

Evolving Faculty Development and Support: A Model for Responding to Change

Authors: Ben Hambelton and Kevin S. Wilson

A major challenge in faculty development is moving faculty from technical-skills training to consideration of the pedagogical potential and implications of digital technologies. We believe that Boise State University's 7-year evolution from skills training to curricular development to technology-infused pedagogical design provides a model for structuring faculty development efforts at other institutions. In retrospect, these three projects had the overall effect of transforming the institution and how many of our faculty teach.

In general, the projects can be said to have led to a 6-stage evolution of faculty development:

Stage 1: Creation of a foundation of effective training.

Stage 2: Creation of an enabling environment through institutionally sponsored projects.

Stage 3: Generation of a critical mass of participation.

Stage 4: Transformation of the institution.

Stage 5: Advancement through new sponsored projects and continued training.

Stage 6: Transformation of practice.

In the sections below, we briefly describe the three projects and provide some suggestions for how such projects can best be implemented with transformative impact.

Case Studies: Three Centrally Managed Faculty-Development Projects

Beginning in 1998, Boise State has undertaken three centrally managed faculty-development projects aimed at assisting faculty in incorporating technology into instruction. The first two projects lasted for three years, and we are now midway through a third three-year project. Each has been funded by a Technology Incentive Grant from the Idaho State Board of Education, and each has been sponsored by the Provost, with implementation being the responsibility of Academic Technologies and related campus agencies, including Extended Studies.

The first project—Bridging the Chasm—was aimed at moving mainstream faculty to the other side of the chasm that lay between them and technology adoption. To get them there, we first had to remove the barriers—perceived and actual—they might encounter while moving toward technology adoption. For instance, when faculty told us that a lack of technical skills prevented them from using technology, we responded by creating special training facilities and conducting the Summer Instructional Technology Institute, a 1-week immersive series of workshops, seminars, and presentations focusing on hands-on technical training. When faculty told us that a lack of suitable equipment prevented them from using technology, we responded with the Digital Studio, a first-rate production facility equipped with computers and software capable of producing high-quality digital teaching materials. Finally, to address the barrier of faculty feeling as if they were venturing alone into unknown territory, we developed online tutorials and databases of instructional software and innovative teaching practices.

The second project—CoreOnline at Boise State—was aimed at training faculty in teams to develop online versions of general-education core courses and increase the number of faculty with the skills to infuse technology into the curriculum.

Once again, faculty were given extensive hands-on training. They were also provided with notebook computers and a stipend, as well as media-production assistance from the staff of Academic Technologies and trained Student Technology Assistants. Guides to best practices were developed and distributed to faculty, while an online orientation to e-learning was developed for students, in addition to a 1-credit course titled ["An Introduction to E-Learning at Boise State."](#)

Our most-recent project—H³: Hi-Tech, High-Quality, Hybrid—is aimed at developing 50 hybrid courses combining the best features of face-to-face instruction with the best features of online learning.

In the most extensive training provided to date, faculty participated in an 8-week Spring Seminar, in which they played the role of students in a hybrid seminar about course redesign. This training was followed by an 8-week Summer Development Institute, during which faculty worked with Academic Technologies staff, Student Technology Assistants, and peer groups to develop all of the teaching materials and content for their redesigned hybrid courses.

These three projects have been the vehicles for transforming the institution and the practice of teaching and learning at Boise State University. We believe that lessons learned from this experience are applicable in other settings.

Building on the Foundation

Our experience has shown that providing effective training is the starting point for a successful faculty-development effort, but that effective training by itself isn't enough. Instead, we recommend that effective training be paired with an "enabling environment," one that arises from an institutionally-sponsored project of significant value. Together, effective training and an enabling environment can generate a critical mass of participation and in turn create a transformative effect on the institution and ultimately on teaching.

Provide Effective Training

Our work with faculty—and our assessment of their training needs—has led us to devise the following four principles to guide development and delivery of training:

- Faculty must know what is possible. Until faculty see real-life applications of technology in instruction, they can only dimly imagine what technology can add to their teaching. Portfolios, showcases, and technology demonstrations go a long way to opening their eyes to the possibilities inherent in technology.
- Faculty must master the technology before reaping more significant benefits. Faculty still struggling with the tools are unlikely—and in many cases, unable—to consider the pedagogical implications of technology.
- Training must focus on faculty's perceived needs. Instructional designers and technical specialists may have great insight into what faculty most need to know and be able to do to integrate technology into instruction, but if that vision does not match the faculty's own perception of their needs, the training and development program will be far less successful. For this reason, it is important to attend to faculty's own perception of their needs.
- Training must provide opportunities for immediate application. Faculty have consistently reported that they learn best when they can immediately apply new tools and new skills to their teaching practices.

