

ED 399 572

CS 509 308

AUTHOR Lawrence, Jennifer A.
 TITLE Learning by Doing. The Student's Perspective: Reflections of a Student Facilitator.
 PUB DATE 19 Nov 95
 NOTE 19p.; Paper presented at the Annual Meeting of the Speech Communication Association (81st, San Antonio, TX, November 18-21, 1995).
 PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Computer Assisted Instruction; *Electronic Mail; Higher Education; Interdisciplinary Approach; Management Information Systems; Mass Media; *Online Systems; *Peer Relationship; Speech Communication; *Teacher Student Relationship; Team Teaching; Undergraduate Students
 IDENTIFIERS Capstone Courses; Facilitators; *Multimedia Technology; *Technology Integration

ABSTRACT

A course entitled "Communicating through Multimedia" was designed as a capstone experience for upperclassmen. It was a team-taught interdisciplinary course in the application of multimedia technology. Students in the course came from three disciplines--speech communication, mass communication, and management information systems. The students were ultimately (as a final project) asked to develop a multimedia application for a client. In practice, the goals set for the course were difficult to achieve. Student evaluations were critical. Attendance was poor; lectures were considered "filler"; and the class as a group did not work together well on the final project. A small group of students, who came to the class with computer skills and a knowledge of multimedia, spent large amounts of time in the lab finishing the project. In retrospect, it is ironic that in a course in new media technologies, neither the facilitators nor the students made use of new technologies to facilitate classroom interaction, communication, or learning. Sprague (1993) has suggested that most learning occurs outside of the classroom, not in it. It makes sense, therefore, that communication among peers and with the facilitators should take place outside as well as inside the classroom. And computers certainly are one means of facilitating that kind of communication, a communication that is immediate and ongoing. (Contains 13 references.) (TB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

LEARNING BY DOING. THE STUDENT'S PERSPECTIVE:
REFLECTIONS OF A STUDENT FACILITATOR

Jennifer A. Lawrence

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OEI position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL
HAS BEEN GRANTED BY

J. Lawrence

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

Jennifer A. Lawrence
Department of Communication Studies
Becker Communication Studies Building
The University of Iowa
Iowa City, Iowa 52242
jennifer-lawrence@uiowa.edu
319.341.8535

Paper distributed at the eighty-first annual meeting of the
Speech Communication Association on Sunday, November
nineteenth, 1995 in San Antonio, Texas.

CS509308

Abstract

In this paper, I suggest an imminent paradigm shift in American higher education. Although technological advances have made such a shift possible, educators have been slow to incorporate new communication technology in their classrooms. If we are to see a change take place, teachers and students alike must be willing to conquer the learning curve associated with using these technologies and create ways of using them that make sense in the context of the classroom.

LEARNING BY DOING. THE STUDENT'S PERSPECTIVE:
REFLECTIONS OF A STUDENT FACILITATOR

Theoretical models of education, like other theoretical models, are developed in journal articles and convention papers and the like. Still, there is a battleground on which these theoretical models are more passionately fought. The stakes are higher here, and the warriors on this battleground are *practitioners* of the models they defend. Some may be inclined to reading the philosophical debate defining their battle, but most salient is the *doing* of the models rather than the reading and talking about them. In chalk-dusted college classrooms across the country, instructors and professors and teachers enact education, and in so doing, determine what is good and proper and appropriate in facilitating learning.

I recently spoke with a colleague about the very dispute I reference here. He was disgusted with a message he had recently found scrawled in the upper left hand corner of the chalkboard in his classroom. The message said, "Please place chairs in proper order before leaving room." My colleague told me that he wanted to write back, "This is the proper order," and leave the chairs in the circle formation he favored for teaching. The debate described here, on the surface, is about the labor of moving some student desks around. But, of course, the issues run much deeper. These instructors represented divergent perspectives on how teaching should happen in the college

BEST COPY AVAILABLE

classroom. More pointedly, the dispute was about how learning happens. Aware that something as mundane as room arrangement might affect the outcome of student learning, each was eager to provide the best environment in which to engage the learners. Each was wary and critical of the others' approach.

