VIRTUALLY EXPERIENTIAL CLASSROOMS

Potosky, Denise
Pennsylvania State University
Great Valley School of Graduate Professional Studies
dxp16@psu.edu

ABSTRACT

There are few resources that address the possibilities for experiential learning in online courses. This paper examines five formats used experiential learning classroom activities, identifies the limitations and the opportunities presented by the Internet as a medium for conducting experiential exercises, and analyzes some experiential learning formats relative to three criteria in order to determine their suitability to Internet administration.

INTRODUCTION

Despite a recent cooling of the market for online M.B.A. programs, there is a general expectation that the popularity of online business courses will increase (Mangan, 2001). Some predict that due to current economic uncertainty, potential students may be less willing to travel to classrooms or to give up their jobs to pursue an M.B.A. (Mangan, 2001). In addition to a slowly growing demand for entire M.B.A. programs offered online, many individual courses within business schools rely heavily on Internet technology as a medium for instruction. Also, in general, faculty is responding to today's Internet-savvy students' expectations regarding the use of Internet technology as a medium for instruction.

There are several sources of information to guide faculty in developing and teaching courses online (e.g., Chamberlin, 2001; Moore, Winograd, & Lange, 2001; Sanders, 2000). Universities and instructors who wish to offer web-based courses benefit from the assistance of publishers, online software developers, and instructional designers in translating course content into web-based documents and graphics. Universities committed to offering courses online may even elect to partner with private companies that develop and deliver online training to corporate employees (Gold, 2001). In addition, accrediting associations also offer guidelines and principles regarding distance education, which include online or "electronically offered" programs (e.g., Middle States Commission on Higher Education; Southern Association of Colleges and Schools). When the time comes to prepare the actual content for a specific course, however, the creation of the content and learning objectives of web-based courses remains primarily subject to the discretion, experience, and imagination of the instructor. What if an instructor who wants to teach an online course also wants to maintain an experiential learning approach to teaching? This area is so relatively new that there are few resources that address the possibilities for experiential learning in online courses. The purpose of this paper, written with first-hand experience in the development of on-line courses as well as an on-line MBA curriculum, is to address the experiential learning issues, limitations, and opportunities that arise when the World Wide Web is the medium for instruction.

EXPERIANTIAL LEARNING AND ONLINE COURSE DEVELOPMENT

Experiential learning encompasses a broadly defined approach toward instruction and learning in which students play an active role in the learning process, i.e., "learning through doing" (Pillutla, 2000, p. 211). This approach is based in experiential learning theory (Rogers, 1969), which asserts that learners need to initiate and be actively involved in learning in order to best understand information (knowledge). The underlying assumption behind experiential learning is that people learn best by doing, i.e., through learning experiences. An experiential format for classroom instruction might include group projects and exercises, games/simulations, role-plays, and other approaches that require the learner to actively participate in his or her learning process. Further, many if not most experiential exercises have been designed to rely on high levels of interaction among students and between students and the facilitator/instructor, and a substantial portion of this interaction presumably occurs face-to-face in the classroom.

Courses administered via the Internet typically do not require students to meet face-to-face for any extended period of time, if at all. Some on-line MBA programs either require only one or two short orientation and/or residency weeks in which students come together in person (e.g., Penn State's iMBA; Duke University's global-executive M.B.A. program); it is conceivable that some programs might not require students to ever meet face-to-face. This circumstance of "virtual strangers" presents a special challenge to the assumptions and the design of online experiential learning. As a result, some in-person experiential exercises are more easily converted into online experiential activities than others.

