Penn State

The Distance Education Online Symposium (DEOS) was established in 1991 with a mission to disseminate distance education information more quickly and less formally than was possible in a print publication. The symposium is comprised of DEOS-L and DEOSNEWS.

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11.3. Faculty Development in Higher Education: "Best Practices" Review and Planning Recommendations for Technology-Rich Learning Environments

Editorial

Over the past three or four years PIB (post-Internet browser), the need for online faculty has far outstripped the supply of those adequately prepared to teach online, and has exceeded the reach of those equipped to train them for this endeavor. Academia has always made the assumption that subject-matter experts could be hired, and they would be, by some mystical process, trained and capable of effectively passing along their expertise to students in the classroom. It is unwise to make this assumption for classroom teaching, but neophytes usually have the example of their own teachers and of their colleagues to ease them along.

But this assumption is disastrous when applied to those who are to teach online. Cyberspace is not the familiar classroom. While the principles of excellence in teaching and learning online have been known since the mid-1980s, it takes a deliberate effort to internalize and practice them and time to make the transition. Faculty are rarely required to give evidence of having had any formal instruction for classroom teaching, and the blithe assumption is made by their departments that teaching online requires as little formal preparation. Classroom faculty are rarely required to attend "faculty development" activities, so why, the academic logic goes, should those who are going to teach online?

Individual online faculty almost invariably welcome all the help they can get—but it is their institutions that do not appear to take seriously the need for systematically planned and funded faculty training in both the technology and the pedagogy of online learning. Unless such efforts are part of a department’s and an institution’s strategic plan, they will be neither supported nor resourced.

I was impressed when I first found this article, unpublished, on Dr. Machanic’s Web site. Considering the importance of this issue, I asked if she would update and revise this article for publication in DEOSNEWS.

Mauri Collins
DEOSNEWS Editor

Faculty Development in Higher Education: "Best Practices" Review and Planning Recommendations for Technology-Rich Learning Environments

Mindy Machanic

The only person who is educated is the one who has learned how to learn and change.
Carl Rogers

Introduction

Why Plan for Faculty Development?

Faculty members in higher education are usually hired because of their subject-area knowledge, not because they are excellent teachers. Most faculty have never been formally taught how to teach and how people learn. As a result, faculty-development programs have been instituted in academia to help faculty learn new and better ways of teaching as well as to increase organizational effectiveness in higher education (Graf et al. 1992; Gullatt and Weaver 1997; Knight 1997; Millis 1994; Oromaner 1998).

At most universities, faculty-development activities developed as the faculty grew, as new programs and departments were initiated, and as the needs of the institution changed. As a result, at many institutions, faculty-development activities became an ad hoc process. In the early stages, faculty development is often a component of the human resources department or the media services group, or is provided by individual departments, faculties, or programs; later, it often becomes a component of an institution-wide teaching and learning center or faculty-resource center (Cravener 1998; Kress and Hafner 1996; McHargue 1996; McMahon 1998).

Just as research shows that most organizations do not manage continuing professional development effectively (Jones and Robinson 1997), most institutions do not have a formal faculty-development plan, in the classic strategic planning sense of a written document with goals, objectives, and strategies. At the time of our original online search in 1998, it appeared that faculty-development plans in this sense did not exist, or were not in a format available to the public, at least. We found components of faculty-development plans: mission-and-vision statements for teaching and learning at particular institutions, strategy documents for faculty-development activities in the short term or midterm, and short-term activity schedules for faculty development. We also found excellent examples of particular approaches to faculty development. We found few documents that put it all together—one of the best overview-and-planning documents is Marsella and Wunsch (1987). This document includes a structure and rationale for faculty-development programs that has been slightly outdated by technological developments, but the institution has updated it more informally through periodic separate documents.

This lack of planning for faculty development may be changing, but only incrementally. While many strategic planning documents may be considered confidential, it is common to find them online—at least outside of academia. An online search in March 2001

revealed a number of documents related to faculty-development planning, although most still were not comprehensive, and many were either undated or out of date. For example, Louisiana State University's strategic plan for the Center for Faculty Development is essentially an outline of goals and objectives presented as part of a larger institutional strategic plan. The University of Louisiana at Monroe's College of Business Administration has its own Faculty Technology Development Plan, created in response to an accreditation document. Connecticut Community College's Faculty Development and Review Plan addresses teaching excellence, but does not specifically address technology competencies. The Technology Plan of the Oregon University System discusses faculty development specifically within the context of technology use. Many of the search results were faculty handbooks, which seem to have proliferated in the online environment. Generally, the recent search results showed that, while there is more planning for faculty development than there was a few years ago, only limited comprehensive faculty-development planning is being done, particularly in relation to technology-rich environments.