McKeachie (1990) outlined the historical development of research in college teaching. As researchers found that student-centered discussion and peer learning contributed positively to learning, many teachers moved from what I call a traditional classroom environment to a collaborative classroom environment. Theoretically, these teachers are interested in providing an forum for learning in which the teacher is a facilitator, not an "authority." Such teachers attempt to facilitate much more student-student interaction, and give the students more control over what happens in the classroom. Practically, teachers who use a collaborative approach do things like putting the classroom chairs in a circle to encourage students to look at one another. Many of these teachers work together with their students to create class "contracts" instead of handing out syllabi the first day of class. Some ask students to assess the course regularly to ensure that the students are doing the kind of learning the teacher would like them to do.

McKeachie's (1990) rendering of the change in educational theory hints at certain factors which may have

contributed to changes in thinking about education. Many of these changes, for instance, took place in the 1960's when T-groups or encounter groups and sensitivity training were in vogue. A paradigm shift was necessary for such dramatic changes to take place in educational theory and practice. Hollis (1994), following Kuhn, argues that "a paradigm has two principal aspects, one intellectual and the other institutional" (p. 85). A paradigm consists intellectually of "basic tenets about the broad character of nature" and is "kept on track by social mechanisms" (the "institutional" entailment of Kuhn's paradigm, pp. 85-86). The shift from traditional models of learning to collaborative models of learning was facilitated, not only by scientific discourse in academic circles about how students best learn, but also by teachers becoming interested in alternative methods of teaching and enacting these models in the classroom.

In this paper, I will explore the notion that the conditions are right for another paradigm shift in American education. My thinking about the possibility for a paradigm shift was informed, in part, by my experiences as a graduate student facilitator in an undergraduate team-taught multidisciplinary course entitled "COM 412: Communicating Through Multimedia." I will allude anecdotally to my experiences in assisting with this class and the students' experiences as I understand them based on: 1) course assessment papers turned in on the first and the last day of

class; 2) "formal" interviews with two of the students; and 3) "informal" conversations with students and general observations of their day-to-day behavior in the class.

Time for a shift?

New technologies have already changed the face of education (Waks, 1995). Recent advances in communication technology may allow educators and educational theorists to revise models of education. At the same time, there is an increasing cultural fascination with computer technology and computer-mediated communication. Communication via computers has recently garnered considerable attention in the popular press (e.g., Lappin, 1995; Morrow, 1994; Stefanac, 1994). In fact, some magazines and newspapers have regular sections which are devoted to issues concerning the Internet. The computer section of most bookstores includes a section exclusively for the Internet, and of late, many of the books filling these sections instruct the reader in (rather than simply understanding the Internet and getting information from it) how to communicate with others through computers (by "publishing" Web pages, etc.).

To the extent that the use of computer-mediated communication and technology in the classroom is already an area of dispute in journals of education and communication, the "intellectual" portion of Kuhn's paradigm shift is fulfilled. To be sure, educators and scholars interested in distance education have long been interested in computer-mediated communication and learning. Recent articles in The

American Journal of Distance Education have explored various issues related to computer-mediated communication in education, including student leadership in computer conferencing (Tagg, 1994), support of constructivist versus objectivist teaching styles on-line (Jonassen, Davidson, Collins, Campbell, and Bannan Haag, 1995), and ideas for new and innovative ways to educate via computers to prepare teachers for the twenty-first century (LeBaron and Bragg, 1994). Distance educators, then, have moved beyond questions of implementation to questions of effective use. Scholars of education have also explored the benefits of using computer-mediated communication in non-distance learning environments (Kuehn, 1994; McComb, 1994).

