The Student as Teacher: Reflections on the Creation of a Prototype Course Designed for Distance Learning

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Abstract

This paper will examine and describe my experience in OMDE 607, Instructional Design and Course Development in Distance Education, specifically the semester project of creating a viable prototype course for delivery at a distance. I will include a brief introduction to the course from the course syllabus and have asked the faculty member to provide her rationale in designing the student prototype development assignment. Selections from the learning journal and the prototype course syllabus will be included as a demonstration of the learning that took place over the semester. The purpose of this paper is to describe the learning experiences I had while moving from an MDE student in the ISD course, to a designer and teacher of my own designed prototype course assignment.

Introduction

While taking courses and completing assignments in the Masters of Distance Education program at the University of Maryland University College (UMUC), I have had many rewarding experiences. These experiences have consisted of the total, complete, and almost instantaneous understanding of a topic, how it works, and how it can be applied to real-life situations. This type of experience occurred in OMDE 607, Instructional Design and Course Development in Distance Education, during the fall of 2001. This paper will discuss that experience by setting forth the actual process of the prototype course design, what I learned from the experience, and how it has changed my educational and career goals.
The Assignment

The purpose of the prototype assignment is praxis, the practical application of Instructional Systems Design theories presented during the fall 2001 semester through the University of Maryland University College virtual classroom. Through the prototype classroom development, students gain hands-on experience with course development techniques and an appreciation for the course development effort that can be gleaned only through trial and error in an actual virtual classroom setting. (I. Giles, personal conversation, January 16, 2002)

The Prototype Course

The course I designed had its birth in another MDE course – OMDE 611, Distance Education Library Services. I wrote a research paper for that course on the topic of assistive devices in libraries for patrons with disabilities. I became interested in persons with disabilities, available assistive devices, how the devices are used, what advantages they provide, and how computers can be used by persons with disabilities, either in libraries, in the home, or in a distance learning environment. While researching this topic, I realized that my local library had one workstation that has been set up for use by patrons with disabilities, but that none of the librarians could explain to me how the equipment worked. If the librarians could not explain it to me, a person who did not need to use the equipment, how could they explain it to a person with a disability that needs accommodation of the adaptive equipment? This question prompted me to design a prototype course for an audience of Masters of Library Science students in a graduate program.
**Discussion of Assigned Readings**

The following articles are a representation of the assigned reading in OMDE 607. These are the articles that helped me most in the design of my prototype course. I have discussed the usefulness of each article.

**Instructional Design of Distance Learning**

Deborah Schrieber

Schrieber has devised a set of activities that are helpful in the implementation of instructional analysis. While her focus is on business, there are many activities that can be transferred to distance learning in an educational environment, such as listing outcomes, identifying goals and activities that promote collaborative learning. I found these activities helpful while writing my goals and objectives, and in designing assignment #4, which asks the students to break into study groups and communicate in a synchronous chat with an assigned disability (typing with one finger) and to report on their experience in a collaborative paper.

**Instructional Design for Distance Education**

Jerrold E. Kemp

Kemp discusses planning that must take place while designing distance education courses. One of his planning steps is to determine how students can work together at a distance. I used his planning model in creating assignment #4, which has students working together in a synchronous chat.
Subject: What's Wrong with Tests?

Guy Bensusan

The disadvantages of teaching to tests are the focus of Bensusan’s article. His premise is that it is more important for students to learn how to research and find the answers to their questions as opposed to memorizing facts. In having my students read the laws regarding accommodations for persons with disabilities, as well as the other reference materials, I have directed my students in ways to find answers. They do not need to memorize the laws; they must know, however, how to find the applicable statutes.

Models of Online Courses

Robin Mason

Mason gives an historical view of instructional systems design and discusses online assessments. Specifically, he stresses that finding information and knowing how to use it is more important than remembering facts. He also discusses teamwork in a distance learning environment. I found this article comparable to the Bensusan article, and helpful in designing my assignment #4. Mason stresses the way the Web is promoting this theory. By asking my students to engage in a synchronous chat (while participating in an asynchronous course) I am taking full advantage of the services available on the Web.
Creating On-Line Courses: A Step-by-Step Guide

William R. Klemm

Klemm lists ten steps for designing a distance education course. These steps list the timing of the course design and include teaching strategies and assessment techniques. I used Klemm's lessons as an overall guide for my course outline, development, and assessment techniques.

