

“I’m Teaching What?!”: Preparing University Faculty for Online Instruction

Susan O’Hara

Stanford University

Robert Pritchard

California State University Sacramento

The percentage of higher education students enrolled in online courses has increased from 9.6% in fall 2002 to 33% in fall 2010. Due to the increased importance of online courses and programs on university campuses, there is a need to better prepare novice technology faculty for the delivery of these courses. This article provides a description of the process through which a group of faculty with low to high technology skills prepared to deliver an online master’s program. Meeting minutes, documents produced, online discussion transcripts, and informal conversations were all used as data to analyze outcomes of the process. The paper concludes with the presentation of practical recommendations, derived from documentation of the process, for preparing novice technology faculty for the delivery of online programs.

Keywords: *professional development, technology, online learning*

Introduction

The growing number of blended, online, and distance education courses, programs, and degrees offered by institutions of higher education offers challenging new opportunities to reexamine teaching and learning. Carefully designed faculty development approaches can create a culture that supports thoughtful focus on teaching while nurturing the sense of connectedness and collegiality that is vital to continuous innovation and improvement in post-secondary institutions (Eib & Miller, 2006, p.1).

Not only are a majority of accredited colleges and universities now offering some form of online study, according to The Sloan Consortium, over 6.1 million students—about 33% of America’s 19 million students—were enrolled in at least one online course for the fall 2010 semester (Allen & Seaman, 2011). This is an increase from 9.6% in fall 2002. Even those institutions that have yet to offer programs entirely online offer hybrid courses that include the use of numerous technology tools. The online study also revealed:

While the number of programs and courses online continue to grow, the acceptance of this learning modality by faculty has been relatively constant since first measured in 2003. Less than one-third of chief academic officers believe that their faculty accept the value and legitimacy of online education. This percent has changed little over the last eight years. (Allen & Seaman, 2011, p. 5)

According to Chris Dede of Harvard’s Graduate School of Education, a growing body of research suggests that, in terms of the learning outcomes produced, such hybrid or blending of online and classroom formats is superior to face-to-face learning alone (Timmons, 2010). The 2011 National Survey of Student Engagement found that, thanks to advances in interactive instructional design,

online students were more engaged in their learning than were their classroom counterparts. The appeal of online learning and e-learning for institutions and policy-makers is that it frees students from a rigid schedule of attendance at their higher education institution. It also enables self-paced learning and is purported to be more cost effective (Gatta, 2003). From a pedagogical perspective, knowledge relating to learning theories, instructional design principles, and research into student learning in higher education has been applied to the use of online learning technologies (Siragusa & Dixon, 2005). The online learning environment creates an opportunity for the use of interactive and collaborative models of learning (Knightley, 2008; McDonald & Reushle, 2000).

Despite the benefits of offering online programs, one of the challenges institutions face is how to prepare faculty who are novice technology users to teach in online environments. According to Gibson, Harris, and Colaric (2008), faculty are often resistant to online programs. Bower (2008) summarizes some of the reasons why this resistance exists, including fear among faculty about being perceived by students as lacking the necessary technological expertise, apprehension about the different role faculty play in online courses compared to the role they play in traditional courses, and concern about the possible lack of prestige for online courses.

The research literature has also shown that the resistance is greater among novice technology users (O'Hara & Pfeifer, 2002). Understanding and addressing the nature of this resistance is central to the success of any effort aimed at preparing novice technology faculty. In order to motivate these faculty to participate, the research has indicated that the following factors should be incorporated into any preparation effort: (1) sufficient time for faculty to become comfortable with the technology tools they will be utilizing, (2) peer mentoring to support faculty learning, and (3) both initial and follow-up training, especially during the adoption process (Hughes, 2002; Passmore, 2000).

In this article, we describe the process through which a group of university faculty ranging from low to high in technology skills prepared to deliver an online master's program. Meeting minutes, documents produced, online discussion transcripts, and informal conversations were all used as data to analyze outcomes of the process. We end by providing the reader with a set of practical recommendations, derived from documentation of the process, for preparing novice technology faculty for the delivery of online programs.

