

Creating Online Learning Modules for Preservice and
Beginning Teachers to Motivate Students:
A Project Summary

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Introduction

This project was an effort to promote effective instructional strategies in CTE instructors and to support the professional development of preservice and beginning provisional instructors. The learning modules in this project were focused on the theme, *Creating a Positive Learning Environment*. Research has shown that student motivation (Garton & Chung, 1996; Mundt & Connors, 1999; Washburn et al., 2001) and classroom management (Joerger & Boettcher, 2000; Mundt, 1991; Mundt & Connors, 1999; Nesbitt & Mundt, 1993; Talbert et al., 1994) are two areas of great concern for beginning teachers. Addressing these two key concerns is of pivotal importance in the development of a positive learning environment; therefore, in this project several online learning modules have been created to address the challenge areas of student motivation and classroom management.

Rationale

Constructivist learning principles were utilized to develop the online learning modules. These principles were chosen because teaching under a constructivist paradigm offers the opportunity to provide learner centered and authentic activities that should promote higher-order thinking in the online environment while addressing the learning needs of adult learners (Doolittle, 1999; Meyer, 2003). Activities provided in the learning modules shall engage preservice and beginning provisional instructors in learning experiences that focus on four standards: (a) higher-order thinking, (b) deep knowledge, (c) substantive conversation, and (d) connections to the world beyond the classroom (Wehlage, Newmann, & Secada, 1996). The online modules designed for this project are intended to create educative experiences that (a) create sustained learning opportunities to deepen preservice teachers' knowledge of teaching and learning; (b) teach preservice teachers as learners using methods, activities, and strategies that they should use to teach their learners; and, (c) facilitate activities that encourage preservice

teachers to reflect, collaborate, and develop a never-ending desire for continued self-improvement (Borko & Putnam, 1996).

Purpose

Originally, the stated purpose of this project was to develop eight online learning modules designed to aid preservice and beginning provisional CTE teachers in creating a positive learning environment. While the content of all eight of the proposed modules was included in the project, certain content areas were combined in the final product; therefore, this project now includes six modules in total. Specific modules (or units) created in the project are as follows: (1) Introduction to Teaching and Learning; (2) Creating an Environment That Promotes Learning – creating rapport and a community of learners; (3) Motivating Students – needs of learners, learning preferences, and brain-based learning; (4) Establishing Expectations and Classroom Management; and, (5) Student Management and Discipline. An orientation unit that provides an overview of online learning and the course as a whole was also created as the sixth module developed for the project.

Project Analysis

The learning modules developed in this project are intended to be useful to a variety of beginning, current, and preservice CTE instructors; however, for the purpose of making cohesive and consistent overall design decisions throughout the project a specific audience of learners was identified as the primary target audience. The project modules were geared toward provisional instructors who are currently working to gain certification in Illinois. This specific audience was selected because in the February 3, 2006 meeting minutes of the University Council for Career and Technical Education the need for a means to address certification needs of this group of instructors was discussed. It seems reasonable to assert that the availability of a course that addresses the professional development needs of these instructors can improve the quality of CTE in Illinois and result in a positive impact for the field overall. So, for our design purposes, it was assumed that prospective learners for project are beginning instructors currently employed at a school.

In order to identify the best format for the online modules in this project an investigation of several current online courses was performed. Courses examined were offered from the following three sources:

1. HRE Online Program at the University of Illinois – Urbana-Champaign
2. English and Liberal Studies Online Programs at the University of Illinois – Springfield
3. MVCR Master Online Teacher Certification Program from the Illinois Online Network

Course examples from these specific sources were selected because they include a wide variety of instructional formats and they enjoy established solid reputations in distance learning arenas.

The communication format of the courses in these programs could be categorized into three basic models. Model 1, the most prevalent model, involved courses that used an asynchronous format. All formal class communication occurred on secured class discussion boards with the occasional use of e-mail. Models 2 and 3 used both asynchronous and synchronous communication methods. In Model 2, most class discussion and activities occurred in asynchronous discussion boards (or through e-mail) but this was supplemented with the occasional use of chat room sessions or occasional full course meetings for a synchronous session – e.g., a special synchronous session might be scheduled to conduct a class wide question and answer review for a midterm exam. These synchronous sessions were generally conducted using *Elluminate Live* – a web conferencing program. In Model 3, the final communication model, the same asynchronous communication methods mentioned in Models 1 and 2 were used, but Model 3 added regularly scheduled synchronous class sessions. This third model used these sessions as a required component of the course and the synchronous sessions occurred on a regularly scheduled weekly basis.

