

University of Northern Iowa
UNI ScholarWorks

Graduate Research Papers

Graduate College

2006

Transferring a face-to-face course to online instruction at a community college

Brenda Heitmeyer

Copyright ©2006 Brenda Heitmeyer

Follow this and additional works at: <https://scholarworks.uni.edu/grp>

 Part of the [Curriculum and Instruction Commons](#), and the [Online and Distance Education Commons](#)

Let us know how access to this document benefits you

Transferring a face-to-face course to online instruction at a community college

Abstract

This paper is a literature review of research related to the differences between developing an online class and a face-to-face class. Differences include how the course material is presented, how to engage the learners, and how students are learning in an online environment. Research is presented from various sources regarding considerations for online instruction and includes statistics on online student learners. The literature states that the instructor assumes a different role as a facilitator for online collaboration in a learning environment.

Instructors need to consider the differences presented by distance education when creating online instruction. The advantages and disadvantages of online classes are explored for both the learner and the instructor. Discussed are current online concerns of accreditation, intellectual property rights, and student cheating. As online classes become more widespread throughout education, community colleges need to offer quality online instruction to remain competitive.

TRANSFERRING A FACE-TO-FACE COURSE TO
ONLINE INSTRUCTION AT A COMMUNITY COLLEGE

A Graduate Review

Submitted to the

Division of Instructional Technology

Department of Curriculum and Instruction

In Partial Fulfillment

Of the Requirements for the Degree

Master of Arts

UNIVERSITY OF NORTHERN IOWA

By

Brenda Heitmeyer

April, 2006

This Review by: Brenda Heitmeyer

Titled: TRANSFERRING A FACE-TO-FACE COURSE TO ONLINE INSTRUCTION
AT A COMMUNITY COLLEGE

Has been approved as meeting the research requirement for the
Degree of Master of Arts

4-27-06
Date Approved

4-27-06
Date Approved

4-27-06
Date Approved

J. Ana Donaldson

Graduate Faculty Reader

Mary C. Herring

Graduate Faculty Reader

Greg P. Stefanich

Head, Department of Curriculum and Instruction

ABSTRACT

This paper is a literature review of research related to the differences between developing an online class and a face-to-face class. Differences include how the course material is presented, how to engage the learners, and how students are learning in an online environment. Research is presented from various sources regarding considerations for online instruction and includes statistics on online student learners. The literature states that the instructor assumes a different role as a facilitator for online collaboration in a learning environment. Instructors need to consider the differences presented by distance education when creating online instruction. The advantages and disadvantages of online classes are explored for both the learner and the instructor. Discussed are current online concerns of accreditation, intellectual property rights, and student cheating. As online classes become more widespread throughout education, community colleges need to offer quality online instruction to remain competitive.

TABLE OF CONTENTS

ABSTRACT.....	iii
INTRODUCTION.....	1
METHODOLOGY.....	3
ANALYSIS AND DISCUSSION.....	4
Differences for Instruction.....	5
<i>Designing for Online Instruction</i>	5
<i>Delivery</i>	7
<i>Visuals</i>	9
<i>Time Considerations for Instructors</i>	10
<i>Additional Considerations</i>	11
Learning Differently.....	11
<i>Adult Learners</i>	12
<i>Time Consideration for Students</i>	13
<i>Challenges</i>	14
<i>Student Advantages</i>	17
<i>Learning Contracts</i>	18
Engaging Learners.....	18
<i>Learning Communities</i>	19
<i>Phases of Engagement</i>	20
<i>Hybrid Learning Environment</i>	22
Additional Concerns.....	23

CONCLUSIONS AND RECOMMENDATIONS.....27

REFERENCES.....33

Attachment A37

INTRODUCTION

The purpose of this literature review is to explore the differences between face-to-face instruction and online instruction when creating a course, particularly in the community college setting. The audience, delivery methods, online activities, and other considerations will be described. The reviewer is interested in learning more about online instruction because she will be switching a face-to-face class to a class with online delivery in the near future.

Online instruction is a vital element in the community college curriculum. An increasing number of online classes are added every day. An analysis of the existing research on the differences between face-to-face instruction and online instruction is helpful in creating the best online course possible since online instruction has different rules as far as delivery methods and activities to engage the learners.

Community colleges are struggling to fulfill the need for online courses with fewer resources than are available for larger colleges and universities. Improvements are still needed for online standards and offering quality distance education at the community college level. The student demographics are an extra consideration for community college online instructors. College students are typically older adults with jobs, families, and other obligations. Technology concerns exist for both the college and the students.

There are several questions the reviewer wanted answered in regards to online instruction at a community college: How is the creation of instruction for an online class different than instruction for a face-to-face class? How is learning different online than in

a face-to-face classroom? What are the best methods for engaging the learner in online courses at a community college?

METHODOLOGY

The methodology used to locate the resources for this paper includes various online databases and books. The online databases include ERIC (SilverPlatter) and InfoTRAC. The online library catalog used to locate sources was UNISTAR which is available through the University of Northern Iowa's Rod Library Catalog. The reviewer was able to locate full-text journal articles from the online databases. The review was also conducted through various Web sites and printed material. The sources were selected based upon the content and relevance to the research questions. The information found for this paper was evaluated based on quality research, relevance to the topic, and if the material was recently published. Authors were investigated to see if they had previous work published and if their work was credible. Journal articles were verified as being peer reviewed and the study data as being significant.

Various keyword/descriptors were used to find the information related to this paper. The descriptors/keywords used for this paper included: (a) online, (b) face-to-face, (c) teaching over the web, (d) distance education, (e) WEB courses, (f) community college, (g) traditional versus on-line, (h) web based instruction, (i) World Wide Web, and (j) Internet.