When any course is developed, the first considerations from an instructor's perspective are typically the identification of learning objectives, the creation of a syllabus, and the assembly of course materials (e.g., textbooks and reading materials). Principles established by accrediting associations might add definition and guidelines

for assessment to these considerations (e.g., Middle States Commission on Higher Education; The Commission on Colleges, Southern Association of Colleges and Schools, "Distance Education: Definition and Principles," 2001). Decisions regarding *how* to present course materials and *how* to engage learners fall, for the most part, into the domain of the academic freedom and discretion of the instructor. Within reasonable constraints of their institutions and accrediting agencies, instructors may develop and adapt their teaching style and lesson plans to the particular needs of students in a class and the situational constraints of the classroom. It is important to note that in the experiential classroom, course content and learning is not "delivered," but experienced and sometimes even initiated by students. Although experiential exercises require careful planning and preparation before the class meets, facilitation skill during implementation of the activity is often equally important. The anticipated adaptation to the class and development of the classroom experience is particularly challenging when a course is developed for a "virtual classroom." The instructor may have to explore his or her options for facilitation and management of course content and interaction between students long before students even register for the class.

The advice available regarding online course delivery emphasizes the importance of creating online "learning communities" (Chamberlin, 2001), encouraging students to interact (Moore et al., 2001), and personalizing the information shared (Moore et al., 2001). These efforts arguably can bring an online course "to life," transforming it from an impersonal dissemination of course content to be read by students to a potentially dynamic, interactive exchange of ideas. As online learning technology continues to improve, new ways of reducing the isolation associated with distance education and enhancing students' feelings of "being part of a class" are being developed (Mangan, 2001). However, most of the suggestions for invigorating the online classroom seem to fall short of developing experiential exercises that capitalize on, or even simply use, Internet technology. That is, the suggestions for online course development tend to apply to the overall communication exchange within the course and not to any specific types of experiential activities. Consider, for example, that the term "interactive," when applied to computer software or web-based technology, does not necessarily mean that people interact with each other. Some prior work has identified specific web-based, interactive tools (e.g., financial analysis tools, multiple choice tutorials) that students can use for active learning (Boscia & McAfee, 2001; Gold, 2001). These are useful experiential tools that enable students to interact with a web-site or software. The assumption appears to be that any type of active involvement, including experiential exercises, is to be preferred to the static, impersonal online delivery of content. At the same time, there is very little guidance regarding the nature and format of experiential activities involving person-to-person interaction that are well-suited to online

courses. The overall purpose of this paper is to provide preliminary guidance in this area.

This paper proceeds in four parts. First the constraints of online course delivery as applied specifically to experiential activities are identified. Second, the advantages to course delivery presented by Internet technology are considered. Third, a set of experiential formats that are well-suited for Internet courses is presented and analyzed. Finally, the paper concludes with a summary as well as recommendations for future investigation and practical considerations.

EXPERIENTIAL CONSTRAINTS PRESENTED BY ONLINE COURSE DELIVERY

Online courses are cool. That is, the Internet is still a relatively cool communication medium (à la Marshal McLuhan) compared to warmer television and the ultimate "hot" medium, face-to-face communication. To be sure, this medium is "heating up" as Internet technology advances to permit audio and video applications. For example, as available bandwidth increases, options for incorporating high quality streaming video are expected to improve. In addition, for instructors using a lecture format, computer and web-based technology offer ways to add graphics, color, and animation to web presentations and course supplements (Mangan, 2001). Still, to those interested in experiential learning, optimism about the future and animated graphics is little compensation for the limitations presented by a currently cool medium. In particular, a cool communication medium lacks nonverbal communication, which has been noted to account for more than half of the meaning we derive from interaction (Hamilton & Parker, 2001). More to the point, although it is difficult to estimate the precise extent to which the success of various experiential formats depends on nonverbal elements of communication, experiential activities tend to rely on the power of observation and the dynamics of face-to-face, interpersonal interaction. The use of a cool medium such as the Internet requires considerably less reliance on nonverbal communication during experiential activities.

