

A Department-Focused Plan for Faculty Technology Professional Development

One university's plan is returning control of instructional technology training to the academic departments

By **Richard A. Ranker** and **Michael B. Clay**

Like most academic technology divisions within information technology organizations, the Office of Information Technology at East Tennessee State University (ETSU) has struggled to offer the right training opportunities and related services to faculty and staff. We offered a wide variety of workshop opportunities (last academic year we offered 68 different topics in a total of 271 workshops to 1,568 attendees). Based on the feedback we received, however, it seemed that our approach lacked a foundation.

The Problem

Student jet pilot to air traffic control tower: "I'm not sure where I'm going, but I'm getting there real fast!"

Our staff often developed workshop topics because they found an exciting new application that they thought might interest the faculty or staff. Both the software collection and associated costs in our Academic Technology Lab were growing, but we couldn't answer basic questions from the early adopters as to why we didn't offer more advanced topics. Similarly, other faculty members asked why there were so many iterations of a particular topic and none on their desired topic.

We labored to keep our three trainers up to date in order to fulfill our promise to offer cohort workshops (special work-

shops requested by five or more people on a topic or topics of their choosing, offered at a time and place of their choosing). The expertise of our trainers was being stretched very thin as they provided in-office one-on-one assistance after the requester attended a workshop.

Our Advisory Board patiently engaged in discussions of workshop topics and looked for some logical defense for our topic selections. In essence, we had slipped into a "build it and they will come" approach to faculty technology professional development. The academic technology staff was very busy trying to keep everyone happy. Had we become the student pilot who was all airspeed with no flight plan?

On campus, we found no clear answers to the basic questions we were hearing. One faculty member asked, "What training should I take if I want to begin to offer a Web-based course next year?" Another asked, "What workshops do you recommend for me if I want to fully use this new multimedia classroom?" Many mainstream faculty asked, "How will this training help me teach my class or help my students learn?" A departmental chair asked, "What basic technology skills should I look for in candidates during the interview process?" As we struggled to provide cogent and consistent answers to these and related questions, we recognized that these questions provided a clue to identifying the true campus needs.

According to Casey Green of The Campus Computing Project,

For the past five years, survey respondents across all sectors of higher education identified "assisting faculty integrate technology into instruction" as the single most important IT issue confronting their campuses "over the next two to three years."¹

The EDUCAUSE current issues survey identified IT planning as one of the top 10 challenges of 2000.² We reasoned that there should be a plethora of plans available to facilitate that integration. Our search of the journal literature of the day and Web pages of other institutions, however, showed no clearly stated plans for how to conduct faculty development on instructional technology. Green, while noting that 63.3 percent of participating campuses reported having strategic plans, suggested that "many of these campus IT plans are often incomplete."³ We found that campus instructional technology plans were often understated in the IT plans or not mentioned at all on organizational Web sites. The literature and conference presentations heralded specialized summer programs, one-on-one assistance to faculty, and even a decentralized approach to faculty development.

We soon came to understand that these additions could be viewed as variations of the "build it and they will come" professional development model. While this model might have been appropriate for

the early adopters on campus, we found that it didn't scale to meet the needs of the majority of faculty. (See Jacobsen for a discussion of the different needs of the early adopters versus the early majority.⁴) As we discussed our approach with more and more faculty, we found four major problems with it:

1. lack of buy-in from, ownership by, and relevance to the faculty;
2. failure to engage the academic departments and their chairs, where the responsibility for faculty development was vested on our campus;
3. misplaced focus on the technology rather than on teaching and learning tasks; and
4. lack of a baseline or benchmark of current faculty skill levels against which we could measure progress.

The Process

Flight instructor to class: "I prefer to fly with pilots who know and use the proper procedures. Nothing irritates a general officer, or the general public, as much as a rough landing does, except, perhaps, no landing."