ANALYSIS AND DISCUSSION

Online courses are becoming more widespread throughout community colleges across the United States. L. Sullivan (2001) suggests “the question is not whether community colleges will be players in the new world of learning but in what way and how soon” (p. 4). Consider the fact that Chesebro (1999) reported that in 1996 only 26% of the U.S. population had access to the Internet. Compare that to the latest statistic for 2004 reported by Oblinger and Oblinger (2005) that 74% have Internet access. With the growing number of Internet users, more students are exploring online options to complete their education. Community colleges have felt compelled to adopt online education to compete with other institutions but they typically lack resources that are available to the larger colleges and universities (Cox, 2005).

L. Sullivan (2001) also considered the technological sophistication of students now entering community colleges and that “these students expect far more advanced learning experiences” (p. 5). Community college students are composed of both traditional and nontraditional students. In his research on community college students, P. Sullivan (2001) found that community college students typically live busy, richly complex lives, and online courses offer more options and flexibility to enable them to meet their goals. Students have options of obtaining entire degrees from online universities without ever stepping into a classroom. According to Cox (2005) “private, for-profit universities such as Phoenix University ... do not serve the students whom community colleges tend to enroll” (p. 1772). Community colleges need to remain competitive by offering a selection of quality online courses.

Differences for Instruction

This reviewer wanted to answer the question: How is the creation of instruction for an online class different than instruction for a face-to-face class? Creating online instruction has become a necessary marketing tool for colleges but many instructors are not properly trained for this new delivery method (Nunaley & Warner, 2002). The development and design of an online course presents different challenges for instructors. “With special efforts made, distance education can actually enhance learning experiences, expand horizons, and facilitate group collaboration” (Herring & Smaldino, 2005, p. 24). Learners have different needs that the instructor should consider for distance education. There are also various methods for engaging the learner through online activities.

Designing For Online Instruction

Instructors need to consider several differences when designing and developing online instruction. Hawkrige (2002) lists the following considerations: (a) Putting lecture notes into HTML for the web simply is not good enough; (b) design of web sites for teaching and learning calls for an understanding of the students for whom the site is intended; (c) understanding the objectives students should be able to reach; and (d) including capabilities of making the site interactive. Online instruction should follow the same basic standards of helping students learn and utilize the objectives of the class. Designing online instruction should begin with the learning objectives and continue with the creation of an online environment that allows students to obtain those goals. “Good instructional goals and objectives should form the basis for instruction, regardless of the chosen medium” (Herring & Smaldino, 2005, p. 38).

An instructional web site should be organized well so the user finds it easy to use. Palloff & Pratt (2001) believe that “a well-constructed course is one that is logical in its design, easy to navigate, and inviting to the user” (p.10). Suggestions for online instruction:

- If it works in a regular classroom, it probably will work in electronically mediated instruction with some adjustment.
- Consider a variety of techniques, but think interactively so students feel part of a learning community, sharing common goals and purpose.
- Combine techniques, a new learning environment opens the door to creative planning.
- Don't be afraid to experiment, to explore, to be creative. (Herring and Smaldino (2005, p. 40)

Online instructional design can also include technology that is easier to incorporate than in a regular classroom. Simulated exercises can be included that allow students to complete activities in a simulated environment via the Internet. Video clips and podcasts can be added to allow students to listen and/or view information related to the class. Web pages can contain links to articles and sites of interest for the students to explore. The web environment presents a number of educational opportunities such as the many informational resources that can be seamlessly integrated into the class (Smith, Caris & Ferguson, 2001).

Delivery

Ali (2003) lists several considerations when designing and implementing online learning: (a) appropriateness of the Internet, (b) course content, (c) instructional styles, (d) student's skills and interest, (e) access, (f) quality control, (g) time management, and (h) communication. Online courses need to have smaller units that students can complete as the course progresses. According to L. Sullivan (2001) several ideas for designing online instruction includes "... design learning content in small, logical 'chunks' with sharing and reuse in mind" (p. 14). Modules can be added to the web page as the class progresses so students have access to the material before assignments are due. Hawkrigde (2002) states "... course designers should recognize the importance of collaboration, dialogue, and debate in knowledge construction and expect learners to demonstrate their ability to work with the content and defend their judgments" (p. 273). Learners need to feel they are part of a learning community in an online class through discussions and activities.

The same information will be available for online students as a regular face-to-face class but the presentation and design will need to be altered. According to Palloff and Pratt (1999), "No longer is there a unidirectional imparting of knowledge by an 'expert' on a particular topic" (p. 5). Online students will be discussing and learning between themselves within the environment. Hutton (1999) concluded that the "... key distinguishing factor between traditional face-to-face teaching and online facilitation is the dramatic shift in our role from an instructor centered and more authoritarian classroom environment towards a more student centered, collaborative and egalitarian

learning environment” (p.12). Students will be expected to contribute to the online learning environment through discussions and activities among the learners themselves. Hutton also stated “The instructor assumes a different social role; to promote human relationship, develop group cohesiveness, maintain the group as a unit, help members work together in a mutual cause, and form a supportive learning environment” (p. 8).

The design of the course should take into consideration both synchronous and asynchronous communications between students. Synchronous tools would include chat rooms and virtual reality environments where students participate at the same time. Asynchronous tools include email, discussion threads, and postings that can be done at any time by various students. Synchronous tools would not work well if the learners are distanced globally since time zones would be a factor. Other challenges presented by synchronous tools are: (a) coordinating a meeting time, (b) trying to all talk at the same time when a large group participates in a chat room, and (c) when technology fails (Conrad & Donaldson, 2004). Asynchronous tools work in an online environment since students will be logging on at different times of the day. Students have a chance to compose their answers before posting or emailing, allowing for a thoughtful in-depth answer. Conrad and Donaldson (2004) suggest that “... asynchronous activities allow each voice to be heard, whether in a small or large group, helping learners feel that they are part of a learning community and increasing their motivation to interact” (p. 22). Instructors need to consider using both synchronous and asynchronous communication and applying the correct tool to the expected outcome and conditions of the class.