Unassigned Reading:

Motivating Students

Barbara Gross-Davis

Gross-Davis' article was not an assigned reading, but it played a major part in my course development. She lists characteristics of a course that motivate students, such as enthusiasm, organization, and variety in course activities. One of her ideas I used in my assessment process was that of giving the students a choice in what they want to focus on in one of the assignments. Assignment #4 fit into her theory of letting students personally experience the learning. Another theory used has to do with students sharing the work they have done with each other. In several of my assignments, I ask the students to post assignments in the conference area to share with other students. This technique was also used in OMDE 607.

Excerpts From Learning Journal

An assignment that ran concurrently with the prototype course development was that of a learning journal. This journal was a place for the OMDE 607 student to record their frustrations, research and accomplishments, what they did to overcome difficulties,
thoughts and ideas about readings, problem solving techniques, and general thoughts about the course development. I have included excerpts from my learning journal that best reflect the learning process I went through over the course of the semester.

**September 23, 2001**

The overall goal of this course is to train librarians how to operate technical equipment in a center designed for patrons with disabilities. This includes, but is not limited to, screen readers, special keyboards, video cameras for enlarging text in books, audio devices for the hearing impaired and the blind, close-captioning devices, and assistive devices for physically disabled patrons. Librarians must also be sensitive to the needs of the patron with a disability, and must be able to respond to those needs in an efficient, knowledgeable and compassionate manner.

**September 30, 2001**

I’m also trying to read the syllabus as a student. Is it comprehensive? Does it cover everything I want to know? Am I clear on the readings and assignments? Do the links work properly?

**October 22, 2001**

My ultimate goal – to have the librarians able to assist library patrons with disabilities. How do I measure that? Originally, I put „learn“ and „understand“ as my goals. I then realized that the students have to produce something in order for me to measure their knowledge and understanding. Even if it is just participation in the conference discussions. But how do I list that in the objective?
October 30, 2001

I’m seeing now why education in this field is so important, and why it takes so long to design a course. Value to the development process is the advantage of working as a member of a team and being able to have discussions with team members concerning the development of the course. My assigned OMDE 607 team members were a great help to me in the comprehension of the design process.

November 13, 2001

I need to read more about assessments to make sure that I am asking my students the correct questions for them to answer in order to actually learn the material. My biggest question – how do I know the students are actually learning the material?

I was planning on the conferences just taking off – much like the 607 course where one person answers the question posed by the instructor, another comments, one more goes back to the original question, and so on. Threads of discussions are created, and students are contributing to many threads. I’d like for my modules to take off like that, but they won’t with the questions I’m asking.
November 20, 2001

It will be much easier to go through a printed copy of the course and see (1) where I need to make changes, (2) make certain the items are consistent throughout the entire course, (3) that the student is encouraged to think (this requires me looking back at the assigned readings and leading the students through the readings with appropriate questions), (4) that the assignments are clear and also designed to encourage the student to think about what he/she is writing about, and perhaps even doing extra reading outside of the course readings, and (5) making certain that my goals and objectives are clear enough that the student knows exactly what is to be learned in this course.

Specifically, I’m wondering about the way I’ve planned my assessments, and how I can motivate my students to be as involved and excited about the topic as I am.

How do you help students find meaning and value in the material you are teaching? Or can you? I want the students to learn how to communicate with and assist (with technology) library patrons with disabilities in a specially designed accessible work area. How can I get across to the students that this is important and they need to see the value in it?

How does the Instructional Designer create an atmosphere in an online course that is both open and positive for the students? How do you help students feel they are part of a community in a course taught at a distance? Or is that even possible in an online course? Is it possible to measure expectations of the student from an instructor’s point
of view, i.e., assignments that are not too easy yet not too difficult, that allow the instructor to judge a student's progress? What is the best way to motivate a student?

