http://www.emporia.edu/idt/id/design.htm.

This course was offered as a traditional class in the fall of 1997. It was important to this author to keep the content in the distance class as close as possible to the content in the traditional class. Although the class used the ADDIE model as the basic model of Instructional Design, many other models were discussed in class. Much of the class time was used to discuss the "pro's and con's" of several traditional and non-traditional methods of designing instruction. Thus, it was important to set up a listserv for the purpose of class discussion. Examples of questions and responses will be included in the presentation and available through the following website: http://www.emporia.edu/idt/id/design.htm.

Development

This author used Adobe Pagemill 3.0 to create the web-site for class. The site itself consists of three frames: a "contact" frame (with e-mail and street address information plus phone numbers), a "menu" frame (with course syllabus, questions of the day, on-line resources, and directions for subscribing to the listserv), and a "main" frame which contains information loaded from the menu.

A listserv was also created to handle the class discussions. These discussions took place on a regular, almost daily basis during both summer and fall semesters (deadlines were emphasized) and were based on the essential elements in Instructional Design, models of Instructional Design, and outside readings.

The students were required to submit projects via e-mail during the summer '98 semester. There were a total of seven small projects due during the course of the summer session. These projects were designed to represent each of the phases of instructional design from Analysis to Evaluation. "Analysis" was broken down into three separate projects: Needs Assessment, Learner Analysis and Task Analysis.
During the fall semester, in lieu of projects, students were required to analyze cases in small, pre-assigned groups. Students were directed to read the cases posted to the website, develop their own conclusions, and then submit them to the group. From there, the group would try to reach a consensus of opinion regarding the questions posed.

**Implementation and Evaluation**

This course was delivered in the summer and fall of 1998. Evaluations as a whole were favorable for the summer semester, but it was evident that the process of submitting projects via e-mail was quite frustrating, both for the instructor and the students. Due to the difficulty in sending and receiving projects via attachment, the course was changed to a case-based course for the fall '98 semester.

Using cases for analysis has proven to be quite rewarding. This author chose to create new cases due to the fact that the case study textbook of choice, “The ID casebook” (Ertmer & Quinn, 1999) was not available for review until just prior to the start of the fall semester. There were a few problems with the clarity of directions in the cases; missed links, making assumptions, not asking questions, etc. However, the problems did not seem to interfere with the students’ knowledge of the case. The problems will be corrected in time for the summer '99 class.

Results of the evaluations during the fall '99 class were favorable, far exceeding this author's expectations. However, the summer class evaluations were not as good—students cited that there was too much work and not enough time. By the time the summer evaluations were received by this author, it was too late to make the changes necessary to create a better course.

This author elicited feedback on an ongoing basis from the students enrolled in the fall '99 course. The students were extremely helpful and provided feedback on an ongoing basis which will help in the design of the summer 2000 course. Students requested a less formal chapter write-up (choosing personal reflections instead of summaries), more lead time on cases, a better way to know where they stand in terms of their grades, and a more reliable method for contacting group members than e-mail.

In light of this feedback, this author has decided to use a webcourse template system called WebCT. This program will allow for instant grading (as the gradebook can be accessed from any computer), chat rooms (for group work), instant reflection posting, and better methods for self-assessment of progress. As everything is contained on the site and chat room conversations can be recorded, it will be...
easier for this author to make certain that students have submitted all of their work in a timely fashion and that group work has been equally shared among members.

Conclusion

The importance of designing web-based instruction is clear. University personnel must prepare for the inevitability that courses delivered traditionally may need to be delivered via the World Wide Web in order for the college or university to remain competitive. What the exact process of conversion looks like for courses such as Instructional Design remains to be seen.

References


WebSite Address: The URL for this class is: www.emporia.edu/teach/id/design.htm
Our server is case sensitive.
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