Designing Effective Online Course Development Programs:  
Key Characteristics for Far-Reaching Impact

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Abstract: There seems to be a great deal of anecdotal evidence suggesting that many faculty members experience shifts in pedagogical beliefs after successfully developing and teaching an online course. Results from a survey of faculty members who participated in a mentoring-based online course development program support this anecdotal evidence and present new questions about the specific qualities of professional development programs that facilitate such changes. Preliminary findings based on the survey data are shared, and additional program characteristics to be explored through additional data collection and analyses are identified.

Introduction

It is widely recognized that teaching online is a different experience than teaching face-to-face, requiring new skills and techniques. Much of this is necessitated by an online learning environment that is qualitatively different than the face-to-face environment of a traditional classroom. Many authors argue that the online environment promotes a more learner-centered instructional approach, requiring instructors to share control of the learning process with students (e.g., Jolliffe, Ritter, & Stevens, 2001; Palloff & Pratt, 1999, 2001; Shearer, 2003). Instructors may find that they need to play a more facilitative role, which can be a significant departure from their normal teaching style and require a shift in thinking related to control of the learning process. Teaching in the online environment “challeng[es] previous practice with regard to assessment, group interaction and student/teacher dialogue” (Ellis & Phelps, 2000, p. 2), and “necessitates a new model of instructor” (Cohen, 2001, p. 31).

It is not surprising then that faculty may face many challenges when developing an online course. Research suggests that faculty may struggle with learning the necessary technology skills (e.g., Giannoni & Tesone, 2003; Institute for Higher Education Policy, 2000; National Education Association, 2000), adapting their pedagogic strategies for the online environment (e.g., Palloff & Pratt, 2001; White, 2000; Wolf, 2003), adjusting to the more learner-centered focus inherent in online courses (e.g., Jolliffe, Ritter, & Stevens, 2001; Palloff & Pratt, 2001; Shearer, 2003), conceptualizing their course for the new environment (e.g., Kang, 2001), and finding the increased time required to develop their online course (e.g., Bonk, 2001; National Education Association, 2000). To address these unique challenges related to teaching in the online environment, many institutions have developed programs to support and assist faculty during the course development process.

Beyond just addressing the challenges listed above, faculty development programs targeting the development of an online course may have the potential to make a much more far-reaching and lasting impact on
faculty members and the institution as a whole. Caplan (2004) argues that, “It is helpful to consider the Web not simply as a new medium for distance education delivery, but also as a partnership of a new teaching paradigm and new technology, creating the potential for fundamental changes in how we undertake teaching and learning” (p. 182). Viewing the development and teaching of online courses from this perspective makes the development of Web-based courses an excellent opportunity to bring about changes far beyond just the specific courses being developed.

After talking with many practitioners involved in distance learning initiatives and considering the personal experiences of the authors, there seems to be anecdotal evidence that many faculty members experience shifts in pedagogical beliefs and make changes to their other courses after developing and teaching an online course. Some anecdotal accounts have been published in the early research literature related to distance education (e.g., Alley, 1996; Frank, 2000; Jaffee, 1997), but this topic has not been adequately investigated and reported. The research study reported here examines this notion and seeks to explore the mechanisms related to the development and teaching of an online course that might explain more far-reaching and substantial impacts on the faculty member’s pedagogical beliefs and teaching practices.

Research in Progress

To examine the effects on pedagogical beliefs and teaching practices, a questionnaire was administered to current and previous participants in a specific mentoring-based online course development program – the Distance Education Mentoring Program.

The Distance Education Mentoring Program

The Distance Education Mentoring Program is designed to educate and certify faculty members in the principles of instructional design so as to enhance the quality of their online courses. Specifically, the purposes of the Distance Education Mentoring Program are (1) to ensure the academic integrity of distance education courses and (2) to align the conditions for learning with the technology used to deliver courses. The program uses a rubric developed by Quality Matters (QM), which is a faculty centered, peer review-based process designed to certify the quality of online courses and their components (MarylandOnline, 2006). Faculty members who have been through the QM certification process and have online teaching experience serve as mentors. Each protégé is paired with a mentor from outside his/her discipline to ensure a focus on instructional design as presented in the QM rubric and avoid involvement with course content. A timeline for the Distance Education Mentoring Program is provided below in Figure 1.
The first stage of the Distance Education Mentoring program, Mentoring, takes place during one semester. During the mentoring stage, mentors and protégés receive a quarter-time release from their other responsibilities to work together as they design and develop their online courses. The focus of their interactions is on the instructional design process and the Quality Matters criteria. In addition to an intensive two-day knowledge exchange session and several monthly workshops, participants are also enrolled in an online course entitled “Distance Learning Institute.” In that course created in the university’s course management system, participants engage in online discussions and have access to resources related to the course design process.