Throughout the projects, we used survey and focus group data to address faculty teaching concerns and perceived needs, and we took every opportunity to raise the level of technology awareness among faculty. Toward this end, we sponsored technology demonstrations and provided examples of effective practice. We also published a "Teaching with Technology" newsletter, distributed to all faculty, and developed tutorials and databases of instructional software and innovative practices.

At the same time, we tried to incorporate principles of effective instructional design into the skills training that participating faculty were receiving, having come to believe that effective instructional design isn't taught to faculty, but that it emerges from reflective application, from faculty making conscious, informed decisions about how to best employ technology in instruction. Though we modeled effective instructional design at every opportunity, embedding pedagogy in skills training, it was only upon turning to the application of those skills that faculty began to see the benefits and value of effective instructional design.

In the CoreOnline project, the need for faculty to immediately apply their new skills was addressed through the Graduated Development Model, a five-step process that guided faculty's efforts to bring a traditional core course online. The Graduated Development Model consists of the following steps:

- 1st Semester: Faculty participate in skills training.
- 2nd Semester: Faculty develop a web presence (syllabus, schedule, contact information, etc. in Blackboard).
- 3rd Semester: Faculty develop an interactive web presence (discussion forums, chat tools, surveys, tutorials, quizzes, etc.).
- 4th Semester: Faculty teach a pilot section of the online course.
- 5th Semester: Faculty refine and revise the online course.

Our efforts to deliver effective training in the H³ Hybrid Course project placed faculty in two different training experiences, one experiential and the other immersive. Their experiential experience was an 8-week hybrid Spring Seminar, which placed them as students in a hybrid course focusing on active-learning strategies and the course-design process. The immersive experience was an 8-week development institute, during which faculty worked full-time to develop all aspects of their redesigned hybrid course, from digital teaching materials to lesson plans for face-to-face sessions. They were supported in their efforts by a peer-review team, an assigned staff member from Academic Technologies, technology demonstrations, and workshops on pedagogy.

Create an Enabling Environment

As we've noted earlier, effective training isn't enough to enable faculty to move beyond mere skills training to a reflective, informed blending of pedagogy and technology. For that to happen, we believe that you must also create an enabling environment, one that is broadly supportive of experimentation and change in teaching practice. Our experience suggests that such an environment generates a critical mass of participation and that this critical mass, in turn, creates a transformative effect on the institution and ultimately on teaching.

What is an enabling environment? First, it consists of a robust technical infrastructure, including pervasive network connectivity, adequate classroom equipment, a course-management system, and faculty access to desktop development equipment and software, along with assistance and consultation in using these tools. An enabling environment also incorporates supportive policies addressing technology in instruction, including university policies on intellectual-property, copyright, student privacy, and intellectual integrity, as well as supportive promotion and tenure guidelines. An enabling environment also includes supportive administrative procedures, such as the following:

- online and web-enhanced student services (bookstore, registration, financial aid, etc.)
- help desks (drop in, online, and telephone support)
- student preparation and support services (for example, [E-Learning at Boise State: An Online Orientation](#) and [Introduction to E-Learning at Boise State](#))

Of equal importance to an enabling environment are public recognition and rewards for faculty who elect to incorporate technology into instruction. Promotion and tenure policies should give credit for the use of technology, and the university administration should publicly recognize the work of faculty adopting technology. Faculty-development projects such as those undertaken at Boise State should be widely publicized, both on campus and off, and participating faculty should receive a variety of incentives and rewards (in our case, stipends, computers, and priority assistance from Student Technology Assistants). Taken altogether, these efforts at publicly recognizing and rewarding faculty communicate the idea that technology adoption is a university priority.

Develop Institutional Initiatives Aimed at Specific Curricular Targets or Specific Audiences

Our principal strategy in creating an enabling environment was to develop strategic institutional initiatives aimed at specific curricular targets or specific audiences, such as core courses (CoreOnline) or faculty not yet using technology (Bridging the Chasm). These centrally managed institutional initiatives not only go a long way toward creating that enabling environment, but they also carry with them numerous benefits unavailable when faculty development consists of individual faculty members working on disparate, individual projects.