Fulfilling the "institutional" portion of Kuhn's paradigm shift requires educators who are interested in performing new ways of teaching, and providing, for their students, new environments in which to learn. General interest in computer-mediated communication, as I have mentioned above, is very strong. Growth in numbers of people with access to the Internet is expected to climb to nearly one hundred million by the end of the century (Morrow, 1994). Access to at least the technology necessary for basic computer-mediated communication is not problematic on most university campuses since the Internet itself began by linking computers together from remote campuses (Rheingold, 1993). However, there is (as yet) a steep learning curve to master the art of communicating with

BEST COPY AVAILABLE

others over the Internet. Many e-mail systems are confusing and frustrating for the new user. Despite the barrage of books designed to help a person create a Web page, "getting up on the Web" is no easy task. Educators have to be both highly motivated to use new technologies in their classes and have enough spare time to investigate these technologies for themselves in order to implement them in the classroom.

Communicating Through Multimedia

The multimedia course for which I served as student facilitator was a team-taught interdisciplinary class in the application of multimedia technology. Here I'm defining multimedia technology as technology which allows a "purveyor" multiple "ways" of communicating (i.e., text, video, audio, animation, art). Effective use of multimedia technology involves communicating multiple ways in one text while taking advantage of computer technology to make the text interactive (i.e., "reader" and "author" improvise the text together). Students and facilitators for this course came from three disciplines, Speech Communication, Mass Communication, and Management Information Systems. The students were to ultimately (as a final project) develop a multimedia application for a client. The hope in designing the course between the disciplines was that each student would be an "expert" in his or her discipline, while learning from the expertise of others.

"Communicating Through Multimedia" was a capstone experience for upperclass students at Miami. Although it

was designed in many ways as a skills-based class (with the client project as the ultimate test of skills), there were many issues the students were asked to grapple with that went beyond skills-learning. Ideally, the course would involve a lot of discussion, much peer learning, and a focus on the action of creating multimedia applications. Student expectations for the course, taken from student assessments given the first day of class, were consistent with this perspective on the course purposes. One student wrote:

I expect to learn about the integration of various media and aspects of each form of medium. In addition I would like to learn some of the tools and techniques for implementing these media on a computer. The reason that I decided to take this class is that multimedia is a rapidly expanding field that I believe all MIS [Management Information Science] majors should be familiar with. Also, the opportunity to work directly with a client promises to provide a "real world" experience as full as possible in a classroom setting.

In practice, the goals set for the course proved difficult to achieve. Subsequent assessments (taken on the last day of class) pointed up several issues about the class with which the students were concerned. Students seemed not to enjoy attending class and were hesitant to participate in discussion when given the opportunity. The class was often

poorly attended, as one student pointed out: "If we had had (sic) class meetings where classmates actually showed-up, we could of (sic) had more of a discussion rather than smaller group meetings." Another student complained, "I feel like class time is consumed by filler lectures just to pass the time." Some students seemed dissatisfied with what they were getting out of class meetings. At the same time, the students felt that they didn't have enough time to complete the projects they were assigned. The result was a compromise between completing a project they could be proud of and getting the kind of skills experience they desired at the beginning of the semester. In practice, this meant that a small group of students wound up spending enormous amounts of time in the lab, finishing projects for the rest of the students. The students that completed the final project were generally those that came to the class with strong computer skills and a knowledge of multimedia. Some students felt that they did not develop the divergent skills necessary to create multimedia applications. One student commented (in a journal entry included in the final assessment):

It's frustrating to come to class lately. When I ask what I can do to help with the client project all I get are shrugs. I feared that the whole class "working" together wouldn't work & it hasn't. It's upsetting because I feel I've worked really hard up until this

point but now I'm just coming to class & there is really nothing to do. I'm too busy w/other classes to come here & watch them work on a project the rest of us are not even up-to-date on now.

The suggestions offered by the students for addressing these issues centered around the idea of improved communication. One student commented:

Thus, I think as a group we have viewed the communication of information as a trivial thing and it has always returned to be a detriment in another stage of the project. For me, working on the project has been more of a lesson on dealing with people and meeting responsibilities than actually learning the intricacies of Authorware.