The question, referring to constructivism in teaching, is how can the students be graded without handing out specific grades? In other words, motivate them to learn but not grade them on their knowledge. What kinds of assignments could be made to do this? But then you lose the constructivist approach to learning. How else do you know that distance students are learning? Or is this figured out from the participation and the types of responses from the conferences?

**November 29, 2001**

How does a designer decide when to make assignments due? One of my study group members has her assignments due one week after the end of the material that is needed to do the assignment. Another has the assignments due the same week as the material that is needed to do the assignment. What is the break-even point on this?

**December 3, 2001**

Now that this journal is nearly complete, I’d like to take time and review how my course came to be and what I have learned from the course creation.

I knew exactly what I wanted to teach, and it seemed very easy to write a syllabus and create assignments. I had a lot of good information in one place, my references were all good but the interactions between the instructor and students were lacking in depth and substance. The conference questions were yes- and no-type questions, the
assignments were unclear and I tried to put too much information up front and not wait
to explain things such as assignment #4, the chat assignment. I began to look at theory
of design. I felt my course content was good, the course presentation needed work.

The assignments and module questions were the most difficult part of this assignment
for me. I asked several people a lot of questions on this problem and got as many
answers. I struggled with the assignments and questions for weeks, not totally happy
with the way the assignments are written or that the questions are stated correctly, in
order to have the students tell me what it is I want them to know.

The assignments were done, and done again, and then there were six, then five, then a
journal. Consistency is a big issue in course design. I have to ask the questions in a
way that the students will at least interact with me, the instructor.

I have to figure out what I want the students to read, then I have to figure out what I
want them to retain from the readings, then I need to decide how I want them to explain
to me what they have retained and learned, and the questions have to be formulated in
a way that encourages them to explain to me what they have learned.

Once I’ve determined that the students have been assigned appropriate readings for
what is important for them to learn on that particular topic, I can begin to look at the
questions in the conferences.
I think that students should come into a course enthusiastic about learning. But that is because I’m so interested in it. There is no guarantee the students are going to share my interest.

When does a designer know that they are finished designing the course? How does a designer know that what has been written in the course is correct? Where are the guarantees that the goals and objectives are correct? This is not an exact science.

**Excerpts From OMDE9990017 Course Syllabus**

Following are parts of the syllabus from my created prototype course. I am including these as evidence that learning did occur over the semester. Before starting this course, I knew nothing about Instructional Systems Design or Instructional Designers. I had no clue how the courses were created. At the end of the semester, I was able to design a course that I wanted to teach, in a topic that I wanted to teach, and make it interesting and informative for my students. The following syllabus entries show how I put my semester studies to use in this semester project.

**Course Description**

This is an elective course in the Masters of Library Science program. It is designed to impart knowledge concerning the laws, regulations, computer software and hardware, and personal communication skills between a librarian and a library patron with a disability. New laws are being enacted every year to make computer software and hardware accessible to disabled persons. Libraries must now, by law, provide accessible and accommodating workstations and computers. The librarian must know
how to work with a patron with a disability and the new technology installed in their library. This course will open the way for librarians to manage, operate and staff an accessible work area within their libraries.

**Goals and Objectives**

At the end of this course, students will be able to explain the requirements for an accessible work area set forth in Section 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1980; be able to identify assistive software used in an accessible work area; and explain how to communicate and assist library patrons with disabilities. Specifically, the students will:

- discuss the basic accommodations required for library patrons with a disability to allow the patrons full access to the library computer services;
- identify and explain key points of Section 508 of the Rehabilitation Act of 1973;
- discuss operating systems and software applications for persons with sight, hearing and learning disabilities;
- describe working on a computer with an assigned physical limitation and discuss potential frustration of typing on a non-adapted computer by a person who has a disability;
- explain methods of assisting patrons with sight- hearing- and learning-limitations;
- create a collaborative paper by working with students in a study group;
- describe specific and overall communication skills between the librarian and a library patron with a disability.

**Assignments**
**Assignment #1**

**Due Date:** 1/14/01

**Description:**

The Importance of Section 508. In 600-800 words, I would like your ideas on Section 508 and why it is so important in today’s computing environment. Why now? Please cite at least three references, one from outside of the assigned course readings. Submit your paper as a response to Module 2.

