Needs, Concerns and Practices of Online Instructors

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Abstract

While the delivery of on-line instructional courses in higher education institutions is flourishing, it is the faculty who play the key role in its successful implementation (Betts, 1998; Rockwell, Schauer, Fritz, & Marx, 1999; Willis, 1994; Wilson, 1998). Limited research has shown that a number of circumstances influence whether or not faculty choose to teach via on-line. Since faculty are pivotal to the success of online instruction, this study explored their backgrounds, concerns, and their on-line teaching practices. The information that is provided will update decision-makers of the current needs and concerns of on-line instructors so an effective distance-learning program can be fostered.

Purpose and Rationale

The purpose of the study was to identify: (a) the factors that influence faculty participation in distance education, (b) the hours of training received prior to delivering an on-line class, (c) the tools used in the on-line class, (d) the percent of class time on-line during the first on-line class and hours fall of 1999, (e) the number of hours spent in preparation each week for on-line coursework, (f) the number of hours spent interacting with students on-line each week, (g) the time spent preparing and delivering an on-line course compared to face-to-face courses, (h) how much more time, if any, was spent preparing and delivering an on-line course each week compared to face-to-face courses, (i) the optimal on-line class size, (j) the number of times instructors meet face-to-face with students and if these meetings were helpful, (k) if both face-to-face and on-line classes were taught in the same class and which was preferred, and (l) what institutions can do to further assist in the effective delivery of on-line courses.

Background Literature

The use of computer-mediated communication with classes to create on-line learning opportunities for students at a distance has become extremely popular in higher educational institutions (Berge, 1998; Rockwell, Schauer, Fritz, & Marx, 1999). Faculty are motivated to teach on-line for a myriad of reasons. Incentives cited most frequently in the literature are: flexible working conditions (since classes can be taught from any place at any time)(Berge, 1998; Clay, 1999; Mims, 1999; Merron, 1999); the ability to reach new audiences (Barron & Lyskawa, 1998; Berge, 1998, Clay, 1999; Mims, McKenzie & Kirby, 1999); on-line instruction is an enjoyable (Betts, 1998, Mims, 1999; Rockwell, Scheuer, Fritz & Marx, 1999); and the opportunity to enhance their technology skills while planning and delivering on-line courses (Clay, 1999; Merron, 1999; Mims, McKenzie & Kirby). Other incentives identified in the literature were the opportunity to instruct a diverse student population (Barron & Lyskawa, 1998; Mims, 1999); increased job satisfaction (Betts, 1998; Clay, 1998); ease in updating and revising previously administered on-line courses (Barron & Lyskawa, 1998; Berge, 1998); and the ability to ensure relevance of course topics (Mims, 1999).

In reality using on-line instruction is not an easy task. Studies have identified a number of obstacles faculty are confronted with when delivering on-line instruction. Some of the most frequently mentioned barriers were: decreased live, face-to-face interaction with students (Berge, 1998; Clay, 1999; Kirby, 1999; Stockeband & Althoff, 1997); lack of time to plan and deliver an on-line course (Berge, 1998; Clay, 1999; Rockwell, Scheuer, Fritz & Marx, 1999); and the lack of support and assistance in planning and delivering an on-line course (Berge, 1998; Betts, 1998; Clay, 1999; Rockwell, Scheuer, Fritz & Marx, 1999; Stockeband & Althoff, 1997). Other concerns that emerged were the great amount of time it took faculty to learn a new medium and update their technology skills before delivering an on-line class (Rockwell, Scheuer, Fritz & Marx, 1999; Rose & Collison, 1997); the inadequate compensation and incentives for delivering an on-line class (Rockwell, Scheuer, Fritz & Marx, 1999); a heavier workload with teaching on-line (Betts, 1998; Rockwell, Scheuer, Fritz & Marx, 1999) and slow computer access (Pan, 1998).

Methods

Participants. The population for this study included all of the instructors at the State University of West Georgia, who taught online courses fall semester of 1999 (N = 70). This included fifteen different departments consisting of faculty and a few administrators and staff members. All of the respondents utilized the online course delivery tool, known as WebCT (<u>http://about.webct.com</u>).