Another student focused on a desire for more interaction with the course facilitators, "...possibly adding individual training or skills test between the student and a professor or graduate assistant may prove to be effective as well."

It is ironic that, in a course in new media technologies, neither the facilitators nor the students made use of such new technologies (in any sort of formal manner) to facilitate classroom interaction, communication, and learning. In the following section, I will sketch out a

suggested (working) model for classroom interaction that takes full advantage of new media technologies designed for facilitating communication. In "Communicating Through Multimedia," use of new technologies supplemented (but did not change) the structure of the course. One student, alluding to the availability of lecture notes on the World Wide Web, asserted, "I learned a lot of these things from the students and from reading what the professors gave us to read in class...and actually, if I found a topic interesting I would go onto the 'Net and I would look for more on the topic." Agreeing with this student, I will next discuss how computer-mediated communication technologies might be used in the classroom to enhance the sort of learning that takes place there, provide more peer interaction for the students as well as more direct interaction with facilitators, and allow them more time to work on their course projects.

The Virtual Classroom

Sprague (1993) claims that learning is something that takes place largely outside of the classroom:

What happens during a formal class meeting just launches a process that may create an occasion for learning. It is later in the rehearsal hall, in the poring over drafts of papers, in the Sunday night phone calls before the Monday morning speech that students

realize their need for instruction and that assistance becomes critical.

When educators made the shift from the traditional model for education to the collaborative model, they worked under the basic assumption that learning happens in the classroom (it just happens in the classroom when the chairs are configured in a different way). Sprague's assertion demands that we think more carefully about the location of learning. We soon conclude that learning is nowhere and everywhere. Although we might locate learning between teacher and student, we simply can not contain it in a room on the third floor of Williams Hall between 10 and 11 on Mondays, Wednesdays, and Fridays.

Accepting such a notion about learning has important entailments. If learning takes place between professors and students in all places at all times, availability becomes an important issue. Teachers sensitive to these ideas about learning want to be around for the moment the student shows up at the professors office door (twenty minutes after office hours are over), breathless from rushing up the stairs, but flushed with excitement about some notion in the extra book that was recommended offhandedly in class. As McComb (1994) points out, CMC vastly increases the moments professors have informal (non-classroom) availability.

McComb (1994) also argues that CMC encourages student responsibility. When used in place of (or in addition to)

BEST COPY AVAILABLE

classroom discussion, it provides a forum for idea exchange that is not tied to a particular time or place. Students who do not feel that they have a voice in class may be more inclined to communicate with others over the Internet. To the extent that CMC allows students to choose to disseminate their messages in a variety of ways (i.e., by either sending them directly to one person or a small group of people or "publishing" the message to the entire class), it also fosters peer interaction. For instance, a student may "post" to the entire class an insight or idea that might otherwise have been shared in the form of a dyadic interaction with only the professor.

Finally, McComb (1994) points out that CMC is efficient. People are able to communicate with one another quickly and when it is convenient for them. Rather than playing answering machine tag, students are able to "talk" about ideas continuously throughout the semester. In the same vein, e-mail discourse can be an ongoing dialogue between students and professors, and, particularly in a senior-level, skills-based course, such dialogue is truly beneficial.

The use of new communication technology in a skills-based course like "Communicating Through Multimedia" may be most important because it has the potential to increase time professors are able to spend time individually with students, to work on skills development. Rather than sitting in a dusty classroom three hours a week listening to

a lecture, students might download lecture notes from the World-Wide Web. Instead of classroom discussion, they might have an ongoing dialogue with one another over e-mail (or on a listserve). This dialogue could then be downloaded and saved for ease of grading class participation. Students and professors then (particularly in a situation in which there is more than one professor) have more time for one-on-one or small group interaction. "Classroom" loses its monolithic status and becomes something of a metaphor for learning.

