# Hook, Line and...Sinking? Helping Faculty Stay Afloat in the Sea of Technology

Darlene Nichols and Laurie Sutch

Accelerated technological change is a fact of contemporary academic life. Teaching faculty face a daunting range of applications, methods, resources, and expectations in teaching today's student. On many campuses support for faculty use of newer teaching technologies is haphazard at best. Additionally, the work lives of teaching faculty are usually exceptionally hectic and demanding—teaching, mentoring, conducting research and participating in administrative activities such as departmental or campus-wide committees can take up much more than the typical eighthour work day. Many faculty members have little time to devote to keeping abreast of changes in the technological tools of the academic trade; instead they find themselves sinking in the sea of new technology.

Expectations are a particular stressor in the academic environment. Incoming undergraduates arrive on campus well-equipped with skills some faculty are only beginning to develop. For most new students, what their professors see as new is no more novel than the telephone—they have grown up on computers, electronics and digital gadgets. These tools are simply part of their daily lives. On the other hand, faculty members sometimes have unrealistic expectations that they can quickly learn a new technology tool and fully realize their complex vision of what the tool can accomplish. For example, a faculty member might assume he or she could quickly create a five-minute Flash movie, not realizing the steep learning curve associated with more complex programs that adds to the total preparation time.

Campus-wide services such as the library, computing support, and teaching and learning centers, already play a significant role in helping faculty to stay afloat and able to fulfill their many responsibilities. Libraries, for example, offer a wide array of faculty support services: information delivery, materials acquisitions, collaboration to teach skills to students through library instruction, and much more. Increasingly these services are augmented by technology, technology that is constantly changing, and increasingly blurring the lines between what is deemed library tech-

Darlene Nichols is Senior Associate Librarian, Psychology Librarian/Coordinator, Graduate Library Instruction, email: dpn@umich.edu; and Laurie Sutch is Associate Librarian, Manager, Faculty Exploratory, email: lasutch@umich.edu, University of Michigan. nology and what is deemed productivity technology. Library users, including faculty members, are not always sure-and should not be expected to knowwhat technology the library manages, and what equipment, software and support are managed by other campus services. These lines blur, for example, as faculty incorporate library information resources, such as electronic texts, into course management software (such as WebCT and similar software) or class web pages. Libraries become important players in aiding faculty to make those linkages, and helping faculty to understand what they may and may not do with these licensed resources. Information management tools such as bibliographic software also calls for library intervention in helping faculty make the best use of the tools, even if faculty do not think of software programs such as EndNote and ProCite as within the library's purview. Faculty members, staff and students often use library information resources without even realizing that it is the library that brings these resources to them.

The library, with its calling to provide campuswide service and with the increase in electronic forms of information and information delivery, is well positioned to extend its teaching role to include the technology that faculty use in their teaching and research to access, manage, and distribute intellectual content. Collaboration, however, is key to providing systematic and more comprehensive support for faculty in multiple aspects of technology.

In this paper we will describe one effort to respond to faculty technology training needs through a joint effort of several independent campus units. We will describe the structure of the organization that has annually produced a weeklong intensive training program for the University of Michigan faculty since 1998. Drawing upon data collected during each of these programs and upon other locally collected data, we will discuss findings related to patterns of faculty interest based on their status, such as comparisons between junior and senior faculty, and on their field or discipline, types of training that drew the most participation, their self-perceived skill levels, the value they perceive the training has on their teaching and research, and changes over the five years this program has run. We will also offer suggestions on developing similar collaborations on other campuses.

Technology Learning at the University of Michigan There are close to 5,000 faculty members on the Ann Arbor campus of the University of Michigan, including teaching faculty, clinical faculty, lecturers, librarians, adjuncts, and research scientists. The Ann Arbor campus is spread out across the city: North Campus, Medical Campus, Central Campus and South Campus. Distance becomes an issue for some faculty members who do not have the time or, sometimes the inclination, to travel to other locations for training. Campus culture is one in which schools and colleges tend to operate quite autonomously, although there is increasing effort to better centralize and share services and equipment to meet common needs. The twenty schools and colleges, and the departments within them, offer a wide spectrum of computing support for their faculty members. Some have virtually none, while others have staff dedicated to providing extensive faculty support that may or may not include training. A number of other campus units are also available to faculty members; these tend to serve a group of departments or the campus as a whole, such as the University Library, Media Union, Language Resource Center, and Information Technology Central Services. While there has always been some level of support, many faculty have been confused about which units support the technology applications they need. In surveys conducted by Information Technology Central Services among University of Michigan faculty in 1999 and 2001, a perceived lack of support was one of the biggest concerns faculty respondents had regarding the use of technology.<sup>1, 2</sup>

## Emergence of the Teaching and Technology Collaborative

In the fall of 1997, several campus services that offered technology training and support to faculty at the University of Michigan came together to establish a new organization called the Teaching and Technology Collaborative (TTC). This group was not mandated by administrators but rather was a grassroots effort to create a network of technology support staff to share knowledge and resources. Though this was somewhat remarkable on a campus more typically characterized by decentralization and autonomy, it was clear that there was a common ground and that cooperation would not only benefit the University teaching faculty, but the participating service units as well.