To eliminate these problems, we developed a Faculty Technology Professional Development Plan (hereafter called the Plan) that addressed the campus readiness for extensive use of instructional technology, specified core competencies for faculty, and created a series of tracks (or groups of skills aimed at fully exploiting some specific instructional technologies). In a way, many university faculties are more often interested in process than product. We have seen instances where faculty rejected sound policies based primarily on the fact that they were not involved in their development. To avoid such rejection, we engaged the faculty in every stage of the Plan, from development through integration to outcome. While we are in the early stages of fully integrating the Plan into our operations, we feel that it is a sufficiently significant departure from practice on most campuses to be worth sharing.

Developing the Plan

The process of developing the Plan was, in many ways, as important as its

content. The process was collaborative and iterative. We collaborated with a wide variety of faculty groups on campus one at a time. For example, the first draft was presented to the Academic Instructional Technology Subcommittee (AITS) of our Information Technology Governance Committee. The AITS made several suggestions for improvement, which were incorporated into the draft Plan. At the following monthly meeting, the AITS reviewed the draft again. Additional changes were suggested; they were reviewed at the subsequent meeting and finally approved by the AITS. This basic process was followed with each reviewing committee.

Some of the other key committees that reviewed ETSU's Plan were the Academic Technology Support Advisory Board, the Council of Chairs, the Dean's Council, the Information Technology Governance Committee, the Faculty Senate, and, finally, the Academic Council.

The Plan went through 42 iterations through 12 separate committees over a 14-month period. In the process, it was transformed from an Office of Information Technology (OIT) plan to a faculty plan. The committees made suggestions and asked tough questions. Ideas to improve the plan were encouraged. At the beginning, whole sections (in the form of tables) were restructured or removed and others were added. In some instances we worked with individual committee members in rewriting parts of the draft to capture the wording needed to overcome the objections of their groups.

Each of the groups that reviewed and improved the draft Plan rightly claimed ownership. The process gained faculty buy-in and yielded genuine improvement to the Plan. The resulting Plan is both detailed and flexible, and clearly identifies the campus consensus of the skills needed to help a faculty member meet common instructional goals. In the end, we had a flight plan for the entire faculty.

The Solution

Flight instructor to class: "If you have a specific objective, then you need a detailed

flight plan; if you don't know where you are going, any flight plan will do."

We found it helpful to construct the plan in two parts, to integrate it on campus in stages, and to measure its success through formal evaluation.

The Plan's Structure

Our Faculty Technology Professional Development Plan consists of two major segments. The first segment, the narrative portion of the Plan, covers the background, expected outcomes, needs analysis, goal, objectives, benefits, recommendations, and implementation plan. The Plan's goal was to build a critical mass of faculty participating in an integrated, campus-wide technology community.

The implementation plan includes nine steps:

- announce goals,
- ensure stability and coordination,
- recognize best practices,
- provide motivation,
- disseminate findings,
- illustrate needs,
- ensure competencies,
- offer options, and
- expand development options.

The second segment of the Plan differs from the first in that it is largely tabular. It addresses campus readiness, the core competencies, and the specialized tracks.

Campus Readiness. The first two tables in the Plan describe what needs to be done for the campus to be ready for real instructional technology integration. Table A calls for a "state of campus readiness" toward technology transformation and suggests objectives that faculty leaders (chairs and deans) and administration will have to take to assure that the campus is really ready. Some of those objectives from Table A prompt the provost and deans to identify appropriate infrastructure needs and clearly stated technology goals for all faculty; deans and chairs to motivate faculty and provide incentives; the Teaching and Learning Center to publish best technology practices of faculty; and the provost and deans to recognize technology adopters.

Table B describes leadership strategies for administrators to integrate, promote,

and sustain the appropriate use of technology in teaching, learning, and research. It describes steps for the senior campus leadership to take to enhance classroom technology infrastructure, prepare a faculty development guide for planning and evaluation, identify and align funding sources, recognize departments that have done an exemplary job of integrating technology into the curriculum, coordinate the faculty technology development activities of several organizations on campus, support discipline-specific collaboration and training, and develop a survey process to evaluate faculty and student technology use. Additional objectives were aimed at providing the correct technology tools for Web-based course development, statistical analysis, and database access. This collection of objectives was developed to assure that the planning, funding, infrastructure, recognition, software, and evaluation were in place before the faculty would be expected to change their teaching and research behaviors.

