

From Innovators to Majority: Evolution in Faculty WebCT Training

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ABSTRACT

This article explores the changes that were necessary to be made to WebCT training at the University of Maryland in relation to shift in the faculty participants. Everett Rogers' model for innovations, a faculty development model, and a set of faculty focus groups guided the restructuring. Training materials were redesigned to provide a more flexible platform from which to offer training to individuals, programs and special focus areas. The faculty support structure has also evolved to offer a variety of options.

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Documentation, Design, Human Factors

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1. INTRODUCTION

As a faculty trainer, have you asked yourself, "Why aren't faculty coming to training like they used to?"

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Perhaps, you do not have this problem at your university, but at the University of Maryland they are not attending training sessions as was the case just a couple of years ago. It is a question that has led us through several iterations of our training and training materials to meet the technology needs of our faculty in their teaching. This article is a brief description of our experiences at Maryland to meet the faculty needs.

1.1 University of Maryland Overview

The University of Maryland is a Carnegie Research-I University. It is a member of the Association of American Universities (AAU). It is also the flagship institution of the University of Maryland System. The University includes 3,600 faculty, 34,000 students and 5,000 staff. There are 13 colleges and schools with 111 undergraduate majors and 96 graduate degrees.

1.2 Teaching and Learning Support

The University of Maryland supports faculty in the use of technology with staff who are central within the Office of Information Technology (OIT) and staff who are funded and reside in the Colleges. Teaching and Learning Support (TLS) is a group within the Academic and User Support unit in OIT. TLS supports faculty across the campus in the appropriate use of technology in their teaching. One of our main responsibilities is to support WebCT. TLS staff include three instructional designers with instructional design and web development skills, a part-time graphic artist with web development skills and an administrator who supports WebCT, among his other responsibilities. As of Fall 2003, WebCT served 47% of the students on the campus. This number continues to grow with each semester.

2. INFLUENCES SHAPING TRAINING

2.1 Diffusion of Innovations (Everett Rogers)

It is helpful to step back and use a structure from which to examine the changing process of faculty needs. Everett Rogers (1995) [1] provides a structure that can serve as a guide in the changing landscape of faculty development. He suggests that there are five types of individuals who react to innovation and change in different ways:

- **Innovators:** venturesome, risk-taking, information seeking, with higher financial status.
- **Early Adopters:** greatest degree of opinion leadership, respected by other members of their social group.

Strategies with motivational emphasis may be most effective at getting them involved in the diffusion process.

- **Early Majority:** deliberate, adopt new ideas just before the average member of a system.
- **Late Majority:** skeptical, adopt new ideas just after the average member of a system. The pressure of peers is necessary to motivate adoption. Intervention strategies that help them to overcome barriers are needed to get them to take up the innovation.
- **Laggards:** traditional, last in a social system to adopt an innovation. Pays little attention to the opinions of others.

In Rogers' model of the innovation-decision process, this conceptualization consists of five stages [1]:

- 1) **Knowledge** occurs when an individual (or other decision-making unit) is exposed to an innovation's existence and gains some understanding of how it functions.
- 2) **Persuasion** occurs when an individual (or some other decision-making unit) forms a favorable or unfavorable attitude toward an innovation.
- 3) **Decision** occurs when an individual (or some other decision-making unit) engages in activities that lead to a choice to adopt or reject an innovation.
- 4) **Implementation** occurs when an individual (or some other decision-making unit) puts an innovation into use.
- 5) **Confirmation** occurs when an individual (or some other decision-making unit) seeks reinforcement of an innovation-decision already made or reverses a previous decision to accept or reject the innovation if exposed to conflicting messages about the innovation.

2.2 Faculty Development Continuum

In addition to the description of Rodgers' adoption of innovation model, TLS has observed four stages through which faculty move in their use of WebCT. First, faculty are interested in how to put material they have already developed into WebCT. They focus on skill development and the correct button to push in the tool. At this point, appropriate pedagogical use of the tool and instructional design are not their consideration. After six months to a year of use, some faculty return and become interested in pedagogical techniques that facilitate interaction. They want their students to use the space for team projects as well as extended discussions beyond the classroom. At some point, some faculty, after observing well designed courses, become concerned about the look and feel of their course as well as navigation. These are some of the first steps in instructional design. The final stage in the process is reconceptualizing a course to take advantage of the technology. This is not only a redesign of the materials, but also is a shift from a faculty-centered to a student-centered model of instruction. Only a few faculty have reached this stage of development at Maryland.

3. RESULTS OF STUDY

Since we had served many of our innovators at the top end of our early adopters on the continuum, it became clear that we needed to change tactics on how we assist and support the faculty on the campus. It was time to discover what it was that faculty needed. We collected information through focus groups that were divided into the level of technology use in teaching (low, medium, and high). Care was taken not to inhibit or overwhelm users who did not use technology in their teaching by interviewing them with high-powered users of technology. Some of the most interesting and telling findings in the study were:

- Highly skilled individuals (often innovators and early adopters) seek out training and resources, while individuals with few or nonexistent skills do not.
- Highly skilled individuals will come to training, while individuals with few or nonexistent skills prefer one-on-one just-in-time peer training.
- Individuals with few or nonexistent skills are not interested in training in the use of technology in teaching until it solves an instructional problem or they are pushed.