Program Content

Over a 2-year period, faculty at the university developed a new master's degree program: Master of Arts in Education, Curriculum, and Instruction with Teacher Professional Development Emphasis. The faculty aimed to design a program that would meet the needs of practitioners who wish to enhance their knowledge about curriculum and instruction as well as their ability to provide professional development to their colleagues. More specifically, the program targets teachers who want to take leadership roles in their schools but not become school administrators. In this era of "highly qualified" (as defined in the No Child Left Behind Act), it provides teachers with the needed knowledge and training for this designation without moving to the level of National Board Certification. The progressive and innovative nature of this program ensures that holders of the degree are highly competent teaching strategists, leaders, and presenters with a wide variety of academic, technical, and practical experiences. A cornerstone of this program is the recognition that candidates may be working professionals living at a distance from the university, raising families, or pursuing other interests.

Program Delivery

The Master of Arts in Education, Curriculum, and Instruction with Teacher Professional Development Emphasis was developed to accommodate students through a nontraditional distributed learning environment using the latest research methods to ensure student success while simultaneously addressing the institution's goals. The courses offered were designed specifically for distributed learning formats. The program was designed to leverage the best qualities of distributed, distance delivery and is not offered in an on-campus format.

One critical component of the program is the inclusion of a mandatory face-to-face retreat at the very beginning of the program. This retreat, which is scheduled in a Friday evening and all day Saturday format, is the result of research indicating the success of online programs is significantly predicated upon the establishment of strong communities of learning (Beck, 2002). It also allows faculty to assess the technological knowledge of each student. Qualified applicants who are unable to attend the retreat are not allowed to enroll in the program.

Approximately 75% of every course in the 30-unit program is offered via distributed distance learning using a variety of communications-based tools including (a) synchronous, object-based, virtual environments; (b) asynchronous discussion board and electronic mail environments; and (c) web-based curricula delivery. Thus, 25% of every course is scheduled as face-to-face meetings. In order to maintain this distance-learning emphasis throughout the program, a need existed to prepare faculty to deliver each course in an online environment.

Program Planning and Preparation for Delivery of the Online Program

A planning team of 12 faculty members from the Department of Teacher Education worked over 2 academic years to design the program. The faculty involved included the chair and associate chair of the department and 10 additional faculty members who volunteered to participate. This group of 10 ultimately became the instructors for the program. The team members ranged from high-level to novice technology users. The majority of faculty involved had never taught in an online setting. The professional activities designed to engage the team in the development of the program consisted of bimonthly retreats, online discussions, course-specific meetings in small groups, and technology professional development workshops. Meeting minutes, documents produced, online discussion transcripts, and informal conversations were all used as data to analyze the success and outcomes of the process.

Early in the process, the focus of this collaborative work was on program content and organization. The department's traditional master's program has six 3-unit core courses and a 12-unit elective component that students complete by enrolling in four additional 3-unit courses. Faculty decided to develop three 4-unit courses that focused on professional development issues to fill the 12-unit elective component in the online program. The first step in this process was to identify a list of learning outcomes for this new program. Using the National Council of Staff Development standards (see Appendix A), together with the learning outcomes from the existing graduate programs within the Department of Teacher Education, faculty developed a list of learning outcomes for the new program (see Appendix B).

Using these learning outcomes and the Principles of Professional Development developed by the National Council of Teachers of English (see Appendix C) as guides, the faculty developed the three

elective courses: *The Professional Lives of Teachers*, *Professional Development of Teachers in Democratic Schools*, and *Schools and Schooling in a World of Policy and Practices*.

Faculty then met to discuss how the content of the electives could be reinforced within the six core courses. This involved reviewing the ways in which the core courses were typically taught and finding ways in which information related to professional development could be incorporated. During this process, faculty identified where the learning outcomes for the program could be met within each course in the program.

Next, faculty worked together to decide how the courses should be sequenced. The first level of discussion regarding the sequencing of courses focused on where each course should be placed over the entire program. Then the discussions focused on each semester's set of courses, and decisions were made about which should occur consecutively and which should occur concurrently. One of the decisions made early in the process was that, to the extent possible, faculty would team-teach courses. Furthermore, faculty teaching courses during the same semester would meet to collaborate and plan the course activities and assignments for that semester. This decision was made to provide greater continuity within the program, a concern faculty had expressed about the online nature of the program.

