



Faculty Development Programming:

If We Build It, Will They Come?

A faculty development survey analyzed what faculty want and need to be successful teaching online

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The number of courses offered online grows every year, resulting in an increasing number of higher education faculty entering a virtual classroom for the first time.¹ It has been well documented that faculty need training and assistance to make the transition from teaching in a traditional face-to-face classroom to teaching online.² Faculty professional development related to teaching online varies widely, from suggested readings to mandated training programs. Various combinations of technological and pedagogical skills are needed for faculty to become successful online educators, and lists of recommended competencies abound.

Although many institutions have offered online courses for more than a decade and train their faculty to teach online, the research literature reveals that little is known about how best to prepare faculty to teach in an online environment. Designers of faculty development programs typically rely on commonly held assumptions about what faculty need to know—a constant guessing game regarding what topics to cover and what training formats to use. The resulting seminars, workshops, training materials, and other resources are typically hit-or-miss in terms of faculty participation and acceptance.

To provide faculty with the proper training and resources for online teaching requires more information to determine

- actual professional development needs,
- ideal formats for professional development events, and
- incentives that would encourage faculty to participate in such events.

For this purpose, we conducted a research study at The Pennsylvania State University to learn more about the professional development experiences and needs of faculty who teach online courses. In particular, we wanted to learn more about how the university's online educators obtained the skills and knowledge needed to teach online and what additional resources they believe would support them in their future distance learning efforts.

Specifically, our research addressed five questions:

1. With which aspects of teaching online do faculty need assistance?
2. What format do faculty prefer for professional development experiences?
3. Do faculty prefer certain lengths of professional development experiences?
4. What barriers inhibit faculty from participating in professional development experiences related to teaching online?
5. What incentives do faculty wish to receive in return for participating in professional development experiences related to teaching online?

Findings from this study can help guide the design of professional development resources for new and experienced distance education faculty.

Definitions

For the purposes of this article, the term *online teaching* means teaching conducted completely online with no scheduled meetings in a physical classroom. *Face-to-face teaching* means teaching regularly conducted in a physical classroom throughout the semester with no substitutions of virtual meetings for classroom meetings. Face-to-face teaching may include online resources and supplemental online learning activities.

Literature Review

Many faculty teach as they were taught, in traditional classrooms with teacher-centered strategies dominated by lecture and discussion. The way faculty teach is also shaped by their own learning preferences. Most online faculty members' learning history still comes from this conventional, face-to-face environment, although that will probably change in the next 10 to 15 years as new instructors with online learning histories join the faculty ranks. Many faculty development programs fail to make significant changes to teaching itself, however, because they focus on the technical side of teaching online, breaking it down into skill sets rather than addressing pedagogy.



For teaching to change to accommodate the fundamentally different online environment, faculty professional development also needs to change. While it is still important to develop skill sets, especially around technology, it is also important to consider faculty role changes, a shift toward student-centered teaching, and basic values and assumptions about teaching.³ It cannot be assumed that faculty with experience teaching face-to-face in the classroom can move seamlessly to successful teaching online.⁴ Faculty need training and support to teach online.⁵ In fact, several authors have suggested a specific set of competencies for online instructors.

Mandernach, Donnelly, Dailey, and Schulte propose an evaluation model for online instructors. Their separate checklists for formative review focus on course setup and organization, climate and community building, instruction and grading, implementation of assessments, and course climate and supplemental materials.⁶ They also provide a checklist for a summative evaluation that includes items from the formative reviews plus an additional item on professional engagement. Many of the items on these checklists could be used to evaluate either face-to-face or online teaching. Examples of competencies applicable to both environments include:

- Instructor models the tone and quality of interactions expected of students.
- General grading criteria or grading rubrics are provided.
- Instructor promotes and encourages a range of viewpoints in the discussions.
- Due dates are clear.
- Classroom atmosphere is inviting and nonthreatening.

A few competencies on the checklists apply specifically to online teaching:

- Links are updated and in working order.
- Announcements have been updated and set to appear at relevant points throughout the term.
- Navigational cues are provided to help students figure out where to begin and how to best move through the course content.

Shank categorizes teaching competencies differently, dividing them into administrative, design, facilitation, evaluation, and technical.⁷ These competencies might apply for all teaching environments. For example, the following are competencies valued in face-to-face and online teaching:

- Provides clear objectives, expectations, and policies.

- Plans activities that allow learners to attach personal meaning to content.
- Helps learners assess their learning and attain personal learning goals.
- Fosters sharing of knowledge, questions, and expertise.