Visuals

Students are, for the most part, only able to see the content of a web page so the visual and text quality becomes essential. “Visuals become critical to a successful learning experience in an online class” (Herring & Smaldino, 2005, p. 51). Pages and pages of text requiring students to scroll as they read will not work. Images, pictures, icons, and even audio and video clips should be added for a variety of visual and learning aids. “The ability to create a visually appealing site does create greater interest on the part of the participants” (Palloff & Pratt, 1999, p. 65). Web pages should be kept simple in design to not distract the online learner. “Continuity of design is necessary for a well designed web site to improve the students’ ability to understand and use the information” (Herring & Smaldino, 2005, p. 85). Equally important is the standardization of pages by repeating icons and allowing students to navigate easily through the web pages.

Different cultural and ethnical groups should be considered when selecting visuals because they could be interpreted differently. “It is essential to be sensitive to the differences in cultural backgrounds of the students in the class” (Herring & Smaldino, 2005, p. 52). Instructors also need to consider the different browsers that may be used and the loading time for learners who have slow Internet connections. The instructor’s choice of pictures and icons should reflect the web environment and not be too large in size to load in a reasonable amount of time. “Well designed visuals can benefit student learning by helping to focus their attention on the important information” (Herring & Smaldino, 2005, p. 54). Color, font and presentation are important considerations for creating web pages.

Time Considerations for Instructors

Another consideration for instructors is the amount of time an online class can take. According to Smith, Caris, and Ferguson (2001),

...web-based distance classes require considerably more work, often including hundreds of hours of up-front work to setup the course. Once the course begins, the long hours continue. . . . instructors must respond to threaded discussion questions, evaluate assignments, and above all answer questions clearing up ambiguities, often spending an inordinate time communicating by email. (p. 4)

Instructors should plan on checking discussion threads, email, and assignment drop-boxes daily. Time comparisons done by Palloff and Pratt (1999) of an online versus a face-to-face class for one week produced the following statistics: Preparation and follow-up was comparable with four to five hours per week for both types of classes. But class time itself was quite different with two and one half hours per week for face-to-face classes compared to fourteen hours per week for an online class.

Smith, Caris, and Ferguson (2001) also stated that “this great amount of work sounds intimidating, however, most online instructors look forward to their time spent online as time away from their hectic face-to-face job, a time spent in an alternate abstracted more intellectual world” (p. 4). Online instructors frequently discover that they enjoy *watching* the students learn from each other through discussions and activities. A positive side of the amount of time involved is the (a) student’s level and quality of participation, (b) the excitement of watching groups of students actively engaged with the material, and (3) the exhilaration felt by the online instructor (Palloff & Pratt, 1999).

Additional Considerations

There are several additional considerations when setting up an online course. Faculty may require additional training on web page creation and the various add-ons to web pages. According to Nunaley and Warner (2002), training issues include items such as email, chat rooms, instant messaging, online etiquette, web-authoring software, use of *emoticons*, threaded discussions, and assisting students with basic technical issues. "The demand for online courses has increased so rapidly that it often has surpassed the expertise of faculty to anticipate the needs and psyche of online learners" (Stumpf, McCrimon, & Davis, 2005, p. 360). Not all instructors have the technical skills required to setup and conduct an online class. A study done by Wang, MacArthur, and Crosby (2003) revealed that:

- (a) instructors realize that technology plays a large role in their lives,
- (b) technology has potential to contribute to increased learning,
- (c) that their confidence in their computers skills was high, and
- (d) in spite of the other points, they feel that the increased time it takes to design online courses may not be worth the effort. (p. 29)

Even though instructors have very good technical skills, a majority are still not confident enough to design online instruction.

Learning Differently

This reviewer wanted to answer the question: How is learning different online than in a face-to-face classroom? "It is clearly extremely challenging for any process of education, let alone one carried out at a distance, to meet the needs of all learners"

(Sampson, 2003, p. 114). Community colleges typically have a diverse population including students directly out of high school and nontraditional older students

Adult Learners

Community college enrollment is comprised of the least-advantaged students who are considered poorer and harder to education than the student population of 4-year colleges and universities (Cox, 2005). Community colleges typically have an open-access admissions policy and serve a wide variety of students. "Community colleges make up only about one-third of all U.S. colleges and universities, but enroll nearly half of all minority students in higher education" (Halsne, 2002, p. 40). Students at community colleges are typically older and many have full time jobs. According to a survey conducted by Halsne (2002), online students typically are visual learners and there are a higher percentage of women than men. The average woman in an online class is 34 years old, employed part-time, and has children living at home. Women found the following advantages when taking online classes: (a) flexibility, (b) not having to hire a babysitter, (c) being home in the evening, and (d) enjoying the personal interaction online (P.Sullivan, 2001). Distance education is an option that allows busy students the chance to complete their classes from home.

To identify the characteristics of the adult learner, online instructors can start the class off with a survey to find out more about the students in the class. The survey could include information about prior technical skills, backgrounds, interests, and expectations. "The more the instructor knows about the students, the better he or she will be able to prepare an effective learning environment" (Herring & Smaldino, 2005, p. 22).

Community college students represent a very diverse population and some of the students will be taking an online class for the first time. Conrad and Donaldson (2004) recommend allowing the student, a novice online adult learner, to use online tools for a non-graded assignment before requiring them to use the tool in class. This assignment allows the student to try out the function in a more comfortable environment before being graded on not only their assignment but also if they could use the tool properly. Examples would be uploading an assignment to a drop box or posting a comment in a discussion thread. Instructors could also pair up students with varied skills to help each other in class. "... an instructor can establish an informal mentoring system by matching a more technologically skilled student with one with more limited experience" (Conrad & Donaldson, p. 38). This idea would decrease the amount of questions to the instructor and allow the more skilled student a feeling of accomplishment.