The team decided that students in this program would complete an alternative culminating experience (ACE) rather than a traditional thesis or project. With the guidance of their advisor and program faculty, students working on their ACE create a portfolio that focuses on one of the three emphases: (1) researching professional development action, (2) creating a professional development program, or (3) acting as a professional development advocate and/or change agent.

Within each emphasis, all portfolios have the same four components:

1. Overview, which includes a description, a rationale, and a timeline
2. Review of relevant literature
3. Student work itself (presented on paper or electronically)
4. Reflection on this work, which includes a critique of its success, an analysis of challenges faced, a discussion of projected next steps, and a description of the significance of this work to the field of education.

Each emphasis has slightly different guidelines that are appropriate to the work it frames. The four components outlined above, however, are required for all portfolios, regardless of their area of emphasis.

Finally, faculty created an assessment plan that would ensure high levels of academic learning by students and be designed to fit with the online delivery model of the program. This assessment plan is sequential, multifaceted, and built from the program's learning objectives. To evaluate the experiences of each candidate, faculty decided to use interviews, observation (face-to-face and online), and document collection. For example, candidate writing samples—which incorporate the descriptive, analytical, and reflective writing styles expected by academia—are gathered throughout the program. In addition, faculty developed a framework for evaluating the online delivery method of the program based on the work of Strachota, Schmidt, and Conceicao (2005; see Appendix D). It was decided that upon completion of their culminating experience, students would be asked to reflect upon the experience and process. Coupled with the course assignments that are attached to the professional development learning objectives, these reflections allow faculty to assess the students' growth in the learning objective areas. The data collected throughout the program and at the end of each cohort's

period of time in the program are analyzed and used to determine any changes needed to improve the quality of the program.

Once decisions had been made about the content and sequence of the program, the discussions focused on the technology tools to be used. A guest speaker who had developed and successfully coordinated the online Master's in Education, Educational Technology Emphasis program spoke to the group and shared what he had learned from his experience. In addition, faculty attended an introductory WebCT (Blackboard Inc.) workshop to allow them to explore the possibilities that this program offers. The main focus for the next two retreat sessions was choosing the technology tools that would enhance delivery and understanding of the content of the program. Faculty decided to use WebCT to deliver the online components of the program. They believed that these tools fit well with the learning activities and content of the courses. In addition, the excellent WebCT support services on campus for both students and faculty would help to ensure a successful implementation.

Faculty decided that all courses would utilize online threaded discussions, chat tools, email, blogs, and online learning modules. They met in a computer lab to design a common interface for each course, which would visually represent continuity across the program and allow for easy navigation by students. The instructional technology support service staff designed a banner for the program that was attached to each course. In addition, faculty decided to allow all program colleagues access to each course, a significant departure from current practice at this institution.

Having chosen the technology tools and specific course instructors, small course-specific groups started meeting to construct online versions of the course readings, assignments, and assessments. Faculty participated in further WebCT training courses to assist them in preparing for the online delivery portion of their courses. Based on research around best practices for planning and delivery of online education, faculty decided to use the following questions to guide them in this process:

1. Are course objectives, instructors' expectations, and evaluation criteria of assignments well communicated to the learner?
2. Does the online course provide students sufficient support (including instructional and technical) for meeting the course objectives and other relevant needs of students?
3. Does the ease of navigation, predictability, and quality of interface enhance the learners' experience?
4. Does the online course encourage students to be active learners?
5. Does the online course encourage learner-instructor interaction?
6. Does the online course encourage interaction and collaboration between and among learners?
7. What opportunities and mechanisms are built into the online courses to provide effective (i.e., contextual), authentic examples?
8. What opportunities and mechanisms are built into the online courses to allow for instructors' feedback for supporting student learning (e.g., timely, not too much nor too little)?

Program Impact

At this point in time, two cohorts ($N = 34$ students) have successfully completed the program. Of the 38 students who started, 3 withdrew from the first cohort while 1 withdrew from the second cohort. One withdrawal was due to the student leaving the area, another was due to a change in jobs, and 2 withdrew because they decided the online model was not a good fit for them. Overall, both students and faculty have expressed a high degree of satisfaction with the program, although both groups

have identified issues that we have attempted to address by making modifications to some aspects of the program.