Competencies more applicable to the online instructor include the following:

- Provides compelling opportunities for online discussion, negotiation, debate.
- Responds to discussion postings adequately without taking over.
- Helps learners troubleshoot technical systems.

Smith proposes 51 competencies for online instruction categorized by competencies needed prior to teaching an online course, during the course, and after the course.⁸ Some of the competencies reiterate Chickering and Gamson's principles,⁹ including

- develops reciprocity and cooperation among students,
- encourages contact between students and faculty, and
- communicates high expectations.

Of Smith's 51 competencies, only a few might be considered unique to an online teaching environment, yet those few could make the critical difference between success and difficulty with online teaching:

- Effectively use whatever technology has been selected for course delivery.
- Translate content for online delivery.
- Develop exercises that take advantage of the web.
- Network with others involved in online education.

However, competencies such as "Manage student expectations," "Promote collaborative learning," "Help students identify strengths and areas of needed development," and "Reflect on the course as a whole" could apply to either online or traditional face-to-face teaching.

Many of the different competencies

suggested, no matter how they are categorized, are not necessarily unique to the online environment. In fact, many of the online competencies are practiced by faculty who enhance their courses with online content through course websites or who have adopted a more facilitative role in their classrooms. Perhaps these competencies should be developed and practiced by more instructors in their face-to-face classes to better facilitate a transition to online teaching. Alternatively, faculty learning to teach online could use their learning experiences to improve their face-to-face teaching.

In addition to competencies for online instructors, there are benchmarks for faculty support, various models of faculty development for online teaching, and suggestions for training content. Recommendations include peer support or mentoring; being a student in an online course; provision of written resources on online teaching issues; ongoing reflection, evaluation, and assessment; and online pedagogy.¹⁰ Recommended aspects of online teaching development and support include technical assistance and training, building a learning community, time management, academic integrity, and facilitating online interaction.¹¹ While not exhaustive, this list gives a general idea of what is valued in an online teaching environment.

Given the many competencies necessary for online teaching, the question shifts to how faculty can develop them. Suggestions range from individualized and structured peer support¹² to online training courses.¹³ Garofoli and Woodell suggest a diffusion-based framework for faculty development that would provide multiple online spaces offering different points of entry based on need and experience.¹⁴ One space could offer self-paced tutorials and guided practice activities. Another space could host a database of success stories. A third space could provide a place for faculty to engage in discussions with peers. This vision of different spaces would permit faculty to choose when and where to participate and apply learning directly to course design and delivery. This resembles suggestions made by others to provide an online repository of ideas, tools,

templates, practices, and modules and to connect those interested in online teaching with both peers and just-in-time resources.¹⁵ This kind of flexibility would allow faculty to tailor their support experience to their actual needs, building in relevance.

A number of academic institutions have already implemented a variety of development solutions. These include mandatory training for all faculty who teach online, with programs ranging from a six-week intensive program at Montgomery College to a six-month course at Dallas Baptist University.¹⁶ Other programs are voluntary, including the 10-week "eLearning in Higher Education" training module created and implemented at the University of Birmingham in the United Kingdom. In this program, participants can develop their online teaching skills through case studies, project work, discussions, reflective practice with learning journals, and online seminars with guest speakers. North Carolina State University has an immersive one-week summer institute during which faculty are trained in the tools and pedagogies needed for an online classroom.¹⁷ The University of Florida has an interactive website and a CD-ROM that details the elements needed to develop online courses, provides video segments from online instructors, and establishes a suggested training plan.¹⁸ Indiana University provides faculty with streaming video and synchronized slides as a way to share current projects with other faculty.

Because of diverse demands on faculty time, providing multiple training opportunities is recommended, beginning with an on-site classroom workshop that continues online.¹⁹ Other suggestions include a combination of lunchtime classroom sessions, multi-day institutes, peer-mentor consultations that provide just-in-time training, peer demonstrations, archived sessions, and web repositories.²⁰ Some of the most popular formats have been short workshops to practice skills; working with a mentor; and release time to devote to independent study.²¹ It has also been found that developers and faculty alike prefer to select from offerings of formal

and informal self-paced programs and short classes offered at different times during the semester.²²

Another question concerns faculty motivation, apart from the intrinsic, to participate in programs designed to develop online teaching skills. Some institutions offer participation incentives. Most often mentioned is an adjusted workload or release time.²³ Other possible incentives include monetary rewards, mentoring and grant opportunities, public recognition, notes of appreciation, special parking privileges, graduate assistant support, travel funds, encouragement from senior-level administrators and department heads, upgrades to software and hardware, and recognition counting toward promotion and tenure.²⁴

Methods

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. This population was asked to complete an online survey of their faculty development needs and experiences related to

online teaching. To aid in the design of the study, we undertook a literature review to locate similar survey studies for online faculty development.

