

Getting the Egg



into the Bottle:

Engaging Faculty

in the Theory and Practice
of Instructional Technology

Mike Giordano and Laurie Trufant

Instructional Development Center
University of New Hampshire

©Copyright Michael Giordano and Laurel Warren Trufant, 2002. This work is the intellectual property of the author. Permission is granted for this material to be shared for non-commercial, educational purposes, provided that this copyright statement appears on the reproduced materials and notice is given that the copying is by permission of the author. To disseminate otherwise or to republish requires written permission from the author.

ABSTRACT:

Getting the Egg into the Bottle: Drawing Faculty into the Theory and Practice of Instructional Technology

Drawing faculty into the theory and practice of instructional technology requires that they think creatively, proceed proactively, and assume risks. The classic "bottleneck" in this process occurs when aspirations exceed available time and skills. We will explore strategies to move faculty through that bottleneck -- without breaking the egg. (49 words)

PRESENTATION OUTLINE:



Using the metaphor of the egg and the bottle, we will explore how the introduction of a course management system on the UNH campus afforded us an opportunity to engage faculty in broader instructional technology theory and practices. We will conclude with a proposed model for positioning our Instructional Development Center as a resource for faculty development. The model rests on an analysis of a 2-year pilot project, anecdotal feedback from faculty and students, and recent faculty survey results. We will invite our audience to critique the model and make suggestions that will guide our research and help us as we move to implement all or some of the model.

1. Statement of the Problem

In March of 2001, I was hired by the University of New Hampshire as an Instructional Designer and charged with taking an existing pool of diverse resources, personnel, and services in the Instructional Development Center (IDC) to the next "level." Our mission was straightforward: Support faculty in their endeavors to successfully integrate technology into their teaching. Two years prior to my arrival, Blackboard's course management system was successfully introduced at UNH, giving most faculty on campus their first experience with using technology as an integral part of traditional classroom teaching. Blackboard was overwhelmingly successful and became the featured service of the Instructional Development Center, requiring time from three full-time employees—over half of the resources available.

The metaphor of the egg in the bottle -- that old third-grade science project -- helps to illustrate our dilemma. Our immediate challenge was to continue supporting Blackboard as a mission-critical application without committing all of the IDC's skills and resources to that end. We had to insure that none of the faculty eggs poised at the opening of our instructional technology bottle toppled off. Our ultimate goal, however, was to draw faculty into the overall process of incorporating a broad range of instructional technology

tools into their teaching. We wanted them inside the bottle, thinking creatively and proactively about how technology could enrich their classrooms -- not just building Blackboard courses. Our problem was to find ways to leverage IDC resources to get faculty past the instructional "bottleneck" at which aspirations exceed available time and skills -- without breaking the eggs.

2. Description of the project

In 1999, UNH implemented a pilot project to bring Web-enhanced features to traditional classroom courses using Blackboard. The initial project was funded by a small internal grant to a committee called Books.n.Bytes, a collaboration of the Computing and Information Services Academic Technology group and the university library. These funds, matched by commitments of space and staff from both CIS and the library, allowed us to purchase a server, renovate faculty training space, and purchase a Blackboard license. In the summer of '99, we brought together a group of fifteen intrepid faculty curious enough about Web-enhanced learning to risk integrating it into their traditional classroom courses.

Over the next two years, our Blackboard project team experimented with a wide variety of recruitment and training models, felt our way through the design and implementation of a faculty support model, wrestled with the practical aspects of administering a mission-critical server, and struggled to find ways to evaluate our own efforts. At the end of two years, we had a surprising -- and somewhat startling -- result. We had trained over 30% of our faculty, who were now teaching more than 200 courses to a student enrollment in excess of 14,000 students! Clearly, it was time to take a step back from the precipice and explore just what all this hectic implementation had accomplished and where it was leading us.

3. Outcome

A careful assessment of the evolution of our recruitment, training, and support models, coupled with survey and evaluation feedback from faculty, revealed some significant facts that can be interpreted in relation to our "egg in the bottle" metaphor:

- Our faculty -- despite prevailing wisdom to the contrary -- were risk-takers. Our training population did not consist entirely of early adopters, but shaded rather heavily over into second-level adopters and even late-majority users. We had faculty ready and willing to place themselves at the opening of our instructional technology bottle wanting to be drawn in.
- Contrary to our initial instinct -- which was to develop an exhaustive training program to diminish an anticipated intimidation factor and to immerse faculty in the information we felt they needed to succeed -- we found that an elaborate training model could, in itself, be intimidating. Faculty tended to extrapolate from the intensity of the training to the difficulty of the process -- "If it really takes 8 hours to learn how to do this, it's too complicated for me." In fact, we

found that requiring exhaustive training was, in a sense, like coaxing faculty into the IDC bottle with a hammer.