The purpose of this article is not to describe a template for a faculty-development plan, but rather to provide a touchpoint for future faculty-development planning activities.

Why Faculty Development?

Faculty. Faculty members at most universities arrive with high levels of professional and content expertise, but with varying levels of teaching and educational technology exposure (Cheung 1999). Initial needs are to ensure that faculty (1) are comfortable with educational technology use, (2) have solid understanding of the instructional design and development process, and (3) have basic understanding of how learning theory can be applied to enhance teaching and learning in their own classes. Ongoing needs are to ensure that new faculty members are appropriately trained in these areas, and that continuing faculty members are constantly updated on theory, technologies, and applications so that they do not assume that, after the training, they can revert to their previous teaching habits (Drummond 1998; Murphy and Terry 1998; Schauer et al. 1998; Tomazos 1997). New and continuing faculty should include part-time and adjunct faculty (Watters and Weeks 1999), since they comprise a large percentage of faculty members in higher education, and all discussions of faculty needs in this document should be assumed to include them.

One additional need must be addressed: the changing role of faculty in the information age. Technology has made information available to anyone with access to a computer and modem. Students have heterogeneous backgrounds, and traditional methods of providing content don't meet the needs of all students. Faculty must learn to cope with student diversity by choosing the teaching approach that best fits the content to be taught (Gandolfo 1998; Matthew, Parker, and Wilkinson 1998; Pincas 1998; Wright 1999).

Teaching Assistants. Teaching assistants (TAs) traditionally have been expected to lead lab sessions, proctor exams, mark papers and, perhaps, teach a lecture session of an introductory course. For the most part, TA training has traditionally been brief or

haphazard (Rushin et al. 1997). Because new learning models often replace the large lecture class with smaller mini-lectures and keynote lectures that preface collaborative and problem-based learning activities, and incorporate learning technologies into courses to greater or lesser extent, this role will be different for the TAs in technology-rich environments. TAs will be expected to facilitate online discussions and face-to-face small-group meetings. They will work with regular faculty to develop learning resource materials and online content; they will still proctor exams and mark papers as before, but they may also be involved in developing projects and activities for the classes. Thus, TAs will need an overview of learning theory, pedagogy, and course-design methodology. TA training will improve their skills and provide a basis for their potential teaching careers (Main 1994; Shannon, Twale, and Moore 1998; Tice 1997).

The Faculty-Development Plan

A faculty-development plan obviously must be tied to the academic mission of the institution. Basic components include a mission and a vision statement for teaching and learning at the institution, a set of goals and objectives, and a series of strategies for reaching those goals and objectives.

Strategic-Planning Statements for Teaching and Learning

The strategic-planning statement for teaching and learning is separate and distinct, but developed from, the overall mission-and-vision and goals-and-objectives statements for the institution. Specifically, these statements for teaching and learning specify:

* The place of teaching and learning in relation to the institution's mission and vision and to the larger context of region, country, and world.
* The desired outcomes for learners: What will graduates experience in their preparation, and what attributes do we want them to have when they leave?
* The values that the institution holds regarding the role of teaching and those who teach.
* The organization and relationships of those who develop faculty, the faculty, and other components: Where will faculty development be housed and organized, and how does it interact with faculty and staff?

The Florida Gulf Coast University (1977) has a good model for a strategic plan for teaching and learning. The University of Hawaii at Manoa's plan (Marsella and Wunsch (1987) includes strategic approaches.

Guiding Future Faculty-Development Activities

A faculty-development plan should ensure that everyone involved with an institution clearly understands the role of teaching and learning at that institution. It should also set goals for teaching and learning and describe strategies for meeting those goals. The goals evolve directly from the mission-and-vision statement and should address the topics described in the preceding section. The strategies, then, are specific, clearly defined

approaches to meeting those goals in ways that guide future professional development activities for faculty and TAs.

One way of judging which strategies are appropriate and effective for meeting goals for teaching and learning is to review the actions of other institutions. Consequently, the following sections of this article discuss various strategies for faculty and TA development that have come from other institutions. Note how these might be used to guide and enhance future activities, both as strategies for planning and as practice.

Who Does Faculty Development?