Asynchronicity. Although web-based courses can be designed to occur in "real time," it is more practical and efficient to allow much of the online interaction between students, course materials, and the instructor to occur asynchronously. Web-conferencing software is impressive, but it is cumbersome as individuals queue their questions and then watch, listen, and wait more than interact. Most web-conferencing software allows only one person to speak at a time, and hence students and the instructor hear or read responses one at a time. Furthermore, current courseware technology typically relies on chat rooms for "synchronous" exchange. Although many can chat at once, students and instructors still read each word at the time...no volume, no audio noise. Those involved in a chat can view the number of responses to specific points, and can "see" the amount of "chat" generated. But there are no interruptions when one is

typing what he/she wants to say, and considerable turn-taking is required when reading others' comments and developing and typing ideas of one's own. Furthermore, one can chat only as fast as one can type. Finally, to require live online "chat" for the majority of a course may defeat the reason the course was offered online to begin with, i.e., to offer greater flexibility and accessibility to students who might not otherwise be able to come to class. As a result, allowing the majority of an online class to occur asynchronously has considerable appeal. Options for online interaction are just not the same as "being there," and group dynamics such as pace, timing, and energy tends to suffer as a result. Access to course materials and communication exchange often occurs asynchronously via e-mail and postings to online "bulletin boards" (or "message boards"). Asynchronous interaction is not inherently prohibitive to experiential activities, but it does affect assumptions about timing, pace, and involvement.

Where in the world are the students? Online courses imply education anytime, anywhere, and under any circumstance. The instructor has little to no influence over the setting in which a student takes an online class, and this can be problematic if the setting for participation in an experiential activity requires certain elements. For example, does the activity require that students work alone? Are interruptions detrimental to aspects of the exercise? Can students "cheat" on the activity by sending information to other students without the instructors' knowledge? The presumed setting for an experiential exercise may need to be modified for adaptation to the online learning environment.

ADVANTAGES AND OPPORTUNITIES PRESENTED BY INTERNET COURSE TECHNOLOGY

The online equalizer. Several studies have examined various aspects of computer-mediated interaction, such as the perception of anonymity (e.g., Lea, Spears, & deGroot, 2001; Postmes, Spears, Sakhel, & deGroot, 2001) and equity/group participation (e.g., Burdett, 2000; Huang & Wei, 2000) that "virtual interaction" offers. Students in online courses may actually participate more than they would "in-person" specifically because of the absence of nonverbal signals that may detract from the content of their message. That is, students in online courses may overcome shyness, may overlook demographic and status differences, and/or may find it difficult to dominate a "conversation." Furthermore, reliance on a written (i.e., typed) format for student comments and discussion may allow for richer discussion, reflection, and involvement by all students in a class, not just the more vocal ones (Chamberlin, 2001).

Never late for class. Asynchronous online experiential activities happen for each student individually, perhaps when the student is at his or her best or at least has chosen to set aside some time to focus on the course. Class begins when the student "logs on," and this fact simultaneously extends and limits the duration of an experiential exercise.

An experiential exercise is extended in the sense that it continues as long as the student focuses on it; it may be possible to set time limitations on the availability of information, but it is quite difficult to prevent students from printing screens or otherwise participating in an activity on his or her own terms. This is probably more an advantage than a disadvantage for many experiential learning exercises. Not only can the instructor usually track how long a student has been "logged on" and perhaps what the student does/types while logged on, but all the prep work (i.e., typing, printing, reading, "surfing" other web sites, etc.) required for participation in a particular activity can be done at the students own pace, and the activity itself need not be bound by the strict time limits that exist in the face-to-face classroom. At the same time, the duration of a specific learning activity is somewhat limited in that the length of uninterrupted, active involvement are at the discretion of each student participant. It may be difficult to hold students captive for 45 minutes or longer for an activity over the Internet. Overall, however, the opportunity to vary "classroom time" using Internet technology seems to outweigh the limitations that student discretion presents. Why can't some experiential learning events occur over any three consecutive days? Why not allow 30 minutes in the morning and 15 minutes at lunch to acquire information, and any block of 65 minutes in the evening to participate in a threaded discussion?

Seeing is believing. The Internet is particularly good at presenting visual graphics, and options exist for including animation and audio/video enhancements. In fact, unless an online course is to be presented as an online textbook of words on a computer screen, online course content should capitalize on computer graphic enhancements. The use of color, images, animation, and sound, not to mention cases and access to company web-sites and other resources, can transform the printed handouts formerly used in a classroom-based experiential activity into a more interactive experience. Furthermore, it can be argued that accessing the Internet and pointing and clicking and "surfing" are not as passive as reading a handout, watching a video, or observing others; there is more to do. It may be difficult, however, to distinguish between more active involvement in learning and more embedded distractions in an activity; more to do is not the same as more to think about. Still, the added visual and tactile aspects of online learning might have otherwise been overlooked in the development of face-to-face experiential exercises. This may be particularly useful for students who are visual and possibly tactile learners.