Population and Sample

Invitations to complete the online survey were e-mailed to 260 World Campus faculty, with 68 usable surveys returned (a response rate of 28.7 percent). A comparison revealed that the demographics of those who completed the survey reflected the general faculty population at the Penn State World Campus in terms of employment status (full-time versus part-time), age, tenure status, and sex. See Table 1.

Research Design

A review of the literature for online faculty development studies at other institutions found four instruments (see Table 2). We contacted the author(s) of each instrument to seek permission to adapt their survey items for our study. University colleagues, including instructional designers and e-learning support specialists, used a modified Delphi process to select and modify items. Each existing item was judged on how well it supported the research questions for

this study and the clarity of the wording. Selected items were later modified to best meet the needs of this study.

Our resulting survey instrument consisted of 32 items in three parts: online teaching experiences, professional development experiences, and demographics. Twenty-eight questions were in multiple-choice format, with four additional open-ended questions.

Results

The survey responses addressed the five research questions designed to help us evaluate faculty professional development experiences and needs with respect to online teaching. With a strong response rate of almost 30 percent, the survey results provided us with valuable insights.

Demographics

A majority of the survey respondents (78.0 percent) have taught at the college or university level for more than five years. Slightly over half (51.5 percent) have attained an academic rank of associate professor or a lower rank such as instructor or lecturer, and a majority is either not on the tenure track (58.0 percent) or already tenured (39.0 percent).

There was a normal distribution of age, with most between the ages of 36 and 55 (64.7 percent). Most respondents were considered full-time faculty (80.6 percent), and a majority were male (64.0 percent).

A majority of the survey respondents have taught more than one online course (61.8 percent). Most characterized their online teaching experience as somewhat positive or very positive (81.6 percent).

Findings

We organized the Penn State survey findings according to our original research questions, as follows.

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

When asked about resources they had already used in developing and teaching online courses, faculty responded that instructional designers and colleagues experienced in teaching online were

Table 1

Demographic Comparison of Population and Sample

Variables		Population		Sample	
		N	%	f	%
Assignment:	Full-time	170	81.0	54	81.0
	Part-time	41	19.0	13	19.0
Age:	Less than 25	1	1.5	1	1.5
	25–35	31	15.0	10	15.0
	36–45	58	27.5	22	32.0
	46–55	66	31.0	22	32.0
	56–65	48	23.0	12	18.0
	Over 65	7	3.0	1	1.5
Tenure Status:	Tenured	73	35.0	26	39.0
	Tenure track	11	5.0	2	3.0
	Not tenure eligible*	127	60.0	39	58.0
Gender:	Female	78	37.0	24	36.0
	Male	133	63.0	43	64.0

* Fixed-term, part-time

Table 2**Survey Instruments Found in the Literature**

Survey	Study Format
Faculty interview questionnaire developed by Radha Ganesan in 2004 for the Mellon Foundation CEUTT Initiative, Syracuse University	The instrument consisted of 35 questions divided into 6 categories. The purpose was to identify and explore the perspectives of participating (Mellon Grant) online instructors. The study collected data from faculty associated with three of Syracuse's online courses.
Faculty survey conducted by the Cooperative Institutional Research Program (CIRP), Higher Education Research Institute (HERI), UCLA, in 2004 (see http://www.gseis.ucla.edu/heri/facoverview.php)	Each administration year, the survey reaches over 55,000 faculty at approximately 500 two-year colleges, four-year colleges, and universities. The survey includes questions on faculty-student interaction, undergraduate teaching, and curricular issues.
Faculty survey for the University of Florida's College of Agricultural and Life Sciences (CALS)*	Descriptive survey study of on- and off-campus CALS faculty to determine distance learning interests and distance education/technology-related training needs.
Faculty development needs assessment survey developed by Carol Wilson for Western Kentucky University**	Faculty development needs assessment survey distributed to 1,500 full-time faculty at nine state-supported Kentucky institutions of higher education, plus interviews conducted with administrators and faculty members.