Institutions that have made faculty development an integral part of their ongoing activities usually place faculty development in a center that provides services to the institution as a whole. Such a center is directed by a person who is committed to developing teaching excellence at the institution, and is staffed by professionals in various aspects of teaching and learning. Such programs include the University of Oregon's Teaching Effectiveness Program. At institutions where faculty development is more of an ad hoc process, faculty-development activities may be provided by staff from a variety of departments and programs, sometimes coordinated through an academic services office, sometimes coordinated with staff development programs. The most wide-ranging and successful programs are freestanding and dedicated specifically to ongoing faculty/TA development. The University of Victoria has developed an extensive freestanding center.

Review of "Best Practices"

The approaches and activities reviewed here have been culled from many institutions, publications, and online documents. Activities or concepts that are discussed together may have come from different institutions, but in our analysis we felt they fit together naturally to make a stronger foundation for practice.

Development activities that follow are divided into two main sections: activities for new faculty, and continuing-faculty-development activities. When appropriate, TA activities are included in the faculty-development section. There is also a brief section on activities specifically aimed at the professional development of TAs.

As we develop and train faculty and TAs, it is important that we start with pedagogy and stress technology as a support to pedagogy, not vice versa (Eastmond and Lawrence 1998; Horgan 1998). Otherwise, we risk over-emphasizing the "gee-whiz" and "sizzle" effects of the technology, and lose sight of the main purpose of using technology for teaching and learning—which is, after all, providing tools to increase access to learning for our students.

It also is important for faculty members to participate in faculty-development activities beyond those that are required; they must have a motivation to do so. For some, the new knowledge and increased sense of competency will motivate them to participate. But for

many others, faculty-development activities may seem just one more burden in a crowded schedule of other activities. The value of faculty development must become part of the organizational culture and norms. Rewards and incentives for participating in continuing faculty-development activities must be set at the institutional level, and recognition for excellence in teaching must be public and ongoing.

New-Faculty-Development Activities

These activities are provided to any faculty person who is new to the institution, whether or not he/she is new to teaching.

University Orientation Activities. The most common faculty-development activities are new-faculty-orientation programs. These normally are held just prior to the beginning of the fall term and can take place over three to five days. While intended to introduce new faculty to the processes and administrative staff of the university, they generally also include continuing faculty in at least part of the proceedings, so that new and continuing faculty can meet.

Mentoring Projects. Although mentoring projects are well established outside academe, they are a relatively recent innovation on university campuses and are becoming more popular because they are effective (Luna and Cullen 1995; Kerka 1998). A mentoring project assigns a more-experienced faculty member to assist and guide a newer member in professional development, navigating the institutional systems, making useful personal and professional connections, setting up a research program, and providing support in adjusting to the new professional home.

Some campuses have also developed mentoring projects for TAs, with mentoring provided either by more-experienced peers, by specially designated support staff, or, occasionally, by continuing faculty who have volunteered for the role.

Improving Teaching. Because many new faculty members have a limited background in teaching, learning theory, or the appropriate use of technology, their mental model of university teaching may be based on the styles of the teachers they have known. Because there has been extensive theoretical development and research in areas of teaching and learning, and new models for teaching and learning have developed over the past several decades, it is important that new faculty be exposed to multiple ways to teach, and to how people actually learn. Some ways that institutions have developed to provide new faculty with this information include:

* Workshops on various aspects of pedagogy and learning theory, provided by "master teachers," educational psychologists, and teaching-support staff.
* Workshops on course design and development methodologies, provided by teaching-support staff and professional instructional designers.
* Workshops on using technology in teaching and learning, provided by teaching-support staff and educational technology specialists.

A particularly useful approach, borrowed from corporate leadership development training and applied to developing good teaching, is the use of role playing and videotaping participants as they take on the role of faculty person. Videotape identifies habits of speech, body language, and other aspects of presentation style upon which to improve.

Introducing Technology Use. The use of technology in teaching and learning ranges from showing videotapes during a class session to holding class on the World Wide Web or through interactive/desktop video. It includes integrating computer-based labs and simulations into classroom sessions or homework assignments, and expecting both students and faculty to be proficient in using certain software or hardware for research, communications, presentations, and other purposes.

Today, there are still many technology-poor academic environments. Faculty members moving from these environments to richer environments may not have been fully exposed to technology and, to avoid embarrassment, may not seek assistance. There is a need to provide new faculty with a basic level of comfort and familiarity with technology.

At many institutions, this either is done at orientation through workshops, or is provided by a teaching-and-learning support center, such as UWired—the University of Washington's collaborative project for teaching with technology. Sometimes, such training is presented by the vendors who provide the technology. However, this training tends to be less useful in providing a baseline of understanding of technology than more-generalized technology training provided by the institution itself. More-specialized technology training is often provided by departments, in conjunction with support staff and/or product vendors.