Half-baked ideas. Much of the content of online courses is *at least* "half-baked." That is, the majority of the material created for online courses is cooked up ahead of time, and the importance of doing so cannot be overemphasized. Just as it would be very difficult for an instructor to type his or her slides during a presentation, it is practically impossible to develop an online experiential activity without considerable advance preparation. Such advance preparation may be a departure from some

experiential formats that rely on a general outline of what is to take place and then develop and change dramatically with each group of participants. Overall, however, the requirement of generating materials and planning outcomes in advance should lead to better organized, developed, and predictable experiential exercises. To be sure, this requirement can be cumbersome for the instructor/facilitator. Indeed, as one reviewer pointed out, preparation for an online course may require a tremendous amount of time, as compared to preparation for classroom instruction. As noted earlier, options for facilitation and management of an activity usually have to be worked out long before student's register for a course, and it can be challenging to anticipate and prepare for (often in writing) various student responses in some activities. This may be especially challenging for new experiential exercises. In such cases, the instructor may have to do considerable development work during online course administration. In the long run, however, it is intuitively appealing to reason that because of the requirement for more elaborate pre-delivery preparation, web-based experiential exercises can potentially be of higher quality (or at least more predictable) than their in-person counterparts, which leave more to chance during the activity itself. Experienced facilitators may lament the partial loss of spontaneity and responsiveness typical to face-to-face activities, but, as in in-person activities, there are ways to retain responsiveness in an online exercise without sacrificing predictability.

EXPERIENTIAL FORMATS WELL-SUITED TO INTERNET COURSES

Examination of ABSEL proceedings (Keys Library CD, 2001) for the past few years suggests several recurring formats for experiential exercises. Role-play formats are those in which students are given contextual information (e.g., memos, cases, scenarios, or other reading material) and role assignments, after which they are asked to interact in groups and ultimately present/produce something to discuss in class. Game/simulation formats requires students to participate in a structured event that demonstrates a particular concept or set of concepts; game/simulations include establishing a laboratory or setting up an experiment in which students "play" in order to achieve some individual or team goal. Many game/simulation formats involve some degree of competition, information sharing, and decision-making. Some game/simulations require more interaction between students than others, and many game/simulations already use computer technology and e-mail to facilitate the exchange of information between students and student teams. Another experiential format asks students to record information on forms or in journals in order to enable students to bring into focus their own learning achievements. These records may be shared in order to demonstrate patterns and generate class discussion of trends. Similar to the "record format," another experiential format is the self-test or survey format in which students complete a self-assessment inventory, survey, or ballot of some sort and then receive guidance in interpreting their scores or responses; class responses can also be examined for patterns, compared to larger samples, and critiqued in terms of the assessment instrument. Finally, the group problem-solving format is a common experiential exercise format. In this format, students are divided into groups and given some form of background information or concepts *to read*. The groups are then asked to apply the information to a specific task, problem, or project *to do*, and each group's results are discussed and evaluated in order to clarify and analyze the concepts.

Although *none of these formats are prohibited by Internet technology*, some are more easily adapted to a web-based format than others. In addition, some formats seem better able to capitalize on Internet capabilities to provide an engaging, interactive experience. Finally, to the extent that some formats are associated with specific kinds of learning outcomes, some experiential formats may be better able to retain their intended learning outcomes better than others when administered over the Internet.

The following analysis demonstrates how these three criteria (i.e., ease of adaptation, useful and engaging, retention of intended learning outcomes) can be applied to the experiential formats. Each experiential format is analyzed in terms of at least one criterion, but due to space limitations not all criteria are applied to all formats. It is important to acknowledge that this analysis is based on the author's experience with facilitating experiential activities using each format as well as the author's experience in developing web-based courses, and as such it is a qualitative assessment. Table 1 provides an overview of this analysis, rating (i.e., low, moderate, high) each of the experiential formats in relation to the three criteria. The cells discussed below are shown in boldface in the table.