* Tracy Irani and Ricky Telg, "The University of Florida's Distance Education Faculty Training Program," paper presented to the Southern Association of Agricultural Scientists, Agricultural Communications Section, Orlando, Florida, 2002.

** Carol Wilson, "Faculty Attitudes About Distance Learning," *EDUCAUSE Quarterly*, vol. 24, no. 2 (April-June 2001), pp. 70-71, <http://www.educause.edu/ir/library/pdf/eqm0128.pdf>.

most helpful. When considering future online teaching experiences, these faculty indicated that they would like to have access to technical advice and assistance, instructional design assistance and resources, and colleagues with experience teaching online.

With regard to designing and developing online courses, faculty were most interested in the following topics:

- Choosing appropriate technologies to enhance their online course (55.9 percent).
- Converting course materials for online use (35.3 percent).
- Creating effective online assessment instruments (35.3 percent).
- Creating video clips (33.8 percent).
- Determining ways to assess student progress in an online course (33.8 percent).

Course delivery topics that held the most interest included:

- Facilitating online discussion forums (47.1 percent).
- Building and enhancing professor-student relationships in the online classroom (39.7 percent).
- Facilitating web conferencing sessions (35.3 percent).
- Increasing interactions in an online course (35.3 percent).
- Managing online teaching workloads (33.8 percent).
- Providing meaningful feedback on assignments (32.4 percent).

The administrative issue that generated the most interest was making online courses available to students at other campus locations (32.4 percent). Insightful responses were given to the

survey question that asked faculty to provide advice for a colleague preparing to teach online for the first time. Most of the advice involved things one should do before teaching online, including observing an online course, being an online student, working with an instructional designer, talking to colleagues experienced in teaching online, learning the university's course management system, and locating technical assistance. One respondent advised,

Do not see online learning as a direct transfer of what is done in a face-to-face learning situation to an electronic context. Online learning necessitates a "re-thinking" of the best means of presenting content and building a successful learning environment. Get background into the "best practices" and approach of the most successful online courses that are similar to the course you have in mind.

Faculty recommended that new online instructors establish an online presence for their students, with one respondent sharing the following:

High-quality interaction and being there for the students is the best way to combat the commonly held misconceptions that online education is impersonal and that online instructors are unplugged from their students.

Respondents also recommended giving prompt and effective feedback to students, providing appropriate details and clarity in their courses, setting student expectations, supporting interaction, playing a facilitative role, and being flexible. Concerning feedback, one respondent said, "I have scripted general feedback to weekly lessons. I use that primarily and add personal comments on top of that when I correspond with each individual student." Another faculty respondent said, "Assume nothing—spell every activity out in as much detail as possible. Explain your grading scheme. Provide assessment rubrics."

Advice was also given concerning the time commitment involved in teaching online. Respondents recommended, “Expect for teaching online to take a lot more time than teaching face-to-face, and budget time accordingly” and “Be prepared to devote a lot of time at the front end.”

Research Question 2: What format do online faculty prefer for professional development experiences?

Faculty were asked to indicate which type of professional development experience they would be most likely to pursue: formal face-to-face events, informal face-to-face events, formal online events, informal online events, or self-paced/self-directed materials. The format most faculty preferred was informal or self-paced learning. Self-paced materials were requested most often (42.6 percent), followed by informal face-to-face events (41.2 percent) and informal online events (33.8 percent). Requests for formal face-to-face training programs (30.9 percent) and online programs (29.4 percent) lagged behind the other formats. In addition, faculty indicated that the most helpful aspects of professional development events related to teaching online included opportunities to share real-life experiences with their colleagues, to use various technologies including the university’s course

management system, and to access specific examples and strategies.

Faculty were also asked to identify their preferred learning mode for these types of professional development activities (see Table 3). Several interesting points stand out. First is the perceived effectiveness of one-on-one professional development. In fact, one-on-one development with a mentor or colleague was considered the most effective learning mode, closely followed by one-on-one interactions with an instructional designer. One faculty respondent commented, “Hearing about the experience of other online instructors is very helpful.” Another valued “an instructional designer to discuss implication and strategies at each step of the course development process.”

Findings from the face-to-face learning mode corroborated that faculty prefer to learn within their own discipline, although only a slight difference separated preferences between the department, college, and university options. Overall, the face-to-face learning mode was considered the least effective compared to one-on-one or online learning modes.