Whatever the means, technology familiarization should be provided to all new faculty. At a minimum, the faculty should be formally introduced to:

* The standard suite of office productivity tools used by the department or university (i.e., word processing, spreadsheet, presentations, e-mail, course management, and Web browser software and environments).
* Accessing and using basic educational technology, including computer labs, media centers, library technology, audio-visual equipment, copy-center equipment, and testing support.

Continuing Faculty Development Activities

Continuing faculty need to be updated on new approaches and technologies to teaching and new theories of learning. In particular, faculty development may be especially important for post-tenure faculty to ensure that senior faculty remain vital and energized (Sorcinelli 1999).

Peer-Mentoring Activities. Peer-mentoring programs also have benefits for continuing faculty members who are mentoring new faculty. The continuing faculty are challenged

with providing assistance through faculty-development activities, as well as seeking resources (Clements 1999).

For continuing faculty who are not mentoring new faculty members, a very few institutions have implemented other, primarily informal, peer-mentoring programs: experienced faculty can formally or informally mentor each other, sharing hints and tips, resources and contacts, and using each other as sounding boards or friendly appraisers when considering and trying new approaches to teaching (Scott and Weeks 1996). However, experienced faculty are less inclined to participate in formal peer-mentoring programs.

The reluctance of continuing faculty can be resolved by one of the following approaches; the success of the approach depends on the organization's culture.

* Make peer-to-peer mentoring mandatory. It might be best to pair mentors from different departments so that there is less feeling of territoriality and competition.
* Offer faculty the choice of mentoring peers from other programs or new faculty from their own programs. This approach implies that some form of mentoring is necessary for all faculty, but gives a sense of choice.
* Assign mentoring in groups. This approach was taken successfully with graduate librarians in Western Australia.
* Provide a peer-mentoring pool, with a coordinator who matches faculty who wish to enter a peer-to-peer mentoring arrangement with other senior faculty who are also interested in peer mentoring. This approach implies that mentoring is desirable, but is not a necessary component of faculty development, and is least likely to be an ongoing success unless other types of rewards are attached to it, such as recognition of peer mentoring in tenure and promotion reviews.

Semester-Start Development Programs. Just as most institutions have new-faculty orientation at the start of each new academic year, some institutions have implemented semester-start sessions for continuing faculty. These sessions provide many of the same types of activities as orientation, but are tailored to the needs of more-experienced faculty members. Programs might include:

* Presentations about new resources and support programs at the institution or in the departments.
* Presentations of research and other professional activities by individual faculty members.
* Cross-department/program-breakout groups to address particular current issues of interest to faculty at the institution, with recommendations presented as appropriate.
* Announcements of upcoming grants, awards, and other opportunities for faculty.
* Demonstrations and hands-on time with new technologies.
* Meetings with senior administrators to discuss concerns, programs, etc.
* Social events to renew acquaintances and make new contacts outside one's immediate day-to-day circle.

Improving Teaching. Successful programs have been implemented at some institutions that are specifically targeted at improving teaching among experienced faculty members. Such programs include:

* Developing a cadre of "master teachers" who evaluate, tutor, mentor, and train other faculty on alternate teaching approaches. These master teachers are appropriately rewarded with release time, additional pay, or similar incentives; they are publicly recognized as being excellent teachers worthy of being emulated. They do not necessarily provide expertise on content, but are seen as role models for good teaching for any discipline.
* Providing regular newsletters, in print or electronic format, highlighting teaching and learning resources, excellence, and related events that might interest faculty.
* Granting release time and/or funding for developing new methods and resources for teaching, or for doing targeted or general research on teaching and learning, within one's discipline or content area or across disciplinary boundaries.
* Providing workshops on specific teaching topics of interest to continuing faculty, such as alternate methods of assessing learning, course design for various types of courses, effective techniques for working with small groups, maintaining professional enthusiasm and avoiding burnout, and training and coaching in public presentation effectiveness (e.g., diction/accent remediation, use of the whole self in public speaking, and use of presentation aids).

Technology Use Updates. A major issue for a technology-rich learning environment is keeping continuing faculty current in areas of technology. It is possible to stay current in the narrow focus of one's own professional expertise while ignoring what is happening in the larger world of technology. As a result, technologies that could have important uses and impacts on teaching and learning may be overlooked.