TABLE 1.
EXPERIENTIAL FORMATS IN RELATION TO THREE CRITERIA FOR ONLINE ADAPTATION

Criteria			
Experiential Format:	Easy to adapt to a web-based format	Capitalizes on current Internet capabilities	Retains intended learning outcomes
Role play	**Moderate**	**Low**	Moderate
Game/simulation	Moderate	High	**Moderate**
Record/Journal	**High**	High	High
Survey	Moderate/High	**High**	Moderate
Group Problem-Solving	**Moderate**	Moderate	Moderate

Ease of Adaptation. All experiential formats are at least moderately easy to adapt to online experiential learning. Three formats, role-play, group problem-solving, and record/journal, can be used as examples of what ease of adaptation means in an experiential learning context. For a first example, converting certain aspects of a role-play exercise to a web-based design is fairly straightforward. It is usually not a problem to upload typed contextual information and role assignments to Internet courseware for online distribution to students. On the other hand, other elements of a role-play may require some assistance from an instructional designer or some technical skill to adapt to an online course. For example, in some role-play exercises, the facilitator introduces new/additional contextual information just prior to the start of a role-play and/or at intervention points during the activity. Online, this may require e-mailed written material and/or short audio-video clips that are made available to students at specific times. In addition, some role-plays incorporate the use of physical articles. Some role-plays just wouldn't be same without the candy or monetary rewards or bells or other "non-print" items that are used in the activity. Perhaps a picture of an item or the promise of a reward, or a programmed audio-video adaptation of the tangible components might be sufficient in a "virtual" role-play. But the creation of a virtual "set" may require considerably more effort and technical expertise than does the creation of a classroom stage setting. In terms of ease of adaptation, some role-plays may be easier to adapt than others, warranting a "moderate" rating in Table 1.

Another example of a format that is moderately easy to adapt to a web-based experiential exercise is group problem solving. Some might argue that the Internet is ideal for group discussion and student team projects (Moore et al., 2001). Because the group problem solving format often relies on printed information distributed within and among groups, it should not be difficult to post this information to a course web site, and password-protection can be used to ensure that only certain groups get certain information. The main drawbacks to group problem solving via the Internet, however, include scheduling times for chats or setting up timelines for discussion threads, and the management of the volume of information/data generated via e-mail and discussion threads (and "listservs") by the instructor. Specifically, if the nature of the project or problem requires that everyone in a group focus on it and discuss it at the same time, a chat room is needed. Chat rooms require times when students in a group can meet online, and this may be particularly difficult if students access the online course from different time zones. Instructors may opt in favor of asynchronous group discussion (e.g., discussion threads or bulletin boards), but then the group project may take longer as students wait for each group member to post something. Perhaps the major consideration regarding how easy it is to facilitate a group problem solving exercise via the Internet concerns the information management skill of the instructor. Managing e-mail, discussion threads, and listservs (i.e., every time a student responds to a discussion, the response is sent to everyone on the listserv; Moore et al., 2001) taps into a different skill set than group facilitation. In fact, as noted by Moore et al. (2000, p. 8.10), "managing threads is an art to be learned by most new online instructors because it can seem overwhelming.... in some ways, giving up

control of the threads is the best way to manage them." In sum, one might expect group problem solving experiential formats to be moderately easy, but not so easy as to be taken for granted in an online course.

One example of an experiential learning format that can be considered very easy to adapt to an online medium is the record/journal format. Just as the instructor can easily draft any document and post it for some or all students in a class to see, so can students. Elaborate graphics may take extra time to "load" when a reader opens or perhaps downloads the document, and there may be some delay as to when students actually upload or submit or post the document (unlike passing things out or turning things in a classroom), but these issues are no more challenging than similar ones that occur in a class that meets face-to-face (students may be absent, may turn in work late, etc.).