Instrumentation. The survey was designed over a period of a month and a half by the research team and explored areas that were grounded in the literature. The instrument consisted of both closed and open-ended questions that collected information on the background of on-line instructors, factors that motivated them to become involved in online instruction, tools utilized in class, the amount of time involved in planning and delivering online courses, the use of face-to-face meetings and how the university could further assist on-line faculty members deliver more effective courses.

Two educational professionals reviewed the instrument. One was a distance expert and the other an instructional designer. Minor changes were made to the instrument based on suggestions from the reviewers

Data Collection and Analysis Procedures. The surveys and a cover letter, explaining the nature of the study and the need for faculty input, were mailed on February 24, 2000. A reminder memo and another copy of the survey were mailed two weeks later to remind participants to return the surveys.

The closed-ended questions were analyzed using the statistical software program Advanced Statistical Package for the Social Sciences (SPSS). The data were analyzed using inferential statistics. All of the statistical tests were set at the .05 level of significance. The open-ended questions were content analyzed by experts who had extensive experience with this technique. Statements from the reports were extracted, categorized and quantified. An interrater reliability check was conducted to examine rater consistency. Satisfactory results were obtained, r = .89.

Respondent Profile. Of the 70 surveys that were originally mailed, four were returned by respondents indicating that they did not use WebCT for class fall semester of 1999. Thirty-one of the 66 surveys were returned to the team, a 47% return rate. According to rank, the majority of the respondents were assistant professors (24.2%) followed by professors (16.6%), associate professors (3%) and other (3%). Most of the respondents had been at the State University of West Georgia 1-5 years (28.8%) followed by 3 for 6-10 years, 3 for 11-15 years, 2 for 32 years. Four faculty members did not respond to this demographic question. Eighty-one percent of those involved in the study indicated they would continue teaching on-line. When asked the number of courses previously taught on-line, 30% reported they had taught one course and 28% indicated they had taught 8 courses. The number of on-line courses taught by this group of faculty in fall semester 1999 ranged from one to four courses. The vast majority of the respondents were teaching one on-line classes (51%). Twenty-two percent were teaching two on-line classes, 13% were teaching three, and 10% were teaching four classes on-line. Most of the faculty were using WebCT to enhance their face-to-face courses. Forty-five percent of the faculty met their classes 11 or more times during the semester face-to-face.

Findings

When faculty were asked what motivated them to deliver on-line courses, seven reasons emerged. These are summarized in Figure 1 below. In the write in section provided for this closed-ended question several respondents indicated this was a challenging format, a quick delivery of information to students, and quick access to information.

Rank	%	Reason
1	58	Desire to get students more involved with technology
2	58	Opportunity to use technology more innovatively to enhance course quality
3	55	Opportunity to meet needs of students at a distance
4	45	Increased flexibility in working hours and location
5	39	Response to students asking for on-line educational opportunities
6	26	Chance to interact with students more frequently
7	19	The course was required to be an on-line course

Figure 1. Ranking of Reasons Faculty Choose to Teach On-Line Courses (rank 1 being the most important).

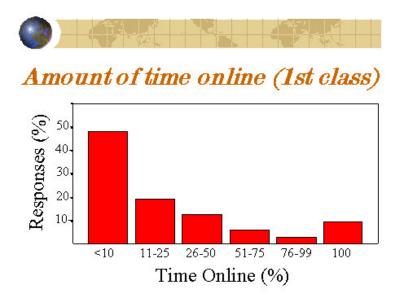
Training for on-line course delivery varied across respondents. Faculty indicated they had training ranging from none to

more than 21 hours before delivering their first on-line class. The vast majority of the instructors, 62%, received 1-5 hours of instruction before teaching their first course. The second most frequently reported amount of training time identified was 21 or more hours, 17% of the faculty.

The types of WebCT tools most frequently used by instructors in their first on-line class were the same as those identified fall semester of 1999. They were: (1) the course materials (94-87%), (2) the bulletin board (87-81%), (3) private e-mail (74-77%), (4) the class calendar (65%), and (5) chat rooms (39-32%).

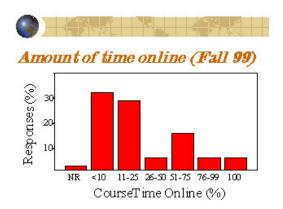
The amount of class time spent on-line the first time faculty used WebCT ranged from ten or less hours to fully on-line. Figure 2 below demonstrates that most new WebCT instructors chose to use on-line instruction minimally, ten or less hours.