4. REDESIGNING MATERIALS

Given Everett Rogers' model for innovation, the faculty development continuum, and the faculty focus group results, it became clear that we needed to redesign our WebCT website and training materials to make them simpler and more accessible to faculty.

4.1 Website Redesign

In the website design (<http://www.courses.umd.edu>), the information that faculty needed most was linked to the front page to ensure easier access. In a prior design, a faculty link led to forms (e.g., course request form, upload student roster form, send grades to the register form, etc.). Less skilled faculty were less likely to explore the site for information. Also, a semester checklist was developed. It includes tasks that faculty need to accomplish each semester. Some of these tasks faculty do only once a semester and they forget the process. Each task on the checklist has a link to forms or the action [Do it] and a link offering step-by-step guidelines [How to]. Aids were developed for students. Faculty could point their students to the home page for them to gain access. These aids for students alleviated the necessity for faculty to provide "how to" WebCT support.

4.2 Training Redesign

The training manuals were organized and written to reflect the workshops. However, outside the workshops, the manuals were not easy for faculty to use as a general reference. Based on the information above, it was clear that new manuals needed to be user-friendly outside the prescribed tutorial-based workshop environment. To accomplish this, the manual is written as a general reference. In training, the trainers give the participants the same manual. Trainers use an outline that enables them to easily tailor training for any group or individual. This also offers flexibility in designing customized workshops because the same manual can be used for all workshops, while a different outline can be designed for each workshop, it dictated.

In addition to a training manual, separate online job aids were created that focus on specific common tasks and sequences faculty encounter (e.g., creating a quiz, creating a small discussion group, etc.).

Finally, a list of help resources was recommended for faculty to use. In addition to TLS staff help, faculty are encouraged to use WebCT contextual help. The help pages are demonstrated several times during the training to facilitate its use by the faculty. Faculty are often paired with other faculty on campus who have similar goals they are trying to accomplish with the tool. For example, one of our faculty uses WebCT very creatively for large classes. We connect her with faculty who have large classes and want to use WebCT.

5. MEETING FACULTY NEEDS THROUGH CUSTOMIZED TRAINING

The diversity of faculty technology skills as well as the diverse application of WebCT and tools within it has led to the use of customized training as a solution for faculty who are in the majority in their willingness to adopt WebCT. This customized training is offered to individuals, programs and special focus areas that cross program boundaries (e.g., large classes).

5.1 Individuals

Individual training is offered mainly for those who need training during the semester and cannot attend Summer and Winter term training. Also, we target specific individual training for those who want to explore specific uses and strategies for their own courses following the generic workshops.

5.2 Programs

Customized training is offered to meet the specific needs of programs (that tend to have similar used, subject matter). The reasons for this type of training vary: training not only on specific tools to meet the needs articulated for the group, but also to provide specific examples of pedagogical strategies relevant to the type of subject matter of the program; training in a convenient location for the faculty in the program, rather than requiring them to come to the TLS faculty training facility; the TLS training facility location can be quite a distance from some of the colleges, inhibiting attendance by less motivated learners; and finally, training to accommodate date, time, and duration requests of particular program members.

5.3 Special Focus

On the campus, there are common situations that go beyond the boundaries of programs, departments or colleges. One of these situations is the appropriate use of WebCT for large classes.

Training for a large class use of WebCT in addition to focusing on a particular course context can also be a way to attract faculty who are teaching large classes to use WebCT. This course offers a course management and administrative emphasis with discussion of the advantages and strategies that can solve problems faculty face when teaching a large class.

Instructional development teams have also been created to facilitate best practices in instructional design, web development, interactions, and assessments. These teams consist of an instructional designer, graphic artist, web developer and a content expert (the faculty). No one person is responsible to have all of the skills required to develop a WebCT course. Because the TLS staff is small, this approach is limited to grant projects and fully online courses at Maryland. TLS offers instructional design expertise for all faculty, but is unable to provide graphic and web development for all faculty.

6. ALL FACULTY SUPPORT STRUCTURE

To provide for the needs of all the faculty on the campus, TLS uses a variety of methods: 1) all faculty have access to instructional designers through email, phone, and personal consultation meetings; 2) student support through online aids and help desk support; 3) an online WebCT User Support course space has been created and offers training manual updates, a discussion area to post problems, a University calendar text file and other resources; 4) a listserv for WebCT announcements (e.g., training schedule, software upgrades, etc.); 5) monthly brownbag lunches that provide special topics and demonstrations (e.g., Respondus, Streamlining Course Administration, Teaching Scholarship, Effective Discussions, etc.); 6) local support liaisons between TLS and the colleges through Academic Technology Coordinators who reside in the colleges and provide personalized support; and 7) sessions that highlight new features offered in new version of WebCT to facilitate their use.

7. FUTURE CHALLENGES

As the faculty who want to use technology in their teaching percolates through the general population to become more ubiquitous, the challenges in teaching the faculty shift in terms of the most effective training methods. It was easy to train our innovators. They came knocking at the door insisting on tools and training. As faculty who have less technology skills and rooted in traditional pedagogy need training, a more personalized approach will be necessary.

8. REFERENCES

[1] Rogers, E. *Diffusions of Innovations*, 4th Ed. The Free Press, New York, NY.