Time Considerations for Students

Students typically feel that the amount of time required for an online class is more than a regular class. The time involved each week should be checked against a total of what a student would spend in a classroom (typically 3 hours per week) plus the amount of time to do weekly assignments and readings (typically 3-6 hours per week). Palloff and Pratt (1999) suggest that "instructors be prepared to help students manage their time online to avoid both overload and the potential for developing addiction to the medium" (p. 51). Instructors can setup weekly homework deadlines and allow ample time for the completion of assignments to help the student stay on track. Tracking student activities

and participation is another method used by online instructors to ensure students are not falling behind in their work.

Students need to be prepared for the amount of time and effort entailed in an online course. According to an opinion survey of community college online students (Lansing & Williamston, 2002): “More than 24% say their online course was more difficult than they expected. For more than 65% however, the level of difficulty was about what they expected ...[and] ...10% (of students) failed to complete their latest online course” (p.6). Students can quickly fall behind and become frustrated in an online course. Cox (2005) discusses a concern with low retention rates in online courses and the lack of analysis from community colleges into why those retention rates are so low.

Challenges

There are several advantages and disadvantages for students taking an online course. According to Hutton (1999), “For most students it became important to discipline themselves to a consistent schedule of reading and study time” (p.6). Students should set aside a certain number of hours each week to complete their online assignments. Conrad and Donaldson (2004) believe “Students cannot be passive knowledge-absorbers who rely on the instructor to feed information to them ... success in an online learning environment depends on the use of instructional strategies that support the shift in roles and the development of self direction” (p. 7). Online students will need to actively participate in their class and not count on an instructor to remind them of their responsibilities.

One of the disadvantages of online learning is the lack of Internet access for the financially disadvantaged population. According to Cox (2005), "...online education is relevant to the entire field of higher education, it is critically important for the community college sector, which enables access to higher education for the least-advantaged students" (p. 1756). Students without Internet access at home will need to spend additional hours in a college computer lab when taking an online class. There is also a lack of technical support for users who are not technically savvy. "Community colleges must recognize the wide technological gap that exists between some of the providers of knowledge who were trained in the last century and 21st-century receivers of knowledge whom they now teach" (Stumpf, McCrimon, & Davis, 2005, p. 358-9). Other negatives listed by Yang and Cornelius (2004) include delayed feedback from instructor, unavailable technical support from instructor, lack of self-regulation and self-motivation, sense of isolation, and monotonous instructional methods. Community college instructors typically become the technical support for their online students unlike larger universities that have their own technical support department. A well designed online class will include creative instructional methods as well as activities to encourage the students to become part of the online learning environment.

A number of community college students are just not ready to take an online class. Marshalltown Community College students are encouraged to take a self-quiz to help determine if distance learning is the right answer for their educational needs (Refer to Attachment A). The survey asks questions regarding learning styles and the need for feedback. Students who need to be prompted to get things done, or who require frequent

feedback from their instructor are discouraged from taking an online class. Online learning works best for students who are self-motivated and able to discipline their time to complete assignments. The following characteristics were found to be true for students attracted and successful with distance education by the California Distance Learning Project (as cited in Herring & Smaldino, 2005):

- are voluntarily seeking further education
- are motivated, have higher expectations, and are more self-disciplined
- tend to be older than the average student
- tend to possess a more serious attitude toward their courses.

The nontraditional community college student would typically possess the qualities necessary to be successful in an online class.

One of the factors relating to retention is the computer skills that the online learner possesses. According to a study done by Dupin-Bryant (2004), the pre-entry variables related to retention in an online class include prior computer training courses and years of computer experience. According to Sampson (2003), students should analyze their needs when choosing a distance learning course. Only after immersion in the actual online course might it become apparent that there are problems. Community college students vary in their technical skills and many are considered non-traditional students. A large majority of the non-traditional students did not grow up with computers and are not equipped to handle the technology required for an online class (Manner, 2003). Manner recommends starting with an in-person orientation, followed by interaction, and slowly adding technical components to online curriculum. Students

should be able to handle the technology necessary for a class or they will be setup to fail. A remedial technology class could be offered to bridge the gap between the less technically skilled students and those that are more experienced.

Student Advantages

One of the advantages students expressed is the opportunity to express their opinions in an online class. According to Hutton (1999),

Students often expressed the sheer joy they felt in belonging to the cohort group and having a sense of place where exploration of their thoughts and feelings were encouraged. Many noted that they experienced freedom to think, challenge, share perspectives, and nurture a growing sense of genuine commitment to the group.

(p. 6)

Many online students find that they enjoy the freedom of speech that is encouraged in an online environment. Smith, Caris, and Ferguson (2001) conducted a survey of online instructors that concluded "... there is an initial feeling of anonymity, which allows students who are usually shy in the face-to-face classroom, to participate in the online classroom" (p. 5). Students typically have time to reflect and compose a written answer in an online class. Due to the extra time, their answers are typically more thoughtful and complete.

Online students also enjoy being active participants in an online learning environment. Ellsworth and Ellsworth (2003) felt that "... constructing meaning and building community works better in the web world than in any other learning situation. Communications are rich, address the subject of the course and give a clear indication of

the level of understating” (p. 6). Another advantage was described by Rossett & Sheldon (2001) as “on-line programs can offer users control over their own experiences, while simultaneously providing guidance for next steps” (p. 192). Students in an online class often enjoy the self-directed atmosphere of the distance education environment.

According to Lansing and Williamston (2002), a total of 79% of current online students plan to enroll in another online course in the future.

