Active Learning and Quality in Online Courses

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Abstract

This paper examines constructivist teaching strategies employed in a distance degree program in child development at a university in the western United States. Students are required to have an existing associate of arts or associate of science degree to enter the program, highlighting the importance of meeting the needs of non-traditional aged students and the shared responsibilities of teachers and learners in a successful program. Beliefs about constructivist teaching include 1) learning is a social activity, 2) active, hands-on experiences allow students to construct meaning, 3) timely, thoughtful feedback is essential to student learning, and 4) a variety of assessment strategies allow students to demonstrate what they know and what they can do. Teaching strategies are tied to each belief statement. These include the use of video and audio clips, online chat sessions for guest speakers and class presentations, online office hours and advising sessions, reflective journaling, threaded discussions, virtual field trips, and group projects. Ethical standards are discussed in relation to online submissions of papers, quizzes, videotapes, and distance supervision of internships including background checks. The department's electronic portfolio assessment program provides the framework for the students to demonstrate their competencies and skills.

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The World Wide Web and its applications for instruction has become a reality, and is being utilized in public schools and institutions all over the world (Gouthro, 2004; Andrews and Marshall, 2000; Diaz and Cartnal, 1999). Online courses are being used to teach computer techniques (Cudiner and Harmon, 2000), chemistry (Lake, 2001), business (Gibson et al., 2001), and adult education (Herrman et al., 2000) to name only a few content areas.

Other researchers wonder about meeting diverse learning styles, addressing constructivist teaching models, and keeping the "personal" element in teaching when using online strategies. Articles exist extolling the virtues of web-based instruction for all of these (Gallant, 2000; Grasha and Yangarber-Hicks, 1999; Ross and Schultz, 1999). Others take a more balanced look at the benefits and possible drawbacks of online instruction for both faculty and students (Hyde and Murray, 2005; Goodyear et al., 2001; Smith et al., 2001; Stopsky, 1999). Issues of concern include increased preparation time for faculty, making scheduled access time for students, the need to stimulate communication and critical thinking in new ways when using online delivery, the rapid change in technology and software packages, and the cost of up-to-date systems and connections on campuses.

For the past six years the Department of Family and Consumer Sciences at the University of Wyoming has dealt with the challenge of meeting the needs of off-campus rural learners without compromising the faculty's shared philosophy of teaching and learning. This paper first lists beliefs about teaching and learning, documenting strategies employed in the online courses to match. The paper will conclude with an examination of ethical issues related to online submission of assignments, quizzes and exams, videotapes, and distance supervision of practicum and internships.

Course Strategies

Our faculty believes that online courses must allow students to meet the identical competencies and objectives as the on-campus delivery of the same courses. While we recognize that the strategies may differ, this is in line with our electronic portfolio student assessment program. Distance students may develop additional skills in the use of electronic technology, and our on campus students may develop more skills in oral communication and formal presentations. We require on campus and off campus students to take our initial perspectives class together online where both groups produce electronic portfolios, get experience with computer skills, work on group projects, and learn about our discipline. We also share the following beliefs about teaching and learning grounded in social constructivist theory (Smith and Ragan, 1999; Kanuka and Anderson, 1998; Vygotsky, 1987). Each belief is listed, followed by examples of teaching strategies that match the intended outcome for students.

Learning a Social Activity

Students bring a variety of experiences to the online environment. Effective teaching strategies allow students to share those experiences in meaningful ways as teachers while they benefit from the experiences of others as learners. In the face-to-face environment, instructors often use large group discussions, small group discussions, shared reflective journals, and group projects to foster interaction, build community, and humanize the classroom environment. The same kinds of strategies can be employed in online classes.

Threaded discussions. Threads are well recognized for allowing students to respond in thoughtful

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ways to questions that stimulate critical thinking and promote the sharing of information. All of our courses utilize threaded discussions. In some cases all of the students will respond to the same set of questions and to at least two other students over the course of a week. We emphasize that it's essential to do more than a one line response, and that responses cannot be posted on the last day before the unit closes since that cuts off the possibility of engaged dialog. In other classes, students are divided into small discussion groups of no more than five students. Questions are then posed that relate to a group project or other activity, such as the exploration of one of the departmental competencies in "Perspectives in Family and Consumer Sciences."