Institutions that value the use of technology for teaching and learning have developed programs to encourage continuing faculty to remain aware of useful developments in technology, even though these technologies may not immediately seem valuable. Such programs may include:

* Certification programs in online teaching for faculty. Walden University has required completion of such a program for all its faculty since mid-1999, including those who do not teach in online programs. In spite of initial resistance from some continuing faculty, all faculty felt they came away from the program with something of value (if only an understanding of how to search the Web and use e-mail more effectively), and all new faculty know completing the certification is part of their job expectation. Of course, other distance-education institutions, such as Capella University and the University of Phoenix, have similar programs for new faculty. Many facility-based universities have instituted similar programs, although these are not always required for all faculty, and some institutions are encouraging their faculty to complete existing certification programs developed and offered by other programs; a list of such certification programs is maintained by the University of Wisconsin's Distance Education Clearinghouse.

* Workshops on beginning topics and advanced training in particular educational technologies/hardware/software (e.g., HTML/Web page design, video production, advanced use of presentation software, desktop publishing approaches, using asynchronous communications effectively).
* Electronic or print-based newsletters on educational technologies.
* Speakers from industry and presentations by faculty on new technologies with application to educational environments.
* Release time and/or funding to develop new teaching resources and courses integrating technology, or for doing research on teaching and learning with technology within one's area of expertise or in a more interdisciplinary context.
* Online orientation to various technologies in use at the institution. Some institutions have placed their faculty guides online, such as Knox College (The Survival/Success Guide for Knox Faculty) and Ohio State University's Office of Faculty and TA Development (Handbook for Instructors on the Use of Electronic Class Discussions).

Teaching Assistant Development

It is possible to make many of the faculty-development activities available to those who are not yet professional academics, but who are still faculty-in-training. Some activities can be tailored to the needs of TA development; for example, mentoring programs are highly effective for this group. Like continuing faculty, their needs for professional development do not stop with orientation; it is useful to have ongoing special development activities for TAs (Holten and Nilson 1990; Lambert and Tice 1993). These may include:

* Ongoing training in successfully completing the tasks of an academic professional, such as developing good tests and assessments; balancing the needs of the professional faculty, self, and students; finding good sources for support and resources for teaching and learning; and presentation skills. The University of California has a comprehensive online TA-development program.
* A special support center, with desks and access to computers with modems and printers, Scantron machines, copiers, phones, resource and reference materials, and staff assistance.
* Peer-support groups.
* Programs to recognize and reward excellence in job performance.

Recommendations for Faculty Development

In the recommendations that follow, TAs are included in faculty-development activities unless otherwise noted separately.

Planning for Faculty/TA Development

1. Develop a mission-and-vision statement for teaching and learning.
2. Develop specific goals, objectives, and strategies for implementing the mission and vision.

3. Tie future faculty development activities to the plan.
4. Periodically review and update the plan.

Organizing Faculty-Development Activities

1. Position teaching excellence as an organizational value.
2. Provide a centralized center for faculty development and teaching excellence.
3. Provide a centralized center for TA support. This may be a subcomponent of the faculty-development center.

Activities for New Faculty Members

1. Develop and implement a comprehensive new faculty-orientation program.
2. Develop and implement a mentoring program for new faculty.
3. Develop and implement workshops and training on pedagogy/teaching and learning, including learning theory and approaches and techniques for teaching.

Activities for Continuing Faculty Members

1. Encourage continuing faculty development through incentives and rewards for participation in faculty-development activities.
2. Encourage excellence in teaching through recognition and rewards.
3. Provide a targeted semester-start faculty-development program each term that includes workshops in pedagogical theory and methods for teaching.
4. Develop and implement a peer-mentoring program for continuing faculty.
5. Develop and deploy a cadre of master teachers.
6. Provide ongoing workshops, speakers, and training on topics of professional interest to continuing faculty.
7. Encourage research and innovation in teaching through incentives and funding opportunities.

Using Technology in Faculty Development

1. Include technology training in all faculty-development activities and provide a standardized basic level of technology training to all faculty, whether in a certification program or in some other form.
2. Use technology to provide some regular faculty development content and activities.
3. Encourage development of new teaching/learning resources and courses incorporating technology through incentives and funding opportunities.
4. Disseminate information about teaching, learning, and educational technology throughout the institution via e-mail, a Web site, and electronic or print newsletters.

Building Bridges

1. Encourage faculty members to participate in off-campus faculty-development activities, to publish their research in teaching and learning even though they are not

designated as "education" faculty, and to publicize their activities in and commitment to teaching and learning excellence. This activity should be considered in promotion and tenure decisions along with activities within the department.

2. Encourage faculty support staff to participate in off-campus professional development activities and research activities related to teaching and learning.

3. Bring in faculty-development specialists and faculty from other institutions for faculty-development idea-exchange programs.

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