While faculty-development efforts focusing on individual faculty members enable "a thousand flowers to bloom," they also lack sustainability as individual faculty members move on to other areas of interest or leave the institution. Individual projects also have relatively little impact on the university as a whole, certainly far less impact than an institutionally-sponsored initiative aimed at specific curricular targets or specific audiences. In addition, individual initiatives tend to attract early adopters rather than mainstream faculty, and they do little to remove the barriers to technology adoption that mainstream faculty encounter.

By contrast, with institutionally-sponsored initiatives, barriers and impediments are addressed institutionally, with policy being altered or created as needed. In addition, resources are more willingly invested, and public success of the project becomes an important priority. Institutionally sponsored projects clearly communicate priority and importance, and they vest ownership and responsibility across the institution, generating facilitative responses from a wide spectrum of university agencies and enlisting those who might otherwise not participate.

That has been our experience, most notably exemplified by the CoreOnline project, which sought to create online versions of general-education core courses. By focusing on core courses, the project had a broad, immediate impact on the curriculum and, by extension, on Boise State. Of extreme importance to its success was the sponsorship and endorsement of the Provost, coupled with the involvement of the Deans of each participating college, who approved faculty proposing to participate and who ensured that each participating department would take ownership of the online core courses, both during their creation and thereafter.

Institutional responsiveness to barriers encountered by faculty resulted in infrastructure improvements, changes to policy, and improvements to procedures and support services. Perhaps most important, the high-profile nature of this institutionally sponsored project resulted in a contagion effect among faculty. As faculty not involved in the project viewed the priority and importance attached to this institutional project they concluded that perhaps they, too, should be using online instructional methods. This resulted in a dramatic increase in the use of Blackboard and an increase in faculty interest in teaching with technology.

Key Steps in Creating an Enabling Environment

Our experience with these three faculty-development efforts have revealed some key steps in creating an enabling environment, most notably the following:

- Gain genuine sponsorship by central administration, in deed as well as word.
- Identify a target of significance and value, such as a specific audience or a particular curricular area.
- Provide critical incentives and support, such as release time, stipends, computers, etc.
- Remove barriers, whether actual or perceived.
- Provide public recognition for participating faculty, fostering a contagion effect among other faculty.

The End Result of Coupling Effective Training with an Enabling Environment

Coupling effective training with an enabling environment creates the necessary and sufficient conditions to support contagion among faculty who aren't participating directly in the faculty-development project, while also stimulating early and middle adopter groups. As a result, the combination of effective training and an enabling environment generates a critical mass of technology adoption among faculty, leading to a wave of innovation and experimentation.

More important, the institution is transformed in the process. Though these projects are certainly not the central cause of the transformation at Boise State, they played a contributing role as Boise State moved forward in its efforts to incorporate technology into instruction. This transformation is most notable on the significantly improved environment for teaching, learning, and technology. More attention is being paid to the teaching environment, the technical infrastructure, teaching and learning issues and support, student technology development, and the need to recognize and rewarding good teaching. Further evidence of that transformation includes an increased interest in informal social/learning spaces conducive to the use of technology and the building of an experimental classroom facility, the Interactive Learning Center, which will house a teaching and learning center for faculty, digital-media production studios for students, and classrooms with highly configurable furnishings and technology to support teaching, learning, collaboration, and communication. Those are just a few of the changes taking place at Boise State, partly as a result of Boise State's ongoing faculty-development efforts.

It is our position is that this transformative impact on the institution and teaching practice was enabled and facilitated by the succession of institutional projects that coupled effective training practices with an enabling environment that in turn formed the catalyst for the development of a critical mass of faculty using technology. This critical mass of participation and its generative enabling environment focused on institutionally valued projects created the conditions to support truly transformative results.

We believe this process, once adapted to individual institutional situations, can be replicated with similar success at other universities.

Ben Hambelton has been director of Academic Technologies at Boise State University for 28 years. During that time the department has grown from an audio-visual unit of the College of Education with 5 staff to a campus-wide department serving teaching, learning, and communicating with a staff of 17 professionals. Ben has overseen the growth of the department from 5 rooms in the Library to a separate building of over 35,000 square feet. Ben's focus of interest is in management, grant writing, learning environments, instructional design, learning support services, and new technology.

Kevin S. Wilson has been working as a technical communicator at Boise State for the past five years and has been an adjunct faculty member in the English Department for more than 10 years, during which time he has taught graduate and undergraduate courses in technical communication. He holds a B.A. in English with a Writing Emphasis from Boise State and an M.A. in English from the University of New Hampshire. For Academic Technologies, Kevin provides editorial services, maintains a variety of web sites, serves as an instructional designer, and coordinates faculty-development activities.