Learning Contracts

Learning contracts can be utilized to allow the student to choose their own course objectives in an online class. Boyer (2003) used action research to test the use of learning contracts chosen by online students for their requirements during a class. Levels of planning, action, and review were used to establish the scaffolding to help the self-directed learner. Students enjoyed the chance to choose their own objectives and make use of their preferred learning styles. Boyer (2003) concluded her study with “final results far exceeded professor expectations in both overall knowledge acquisition and outcomes-based evidence” (p. 381). The graduate students in Boyer’s study were able to create their own learning goals and tailor their learning needs to their specific interests and specialties.

Engaging Learners

This reviewer wanted to answer the question: What are the best methods for engaging the learner in online courses at a community college? The literature supports the fact that students need to feel comfortable in the learning environment and part of a larger group. The results of a study done by Johnson, Aragon, Shaik, and Palma-Rivas

(1999), concluded that “student satisfaction with their learning experience tends to be slightly more positive for students in a traditional course format although there is no difference in the quality of the learning” (p. 6). Current trends are discovering that some students prefer the online environment because of their positive experiences as participants in an online learning community (Conrad & Donaldson, 2005; Ellsworth & Ellsworth, 2003).

Learning Communities

Ellsworth & Ellsworth state “Constructing meaning and building community works better in the web world than in any other learning situation. Communications are rich, address the subject of the course, and give a clear indication of the level of understanding” (p. 6). Once students become comfortable in their online environment they are ready to communicate with others in their group. The instructor is responsible for creating a comfortable environment where students begin to interact with each other through various activities. “Interaction and collaboration is not intuitive to many adult learners who have been educated in a predominantly lecture-based environment” (Conrad & Donaldson, 2004, p. 9). Online instruction will begin with typical documents such as the agenda and syllabus then quickly change to guided activities and assignments that encourage collaboration between students.

There are several methods for engaging the learner in online courses at a community college. According to Hutton (1999) “... use public and private messages to engage in feedback on all goals and assignments ... and use complimentary distance technologies (video, audio, telephone) when possible” (p. 6). The important instructional

consideration is to keep learners active and create an atmosphere that enables them to feel part of a learning community so they do not feel like they are learning all alone. Students are meeting the course objectives plus expanding their growth through transformative learning. Palloff and Pratt (2001) define transformative learning as the co-creation of meaning and knowledge that can occur in the collaborative online classroom. Students not only learn but also are able to use their knowledge to apply that learning to real world situations.

Phases of Engagement

The instructor's role is quite different in an online environment in relation to the different roles of the student. According to Conrad and Donaldson (2004), "... the involvement of the learner in the course, whether one calls it interaction, engagement, or building community is critical" (p. 6). As learners gain more confidence the instructor can then guide them through the phases of engagement. The role of both the instructor and the student changes as the environment becomes more cohesive and collaborative. The authors have created four phases of engagement that include:

- Phase 1: (weeks 1-2) the learner is considered a newcomer and the instructor the social negotiator. The process consists of the instructor providing activities that are interactive and that help learners get to know one another.
- Phase 2 (weeks 3-4) the learner is the cooperator and the instructor is the structural engineer. Process includes instructor formed dyads of learners and providing activities that require critical thinking, reflection and sharing of ideas.

- Phase 3 (weeks 5-6) the learner is the collaborator and the instructor is the facilitator. Process includes instructor provided activities that require small groups to collaborate, solve problems, and reflect on experiences.
- Phase 4 (weeks 7-16) the learner is the initiator/partner and the instructor is the community member/challenger. Process includes group presentations and projects (Conrad & Donaldson, 2005).

Designing a course using the phases of engagement, allows instructors to adjust their role as the students adjust to their online environment.

Activities are important to engage students in the online community and to help promote the feeling that they all belong. Each phase allows the learner to become more independent and more engaged with the online learning community. Activities can accomplish several things: (a) pulling in shy students, (b) bonding students together, and (c) creating an atmosphere of a learning community. Activities can be simple ice-breaking techniques such as describing yourself in one word, or more complex group activities like role playing. "Nontraditional ... students often bring a wealth of life experiences to the course that can be used as a springboard for meaningful activities" (Conrad & Donaldson, 2004, p. 84). Learning happens best in an environment where ideas can be shared, debated, and discussed. The community college setting is a wonderfully diverse population of students that will bring different experiences into the online environment. Students will learn from each other by sharing their experiences through discussions and activities.

Hybrid Learning Environments

Hybrid learning environments typically include time spent face-to-face as well as online instruction. Students can get to know the instructor and the other students before or during the online class environment. Herring and Smaldino (2004) discuss the choices of meeting for the first half of a class or just meeting face to face once a month. Some students feel more comfortable being able to *see* their peers in person. Without a face to face component, online groups will typically setup several in-person meetings themselves to work on large assignments. Videoconferencing would be another avenue to allow students to feel more comfortable in their learning environment. Boyer (2003) recommends a face-to-face orientation meeting before online instruction begins and a closing meeting at the end of instruction. An orientation meeting allows students to meet each other in person and allows the instructor the opportunity to explain objectives, technology, and procedures.

Concerns with cheating online have convinced some online instructors to require their students to take their final exams in-person. Typically this can be at the college from which the course is offered or at a local library if an appropriate proctor can be obtained. Online instructors get to know their students' style of writing through an online class and believe they would know if someone else was doing their work for them. With entire degrees offered online, concerns with someone other than the student doing the work becomes a bigger possibility.

Additional Concerns

New critical concerns regarding online education include accreditation, solid technological infrastructure, and intellectual property rights (Palloff & Pratt, 2001). Some online instruction classes have been created so quickly that the academic quality is being questioned. According to Palloff and Pratt (2001), "... some feel that new standards need to be developed because online courses are not a reproduction of those delivered fact-to-face" (p. 13). The delivery method should not affect the learning objectives that need to be achieved for each class. Dr. Chris Russell, Marshalltown Community College CAO, states "Our objectives are the same for the same course no matter the delivery method: ICN, online or face-to-face and our previous research indicates similar patterns of student success in each of these modes of instruction" (C. Russell, personal communication, April 18, 2006). Cost is another consideration for the course authoring software used and if additional costs should be passed on to the students. Additional costs are a big concern for community colleges which have typically been less expensive for students than four year colleges and universities.