It was also interesting to learn that faculty considered online resources and references and online self-paced modules a more effective learning mode than any of the face-to-face options, with

the use of online resources and references getting the highest effectiveness rating in that category. This result might point to the time constraints faced by faculty, especially in a Research I institution where research and service are often perceived as more highly valued professionally than teaching. When faculty request professional development, we should provide exactly what they need precisely when they need it.

Research Question 3: Do online faculty prefer certain lengths of professional development experiences?

Closely related to the format of training is the time investment required. The optimal length of time faculty are willing to spend in professional development for online teaching ranges between a series of short (less than one day) workshops over several weeks (preferred by 20.6 percent) to a single one-day workshop (19.1 percent) and self-paced materials that can be used on an as-needed basis (16.2 percent). When faculty were asked when they would prefer to participate in a professional development experience, they gave a similar range of responses to interest in attendance during the summer semester (preferred by 38.2 percent), the fall semester (33.8 percent), and the spring semester (33.8 percent). The break before the summer semester was also a

Table 3					
Preferred Learning Modes					
Responses		Level of Effectiveness*			
		Not at All	Not Much	Somewhat	Highly
One-on-One:	With mentor/colleague	0.0	0.0	23.5	55.9
	With instructional designer	0.0	2.9	23.5	52.5
	With technical staff	0.0	2.9	42.6	33.4
Face-to-Face:	Within department	8.8	16.2	42.6	7.4
	Within college	7.4	16.2	45.6	7.4
	Within university	4.4	22.1	41.2	5.9
Online:	Resources/references	0.0	7.4	45.6	26.5
	Self-paced modules	7.4	14.7	35.3	22.1
	Instructor-led modules	8.8	14.7	36.8	16.2

* Percent answered

popular choice (30.9 percent), while the responses for all other breaks between or during semesters ranged between 11.8 percent and 16.2 percent.

Research Question 4: What barriers inhibit faculty from participating in professional development experiences related to teaching online?

The barrier to participation in faculty development for online teaching cited most often was limited time to participate (61.8 percent). Another barrier was a lack of recognition toward promotion and tenure (26.5 percent). Other barriers to participation included a lack of incentive or reward (20.4 percent), a lack of awareness about professional development opportunities related to teaching online (18.4 percent), and little or no access to these opportunities (12.2 percent).

Research Question 5: What incentives do faculty wish to receive in return for participating in professional development experiences related to teaching online?

Faculty were asked to indicate the primary incentive they would want to receive for participating in professional development related to teaching online. While respondents showed an interest in a range of incentives, no single incentive captured a majority's interest. Recognition toward promotion and tenure was chosen by 23.5 percent, a financial incentive was chosen by 17.6 percent, assistance teaching an online course was chosen by 13.7 percent, and receipt of a university-sponsored certificate of achievement in online teaching (which would need to be created at Penn State) was chosen by 11.8 percent. Release time to develop or deliver online courses was cited infrequently (4.4 percent, respectively). Interestingly, 11.8 percent of the respondents indicated that no incentive was necessary.

Discussion

The demographics indicated that a number of the survey respondents had fixed-term and part-time appointments with the academic ranks of instructor (19.7 percent), assistant professor (12.1 percent), lecturer (9.1 percent), adjunct

(6.1 percent), or senior instructor (4.5 percent). These faculty members' major responsibility presumably is teaching rather than research, and they might have fewer time constraints that would keep them from participating in professional development activities. However, some part-time faculty have full-time jobs within their profession or have chosen their part-time teaching assignments due to other obligations that prevent them from teaching full-time. Since there were no significant differences between academic ranks for preferences in professional development activities, incentives for participation, or barriers to participation, more information is required to fully understand the unique needs of this segment of the faculty population.

Responses to the survey reflected faculty's interest in a connection to design and development resources and communication about the availability of these resources, along with suggestions for content delivery, interactive exercises, assessment strategies, and effective instruction. This is also reflected in the survey respondents' indication of their desire for assistance with effectively adapting their teaching to an online environment. Most worry about losing the benefits of face-to-face interactions and seek to understand new instructional design methodologies that maintain the level of interaction and relationship inherent in face-to-face classroom environments.

These concerns echo findings gathered by the four source instruments adapted for our survey. Those surveys found faculty questioning the instructional efficacy of learning online and feeling inadequately prepared to design, develop, and facilitate effective online teaching experiences. Related to these concerns is faculty's desire to understand the technology involved in the online teaching environment.

While faculty have some interest in enhancing their skills in using technological tools to build solutions, most are more concerned with the instructional design implications in developing their online courses. This includes a better understanding of the kinds of interactions that need to exist in an online

teaching environment and how to make better decisions about the technology selections in order to achieve learning goals.

