### Discovering What Faculty REALLY Need to Know About Teaching Online

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#### Background

The number of courses offered online grows every year (Romano, 2006), resulting in an increasing number of higher education faculty who are entering the "virtual" classroom for the first time. Despite the fact that many institutions have been teaching online for over a decade, the literature reveals that little is known about how best to prepare faculty to teach in an online environment.

It has been well documented in the literature that faculty need training and assistance to make the transition from teaching in the traditional face-to-face classroom to teaching online (Abel, 2005; APQC, 1999; Berg & Collins, 2003; Bower, 2001; Donovan & Macklin, 1998; Hagner, 2001; Irani, 2001; Ko & Rossen, 2004; Palloff & Pratt, 2001; Phipps & Merisotis, 2000; Riedinger & Rosenberg, 2006; Smith, 2005). Faculty professional development related to teaching online varies from the provision suggested readings to mandatory training programs. It seems that various combinations of technological and pedagogical skills are needed, and lists of competencies abound. The question is: What is needed in a good training and development program for faculty continuing to teach online and for those just preparing to teach their first online course? Then, if we build it, will they come?

Therefore, the purpose of this research study was to determine the professional development needs of faculty who teach online courses at a large Research I institution. We were particularly interested in learning more about how university's online educators obtained the skills and knowledge they needed to teach online, and what additional resources they feel would support them in their future distance learning work. Survey results will be used to guide the development of professional development resources for new and experienced distance education faculty at Penn State.

#### **Research Questions**

In order to provide our faculty with the proper training and resources to be successful online educators, more information is required to determine their professional development needs, the format in which their professional development events should be offered, and the incentives that would encourage them to participate in such events. Survey results will be used to guide the development of professional development resources for new and experienced distance education faculty at Penn State.

The study addressed four research questions:

- Q1: With what aspects of teaching online do faculty need assistance?
- Q2: What types of professional development experiences are needed by online faculty?
- Q3: What format should these professional development experiences take to best meet faculty needs?
- Q4: What incentive(s) do faculty wish to receive in return for participating in a professional development experience that is focused on teaching online?

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### Method

### **Population and Sample**

The target population for this study was Penn State University faculty who have taught at least one completely online course through Penn State's "World Campus," the distance learning delivery unit for the University. Invitations to complete an online survey were e-mailed to 260 World Campus faculty with 68 usable surveys completed, for a response rate of 28.7%. In order to compare the sample to the target population, the University's Data Warehouse was queried to obtain population data. This data was available for 211 of the 260 World Campus faculty. The comparison showed that the sample closely reflected the population in terms of employment status (i.e., full-time vs. part-time), age, tenure status, and gender.

### **Research Design**

A review of the literature was undertaken to locate any similar survey studies for online faculty development conducted at other institutions. Four instruments were uncovered:

- 1. A "Faculty Interview Questionnaire" developed by Radha Ganesan for the Mellon CEUTT Project at Syracuse University;
- 2. A faculty survey conducted by the "Cooperative Institutional Research Program" (CIRP);
- The University of Florida's College of Agricultural and Life Sciences survey described in a 2001 article in Syllabus (Campus Technology) titled "Going the Distance: Developing a Model Distance Education Faculty Training Program"; and,
- 4. A faculty development needs assessment survey described in the 2001 Educause Quarterly (No. 2) article titled "Faculty Attitudes about Distance Learning" by Carol Wilson.

The author(s) of each instrument was contacted to seek permission to adapt their survey items for the purpose of this study. A modified Delphi process was utilized through the use of university colleagues, including instructional designers and eLearning support specialists, to select and modify items. The items were judged on how well they supported the research questions and the understandability of the wording. The resulting instrument consisted of 32 items presented in three parts: Part 1 – Online teaching experience(s), Part 2 – Professional development experience(s), and Part 3 – Demographics. Twenty-eight of the survey questions were in multiple-choice format, with four presented in an open-ended format.

#### Results

# **Demographics**

A majority of our sample have been teaching at the college/university level for more than 5 years (78.0%). Slightly over half have attained an academic rank of associate professor or lower rank such as instructor or lecturer (51.5%). A clear majority is either not on the tenure track (58.0%), or already tenured (39.0%). A majority of the survey respondents have taught more than one online course (61.8%). There was a normal distribution of age, with the majority between the ages of 36 and 55 (64.7%). A majority of the respondents were considered full-time (80.6%) and were male (64.0%). Most respondents characterized their online teaching experience(s) as somewhat positive or very positive (81.6%).

# Research Question 1: With what aspects of teaching online do faculty need assistance?

The course design and development topics selected most often by the survey respondents were choosing appropriate technologies to enhance their online course (69.1%), converting course materials for online

use (43.6%), creating video clips (41.8%), determining ways to assess student progress in an online course (41.8%), adapting traditional lecture material to an online environment (32.8%), creating audio clips (38.2%), and designing and developing attractive Web sites (38.2%). The course delivery topics that most interested the survey respondents were facilitating online discussion forums (e.g., threaded message boards) (58.2%), building and enhancing professor/student relationships in the online classroom (49.1%), facilitating Web conferencing sessions (using tools like ElluminateLive, Centra Symposium, WebEx, or Horizon Wimba) (43.6%), increasing interactions in an online course (e.g., student-to-student, faculty-to-students) (43.6%), and managing their online teaching workload (41.8%). Finally, the administrative issue that generated the most interest (71%) was making their online courses available to students at other University campus locations.