**Assignment #2**

**Due Date:** 2/11/01

**Description:**

Technological Advances for Persons with Visual Limitations. In a paper between 600-800 words, please tell me what you think are the most important technological advances to assist patrons who have sight limitations of the library? Why? Please list at least three references, one from outside of the assigned course material. Submit your paper to the WebTycho assignment area.

**Assignment #3**

**Due Date:** 2/25/01

**Description:**

Assisting Challenged Patrons. Due the end of week 8. Please write a 600-800 word paper on one of the following topics:

- How would you assist a patron with a visual disability surf the Internet?
- How would you assist a patron with a hearing disability watch (and hear) a video?
- What types of assistive software are available to assist a patron with a learning disability?

Keep in mind the technology available. Reference at least three sources, one from outside the assigned readings. Submit your assignment in the WebTycho Assignments area.

**Assignment #4**

**Due Date:** 3/18/01

**Description:**

Chatting with a disability. Due the end of week 11. For assignment #4, please divide into study groups of three or four students. It is recommended that these groups be based on geographical location and time zone compatibility, but can be based on relationships you have developed with your fellow classmates either in this course or a previous course.

This assignment will give students the opportunity to work together as a group on a collaborative project. Please submit one paper for your entire study group.

Enter into a chat with your study group team using WebTycho for your chat, and notify the instructor of date and time of chat prior to the chat. Type your postings with the ring finger of your non-dominant hand ONLY. If you are right-handed, use the ring finger on your left hand, and if you are left-handed use the ring finger on your right hand. If you are ambidextrous, use the ring finger on the weaker hand. ONLY use this one finger for all keystrokes - space, enter, delete, etc. Keep your chat focused on problems that a library patron with a physically disability might experience in sending e-mails, communicating through a chat room or surfing the Internet.

Following the chat, in 1,000 words or less, in a collaborative document, describe your experience. What was it like? How did you feel? Based on your experience in the chat, relate your experience to the keyboarding challenges of a person who has a physical disability. What do you think should be required on computers to aid persons with physical disabilities?

Post your assignment as a response to the conference for the first week of Module 6 so we can all benefit from each other’s experiences.

**Assignment #5**

**Due Date:** 4/8/01
Description:
The best way to be of Assistance. Due the end of Week 14. Write a 600-800-word paper on the best way for the librarian to be of assistance to library patrons with sight, hearing, learning and physical disabilities. Keep in mind all of the available technology, methods of communicating with patrons who have a disability, and any type of assistance required by the patron. Include references to at least three sources, one from outside the assigned readings. Submit your paper to the WebTycho Assignment area.

Topic/Themes: Journal  Due Date: 4/15/01
Description:
Throughout the semester, I would like you to record weekly your thoughts concerning disabilities, types of technology available to assist persons with disabilities, ways to communicate with patrons with hearing or visual disabilities, and the types of research you are doing in completing the assignments. Include web sites you visit and other database articles and references you have used during the semester. I'm also interested in your personal opinions and comments about the assigned readings.

Show me what work you have done this semester, and how your knowledge of the library patron who has a disability, the technology available to serve the patron, and ways to communicate with the patron are going to help you in your future work at a library.

There is no page minimum or maximum to this assignment. Obviously, the more information you record in your journal, the more I will be able to ascertain what you have learned this semester. However, I'm looking for quality as opposed to quantity.

Post your assignment to the WebTycho assignment area.
Conclusion

Lessons Learned

Over the course of the fall 2001 semester, there were many topics and issues discussed in the conferences and in the assignments. At the time the topics were presented, they had no real meaning other than words on a page. The ADDIE (Analysis, Development, Design, Implementation, and Evaluation) process, introduced in the first week of the semester, was confusing and I could not see its use in course design. The theory of constructivist teaching was just that – a theory. It had no real application other than the scenario presented in the article by Sprague and Dede. What I was unaware of was that the order in which the topics and readings were presented was deliberate on the part of the instructor in preparing us for the semester project of the prototype course development. After beginning the course development process, the series of readings became obvious.