Capitalizing on Internet Capabilities. Rather than merely adapt to the constraints that may be imposed by current Internet technology, some experiential learning formats seem able to truly capitalize on the special features of the World Wide Web. To give just one example, the survey or self-test format can actually work better in an online course than in a classroom, especially if scoring is done automatically and interpretation information is accessible via some web site. Students can visit a pre-determined web site, complete a survey online, and immediately receive their scores. In another version of this format, the instructor can post questions or cases for the class to answer using a multiple-choice format. Responses can quickly be aggregated and presented using charts or other graphics that allow students to see how others responded to the question. The responses of guests, experts, or students in other sections can be integrated into displays of survey responses. The Internet and survey formats go particularly well together, and the Internet opens up possibilities for this format that do not exist in a face-to-face, closed classroom.

In contrast to survey formats, traditional role-play formats do not seem to capitalize as well on what Internet technology has to offer. This statement is not intended to imply that new role-play formats could not be developed specifically for Internet administration. However, adapting an existing, in-person role-play for Internet administration is likely to use only a small portion of Internet capabilities. Web-based role-plays may be further limited by the constraints presented by current Internet technology discussed earlier in this paper. For example, role-plays typically require students to act out their parts or roles. Unless roles are naturally inclined to take shape via electronic, written communication, it is hard to imagine role-play exchanges that do not include face-to-face interaction. Current courseware does not assume students have video imaging or digital recording capabilities, yet the visual, nonverbal aspects of many role-plays contain a significant amount of the dynamic information generated. Students can be asked to use typed symbols that reflect paralanguage and nonverbal aspects of their contributions,

but such effort is cumbersome and may not adequately reflect the energy and emotion involved. Finally, because chat rooms and web conferencing software tend to work best for small group discussions (Moore et al., 2001), some role plays may only be possible with asynchronous threaded discussions. Again, this cools down an otherwise "hot" format. The things that the Internet is good at are not particularly applicable to role-play formats.

Retention of Intended Learning Outcomes. The medium used in communication affects (and alters) the intended verbal and nonverbal messages. An experiential activity can be relatively easy to set up for an online course and Internet technology may compliment the design of the activity, but the outcomes achieved via the Internet may not be the same as those obtained in a classroom. For example, even if everything runs smoothly, the outcomes obtained from a game/simulation played over the Internet can differ substantially (or not at all) from a game/simulation played in a classroom. Level of personal involvement, pace, and perceptions of social pressure that are encompassed in certain game/simulations may be difficult to replicate over the Internet. Although this issue relates to ease of adaptation, it also highlights the choices regarding procedures and outcomes that an instructor makes when adapting an experiential exercise to the online course. An instructor might want to match as many aspects of the online game/simulation to the way the game/simulation is played in person. However, this does not guarantee similar outcomes. To provide one commonly known example, the popular TV game/simulation show "Who Wants To Be A Millionaire" can be played either online or in person before a television audience. The rules and objectives of the game/simulation that is played via either medium are very similar. However, the Internet player doesn't actually win any money, and probably doesn't feel as stressed as the TV players appear to be about their choices. Alternatively, the instructor might modify the way the game/simulation is played over the Internet in order to capitalize on specific technological features in order to arrive at the same outcomes achieved by the in-person version game/simulation. Different rules may apply, different strategies may be employed, but the comparative versions of the game/simulation can be designed to end up with very similar realizations, rewards, emotions and learning goal accomplishments. Some of these modifications may be significant in terms of the design of the activity; others may be less substantial. Overall, it is important for instructors to explicitly distinguish between and evaluate the relative importance of the processes versus the outcomes of an experiential learning activity. The Internet may offer an alternative path to a very similar learning outcome within a given experiential format.

SUMMARY AND RECOMMENDATIONS

This paper examined the goals of experiential learning, identified the limitations and the opportunities presented by

the Internet as a medium for conducting college courses, and offered some recommendations for experiential learning formats that appear to be well-suited to Internet administration. "Well-suited" should not be misconstrued to imply "better" or "more effective," as this paper was not intended as an empirical comparison of modes of administration. Although some research has suggested that the media involved matters less than the quality of instruction (Clark, 1983; 1994), the particular learning situation, tasks and learners involved (Kozma, 1994), other research has indicated that web-based collaborative learning may be less effective (in terms of mastery of course content) than non-web-based collaborative learning (Frank, 2000). The comparison of outcomes from web-based instruction to other instruction mediums is a fairly new area of research, and future study results will surely inform the development of high quality web-based educational tools and the design of virtual classrooms. In this paper, well-suited meant relatively easy to adapt to a web-based interaction format, potentially useful and engaging as an online experiential format, and likely to attain learning outcomes similar to those generated when the exercise is administered (or facilitated) in a classroom.