Student evaluations of individual courses have yielded two types of data. Results from the standard university evaluation that is completed after each course indicate students highly value the variety of ACE options and the professional development content they are learning. One student comment that captures the essence of most of the feedback about this issue noted the “effective blending of conceptual content related to professional development with pragmatic approaches to planning and delivering [professional development] that are effective and authentic.” The evaluation instrument contained in Appendix D indicated a high degree of satisfaction in the Learner-to-Learner and Learner-to-Content areas, while the results from Learner-to-Instructor category were positive with the exception of “receiving timely feedback” and “getting individualized attention from my instructor when needed.” The comments that indicated dissatisfaction in these areas were concentrated in two courses.

Faculty feedback after two cohorts has been primarily positive. The most important indicator is probably the fact that all 10 faculty want to continue to teach in the program. Nonetheless, they have identified two areas that need improvement. First, the collaborative partnerships among faculty that were supposed to occur each semester worked more effectively in some semesters than in others. Second, faculty believe that someone needs to serve as the point person for coordinating various aspects of the program, from scheduling and facilitating meetings to communicating with technology support staff on campus. Both of these issues are under consideration by the department chair as planning for cohort three is underway.

Recommendations for Preparing Novice Technology Faculty for Delivering Online Programs

The preceding sections describe the content of the program, the way in which it is delivered, the process we followed to prepare faculty for its implementation, and the impact it had on faculty and students. What follows is a list of recommendations that others might follow—in effect, the lessons we learned from our experience:

- **Technology is a tool:** The content needs to drive the use of technology. Seeing the content and delivery of the program as the main priority allowed faculty to choose technology tools that would enhance delivery and understanding of the content. Faculty did not let the technology drive the program.
- **Appropriate technology:** Utilizing the right tools, which are usable and offer enough functionality to achieve the goals of the program, is essential for success. Tools that ensure the delivery of online educational content—such as email, online discussion boards, chat facilities, and announcement boards with the document repositories, drop boxes, links to other websites, online assessments, and interactive tutorials that combine image, text, animations, video, and audio—need to be incorporated into any online program.
- **Common interface:** Faculty and students should use a system that uses the same navigation scheme, look, and feel. The same communication tools should be used for all classes. Assignment submission and retrieval procedures should be similar and streamlined.

- **Faculty teams:** Have expert faculty team with and mentor novice faculty. Teaming faculty together to teach courses allows for a sharing of expertise on the professional development and technology content and helps support those who feel less secure with technology.
- **Authentic tasks:** Design technology professional development activities that focus on using the tools in the context of the program you are developing. When faculty are engaged in learning new uses of technology for authentic tasks, like developing a new course or program online, they are more engaged and retain more of the information.
- **Ownership and voice:** All faculty participating in the development of the program had ample opportunities to provide input into the content and structure of the program. Even though there was a range of technology skills, all members were provided with education on the development of online programs, allowing them to make informed decisions about the online aspects of this program.

Conclusion

Even with the growth of online courses and programs, many faculty members are still hesitant about teaching in these environments (Maguire, 2006). University faculty who are novice technology users often have low self-efficacy about teaching with technology and are resistant when asked to participate in the development and/or delivery of online courses and programs (Zhen, Garthwait, & Pratt, 2008). Given the increasing popularity of these options, universities must find effective ways to reduce this anxiety and empower faculty, particularly those who are novice technology users. Our hope is that our experience will contribute to that effort.