Faculty have somewhat been left out of the loop when choosing which classes work well online and who could best create and deliver them. "Faculty ... object to the creation and spin-off of for-profit arms of universities devoted to the development and delivery of online courses, citing poor quality" (Palloff & Pratt, 2001, p. 13). There should be a good planning process in place for online expansion instead of the rush to get courses online quickly. A plan of action should be in place for future expansion and which courses are going to be offered online at a later date.

A critical question is: Who owns the material created and posted for an online class? A controversy has erupted over the property rights belonging to the institution themselves or the faculty member who created it. The institution might own the server where the web pages reside but typically in a face-to-face class the instructor has full intellectual property rights (Palloff & Pratt, 2001). In a community college setting the web pages may reside on an outside server that is administrated by another college or business. Standards should be put into place to make sure only students that are enrolled in the class have access to the material through logon names and passwords.

Administrative issues that need to be considered for online teaching include class management, faculty time, and compensation. This reviewer has already expanded on the extra time involved for an instructor to create and conduct an online class. Should the instructor be compensated more for online instruction than face-to-face instruction? Should a student be required to pay more for online instruction? Typically there are additional technology costs such as the purchase of the online management software plus a server fee to store the web pages. But, there is no cost for the use of a room or for copying material to be handed out to students. Is it fair to charge students more for the additional costs of an online class versus a regular face-to-face class?

Another administrative issue is class management for online classes. Students need to feel comfortable in an online environment and the instructor should be aware of any *harassing* of students even in an online environment. According to Herring and Smaldino (2005), "In the distance setting, the issue of class management becomes an even more important issue to address because of the separation of instructor and

students” (p. 58). Rules and guidelines should be spelled out in advance (just like a face-to-face class) so students know exactly what is expected of them. Instructors need to carefully monitor discussion threads and chat areas to insure that all students are being treated fairly and ethically. Tracking software can allow instructors to view all of the material posted on a web site as well as keep track of how many times a student has logged on and participated. Conrad and Donaldson (2004) discuss the use of a newer software tool, ForumManager, that allows the instructor to evaluate each learner’s postings without reading everything.

Community colleges do not always have the resources necessary to handle the storing of web pages or the technical support required by students. eCollege is a consortium that allows community colleges to use their services to provide online classes. Dr. Art Lendo, President of Pierce College, states “Our partnership with eCollege greatly facilitates the fulfillment of our mission to offer high quality, affordable and convenient online degrees to primarily working adult learners, giving them a competitive edge in the modern workplace” (About eCollege, nd). The advantages of using eCollege’s services would include technical support for the student and a broad range of class offerings. There is a significant fee paid by the college plus an additional fee for the students. The community college would not have any control over the content of the classes and they would be taught by other instructors. The biggest disadvantage would be losing control of the content of classes offered online and the possibility that the online class would not match a regular face to face class taught at the community college.

Another serious issue is the selection of online faculty. "Not all faculty personnel are suited for the online environment, and academic institutions are making some serious mistakes when deciding who should teach" (Palloff & Pratt, 2001, p. 21). Sometimes the *expert* in the field is not the best person to create the instructional design for an online class. An instructor might be a dynamic presenter but not possess the technical skills to create a good online class. The instructor also has to be the type who will relinquish control of his or her class and allow the learners to create their own learning community. They need to be comfortable not only with the technology but also the entire distance learning environment. Palloff and Pratt (2001) offer that, "a good measure of openness and flexibility is key to a successful transition to the online realm" (p. 22). Since students are involved in learning communities they are guiding the topics and discussions that are important to them. Instructors need to allow this to flow along naturally and serve as a facilitator and guide.

There are numerous considerations when changing a face-to-face class to an online environment at a community college. Examples from the literature regarding the differences to be considered when designing and developing an online class have been presented. The differences for student learners and the methods to engage learners in an online learning community have also been documented. Community colleges are immersed in creating online classes to compete with other colleges and universities. This literature review has outlined many of the areas of concern that need to be addressed in order for community colleges to offer quality instruction in an online environment.

CONCLUSIONS AND RECOMMENDATIONS

This review has answered the questions put forth earlier regarding online instruction at a community college: How is the creation of instruction for an online class different than instruction for a face-to-face class? How is learning different online than in a face-to-face classroom? What are the best methods for engaging the learner in online courses? According to the literature, researchers have conducted surveys to learn about the differences between online instruction and face-to-face classes. Community colleges are joining the online bandwagon by offering more of their classes online. Going from a face-to-face class to online instruction requires planning. There are several considerations when switching a regular class to online instruction including: (a) design and development, (b) the instructor's role, (c) instructor training, (d) visuals, (e) amount of time involved, (f) adult learners, and (g) how to engage online learners. Community college students are a diverse population that learns differently in an online environment. There are additional challenges and also advantages to online learning. Instructors become facilitators and social negotiators as they guide students through activities online. Students also learn differently online and have expressed the advantages and disadvantages that they have found in online classes. Learner activities become very important in the process of engaging online learners. Each of these areas has been explored in this review to examine the considerations instructors need when creating an online course

This reviewer believes that the research documented the considerable differences between face-to-face instruction and online instruction. These differences need to be considered when transferring a regular class to an online class. Instructors should prepare themselves for the amount of time an online class takes and how important it is to give students timely feedback. The creation of an online class has additional considerations regarding the visuals, synchronous and asynchronous communication, and how well the pages flow from one to the next. Instructors need to create an online environment that is easy to read as well as functional for all types of technology.