These data are consistent with the relatively minor interest expressed in professional development pertaining to technical content. Yet Palloff and Pratt believe that familiarizing faculty with the software they will be using to deliver the course is key to faculty training.²⁵ Perhaps if the technical training were integrated into hands-on professional development experiences that blended pedagogical topics with examples of its actual use in online courses, there would be more interest in participating in such training.

Time is the most critical barrier to engaging and preparing faculty to teach online. Faculty require flexibility to fit professional development into already busy schedules. Of faculty surveyed, 86 percent reported having limited time, which precludes them from participating in some professional development experiences. They are concerned about the time it takes to design, develop, and manage online courses. They are also guarded about the time required to develop their abilities to complete those tasks more effectively.

Faculty responses indicate a desire for informal learning opportunities, flexible scheduling, short sessions, and one-on-one support for anytime, anywhere professional development. These findings are consistent with results from the prior survey instruments.

Our assumption that most faculty would prefer professional development during semester breaks, so as not to interfere with busy semester schedules, is not supported by the findings. The number and format of formal training opportunities also clearly do not meet faculty's expressed needs. Just as online courses provide students with anytime, anywhere learning, we need to provide faculty with anytime, anywhere professional development.

Modularizing professional development resources into learning objects would let faculty pick and choose exactly what they need. It would also allow support personnel to repackage the

modules for one-on-one consultations, workshops, and other formats.

The survey responses to the preferred format for development activities are extremely informative as well. Preference was strong for one-on-one assistance from an experienced colleague, which supports the concept of a mentoring network. This reflects much of the literature, which recommends a peer support or mentoring program.²⁶ At present, no formal mentoring structure for online teaching exists at Penn State, although it is recommended for investigation. We must connect our experienced online educators with each other and with those preparing to teach online, since faculty clearly want this and already seek mentoring from colleagues to develop their online teaching skills.

Faculty responses also indicated preferences for one-on-one time with an instructional designer or technology specialist, access to online resources and references, and face-to-face professional development within their department and college. If we also acknowledge that faculty professional development is adult education, then we can consult research and literature on adult learners to design learning opportunities that offer a climate of respect, encourage active participation, take advantage of prior experiences and build on them, employ collaborative inquiry, and empower participants to reflect and take action on their learning.²⁷

The survey also provided helpful information about the barriers faced by faculty and the incentives preferred for participation in professional development for online teaching. A majority of the survey respondents indicated a lack of time as a barrier, as did Donovan and Macklin, who recommend structuring support to make minimal demands on faculty's limited time.²⁸ The provision of release time to develop or teach an online course was not reported by faculty as an important incentive for participating in development experiences, however. We hypothesize that most faculty participate because they want to create the most effective teaching experience for their students, and to do so in a way that is both famil-

iar and effective. Providing external rewards (such as certificates) or release time does not offer enough incentive. More creative approaches are needed to capture faculty enthusiasm for teaching effectively online by providing them with resources and support when and where they need it and in an appropriate format.

Another area of faculty development concerned interaction in the online environment. Although the university has offered some training in organizing and administering discussion boards and chat rooms, an interest in this area was still evident in the survey responses. Managing teaching workloads and large enrollments presents additional training opportunities and important considerations for university administrators. With the increase in online education and the resulting change in faculty roles, faculty professional development opportunities must reflect these changes.

Conclusion

Michael Moore argues that distance education is "the most significant development in education in the past quarter century."²⁹ This raises implications for education's conceptualization and organization and for the roles assumed by faculty. The results of the Penn State study can guide the development of professional development resources and programs for distance education faculty so as to recognize these shifts in practice.

We clearly have more to learn about faculty wants and needs for professional development in teaching online. Further study can determine whether certain professional development topics would fit best into a particular format. We also need to establish the formats, lengths, and times preferred for professional development by faculty preparing to teach online for the first time. Delving more deeply into what makes our online faculty's teaching experiences positive or negative, and correlating their experiences with those of their students, would also benefit professional development planning.

Efforts are under way at Penn State to build on the knowledge gained from this survey by conducting a pedagogically

based faculty development needs assessment that would address specific college and campus issues. The needs assessment instrument, collaboratively designed by the instructional design community at Penn State, is intended to be customized and administered locally by college and campus personnel, with findings to be shared among the broader faculty development community at the university.