References

- Allen, I., & Seaman, J. (2011). *Going the distance: Online education in the United States 2011*. The Sloan Consortium. Retrieved from http://www.sloan.c.org/publications/survey/pdf/staying_the_course.pdf
- Beck, B. (2002). Lessons in community building: From dialogue to action. *Journal of Higher Education Outreach and Engagement*, 7, 27–40.
- Bower, B. (2008). Distance education: Facing the faculty challenge. *Online Journal of Distance Learning Administration*, 4, 25–39.
- Eib, B. J., & Miller, P. (2006). Faculty development as community building – An approach to professional development that supports communities of practice for online teaching. *International Review of Research in Open and Distance Learning*, 7, 1–15.
- Gatta, M. (2003). *Findings from the field: early findings of the New Jersey online learning project for single working-poor mothers*. Rutgers University Centre for Women and Work.
- Gibson, S., Harris, M., & Colaric, S. (2008). Technology acceptance in an academic context: Faculty acceptance of online education. *Journal of Education for Business*, 83, 355–359.
- Hughes, J. (2002). When good intentions are not enough: Motivating faculty "ownership" of IT initiatives. *Teaching, Learning, & Technology: The Connected Classroom*. Proceedings of the Seventh Annual Mid-South Instructional Technology Conference, Murfreesboro, TN.
- Knightley, W. M. (2008). Adult learners online: Students' experiences of learning online. *Australian Journal of Adult Learning*, 47, 264–288.

- Maguire, L. L. (2006). *Literature review: faculty participation in online distance education: Barriers and motivators*. Millersville University. Retrieved from <http://www.westga.edu/~distance/ojdla/spring81/maguire81.htm>
- McDonald, J., & Reushle, S. (2000). Engagement in web-based education: designing for models of student learning, *Journal of Open Learning*, 9, 287–297.
- National Survey of Student Engagement. (2011). *Fostering student engagement campuswide*. Retrieved from http://nsse.iub.edu/html/annual_results.cfm
- O'Hara, S., & Pfeifer, J. (2002). A model for technology integration and faculty professional development in higher education. *Paper Presentation for the Annual Convention on Technology in Higher Education at Peking University, China*.
- Passmore, D. L. (2000). Impediments to adoption of web-based course delivery among university faculty. *ALN Magazine*, 4. Retrieved from <http://www.aln.org/publications/magazine/v4n2/passmore.asp>
- Siragusa, L., & Dixon, K. C. (2005). Closing the gap between pedagogical theory and online instructional design: a bridge too far? In Chiazzese, G., Allegra, M., Chirafi, A., & Ottaviano, S. (eds.), *Methods and technologies for learning*. WIT Press.
- Strachota, E. M., Schmidt, S. W., & Conceicao, S. (2005). *Using online surveys to evaluate distance education programs*. 2005 Distance Teaching & Learning Conference. Madison, WI, University of Wisconsin-Madison.
- Timmons, G. (2010). *Going online to keep traditions alive and increase access*. Diverse issues in higher education. Retrieved from findarticles.com/p/articles/mi_m0WMX/is_3_27/ai_n53026490/
- Zhen, Y., Garthwait, A., & Pratt, P. (2008). Factors affecting faculty members' decision to teach or not to teach online in higher education. *Online Journal of Distance Learning Administration*, 11, Retrieved from <http://www.westga.edu/~distance/ojdla/fall1113/zhen113.html>

Appendix A

National Council of Staff Development Standards

- I. Context Standards: Staff development that improves the learning of all students:
 - a. Organizes adults into learning communities whose goals are aligned with those of the school and district. (**Learning Communities**).
 - b. Requires skillful school and district leaders who guide continuous instructional improvement. (**Leadership**)
 - c. Requires resources to support adult learning and collaboration. (**Resources**)

- II. Process Standards: Staff development that improves the learning of all students:
 - a. Uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement. (**Data-Driven**)
 - b. Uses multiple sources of information to guide improvement and demonstrate its impact. (**Evaluation**)
 - c. Prepares educators to apply research to decision making. (**Research-Based**)
 - d. Uses learning strategies appropriate to the intended goal. (**Design**)
 - e. Applies knowledge about human learning and change. (**Learning**)
 - f. Provides educators with the knowledge and skills to collaborate. (**Collaboration**)

- III. Content Standards: Staff development that improves the learning of all students:
 - a. Prepares educators to understand and appreciate all students, create safe, orderly and supportive learning environments, and hold high expectations for their academic achievement. (**Equity**)
 - b. Deepens educators' content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately. (**Quality Teaching**)
 - c. Provides educators with knowledge and skills to involve families and other stakeholders appropriately. (**Family Involvement**)

<http://www.naepdc.org/Quality Framework/NSDC Standards.doc>www.naepd

Appendix B

Learning Outcomes MA in Education, Curriculum, and Instruction With Teacher Professional Development Emphasis