Figure 2. Amount of Time Instructors Spend Online their First Class



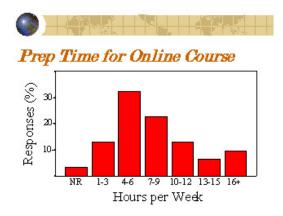
During fall semester 1999 WebCT was used more extensively. There was a decrease in the ten-hour or less category but noteworthy increase in the 11-25 and 51-55 hour categories. Figure 3 summarizes the findings.

Figure 3. Amount of Time Instructors Spend Online Fall Semester 1999



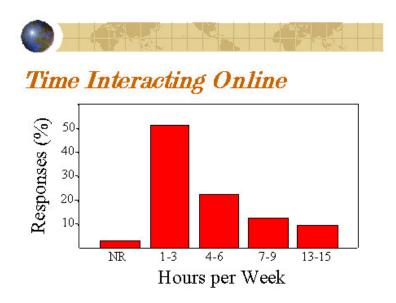
The data indicate that the vast majority of the faculty, 76%, felt they spent more time preparing and delivering WebCT courses compared to traditional face-to-face courses. Figure 4 highlights the amount of time faculty spent preparing on-line classes. The majority reported spending 4-6 hours for course preparation.

Figure 4. Hours Spent by Faculty Preparing an Online Course



The amount of time faculty spent interacting with students in on-line courses each week ranged from 1-3 to 13-15 hours. A little over half of the faculty, 52%, indicated that they interacted 1-3 hours each week with students on-line in WebCT. Figure 5 summarizes the findings.

Figure 5. Hours Per Week Faculty Interacted with Students Online



The optimal class size for on-line classes identified by faculty ranged from 10-15 students to 26-30. The majority of the respondents reported that 10-15 students was an ideal class size (32%). The other class sizes that were reported in rank order were: 15-20 students (23%), 21-25 students (13%), and 26-30 students (6%). Twenty-six percent of the respondents did not answer this open-ended question.

The question dealing with whether face-to-face meetings were helpful when used with on-line course work revealed the overwhelming majority of respondents felt that face-to-face was helpful, 96.7%. The reasons specified were:

- 1. face-to-face meetings provided an opportunity for people to interact and get to know one another (N=13),
- 2. the meetings provided a chance for student questions to be answered (N=5),
- 3. the meetings provided an opportunity for students and/or the instructor to do presentations and/or demonstrations (N=4);
- 4. face-to-face meetings were used to give exams and/or do progress checks on students (N=2);
- 5. they provided an opportunity to introduce the course to students and/or the technical requirements for a WebCT class (N=2)
- 6. face-to-face classes enables students to submit reports (N=2)

The study discovered that 40% of the respondents had taught the same course both face-to-face and on-line with WebCT. The type of delivery format the majority preferred was a combination of both face-to-face and on-line instruction, 25.8%. This was followed by a preference for face-to-face instruction. Total on-line instruction was the least preferred by this group of faculty members. Faculty reported the following reasons for their preference of face-to-face and on-line instruction:

- 1. the advantages of both formats can be realized when they are used (i.e., online learning anytime anywhere; face to face personal interaction with the instructor and class);
- 2. the instructor can get to know students better when they are in the same room;
- 3. the instructor can check on student progress in the course more closely when periodic face-to-face meetings take place;
- 4. there is a reduction in the drive time to campus for students when classes are on-line;
- 5. greater collaboration and sharing of ideas occurs when using both teaching formats;
- 6. classes totally on-line are sterile;
- 7. electronic communication opportunities exist;
- 8. some students become more assertive typing than talking in class;
- 9. convenient access to information, especially if class is missed;
- 10. assignments can be given electronically;
- 11. a variety of learning styles are addressed;
- 12. questions can be posted immediately;
- 13. WebCT is a useful way to transmit information; and
- 14. labs cannot be done on-line.

When faculty were asked how the University can further assist them in delivering their on-line courses several suggestions were made. They are listed in rank order in Figure 6.