Core Competencies. The beauty of the Plan is that it was designed by and for faculty, with clearly identifiable skill sets in mind. In Table C the Plan starts focusing on objectives for the faculty by stating the critical, generic, core technology skills needed for all faculty to be fully vested members of the ETSU learning community. The product of significant debate on campus, this list of skills for the core competencies is a major milestone for ETSU in that it establishes a goal against which faculty development progress can be measured.

Advanced Tracks. The Plan goes on to describe a series of optional tracks that, when completed, will make a faculty member more productive in a particular area. The tracks focus on using the office suite software (Table D), integrating a variety of technologies into face-to-face instruction (Table E), fully using a multimedia classroom (Table F), developing a stand-alone Web-based course (Table G), delivering a course on interactive television (Table H), developing the pedagogical background needed to integrate technology into instruction (Table

I), or conducting empirical research for publishing (Table J).

Integrating the Plan

We are still in the process of completely integrating the Plan into the way our division supports faculty development. However, we have completed some important steps, such as changing all of our training materials to support the Plan, testing the Plan in our Faculty Technology Leadership classes, and reviewing the Plan individually with our departmental chairs.

One of the first things we did after the Plan was adopted was modify all open-enrollment workshop materials to assure that they taught skills specifically described in the Plan. Similarly, cohort workshops could be more outcomes- or skills-oriented. Trainers also matched the online resources, such as the 300-plus Web-based tutorials in a commercial software package we leased with those skill sets, and made all training materials from our workshops available on the Web. One-on-one help made more sense with the Plan's focus; we could discuss with faculty not only the specific skill they requested help on, but also other skills as they related to a particular track in the Plan.

One of the first real tests of the Plan was its integration into the Faculty Technology Leadership (FTL) program. FTL was designed as a two-semester graduate program to help mainstream faculty serve as campus technology mentors and leaders. Participants were also trained to master the core technology competencies, multimedia classroom skills, and the Web-based course development skills. Faculty enrolled in the FTL program were continually surveyed on their self-reported confidence in their ability to accomplish the core competency skills. Additional surveys were developed on the multimedia classroom and Web-based course skills; their use in the FTL classes helped refine the questions and built our confidence in the instruments. Eventually, we developed surveys for each of the tracks.⁵

Another way in which the Plan has become a focusing device for instructional technology was its integration

into the chair visits. The Academic Technology Support director and the trainer for the respective college met with the chairs of the academic departments. The purpose was to introduce the trainers, review the Plan, and offer to survey the department members using the Core Competency survey.

We are starting to collect departmental data, which will permit two major things. First, it will give the chairs an opportunity to request faculty development opportunities for their department members in the form of cohort workshops. Such cohort workshops should empower the departments to control their own faculty development efforts rather than relying on open-enrollment workshops. These offerings will be more focused and purposeful than what we could provide in the past.

Second, combining the survey data will let us paint a more complete college-wide or campus-wide picture of the faculty's comfort level in performing the core competency skills. This will serve as a baseline and allow for benchmarking as the faculty development process continues.

Outcomes

The success of the integrated technology professional development model will be determined over time and by its ability to scale for the majority of faculty. We have outlined an evaluation plan that involves a departmental level survey of faculty confidence in their ability to do the core competencies a year after the initial survey and following cohort training at the departmental level. Departmental statistics will be aggregated to demonstrate progress for each college and for the campus as a whole. In the meantime, we have gotten some anecdotal indicators of success.

The number of Web-enhanced and Web-based classes and students enrolled continues to climb (85 faculty trained, serving more than 3,000 students in the first 3 months; 231 faculty and 6,500 students at the end of the first year). The number of cohort workshops is increasing, and most of them are the result of the chair visits. Faculty satisfaction with the workshops remains at a steady aver-

age of 4.8 on a 5.0 Likert scale. The graduates of the first FTL class are having an impact on their departments in several ways, including the number of technology-enhanced courses (50), conference presentations (8), papers published (5), and faculty mentored on technology skills (39).⁶

We recognize that our assessment processes are still in the early stages. We have visited with more than half of our department chairs, and the surveys have just begun. Core competency surveys have been set up for more than 60 percent of these departments.