After the courses have been developed, they are self-assessed by the protégés and evaluated by the mentors. Based on the feedback from the mentors, protégés can make final edits to their courses before teaching them the following semester, the Teaching stage. Once the protégés have taught their courses, the full courses (including student and instructor interactions) are again evaluated by the mentors according to the Quality Matters rubric (the Evaluate stage). Based on their attainment of the criteria, protégés’ courses were scored as either “pass,” “conditional pass,” or “fail.” Protégés whose courses do not receive a pass are given an opportunity to improve their course based on the feedback from the mentors. Once protégés have taught their course and received a “pass” rating based on the mentors’ evaluation, they are publically recognized at a luncheon and presented a certificate of completion (the Acknowledge stage). Additional information about the structure of the Distance Education Mentoring Program has been reported by Barczyk, Buckenmeyer, and Feldman (2010).

The Questionnaire and Respondents

To gain insight into the protégés’ experience, protégés from three offerings of the Distance Education Mentoring Program were surveyed. A total of 69 protégés were invited to complete an electronic survey administered through the university course management system. Currently, 32 protégés have completed the questionnaire, which indicates a 46% response rate.

The questionnaire contained 72 close-ended items, 58 of which addressed the characteristics and outcomes of the mentoring program. A majority of items asked respondents to rate their agreement with a statement on a four-point Likert-type scale where 1 indicated strong agreement and 4 indicated strong disagreement. The questionnaire also contained 14 items related to demographic and background data.

Preliminary Results and Discussion
Several questions on the questionnaire addressed the protégés’ perceptions about the impact of their participation in the mentoring program on their teaching. In response to the statement, “My online teaching has improved as a result of my participation in the Distance Education Mentoring Program,” 26 respondents (81%) agreed (2 respondents disagreed, 4 did not answer). Twenty-two respondents (69%) agreed with the statement, “My on-campus or traditional classroom teaching has improved as a result of my participation in the Distance Education Mentoring Program” (7 respondents disagreed, 3 did not answer).

Two related questions were also asked. Eighty-eight percent of the respondents (28) agreed with the statement, “I have been able to apply the skills and knowledge acquired from the DE Mentoring Program to my other courses” (1 disagreed, 3 did not answer). Similarly, 27 respondents (84%) agreed with the statement, “I have made changes to my other courses as a result of participating in the Distance Education Mentoring program” (2 disagreed, 3 did not answer).

The protégés’ responses on these four questions provide evidence to support the anecdotal claims presented in the literature and encountered by the authors in their work with faculty developing online courses. The majority of protégés who completed the questionnaire reported that they were able to apply the skills and knowledge they learned through the mentoring program to make beneficial changes in the other courses they teach. This finding presents a general conclusion that can now be explored in more depth to begin to understand the mechanisms responsible for the reported changes in instructional practices.

A fundamental question that must be addressed first is whether these changes in instructional practices were brought about as a result of participating in the Distance Education Mentoring program or simply developing and teaching an online course. For the most part, the participants in the early offerings of this program (i.e., the respondents) were eager to participate in the program and tended to be early adopters of technology. In fact, when asked how enthusiastic they were to participate in the program, 29 respondents (91%) indicated that they were looking forward to participating (only one respondent was not looking forward to participating). Similarly, the majority of respondents (72% - 23 respondents) agreed with the statement, “I am an early adopter of new technology” (8 respondents disagreed; 1 did not respond).

It is perhaps not surprising then that many respondents (63% - 20 respondents) had taught at least one online course in the past (only 6 of the 32 respondents had not). An ANOVA comparing those who had taught online in the past to those who had not yielded no significant results for any of the questionnaire items. This suggests that it is indeed the course development program that is impacting faculty beliefs and teaching practices, and not the process of developing and teaching an online course itself.

The next step in this research agenda is to explore the qualities of the Distance Education Mentoring Program that might be responsible for promoting changes in pedagogical beliefs and teaching practices. Some key aspects of this specific program that deserve attention are its focus on mentoring by peers experienced and trained in best practices in online education, the use of the Quality Matters rubric to focus development and assess courses, and the general focus on and foundation of the program in instructional design principles (as opposed to specific content).

Conclusion

The preliminary analysis of the questionnaire data supports the hypothesis that the impact of faculty participation in a mentoring-based online course development program grounded in the principles of instructional design reaches beyond the online course that is being developed. This research suggests that the development of an online course is a good opportunity to impact teaching and learning far beyond just the single course that is being developed. It is important to now begin to explore the qualities of the Distance Education Mentoring Program that may be responsible for bringing about changes in pedagogical beliefs and teaching practices. Identifying specific qualities of the program will provide valuable information to practitioners seeking to structure faculty development and online course development opportunities to facilitate reflective thought and careful examination of the connection between pedagogical beliefs, instructional practices, and student learning outcomes. Such information will also extend the literature base related to the development of online courses and the structure of faculty development programs more generally.
It is, however, important to note some limitations with the current research. As was stated earlier, the respondents did not represent a random sample of the faculty members at the institution. They were early adopters of technology who were eager to participate in the course development program. As the program continues, it will be important to examine the beliefs and experiences of the participants who may be less enthusiastic about the program and the development of an online course in general. Also, as noted earlier, the data in this study are limited to participants’ self-report questionnaire responses. The researchers are in the process of conducting interviews to triangulate the data and gain additional insights into the mechanisms of the program responsible for the changes. Future research incorporating other methods and exploring other data sources such as course syllabi and materials is also in progress.

References