In addition, the World Campus is making a significant investment to upgrade the professional development provided to instructors of the courses it offers by hiring a Director of Faculty Development. This individual will use the information gleaned from the research conducted to design faculty development events and resources that more effectively meet the needs of online faculty, including faculty learning communities and mentoring opportunities.

Finally, given the value our online faculty place on their access to, and work with, instructional designers, the professional development needs of that community demand attention. A needs assessment of those who work in an instructional design capacity at our institution should also be undertaken.

Meeting the professional development needs of the faculty and staff who are involved in online teaching will undoubtedly be a moving target as our knowledge and experiences in this realm grow. This study was an important first step toward understanding training needs at our institution. We will need to continue our efforts in order to monitor the changes and trends in the field of online teaching and learning. *e*

Acknowledgments

Brenda Firestone and Kirk Fleming, doctoral candidates in the Adult Education program at Penn State Harrisburg, provided assistance in reporting the survey results. Some of these results were first explored in an earlier paper published in the proceedings of the 2006 Distance Learning Conference, Madison, Wisconsin.

Endnotes

1. Lois Romano, "Online Degree Programs Take Off," *Washington Post*, May 16, 2006, section A, p. 6.
2. See, for example, Rob Abel, *Achieving Success in Internet-Supported Learning in Higher*