Community college students can face additional challenges in the online environment. Community colleges have a diverse population that needs to be considered when offering classes online. Not all students are disciplined and mature enough to handle online classes. Some students need the structure of a face-to-face class and the guidance of a *live* person to set their deadlines. Students need to bring into an online class some previous experience with web technology. A developmental class could be offered as a remedial class for students who do not have the required technological skills. This class could be a prerequisite for their first online class with the option of anyone *testing out* of the class. Technology support should be offered for online students enrolled at a community college. Ideally this support would come from someone other than the instructor themselves.

Standards are needed for both the quality of online education and the delivery software used at a community college. Students at Marshalltown Community College could end up taking online classes in WebCT, Blackboard, Pageout, or Compass. This

reviewer is a faculty member at Marshalltown Community College and believes that a standard format is needed. As we progress with more online classes, we need to have a standard format for the delivery of the class and host the web pages on our own servers. The quality has remained constant because the online classes meet the same objectives as the face-to-face classes. Costs need to be analyzed to see if online classes should cost more than regular face-to-face classes and if instructors should be compensated at a higher rate for their extra time. Data should be collected regarding student satisfaction with their online experience and statistics kept on the retention rate. Qualitative data could be gathered from students who drop online classes and see where the problems are arising. Additional data could be obtained from students who completed the course successfully to learn more about their characteristics and qualities that allowed them to be successful. Marshalltown Community College is currently piloting an online course satisfaction survey and Dr. Russell, CAO, believes we would also benefit from student demographic information on future surveys (C. Russell, personal communication, April 18, 2006).

Additional training for instructors should be provided to allow teachers to learn new technologies as well as the best delivery methods. Better instructional development is a necessity for setting up online classes that work well for both the students and the instructors. The newest technologies should be incorporated when they can enhance the learning environment and allow students to better reach the course objectives. The newest management software also makes it easier for instructors to track student's progress and

respond to their needs in a timely manner. Streaming video, podcasting, and the use of blogs are the newest technologies that should be explored further.

Online activities are very important for engaging the learner and allowing them to construct their own meaning. Instructors can make online classes worthwhile and satisfying for the student by creating a safe and comfortable atmosphere for the student to collaborate with other students in a learning community. Typical community college students could be students directly out of high school or nontraditional students who have been exposed to the work force. Students should be required to pass out of a prerequisite class to prove they are technically able to take an online class. Some of the nontraditional students will need to complete the class to learn more about web technology and how to succeed in an online class. Both types of students will bring experiences and ideas to the learning environment that will enhance the learning community as they collaborate together.

Additional online resources are available for online instruction. A majority of textbook publishers now offer E-packs to go along with text books. E-packs are modules that can be uploaded to a class management tool such as WebCT and a basic class matching the instructor's resources has been created. Instructors can then go in and turn on or off tests, assignments, etc. eCollege is another avenue that community colleges can explore because this choice would take care of both the technological and instructional design. Unfortunately, the college would lose their own unique qualities and dynamics for their online curriculum choices.

Hybrid classes, delivering instruction both face-to-face and online, are another idea that is starting to take shape. There are currently classes where students take part of the class online, such as tests and assignments, and the rest is a face-to-face class. Hybrid classes could offer the best of both worlds and allow students to get to know each other, have access to the instructor, plus the flexibility of doing assignments and tests online. Hybrid classes need to be advertised differently in the catalog to explain the delivery methods and would not fill the needs of the students who are quite a distance away from campus.

Technology has made great advances in the past decade but online instruction is still lagging behind by not using this technology effectively. This reviewer has taken online classes and found that there are vast differences in what is currently being used as online instruction. Offering online courses is a relatively new concept for community colleges and it will take some time to iron out all of the details.

Administration and faculty need to work together to tackle some of the issues raised in this literature review: Which faculty members make the best online instructors? Should they be compensated differently for online instruction? Who owns the intellectual property rights for the material posted online? Are we reaching out to students who would otherwise not be able to take a community college class?

What about accreditation for online classes? Should new standards be developed for online courses such as Palloff and Pratt suggested? Are the online universities popping up all over the country providing a quality education for their students? Another big consideration is student cheating. How do we know that the student enrolled in the

class is the one participating in cyberspace? One current suggestion is requiring students to take their final as a proctored test either at the college or at their local library. This could be the wave of the future.

To remain competitive in today's market, community colleges need to offer quality instruction in the format that students are requesting. Online instruction can be a very rewarding experience for both students and faculty. Additional planning and a thoughtful design are required to create a collaborative online environment. More research is needed on the quality of online education and the best methods of delivery for both instructors and students. Online education will continue to grow and many of the questions listed in this review will be answered in the near future.

REFERENCES

- About eCollege*. (n.a.). Retrieved March 28, 2006, from
<http://www.ecollege.com/company/About.learn>.
- Ali, A. (2003, Sep./Oct.). Instructional design and online instruction: Practices and perception. *Tech Trends*, 47(5), 42-46.
- Boyer, N.R.. (2003). The learning contact process: Scaffolds for building social, self-directed learning. *The Quarterly Review of Distance Education*, 4, 369-383.
- Chesebro, J. (1999, Summer). Communication technologies as symbolic form: Cognitive transformations generated by the Internet. *Communication Quarterly*, 47, 1-7.
- Conrad, R.. & Donaldson, J.A. (2004). *Engaging the online learner: Activities and resources for creative instruction*. San Francisco, CA: Jossey-Bass.
- Cox, R.D. (2005, August). Online education as institutional myth: Rituals and realities at community colleges. *Teachers College Record*. 107(8), 1754-1787.
- Dupin-Bryant, P.A. (2004). Pre-entry variables related to retention in online distance education. *The American Journal of Distance Education*, 18(4), 199-206.
- Ellsworth, J., & Ellsworth, M. (2003). *Communications and web courses: Can we talk?* Flagstaff, AZ: Northern Arizona University.
- Halsne, A.M. (2002). *Online versus traditionally-delivered instruction: A descriptive study of learner characteristics in a community college setting*. Unpublished doctoral dissertation, Chicago, IL: Loyola University of Chicago.