In designing the course, I became aware of the daunting tasks of the Instructional Designer – of the conceptualizing, researching, writing and editing of a course. What appeared to be an easy assignment became more difficult as the concepts of the semester emerged. I understood their relevance to the prototype course design, thereby having to rewrite and edit my course to comply with the concepts and the models of design that we had been discussing. The ADDIE model not only became clear, it became an outline to follow for effective and solid course design.
The Future

I was satisfied by my creation of the prototype course. The enjoyment I got from the researching, designing, editing, and creating assignments was great. The creativity I could include in the course and the varied assignments that would actually teach my students the topic at hand was rewarding. Not only did I enjoy the course design, I enjoyed the leeway I had in designing goals and objections, of deciding what the students should learn to enhance their lives, and the creativity in my assessment process. While working on this prototype design, I decided that I wanted to pursue Instructional Systems Design as it relates to distance learning. I feel I have something to contribute to the field, and that I could make a difference in a student’s educational career by designing solid and creative courses that would have relevance to the student’s life.

I am now researching additional graduate school programs in ISD and looking into careers within the Federal Government in the training and education sectors. The corporate world offers many training opportunities, but I want to stay in an area that will actually help students and learners at all levels improve their skills and learn new topics in a comprehensive fashion.

This course became a diving board for me into the rest of my career. I now have goals and aspirations of what I want to do, how I want to do it, and the results I hope to achieve. During the fall 2001 semester, I learned how to create a course from scratch; I also learned a lot about myself and what I can achieve. Isn’t that what an education is all about?
References


Kemp, J. Instructional Design for Distance Education. Education at a Distance, 14(10), United States Distance Learning Association.


Sprague, Debra, Dede, Christopher. (1999) If I teach this way, am I doing my job? Constructivism in the classroom. ISTE L&L vol. 27 no. 1.
The Student as Teacher: Reflections on the Creation of a Prototype Course Designed for Distance Learners
Lisa George
This paper will examine and describe my experience in OMDE 607, Instructional Design and Course Development in Distance Education, specifically the semester project of creating a viable prototype course for delivery at a distance. This paper outlines a learner support system for the students in the islands of Maldives. The learner support system is based on a distance education model designed and developed for Maldives. This learner support system will enable the students to receive more timely feedback to their queries and builds on the existing [Show full abstract] support system. This kind of distance learning software is particularly necessary for schools, colleges, and universities. It replicates the experience of a physical classroom and provides great potential for interactivity. In a virtual environment, educators can hold live lectures by utilizing video conferencing, online whiteboards, and screen sharing. Learners, in turn, can raise their hand to ask and answer questions, just like in the real classroom. Kahoot! is a game-based learning platform designed for building which are gamified multiple-choice quizzes. You can create kahoots in minutes on your own or choose from 40+ million ready-to-play games, assign them as part of distance learning or for review and formative assessment in class, and track how well they are doing. In this process, teachers were also expected to support students academically and to be included in the distance education process. However, in many countries, even if teachers want to contact their students, the number of countries where teachers are trained on is very limited; In Europe and Asia, only 20% to 30% of countries provide training on distance education to teachers. On the other hand, teachers at the other end of the spectrum have to cope with a much more intense workload, demands and expectations than when the schools are open and education is maintained in the classroom, with communication technologies being easily accessible. Distance learning is one of the most challenging issues for teachers in this process. Students connect with their instructors and each other through modalities of almost every variety, greatly expanding avenues of communication. Norberg, Dziuban and Moskal's (2011) development of a time-based blended learning model, for instance, modifies the instructor's role (Liu & Hwang, 2010) in learning environments based on students' synchronous and asynchronous learning preferences. The need for new and more authentic assessment techniques in addition to challenges to traditional educational structures (e.g. semester length time boundaries) raises issues about what moderates students' ac... Audience analysis. Distance learning techniques are not appropriate for all students. In most cases, a great deal of motivation and the ability to work in a self-paced environment are essential. You should carefully examine the locations of the students also. For example: Will the instruction be delivered to schools or to homes? Can the students read? What are their learning styles? Is supervision required? Instructor analysis. With distance learning, facilitators and technical support teams are also necessary. For example, there may be a "teacher" who delivers the lesson via a videoconferencing system. The class is then sent to several schools throughout the area, and remote students participate.