While a few department surveys have been conducted (due primarily to the summer break), the relatively low number prevents us from painting a composite campus profile of the technology skills of our faculty. The Plan is beginning to be recognized as a guide for personal instructional technology growth, but it will likely take another year or two before its central position is recognized throughout the campus.

Relevance to Other Institutions

Old flight instructor to class: "The difference between landing and crashing usually depends on how quickly you adjust your attitude and your attitude."

Engaging the faculty in the development of any faculty technology development plan is a critical lesson other institutions need not learn on their own. Similarly, placing the responsibility for the Plan in the academic departments is a replicable — and critical — step.

We understand that our Plan may not be the best plan for other campuses. However, by using the existing ETSU Plan as a first draft, another campus might be able to eliminate up to a year from the development of their own campus plan. Interested campuses will find many of the support materials associated with our Plan available on the Web (see the sidebar "Online Resources"), including the surveys of the core competencies and other tracks. Workshop training materials can be copied from the ETSU site to serve as a

Online Resources

Workshop attendance and rating data:

<http://ats.etsu.edu/WorkshopResources/attendance/countforworkshopsfall00-sum01.htm>

The Plan:

<http://ats.etsu.edu/ftpdp/Facdevplan011702.htm>

Technology Tracks:

<http://ats.etsu.edu/tracks/techtracks.htm>

Training materials:

http://ats.etsu.edu/workshopResources/workshop_resources.htm

Core competency and specialized track surveys:

<http://ats.etsu.edu/resources/surveys/>

Satisfaction with workshops survey results:

<http://ats.etsu.edu/WorkshopResources/attendance/>

Faculty Technology Leadership program impact:

<http://ats.etsu.edu/ftl/FTL-1survey.htm>

starting point for others launching into the workshop process. The same is true for the just-in-time training aids. Finally, the Faculty Technology Leadership program has a wealth of instructional and evaluative data that could be helpful in starting a similar program.

Final Thoughts

The Plan is a dynamic document, requiring ongoing updates and changes. Unlike many existing approaches to faculty technology training, this Plan clearly focuses the development efforts of individual faculty members and of the overall campus while placing the academic departments at the controls.

The process behind developing the Plan has been very helpful, as well. The faculty has participated in the plan's development, thereby ensuring relevance and ownership. Chairs of academic departments are beginning to use the Plan to coordinate and guide the professional development of their faculty (and help in some hiring decisions). The Plan has re-focused our workshop efforts on teaching and learning with technology and will offer, after more surveys are completed, a benchmark to assist in measuring faculty development progress. We believe the campus is on a flight plan

toward success, and trust we won't crash along the way. *e*

Endnotes

1. K. C. Green, "Campus Computing 2001: The 12th National Survey of Computing and Information Technology in American Higher Education" (Encino, CA: The Campus Computing Project, 2001).
2. P. B. Gandel et al., "Top 10 IT Challenges of 2000," *EDUCAUSE Quarterly*, 23 (2), 2000, pp. 10–16.
3. Green, op. cit.
4. M. Jacobsen, "Bridging the Gap Between Early Adopters and Mainstream Faculty's Use of Instructional Technology," 1997; ERIC Database #ED 423 785.
5. See <http://ats.etsu.edu/resources/surveys/>.
6. See <http://ats.etsu.edu/ftl/FTL-1survey.htm> for details and some testimony on the effectiveness of the FTL program.

Richard A. Ranker (rankerr@mail.etsu.edu) is a retired Air Force officer and a Collegis employee serving as the Director of Academic Technology Support for the Office of Information Technology at East Tennessee State University (ETSU) in Johnson City, Tennessee. Michael B. Clay (claym@mail.etsu.edu) is a Collegis employee serving as Training Manager for the campus, Director of Technology for the College of Education, and lead instructor for the Faculty Technology Leadership program at ETSU.