- Hawkridge, D. (2002). Distance learning and instructional design in international settings. In R. Reiser & J. Dempsey (Eds.) *Trends and Issues in Instructional Design and Technology*. (pp. 273-274). NJ: Pearson Education, Inc.
- Herring, M., & Smaldino, S. (2005). *Planning for interactive distance education: A handbook* (2nd ed). Bloomington, IN: Association for Educational Communications and Technology.
- Hutton, S. (1999). *Course design strategies - Traditional versus on-line: What transfers? What doesn't?* Paper presented at the Annual Meeting of the American Association for Adult and Continuing Education: Phoenix, AZ, November 1999.
- <http://www.iavalley.edu/internetcourses/OnlineQuiz.htm> retrieved on February 26, 2006
- Johnson, S., Aragon, S., Shaik, N., & Palma-Rivas, N. (1999). *Comparative analysis of online vs. face-to-face instruction*. Department of Human Resource Education, Champaign, IL: University of Illinois at Urbana-Champaign.
- Lansing, Williamston, School Public Relations Consultant Services (2002). *Attitudes and opinions of online students toward community college online learning: An opinion survey of community college online students*. Lansing, MI: Michigan Community College Association.
- Manner, J.C. (2003, Sep./Oct.). Serving the non-traditional students through a technology-enhanced curriculum. *Tech Trends*, 47(5), 32-35.
- Nunaley, M., & Warner, D. (2002). *From key handouts to more hands on keys: Planning for the progressive use of technology by faculty*. Gallatin, TN: Volunteer State Community College.

- Oblinger, D., & Oblinger, J. (2005). *Is it age or IT: 1st steps toward understanding the next generation*. Retrieved May 1, 2005 from <http://www.educase.edu>.
- Palloff, R. & Pratt, K. (1999). *Building learning communities in cyberspace: Effective strategies for the online classroom*. San Francisco, CA: Jossey-Bass Publishers.
- Palloff, R. & Pratt, K. (2001). *Lessons from the cyberspace classroom: The realities of online teaching*. San Francisco, CA: Jossey-Bass Publishers.
- Rossett, A., & Sheldon, K. (2001). *Beyond the podium: Delivering training and performance to a digital world*. NY: John Wiley & Sons, Inc.
- Sampson, N. (2003, September). Meeting the needs of distance learners. *Language, Learning & Technology*, 7(3), 103-118.
- Smith, G., Caris, M., & Ferguson, D. (2001, June). *Teaching over the WEB versus face to face*. Paper presented at ED-Media World Conference on Educational Multimedia, Hypermedia & Telecommunications, Tampere, Finland.
- Stump, A.D., McCrimon, E., & Davis, J.E. (2005, June). Carpe diem: Overcome misconceptions in community college distance learning. *Community College Journal of Research and Practice*, 29, 357-367.
- Sullivan, L. (2001). *The learning object economy: Will your college be ready?* New York, NY: The College Board. (ERIC Document Reproduction Service No. ED463012).
- Sullivan, P. (2001). Gender differences and the online classroom: Male and female college students evaluate their experiences. *Community College Journal of Research and Practice*, 25, 805-818.

- Wang, M., MacArthur, D., & Crosby, B. (2003, Sep./Oct.). A descriptive study of community college teachers' attitudes toward online learning. *Tech Trends*, 47(5), 28-31.
- Yang, Y. & Cornelius, L. (2004). *Students' perceptions towards the quality of online education: A qualitative approach* Paper presented at the meeting of the Association for Educational Communications and Technology, Washington, DC.

ATTACHMENTS

Attachment A

Are Internet courses right for you? Take this quiz to see!

Take the following self-quiz to help you determine if distance learning is the right answer for your educational needs.

My need to take a distance learning course now is:

- High. I need it immediately for a degree, job, or other important reason.
- Moderate. I could take it on campus later or substitute another course.
- Low. it's a personal interest that could be postponed.

Feeling that I am part of a class is:

- Not particularly necessary for me.
- Somewhat important to me.
- Very important to me.

I would classify myself as someone who:

- Often gets things done ahead of time.
- Needs prompting to get things done on time.
- Puts things off until the last minute.

Classroom discussion is:

- Rarely important to me.
- Sometimes important to me.
- Almost always important to me.

When an instructor makes an assignment, I prefer:

- Figuring out how to do the assignment myself.
- Trying to do the assignment on my own, then asking for help as needed.
- Having frequent guidance on the assignment.

I need faculty comments on my assignments:

- To be minimal; the grade is all that is really necessary.
- Within a few days, and general comments are OK.
- To be extensive or I get very frustrated.

Considering my professional and personal schedule, the amount of time I have to work on a distance learning course is:

- More than enough.
- About right.
- Very limited.

When I am asked to use VCRs, computers, voice mail, or other technologies new to me:

- I look forward to learning new skills.
- I feel apprehensive, but try it anyway.
- I put it off or try to avoid it.

As a reader, I would classify myself as:

- Good. I usually understand the text without help.
- Average. I sometimes need help to understand the text.
- Slower than average.

The number of miles I live from campus is:

- More than 15 miles.
- Five to 15 miles.
- Less than five miles.

(Figure your total score by giving yourself 3 points for each "a" answer, 2 points for each "b," and 1 point for each "c" answer.) If you scored in the range of 24-30, distance learning courses are a real possibility for you. If you scored in the range of 17-23, distance learning courses may work for you, but you may need to make a few adjustments in your schedule and study habits to succeed. If you scored in the range of 10-16, distance learning courses may not currently be the best alternative for you—talk to your advisor or counselor.

NOTE: INFORMATION EXTRACTED FROM: <http://www.iavalley.edu/internetcourses/OnlineQuiz.htm>