The suggestions provided in Table 1 are offered primarily to stimulate further analysis, research, and discussion. Rather than elaborate on each cell in the table, this paper provided examples of how each of the three criteria can be applied to common experiential exercise formats. This analysis demonstrated the constraints as well as the opportunities associated with each of five experiential learning formats relative to at least one of the criteria. In the process of doing so, the analysis hopefully provides some practical considerations for experiential learning over the Internet and prompts some further exploration of the options that Internet technology presents to college instructors.

REFERENCES

Boscia, M. W., and McAfee, R. B. (2001). Using a web-based tutorial program to enhance student learning. *Developments in Business Simulation and Experiential Learning*, Volume 28, 1-7.

Burdett, J. (2000). Changing channels: Using the electronic meeting system to increase equity in decision-making. *Information Technology, Learning, and Performance Journal, 18*(2), 3-12.

Commission on Colleges, Southern Association of Colleges and Schools, (2001). *Distance Education: Definition and Principles*. Available: http://www.sacscoc.org

Chamberlin, J. (January, 2001). Digital dissemination. *APA Monitor on Psychology, 32*(1), 64-66.

Clark, R. E. (1983). Reconsidering research on learning from media. *Review of Educational Research, 53*(4), 445-459.

Clark, R. E. (1994). Media will never influence learning. *Educational Technology Research and Development, 42*(2), 21-29.

Frank, S. L. (2000). Collaborative learning and web-based instruction in a cognitive apprenticeship model. *Developments in Business Simulation and Experiential Learning*, Volume 27, 188-194.

Gold, S. (2001). E-learning: The next wave of experiential learning. *Developments in Business Simulation and Experiential Learning*, Volume 28, 76-79.

Hamilton, C., & Parker, C. (2001). *Communicating for results: A guide for business and the professions, 6th ed*. Belmont, CA: Wadsworth/Thomson Learning.

Huang, W. W., & Wei, K. K. (2000). An empirical investigation of the effects of Group Support Systems (GSS) and task type on group interactions from an influence perspective. *Journal of Management Information Systems, 17*(2), 181-206.

Kozma, R. B. (1994). Will media influence learning? Reframing the debate. *Educational Technology Research and Development, 42*(2), 7-18.

Lea, M., Spears, K., & deGroot, D. (2001). Knowing me knowing you: Anonymity effects on social identity processes within groups. *Personality and Social Psychology Bulletin, 27*(5), 526-537.

Mangan, K. S. (2001). Expectations evaporate for online MBA programs. *Chronicle of Higher Education Online* Available: http://chronicle.com/free/v48/i06/06a03101.htm

Middle States Commission on Higher Education, *Guidelines for Distance Learning Programs*. Available: http://www.msache.org/pubs.html

Moore, G. S., Winograd, K., & Lange, D. (2001). *You can teach online: Building a creative learning environment*. Boston: McGraw-Hill.

Pillutla, S. (2000). Creating a comprehensive web-enhanced classroom. *Developments in Business Simulation and Experiential Learning*, Volume 27, 210-216.

Postmes, T., Spears, R., Sakhel, K., & deGroot, D. (2001). Social influence in computer-mediated communication: The effects of anonymity on group behavior. *Personality and Social Psychology Bulletin, 27*(10), 1243-1254.

Rogers, C. R. (1969). *Freedom to learn: A view of what education might become*. Columbus, OH: C.E. Merrill Pub. Co.

Sanders, P. (2000). Your class is in session, now what! The challenges of going on-line. *Developments in Business Simulation and Experiential Learning*, 27, 217-218.