Conclusion (Practicing What We Preach)

Bailey and Cotlar (1994) argue that, "the mission of academic institutions, to prepare students for life and for their careers, requires that educators incorporate technology into teaching and learning in most, if not all, courses" (p. 185). As I have mentioned, many educational scholars (as evidenced by the discourse of journal articles and conference papers) believe in the need for technological innovation in the college classroom. If a paradigm shift of the sort Kuhn talked about is to take place, however, it will take more than journal articles to make it happen. If we are to incorporate new communication technology in the college classroom, practitioners must be committed enough to learn to set up a listserve or a page on the World-Wide Web. Students and professors, then, together construct new ways of doing learning that make sense to them. Theorizing about new media technologies and teaching our students to use them will only go so far. IF we as educators will reap the

Learning by doing • 16

benefits promised by new media technologies, we must move beyond theorizing and teaching to doing.

Works Cited

- Bailey, E. K., & Cotlar, M. (1994). Teaching via the Internet. Communication Education, 43, 184-193.
- Hollis, M. (1994). The philosophy of social science: An introduction. Great Britain: Cambridge University Press.
- Kuehn, S. A. (1994). Computer-mediated communication in instructional settings: A research agenda. Communication Education, 43, 171-183.
- Lappin, T. (1995). Déjà vu all over again. Wired, 3.05, 175-222.
- LeBaron, J. F., & Bragg, C. A. (1994). Practicing what we preach: Creating distance education models to prepare teachers for the twenty-first century. The American Journal of Distance Education, 8, 5-19.
- McComb, M. (1994). Benefits of computer-mediated communication in college courses. Communication Education, 43, 159-170.
- McKeachie, W. J. (1990). Research on college teaching: The historical background. Journal of Educational Psychology, 82, 189-200.
- Morrow, C. (Ed.) (1994). The Internet Unleashed. Indianapolis, IN: Sams Publishing.
- Rheingold, H. (1993). The virtual community: Homesteading on the electronic frontier. New York: HarperCollins.

Sprague, J. (1993). Why teaching works: The transformative power of pedagogical communication. Communication Education, 41, 1-25.

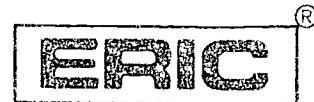
Stefanac, S. (1994). Multimedia online. New Media, 4, 56-63.

Tagg, A. C. (1994). Leadership from within: Student moderation of computer conferences. The American Journal of Distance Education, 8, 40-50.

Waks, L. J. (1995). Technology's school: The challenge to philosophy. Greenwich, Connecticut: JAI Press, Inc.



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Paper presented at the Annual SCA Meeting (San Antonio) <i>Learning by Doing: The Student & Peer-graduate: etc.</i>	
Author(s): <i>J. A. Lawrence</i>	
Corporate Source:	Publication Date: November 18-21, 1995

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the following options and sign the release below.

✓



Sample sticker to be affixed to document

Sample sticker to be affixed to document



Check here

Permitting microfiche (4" x 6" film), paper copy, electronic, and optical media reproduction.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Level 1

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Level 2

or here

Permitting reproduction in other than paper copy.

Sign Here, Please

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: <i>J. A. Lawrence</i>	Position: <i>Consultant</i>
Printed Name: <i>Jennifer Lawrence</i>	Organization: <i>The University of Iowa</i>
Address: <i>3538 Maplewood Dr Iowa City IA 52240</i>	Telephone Number: <i>(319) 341-8535</i>
	Date: <i>Sept 16, 1996</i>

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:	
Address:	
Price Per Copy:	Quantity Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name and address of current copyright/reproduction rights holder:
Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:	<i>Acquisition</i> ERIC/REC 2805 E. Tenth Street Smith Research Center, 150 Indiana University Bloomington, IN 47408
---	---

If you are making an unsolicited contribution to ERIC, you may return this form (and the document being contributed) to:

~~ERIC Facility
1301 Piccard Drive, Suite 900
Rockville, Maryland 20850-4305
Telephone: (301) 258-5600~~