Table of Online Communication Models

	Asynchronous Communication (Discussion Boards, E-mail)	Synchronous Communication (Web Conferencing, Chat Sessions)
Model 1	Regular Use – weekly	Not Used
Model 2	Regular Use – weekly	Occasional Use – infrequent
Model 3	Regular Use – weekly	Regular Use – weekly

Model 1 offered the greatest flexibility for participating in class activities from a perspective of specific time and date. Access to a flexible schedule is a key concern for many online learners (McDonald, 2002; Myer, 2002; Wu & Hiltz, 2004); however, for the development of modules in this project the Model 3 format was chosen. The model with asynchronous communication and activities coupled with regular synchronous sessions offered learners an added support for the building of an effective learning community. This was an important support for two main reasons. First, it has been reported that a challenge of the online environment is that online learners can struggle with feelings of isolation (Myer, 2003; Swan, 2003). Weekly synchronous conferences can alleviate feelings of isolation by providing learners with real time access to the instructor and to peers. A second rationale for using Model 3 was based on the desire to provide sufficient communication opportunities where collaborative and cooperative learning could be encouraged and supported in an immediate way (Swan, 2003). As stated earlier, this project is based in constructivist and student-centered learning practices; Model 3 appeared to offer the best variety of communication strategies to promote these learning methods.

Module Philosophy Rationale

The philosophical choices made for development of these modules were based in learner-centered constructivist theories. Most educators today possess at least a modicum of familiarity with the educational philosophies of Dewey (1963), Vygotsky (1962), and the more recent writings of Knowles (1998). Dewey emphasized the idea that students needed to be allowed to draw upon past experiences to successfully integrate and build new understanding and meaning. He alluded to the concept that social experience played a key factor in learning development. Vygotsky, to a somewhat larger extent than did Dewey, asserted the concept that informal social interactions play an important factor in the facilitation of learning. Knowles postulates that a vast amount of adult learning is informal and he identifies as important the use of real-life situations as vehicles for building understanding. All three of these educational philosophers allude to the concept that new knowledge is built from the foundation of previous experience. Current research has indicated that constructivist learning strategies are acknowledged to be

beneficial in online learning environments (Monteith & Smith, 2001; Hughes & Daykin, 2002; and Jung et al, 2002). Therefore these strategies were used in the development of these learning modules.

Module Pedagogy

When we address adult learners who have careers there are some particular learning needs that are different than those of traditional students. Knowles states that adult learner needs differ from traditional students in the following ways: "(1) adults need to know why they need to learn something, (2) adults need to learn experientially, (3) adults approach learning as problem-solving, and (4) adults learn best when the topic is of immediate value" (Knowles, 1984). These learners require learning environments that are rich in opportunities to build knowledge. Rote memorization and passive learning strategies are therefore replaced with active learning strategies and self-directed learning activities. In the modules prepared for this project the learners' needs listed above are directly addressed.

Module Design and Development

In order to provide learners with a consistent and well-ordered learning experience a general template was developed for the modules of this project. The template includes activities which provide multiple opportunities for students to interact with one another, with the instructor, and with course content materials, as all three types of interaction are important in the achievement of course goals (Hughes & Daykin, 2002; Richardson & Swan, 2003; Sims, 2003). An outline of the general module format follows:

- A. Module Introduction and Objective Page
- B. Discussion Activity 1 – Full Class Introductory Activity
- C. Course Readings
 - a. Content Article 1
 - b. Content Article 2
 - c. Content Article 3
- D. Assignment Activity 1 (usually a small group activity)
- E. Discussion Activity 2 – Peer Facilitated Article Discussion (full class)
- F. Discussion Activity 3 – Instructor Facilitated Concept Discussion

G. Discussion Activity 4 – Instructor Facilitated Concept Discussion

H. Synchronous Session Participation

- a. Question and Answer Session
- b. Discussion of Key Concepts of the Week
- c. Break-out session for small group activities

I. Module Closing Activities

- a. Reflections
- b. Development Assignments

J. Coming Attractions Notice (optional)

In *The Process of Education*, Jerome Bruner states, "Ideally, interest in the material to be learned is the best stimulus to learning" (1966). Keeping this idea in mind, the driving strategy behind the development of the online modules involved using learner interests to guide the direction of much of the discourse in the modules, while maintaining a commitment to addressing course objectives.