We have found that students also need a forum to share information on a more informal level. For example, one semester several of our students were in the military or were military spouses. The instructor in "Multicultural Influences on the Young Child" created a separate thread for the students, effectively creating a support group for each other outside of the content of the course, but very much a part of the goal of creating communities of learners. In the "Graduate Seminar in Child Development: Cross-Cultural Roots of Minority Child Development" students were encouraged to send photos for a Photo Gallery so that everyone could picture those with whom they were working and learning. A "Malt Shop" thread was created to allow students to chat about their families, their cultures, their work settings, or anything else they wanted to share. A "Help Me" thread was created in several courses to allow students to ask questions about assignments or content. The instructor and other students would respond so that everyone had access to the information and could feel safe about asking and answering.

Virtual field trip. The virtual field trip was a strategy first used in "Parent-Child Relationships." The instructor wanted students on our campus to benefit from talking with other students about similar course topics. She contacted a faculty member at another university and created a mechanism whereby our students could enter a similar course being taught online at that campus. Students could read materials in a document sharing area, then join in a common threaded discussion. This allowed students from a variety of backgrounds and experiences to learn together.

Chat room. The chat room is an excellent tool for online class presentations and interactions with guest speakers. In "Families of Children with Special Needs" students are responsible for a midterm presentation. They conduct research on a handicapping condition and its impacts at home and school. They create materials for the other students to read, then answer questions and lead a discussion in the chat room. Materials include posted websites and fact sheets in a document sharing area. In "The Graduate Seminar in Child Development" this strategy is taken a step further when the student is also responsible for posting and facilitating a threaded discussion question. The students must also post a Power Point presentation in

addition to websites and a fact sheet. Their final paper is available to all of the students in a document sharing area.

When combined with video and audio clips, students have the opportunity to interact with guest speakers in the chat room. In "Directing Preschool and Day Care Programs" students saw an interview posted in the lecture material related to writing successful grants and ways to access external funding that had been videotaped ahead of the chat session. They then read additional material on the topic and entered the chat room ready to pose questions to the interviewee who was there with them in real time. The video clip allowed them to feel more personally connected to the guest speaker, and varied the normal written lecture and assigned readings in the textbook. Another way to accomplish a similar objective would be to make CD or DVDs of the interviews for the course and have them distributed at the same time students order their textbooks.

Active, Hands-on Learning Experiences Construct Meaning

Active learning strategies can and should occur in online courses. Interactivity is accomplished through hot buttons to externally linked pages and websites as a matter of course, but assignments can be created to allow students to engage in direct experiences as well. In "Introduction to Textile Science" students receive a textile sample kit so that they can do experiments related to physical and chemical properties using the fabric swatches and report the results. Students in "Child Development" engage in directed observations of children to learn about the developmental domains and the range of normative and atypical development, then write a final analysis paper using data from their observations.

In "Directing Preschool and Day Care Programs" multiple strategies are combined. Students conduct a shadow study of a director in their local communities after creating interview questions together in the chat room and via email, interviewing the director, shadowing them while taking field notes, then working in groups to write papers comparing best practices with the challenges directors face. These are then posted for all the groups to read. Individuals write reaction papers and submit them to the instructor who provides feedback to the group members.

Timely, Thoughtful Feedback Essential to Student Learning

In many of our courses, initial assignments build into midterm and group projects and papers. Instructors require students to submit drafts of their work before submitting the final paper or project as part of our writing competency. It is therefore essential that students receive timely, thoughtful, detailed feedback on their work. For example, in "Consumer Issues" students are paired with an international student partner to identify a common issue. Following interviews and research, the student uses reflective

journaling to organize information, then submits a draft of the paper to the drop box for instructor feedback prior to the final submission.

The need for timely feedback goes beyond assignments. Instructors are encouraged to put online office hours (sessions held in the chat room) and email policies into their online syllabi. Faculty members have also used the chat room for student advising. In a recent study, Williams (2004) found that students felt most connected to their instructors and expressed the greatest satisfaction with their learning in a course when faculty responded within 24 hours of an email message and provided written responses on their assignments within a week of posting. Additionally, interviewees stated that timely feedback and frequent interactions with distance instructors contributed to a feeling of connectedness to the course content, individual instructors, and program while strengthening their learning. In another study (Williams et al., 2003), students expressed their preferences for the type of feedback provided by instructors on written assignments. Students felt that specific comments and questions coupled with suggestions, detailed grading rubrics, and the ability to discuss specifics with their instructor did the most to improve their writing and understanding of assignment requirements.