- The training we offered was often perceived as an obstacle to participation rather than as an enabling experience, despite the fact that some of the information delivered was essential to success. Lengthy or multi-session training programs were, in fact, narrowing the "bottleneck" and making access to broader instructional technology theory and practice more, rather than less, painful.
- Faculty identified the support they received *after* the training as the key to the overwhelming success of the project. They were willing to experiment, stumble, innovate, and even fail, because they knew there would be someone - - some person, not documentation or training opportunities -- available to address their immediate concerns and ensure that their content was delivered intact. Once they knew there would be someone in the IDC bottle to catch them, they were ready to take the plunge.
- The simplification of tasks accomplished through the course management interface clearly opened doors, raised awareness, and encouraged at least preliminary exploration of the possibilities of instructional technology. Success developing and delivering a Web-enhanced course through course management software was not, however, sufficient to encourage faculty to explore other instructional technologies proactively. The sheer simplicity of the interface was, ironically, preempting inquiry into other ways to use technology to enhance the traditional classroom. Many were clearly willing to "stand pat" with Blackboard rather than work their way through to a broader exploration of instructional technology techniques.
- For those who did look past Blackboard to other instructional technologies, the primary inhibitor -- the "bottleneck" -- was not skills or risk, but time -- time to explore the theory, time to acquire the skills, and time to implement the practice. The greater the innovation or risk, the more creative or ambitious the project, the tighter and more painful the squeeze through the bottleneck.

Thus we found that, although Blackboard was opening doors to the possibilities of instructional technology, in most cases those doors weren't leading anywhere. We were getting the attention of our faculty eggs, but we had no clear strategy for drawing them through that crucial bottleneck and into our IDC bottle.

4. The Model and Its Relevance

Our experience with Blackboard convinced us that we needed a faculty development model that would move beyond problem-oriented support and application-based training, to a team-oriented design and development approach that could draw faculty into instructional technology theory and practice without a prohibitive investment of time. To be successful, that model would have to:

- Encourage faculty to explore the broad possibilities of instructional technology;
- Promote an awareness and appreciation of instructional design and instructional technology theory;
- Allow faculty to concentrate on pedagogical issues and content;
- Provide skill-based design and development support;
- Reduce the need for large investments of faculty time.

Blackboard helped define our constituency and demonstrated the need for other strategies. In fact, we hope it will prove to be just one of several different "matches" we can light to draw our faculty in. Our goal now is identify other matches -- programs and services that will directly encourage faculty to integrate a broad range of technology into their teaching.

With that goal in mind, we are currently exploring programs and services described in the literature and in place at other institutions. We seek models that will allow the IDC to be proactive in easing faculty through the "bottleneck." Some of the programs and services we are currently investigating include:

- Project-driven instructional development teams that work with faculty to solve specific instructional problems or implement specific classroom innovations;
- A clearly articulated set of "best practices" to guide faculty as they begin to think creatively about the impact of technology on their teaching;
- A Summer Instructional Technology Faculty Development Program that pairs faculty with the skills and resources they will need to address specific instructional issues;
- Faculty representation in the IDC through an Academic Technology Liaison (ATL) program that pairs IDC team members with representatives from each college;
- A mentoring program that pairs faculty with student mentors who can support them through the instructional design and development process;
- An organizational and resource model that supports departments and colleges directly through regular direct contact with a representative from the IDC;
- An ongoing evaluation strategy that assesses our services in relation to our goals;
- Partnerships with other multimedia service departments on campus to allow greater integration of services and thus easier access for faculty;
- Partnerships with the Teaching Excellence and Faculty Development Grant programs already in place on our campus.

Ideally, we seek just the right combination of these programs and services -- one that will encourage but not coerce, engage but not intimidate, support but not direct. Some of our faculty eggs are poised very delicately on the rim of the IDC bottle; others are ready to take the plunge but looking for help squeezing through. Our goal is to generate just enough heat through our programs and services to draw them into the instructional technology vision we have for the campus.