Figure 6. Suggestions on How the University can assist Faculty in Delivering Online Courses

Rank	Suggestion Provide more and varied training sessions to faculty (i.e, Authorware, on-line course development)		
1			
2	Continue to provide tech support as needed by the instructor and students		
3	Give faculty release time to design and deliver on-line classes		
4	Provide more incentives for on-line instructors (i.e., laptops, student assistants, merit pay)		
5	Continue with the helpful support services		
6	Upgrade WebCT		
7	Limit the enrollments in on-line courses		
8	Fix WebCT problems in a timely manner		
9	Provide more detailed, understandable instructional materials to faculty		
10	Do not force faculty to teach on-line courses who do not wish to do so		
11	Make WebCT more user friendly		
12	Provide mentors in each department or college who can answer questions that come up for the less experienced distance instructors		
13	Provide more time for learning WebCT after the training	1	

Implications

The findings of this study should help administrators and faculty identify and address implementation issues related to on-line course delivery. Administrators need to determine what factors encourage faculty to adopt online instruction, and what kinds of support faculty require to design and implement online delivery. The study provides valuable information for administrators to consider as they wrestle with on-line delivery issues such as course size limitations and time required for faculty to prepare and deliver online courses. Faculty who have not participated in online instruction need to know the time and resources required to design and implement on-line courses, as well as an introduction to the various course tools that can be used in on-line delivery. Faculty will also gain insights into how on-line support can be used with face-to-face instruction. Hopefully, the findings from this study will help on-line researchers refine and focus research questions related to the implementation and delivery of on-line courses.

References

Barron, A.E. & Lyskawa, C. (1998). A review of tools for developing and managing online courses. <u>Society for</u> Information Technology and Teacher Education Annual, 163-165.

Berge, Z.L. (1998). Barriers to online teaching in post-secondary institutions: Can policy changes fix it? <u>Online Journal of</u> Distance Learning Administration 1(2), Summer (On-line), <u>http://www.westga.edu/~distance/Berge12.html</u>

Betts, K.S. Factors influencing faculty participation in distance education in postsecondary education in the United States: An institutional study. (Doctoral dissertation. The George Washington University, 1998). <u>Dissertation Abstracts</u> <u>International</u>: UMI.

Clay, M. (1999). Faculty attitudes toward distance education at the State University of West Georgia. <u>University of West</u> Georgia Distance Learning Report, December (On-line), <u>http://www.westga.edu/~distance/attitudes.html</u>

Kirby, E. (1999). Building interaction in online and distance education courses, Society for Information Technology and Teacher Education Annual - 1999, 199-201.

Merron, J.L. (1999). Managing web-based literature course for undergraduates. <u>Online Journal of Distance Learning</u> Administration 2(2), Summer (On-line), <u>http://www.westga.edu/~distance/merron14.html</u>

Mims, N.G., McKenzie, B.K., & Kirby, E. (1999). How to simplify involvement in on-line course work, <u>Society for</u> Information Technology and Teacher Education Annual - 1999, 220-223.

Mims, N.G. (1999). Out of the ivory tower and into the chat rooms -- are we giving in too much to technology? <u>Online</u> Journal of Distance Learning Administration 2(3), Fall (On-line), <u>http://www.westga.edu/~distance/mims23.html</u>

Olcott, D.JU., & Weight, S.J. (1995). An institutional support framework for increasing faculty participation in postsecondary education. <u>The American Journal of Distance Education</u>, <u>9</u>(3), 5-17.

Pan, A.C. (1998). Optimize the web for better instruction. <u>Society for Information Technology and Teacher Education</u> <u>Annual</u>, 146-149.

Rockwell, S.K., Scheuer, J., Fritz, S.J., & Marx, D.B. (1999). Incentives and obstacles influencing higher education faculty and administrators to teach via distance. <u>Online Journal of Distance Learning Administration 2</u>(4), Winter (On-Line), http://www.westga.edu/~distance/rockwell24.html

Willis, B. (1994). Distance Education Strategies and Tools. Englewood Cliffs, NJ: Educational Technology Publications.

Wilson, C. (1998). Concerns of instructors delivering distance learning via the WWW. <u>Online Journal of Distance</u> Learning Administration 1(3), Fall (On-line), http://www.westga.edu/~distance/wilson13.html

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