A Variety of Assessment Strategies Demonstrate Competence

On-campus and online courses routinely incorporate quizzes, exams, papers, observation reports, presentations and other written assignments. However, these should include authentic assessment opportunities where the students do real-world activities and projects for audiences beyond the instructors (Huba and Freed, 2000; Wiggins, 1998). In "Administrative Internship in Child Development" students conduct a needs assessment, then plan and conduct a staff training workshop or workshop for a local early childhood association. The workshop is videotaped and sent to the instructor. The student is evaluated by the recipients of the workshop via an evaluation form that the student submits along with a self-evaluation. The faculty member views and critiques the video, then sets up a conference call with the student and the on-site member to have a discussion about strengths and weaknesses of the workshop design and delivery. A similar process occurs in "Internship in Child Development." The student videotapes teaching three times during the semester. Videotapes show group time, learning centers, outdoor play, snack and other activities where the student has assumed the role of lead teacher. In both cases, the on-site mentor participates in at least two conference calls and submits an evaluation sheet twice during the semester.

All students in our department, on campus and off, are required to produce an electronic portfolio as part of our student assessment process. All of our students take "Perspectives in Family and Consumer Sciences" online. They begin the self-assessment of their skill level on all six of our competencies: written communica-

tion, oral communication, computer literacy, critical thinking, global diversity, and professional development. They then create an interactive web page or interactive power point presentation to document their abilities. Students use digital photos of design projects, video clips, papers they have written and other forms of electronic documentation. The assessment process continues through their program, culminating in a final ePortfolio in "Professional and Research Perspectives in FCS."

Ethical Issues

All students must adhere to the University's policies on plagiarism, which are listed in the online course syllabi. We have found that the online environment creates different kinds of copying issues. For example, we have had students responding to a thread by copying and pasting something from a website, or even from another student. Others have written papers without internal citations, citing sources in the bibliography, or putting material taken directly from a source into quotation marks. In our "Perspectives in Family and Consumer Sciences" course, students are exposed to ethics as part of their professional development, writing, and computer literacy competencies through readings, assignments, quizzes, and self-assessment activities. For example, students discuss email etiquette and plagiarism with a faculty member in a chat session devoted to the writing competency. The faculty member first posts readings and questions the students need to come prepared to discuss. During the chat session, the instructor poses additional questions and the students must respond citing evidence from the readings in addition to their personal experiences. In several other courses students analyze case studies related to professional ethics using multiple ethical frameworks and codes of ethics.

Online exams and quizzes could conceivably be taken by someone other than the student. While we use projects more than tests in our curriculum, a mechanism does exist for professors who opt for exams. A professor can create exams that can only be accessed with a password. The student must locate a faculty or staff member at another institution who is willing to proctor the exam. The password is sent to that proctor. The student must show a photo ID at the time of the exam, and then the proctor puts the password into the system, giving the student access to the exam.

Students in our degree programs will be working with children and adults in a variety of courses and settings. All students in our program must submit proof of a criminal background check within one semester of enrolling. We require the procedure their home state requires for licensed home providers and teachers. Failure to do so will result in the student being dropped from the major. In "Child Development" students must observe children in order to more fully understand developmental domains. Students who were currently teachers were able to observe students in their own programs as part of their normal student evaluation plan. However, we felt that beginning students who

were not currently working in licensed programs should not have contact with children other than children of family members with written approval. To accommodate those students who did not have children of their own or family members with young children, an alternate was provided: Students not working in programs would need to conduct the observations in a public setting and not interact with the children. For example, a physical development observation might be done at an elementary school soccer match that is open to the public.

For upper level courses, such as practicum and internships, students must have a signed legal liability form on file with our office showing that they have the director's permission to work in a program with adults or children. The form was created by lawyers in the Office of General Counsel. The form is then sent to our office and forwarded to the Vice President for Administration for approval. Only nationally accredited sites are approved to assure the necessary standard of quality.

Summary

It is possible and desirable to use online teaching strategies grounded in social constructivist theory. Using the strategies described in this paper increase student engagement, create communities of learners, and support meaningful student assessment. Individual courses and online degree programs are strengthened when the faculty involved share beliefs about teaching and learning and articulate those beliefs. Principles of sound pedagogy are the same in face-to-face and distance classes. The challenge in online courses is to think beyond trying to duplicate exactly what occurs in on-campus courses and think instead about the objectives, competencies, skills and experiences one wishes to create.

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