Module Component Purpose/Rationale Breakdown

The *Module Introduction and Objective Page* serves the purpose of providing an overview of the module objectives while identifying and establishing a schedule of activities for the module. It is also a place where the course instructor can interject opening comments and special directives if so inclined.

Discussion Activity 1 is designed as the interest approach opening to each module. Participation in this activity requires that students draw on personal experience and share opinions, insights, and ideas that apply to topically relevant concepts in each module (Miller & Lu, 2003). This activity provides an ideological springboard into the content articles that follow this activity.

The *Course Readings* serve as the pre-determined content components of the project whose purpose is to provide an information rich common base which learners can draw upon to aid in their negotiation of new understanding. Through discussion and class activities it is expected that the course readings will be used by readers to help support their interpretations and assertions in course activities.

Assignment Activity 1 is included as a component of the module to provide the learners with the opportunity to collaborate with peers in a small group effort. It is

intended that the specific member composition of these small groups change weekly in an effort to provide learners with opportunities to experience a diverse array of perspectives within the class. During this assignment the learners will participate in activities such as examining case studies and creating portions of projects to be discussed during the synchronous session. These types of activities are a pivotal for building the peer to peer connections that help promote a healthy learning community (Brown, 2001; Lapadat, 2000; Spiceland & Hawkins, 2002).

There is a dual purpose behind the inclusion of *Discussion Activity 2 – Peer Facilitated Article Discussion*. First, this activity provides learners the opportunity to gain facilitation experience in the controlled environment of the class – a desirable component in most teaching methods courses. Additionally, as each different facilitation team takes over and provides the guidance for the week’s discussion, the learners can assume responsibility for supporting one another and develop connections to increase the bond between members of the learning community.

In *Discussion Activities 3 & 4 – Instructor Facilitated Concept Discussion* the purpose is to help explore the relationship between the articles in class and the real world examples or situations that are used in the discussion boards. The activities were designed so that the facilitator can use guided questioning techniques to assist the learners in building meaning (Hughes & Daykin, 2002; Meyer, 2005).

The rationale behind the inclusion of *Synchronous Session Participation* was discussed earlier. It provides learners with real time access to all members of the learning community, opens the potential to engage in collaborative efforts, and provides a defense against feelings of isolation that can be experienced by some online learners. This component also offers an opportunity to conduct formative assessments such as polling learners to gauge their understanding of key concepts.

The *Closing Activities* component is included for varied reasons. The development activities provide a means of increasing instructional skills through practice, planning, and study. The reflections provide learners with the impetus to become more reflective teachers by assigning specific questions that require deep consideration.

The *Coming Attractions Notice* component of the module is simply a way to provide the learners with plenty of time to set up details for completing assignments due

in the following module. The purpose of this component is to provide organizational support to learners.

Module Evaluation Process and Results

A survey was developed to evaluate the modules of this project. The survey was composed of inquires which evaluated the four areas listed below:

Design

- Is site navigability good?
- Is information easily found?
- Is the module aesthetically appealing?

Content

- Is the information relevant?
- Is the content credible?

Technical Elements

- Did all links work?
- Did graphics download quickly?
- Can meaningful information be viewed within 20 seconds?

Overall Impression

- What is the overall impression about this site?
- Are there any suggestions to improve this site?

The survey questions above provided a means to gain formative feedback on the modules for use in improvement and development of the project site. Access to the learning modules was provided to committee members and a request for module review was made. Modules titled Unit 0 – Orientation, and Unit 1 – Introduction to Teaching and Learning, were open and available. Although few committee members logged into the site and completed the survey, the feedback received from the two committee members who returned the surveys was all positive. There were no concerns or troubles mentioned in any of the four areas of evaluation.

Future Module Development

The modules developed in this project address the theme of *Creating a Positive Learning Environment*; however, these modules represent only the first section of the teaching methods and concepts necessary to support the professional development of

beginning and preservice teachers. The information provided in these modules should be considered as representative of only the first six weeks in what could be developed into a sixteen week long educational experience for exploring teaching strategies for youth. A full course syllabus, located in the online course management system, provides an overview of what the complete sixteen week long course activities might include. The current module format could be used for future module development using the course content overview located in the syllabus.

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