	GPAG	K/S/D	PD Outcomes
Understand	Expertise	K	The progression of professional lives of teachers
	Expertise	K	Leadership styles, learning styles, and communications styles in order to maximize their professional growth and development as leaders within a complex educational system
	Expertise	K	Research and best practices in professional development, adult learning theory, data-driven decision making, and the basic principles underlying innovation and change processes in educational organizations
	Expertise	K	The role of technology in facilitating learning, increasing efficiencies, and managing data to improve instruction, assessment, and ultimately, educational outcome
Develop	Expertise	S	Expertise in creating professional networks and effective collaborative strategies to enhance excellence in job performance and advance teaching as a professional
	Expertise	S	Expertise and strategies to facilitate collaboration with stakeholders in the educational enterprise in order to enhance the education of students in a democratic society
	Leader	K	Awareness of educational issues and an understanding of global contemporary school systems, those service low-income and culturally and linguistically diverse students and communities
	Expertise	S	Ability to utilize multiple perspectives to critically analyze political practices and policy implications related to PD
Model	Expertise	S	Acquired knowledge, skills, and technologies in the PD field
	Leader	S	Curricular, instructional, and professional leadership in the pursuit of excellence in schools, districts, and states
	Expertise	S	Ability to align professional development plans with the mission, vision, values, and goals of the school district
	Leader	D	A commitment to excellence in one's own teaching and professional development practices
Advocate	Leader	S/D	Sound professional development practices to improve academic achievement for all students
	Leader	S/D	The development and support of communities of practice such as professional learning communities and action research networks
	Leader	S/D	Engagement in the educational policy development process

Note: GPAG = graduate program area group; K = knowledge; S = skills; D = dispositions; PD = professional development.

Appendix C

Principles of Professional Development (National Council of Teachers of English)

- Professional development of teachers/faculty is a central factor leading to student success.
- Professional development treats teachers/faculty members as the professionals they are.
- Professional development supports teachers/faculty at all levels of expertise; its value is confirmed by external validation.
- Professional development relies on a rich mix of resources including a theoretical and philosophical base, a research base, and illustrations of good practices.
- Professional development can take many different forms and employs various modes of engagement.
- The best models of professional development are characterized by sustained activities, by engagement with administrators, and by community-based learning.
- Professional development is systematically reviewed with evidence of efficacy provided by a review process including multiple stakeholders and the National Council's own research.

Appendix D

Evaluating Online Courses

Learner-Content Interaction

1. The course documents, lessons, or activities used in this class facilitated my learning.
2. The course delivery tool was easy to navigate and enhanced my learning experience.
3. The design of the online course was clear and consistent and provided instructions for navigation and interaction.
4. The assignments and/or projects in this course facilitated my learning.
5. The learning activities in this course required critical thinking, which facilitated my learning.

Learner-Instructor Interaction

1. In this class, the instructor was an active member of the discussion group, offering direction to posted comments.
2. I received timely feedback from my teacher.
3. I was able to get individualized attention from my instructor when needed.
4. In this class, the instructor functioned as the facilitator of the course by continuously encouraging communication.

Learner-Learner Interaction

1. In this class, the online discussion board provided opportunity for problem solving with other students.
2. In this class, the online discussion board provided opportunity for critical thinking with other students.
3. This course created a sense of community among students.

The *Journal of Educational Research and Practice* provides a forum for studies and dialogue that allows readers to better develop social change in the field of education and learning. Journal content may focus on educational issues of all ages and in all settings. It also presents peer-reviewed commentaries, book reviews, interviews of prominent individuals, and additional content. The objectives: We publish research and related content that examines current relevant educational issues and processes aimed at presenting readers with knowledge and showing how that knowledge can be used to impact social change in educational or learning environments. Additional content provides an opportunity for scholarly and professional dialogue regarding that content's usefulness in expanding the body of scholarly knowledge and increasing readers' effectiveness as educators. The journal also focuses on facilitating the activities of both researcher-practitioners and practitioner-researchers, providing optimal opportunities for interdisciplinary and collaborative thought through blogging and other communications.

Walden University Publishing: <http://www.publishing.waldenu.edu>