- Education*, A-HEC, 2005, http://www.a-hec.org/IsL_orig_study.html; Susan Ko and Steve Rosen, *Teaching Online: A Practical Guide* (Boston, Mass.: Houghton Mifflin, 2004); Bonnie Riedinger and Paul Rosenberg, "Uniting Technology and Pedagogy: The Evolution of an Online Teaching Certification Course," *EDUCAUSE Quarterly*, vol. 29, no. 1 (January–March 2006), pp. 32–39, <http://connect.educause.edu/Library/EDUCAUSE+Quarterly/UnitingTechnologyandPedag/39963>; and Theodore C. Smith, "Fifty-One Competencies for Online Instruction," *The Journal of Educators Online*, vol. 2, no. 2 (2005), <http://www.thejeo.com/Ted%20Smith%20Final.pdf>.
3. Carol A. McQuiggan, "The Role of Faculty Development in Online Teaching's Potential to Question Teaching Beliefs and Assumptions," *Online Journal of Distance Learning Administration*, Vol. 10, No. 3 (Fall 2007), <http://www.westga.edu/~distance/ojdla/fall103/mcquiggan103.pdf>.
 4. Rena M. Palloff and Keith Pratt, *Lessons from the Cyberspace Classroom: The Realities of Online Teaching* (San Francisco, Calif.: Jossey-Bass, 2001).
 5. Ko and Rosen, *Teaching Online*; Suzanne Levy, "Six Factors to Consider When Planning Online Distance Learning Programs in Higher Education," *Online Journal of Distance Learning Administration*, vol. 6, no. 1 (Spring 2003), <http://www.westga.edu/~distance/ojdla/spring61/levy61.htm>; and Geraldine Torrisi and Glenda Davis, "Online Learning as a Catalyst for Reshaping Practice—The Experiences of Some Academics Developing Online Materials," *The International Journal for Academic Development*, vol. 5, no. 2 (2000), pp. 166–176.
 6. B. Jean Mandernach, Emily Donnelly, Amber Dailey, and Marthann Schulte, "A Faculty Evaluation Model for Online Instructors: Mentoring and Evaluation in the Online Classroom," *Online Journal of Distance Learning Administration*, vol. 8, no. 3 (2005), <http://www.westga.edu/~distance/ojdla/fall83/mandernach83.htm>.
 7. Patti Shank, "Competencies for Online Instructors," Learning Peaks, 2004, <http://www.learningpeaks.com/instrcomp.pdf>.
 8. Smith, "Fifty-One Competencies for Online Instruction."
 9. Arthur W. Chickering and Zelda F. Gamson, "Seven principles for Good Practice in Undergraduate Education," *American Association of Higher Education Bulletin*, 1987, pp. 3–7.
 10. Abel, *Achieving Success in Internet-Supported Learning*; Sue Bennett, Ann-Marie Priest, and Colin Macpherson, "Learning About Online Learning: An Approach to Staff Development for University Teachers," *Australian Journal of Educational Technology*, vol. 15, no. 3 (Summer 1999), pp. 207–221, <http://www.ascilite.org.au/ajet/ajet15/bennett.html>; David Covington, Donna Petherbridge, and Sarah Egan Warren, "Best Practices: A Triangulated Support Approach in Transitioning Faculty to Online Teaching," *Online Journal of Distance Learning Administration*, vol. 8, no. 1 (2005), <http://www.westga.edu/%7Edistance/ojdla/spring81/covington81.htm>; Ko and Rosen, *Teaching Online*; Palloff and Pratt, *Lessons from the Cyberspace Classroom*; Smith, "Fifty-One Competencies for Online Instruction"; Torrisi and Davis, "Online Learning as a Catalyst"; and Yi Yang and Linda F. Cornelius, "Preparing Instructors for Quality Online Education," *Online Journal of Distance Learning Administration*, vol. 8, no. 1 (2005), <http://www.westga.edu/~distance/ojdla/spring81/yang81.htm>.
 11. Ko and Rosen, *Teaching Online*; Palloff and Pratt, *Lessons from the Cyberspace Classroom*; Peg Pankowski, "Faculty Training for Online Teaching," *T.H.E. Journal*, (September 2004), <http://www.thejournal.com/articles/16956>; and Ronald Phipps and Jamie Merisotis, *Quality on the Line: Benchmarks for Success in Internet-Based Distance Education*, The Institute for Higher Education Policy, March 2000, <http://www.ihep.org/Publications/publications-detail.cfm?id=69>.
 12. Covington et al., "Best Practices: A Triangulated Support Approach."
 13. Palloff and Pratt, *Lessons from the Cyberspace Classroom*.
 14. Elaine Garofoli and Jim Woodell, "Faculty Development and the Diffusion of Innovations," *Syllabus*, January 2003, <http://campustechnology.com/articles/39321/>.
 15. John F. Chizmar and David B. Williams, "What Do Faculty Want?" *EDUCAUSE Quarterly*, vol. 24, no. 1 (January–March 2001), pp. 18–24, <http://www.educause.edu/ir/library/pdf/eqm0112.pdf>.
 16. Abel, *Achieving Success in Internet-Supported Learning*.
 17. Covington et al., "Best Practices: A Triangulated Support Approach."
 18. Tracy Irani, "Going the Distance: Development a Model Distance Education Faculty Training Program," *Campus Technology*, (August 2001), <http://campustechnology.com/articles/38638/>.
 19. Terry Anderson, Stanley Varnhagen, and Katy Campbell, "Faculty Adoption of Teaching and Learning Technologies: Contrasting Earlier Adopters and Mainstream Faculty," *Canadian Journal of Higher Education*, vol. 28, no. 2–3 (1998), pp. 71–98; and Ko and Rosen, *Teaching Online*.
 20. Chizmar and Williams, "What Do Faculty Want?"; Palloff and Pratt, *Lessons from the Cyberspace Classroom*; and Yang and Cornelius, "Preparing Instructors."
 21. Anderson et al., "Faculty Adoption."
 22. Irani, "Going the Distance."
 23. Anderson et al., "Faculty Adoption"; Irani, "Going the Distance"; and Debra Salmon and Mathew Jones, "Higher Education Staff Experiences of Using Web-Based Learning Technologies," *Educational Technology & Society*, vol. 7, no. 1 (2004), pp. 107–114, http://www.ifets.info/journals/7_1/11.pdf.
 24. Abel, *Achieving Success in Internet-Supported Learning*; Chizmar and Williams, "What Do Faculty Want?"; and Irani, "Going the Distance."
 25. Palloff and Pratt, *Lessons from the Cyberspace Classroom*.
 26. Covington et al., "Best Practices: A Triangulated Support Approach"; Pankowski, "Faculty Training for Online Teaching"; and Phipps and Merisotis, *Quality on the Line*.
 27. Patricia A. Lawler, "Teachers as Adult Learners: A New Perspective," *New Perspectives on Designing and Implementing Professional Development of Teachers of Adults: New Directions for Adult and Continuing Education*, Kathleen P. King and Patricia A. Lawler, eds., vol. 98 (2003), pp. 15–22, <http://www.josseybass.com/WileyCDA/WileyTitle/productCd-0787969184.html>.
 28. Mark Donovan and Scott Macklin, "One Size Doesn't Fit All: Designing Scaleable, Client-Centered Support for Technology in Teaching," paper presented at the CAUSE '98 conference, Seattle, Washington, 1998.
 29. William G. Anderson and Michael Graham Moore, *Handbook of Distance Education* (Mahwah, N.J.: Lawrence Erlbaum Associates, 2003), p. ix.

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