The assistance and/or resources the respondents would like to have when they develop and teach an online course in the future include technical advice and assistance, instructional design assistance and resources, and access to colleagues who have experience teaching online. The single, most helpful resource they have utilized related to teaching online was instructional designers (42.6%) and colleagues experienced in teaching online (36.8%).

The most insightful responses were given to the survey question that asked respondents to provide advice for a colleague who was preparing to teach online for the first time. A majority of the responses dealt with things they needed to do before teaching online. Advice was given to observe an online course, be an online student, work with an instructional designer, talk to colleagues experienced in teaching online, learn the University's course management system, and locate technical assistance. When actually teaching online, advice was given to establish an online presence, provide prompt and effective student feedback, provide course detail and clarity, set expectations, provide interaction, play a facilitative role, and be flexible.

# **Research Question 2: What types of professional development experiences are needed by online faculty?**

When asked what type(s) of professional development experience(s) they would be most likely to take advantage of, the top two preferences were for self-paced/self-directed materials such as Web-based resources, video tapes/DVDs, CDs, handouts, etc. (50.9%), and informal face-to-face events such as presentations, brown bag meetings, etc. (49.1%). Other top selections included informal online events such as Web-based presentations, chat sessions, etc. (40.0%), formal face-to-face events such as a regularly scheduled course or set of training modules (40.0%), and formal online events such as Web-based, regularly scheduled course or set of training modules (34.6%). In addition, the respondents indicated that the most helpful aspects of professional development events related to teaching online included the opportunity to share real-life experiences with their colleagues, utilize various technologies including the university's course management system, and to access specific examples and strategies.

# **Research Question 3: What format should these professional development experiences take to best meet faculty needs?**

The types of formats preferred by our survey respondents were a series of short (less than 1 day) sessions/workshops conducted over several weeks (25.9%), a full day (24.1%), a self-paced program (i.e., completed at one's own time/pace) (20.4%), or a half day (13%). The most popular times of the year for these events was during the summer (50.0%), fall (44.2%), or spring (44.2%) semester, or during the break before the summer semester (40.4%).

# **Research** Question 4: What incentive(s) do faculty wish to receive in return for participating in a professional development experience that is focused on teaching online?

The respondents indicated that the primary incentive they would wish to receive if they participated in a professional development event that was focused on teaching online was recognition toward promotion/tenure (23.5%), a financial incentive (17.6%), assistance teaching an online course (13.7%), and the receipt of a University-sponsored certificate of achievement in online teaching (11.8%). Roughly 12% indicated that no incentive was needed.

#### Discussion

In a cross-analysis of the most popular professional development event types with the most popular lengths and times for an event, self-paced/self-directed materials offered through a series of short sessions during the summer session received the most responses. However, the results were so close that they suggest that the University also needs to be offering programs and resources in multiple formats to meet the diverse needs of its faculty. For example, both "formal and informal face-to-face" and "formal and informal online" professional development events are desired. Faculty also expressed interest in having programs take place not only during the summer semester, but also during the fall and spring semesters, as well as during the break before the summer semester. They would like to have a series of short sessions, as well as full day, self-paced, and half day formats available. This illustrates that our faculty require flexibility to fit their professional development into their already very busy schedules. In analyzing the responses to a survey question regarding participation barriers, this supports the finding that 85.7% of faculty surveyed have limited time that precludes them from participating in professional development experiences.

Just as their online courses provide their students with anytime, anywhere learning, we need to provide our faculty with anytime, anywhere professional development. Modularizing our professional development resources into learning objects would allow faculty to pick and choose exactly what they needed, and would also allow the support personnel to repackage the modules as needed for one-on-one consultations, workshops, series of workshops, and other formats. Survey data also reveals that it is necessary to connect our experienced online educators with each other and with those preparing to teach online. The development of a mentoring program or faculty learning community will, therefore, be investigated.

Future research is needed to determine whether certain professional development topics would fit best into a particular format. It is also necessary to determine the formats, lengths and times preferred by those faculty who are preparing to teach online for the first time. Further study is also needed to delve more deeply into what makes our online faculty's teaching experiences positive or negative, and to correlate their experiences to that of their students. Considering the value our online faculty place on their access to, and work with, instructional designers, the professional development needs of the instructional designers who are working with our online faculty should also be determined.

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#### **Biographical Sketches**

**Ann Luck** is the Senior Instructional Designer for the John A. Dutton e-Education Institute, in the College of Earth and Mineral Sciences at Penn State University. Working in the field of distance education since 1991 with faculty associated with the College's academic departments and with Institute staff, she has designed, created, maintained, and evaluated certificate and degree programs offered to adult professionals worldwide via the World Wide Web and other distance learning modalities. She has conducted a large number of faculty development programs over the past 14 years, primarily focused on teaching and learning in distance education settings.

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