The Teaching and Technology Collaborative began as an informal and unofficial group of University staff members with a common interest and related job responsibilities: each person worked in a unit or department that supported faculty efforts to incorporate technology into their teaching and into their students' learning. The initial call to come together was made by a staff member of the Office of Instructional Technology, a unit within the campus-wide Information Technology Division (ITD), now Information Technology Central Services (ITCS). Campus units with representatives initially participating in this group were the University Library, the Science Learning Center, the Language Resource Center, the Center for Research on Learning and Teaching, the Faculty Exploratory, and the Knowledge Navigation Center. Information exchange was the first order of business as members became better acquainted with the services and policies of each unit.

In brief, these units provided the following resources for faculty. The Office of Instructional Technology offered support to faculty members using advanced technological applications in their teaching such as multimedia or designing online courses. The Faculty Exploratory<sup>3</sup> provided technology workshops and one-on-one assistance, especially for those in the early learning stages. The University Library made available an extensive array of information resources as well as classes and consultations on the use of these resources and on software such as ArcView. The Center for Research on Learning and Teaching gave seminars throughout the academic year on principles of university teaching in general and offered consultations on evaluation, course design, presentation skills and other issues related to teaching. The Science Learning Center served the natural science departments and provided computing support services for science education. The Knowledge Navigation Center trained faculty, students and staff in a wide array of technology applications. And finally, the Language Resource Center provided both a facility for language education and extensive support to language instructors in applying technology to language instruction. Recognizing the interconnections of the services found in each unit and with the goal of building upon shared programs as well as specializations, the group gave itself the name Teaching and Technology Collaborative (TTC).

The first product of this fledgling organization was the TTC Matrix, which was available in both paper and electronic formats <a href="http://www.umich.edu/">http://www.umich.edu/</a> ~teachtec/ttcmatrix.pdf>. This was an attempt to organize and display services in a way that would help service providers and faculty members identify points of service by type of service need. For example, someone looking for training or facilities for scanning texts or images would locate "scanning" on the list of services and read across the matrix to find appropriate service locations. This was particularly helpful to service providers themselves in referring faculty members to the right place and the right person without a lot of guesswork. Eliminating the frustrating hunt for the right point of service was a tremendous step forward for everyone.

The TTC wanted to do more to help faculty with their technology needs and so planned an ambitious weeklong program to be held in May, right after the end of the winter term. Knowing that even faculty who were not teaching in the spring/summer terms remained on campus during the first few of weeks after the end of the winter term, mid-May seemed an ideal time for what the TTC came to call the "Enriching Scholarship" program. Time to learn and use new technology was one of the major issues raised by faculty respondents in the 1999 and 2001 campus surveys of faculty information technology needs.<sup>4, 5</sup> Holding the program over the course of one week gave faculty members an opportunity to focus and concentrate on their technology skills at a time when many were under less pressure from their other academic responsibilities.

One intentional purpose of the Enriching Scholarship program was to publicize the services of the member units of the TTC. This not only gave program participants a better understanding of what was available campus-wide, it also assured that they knew where to go for follow-up assistance after Enriching Scholarship. More than one participant in the program wrote the following kind of statement on the session evaluation form: "It's very helpful to people beginning a project to know what resources are available (who is responsible for what)." Even though a relatively small number of faculty take advantage of Enriching Scholarship each year, each faculty member receives a brochure describing the program and providing contact information that they can—and do—reference later.

The first Enriching Scholarship program was highly successful with a large faculty turnout and extremely positive feedback from all who attended. After this success, the members of the TTC discussed the future of the group. All reaffirmed their individual commitment and that of their units to the TTC. In several cases the TTC members were the heads of their units and in other cases, such as the Library, the TTC representative had verbal commitment from their dean or director. After the TTC's initial year, a new member, the Educational Services department of the Information Technology Division was added to the group. Enriching Scholarship has become an annual event, attended by several hundred faculty and staff members from across campus. In the first program in 1998, faculty could select from 50 sessions. In 2002, over 90 sessions were offered, in addition to a preconference during which faculty could hear their colleagues speak about various ways they had applied technology to teaching. The program continues to grow as the TTC members continue to look for better ways to reach and serve the faculty audience.

#### **Enriching Scholarship**

The Enriching Scholarship program<sup>6</sup> offers faculty an opportunity to take workshops on an extensive variety of topics. Although the labels for the types of sessions have changed somewhat over the years the classes are broadly clustered into six categories: web authoring and enhancement; proposals, funding and evaluation; multimedia tools; information management; technology for use with non-English language instruction; and course development. These categories, however, do not truly give a sense of the variety of choices faculty have. Some classes are tool-specific-PowerPoint, Flash, Excel, Web of Science, EndNote-while others are more thematic—evaluating the impact of technology, using technology to enhance learning, understanding copyright. Faculty can learn to use a virtual reality cave, incorporate non-roman fonts in course management software, run a videoconference, create online quizzes, digitize audio and video, utilize specialized library and information resources, track down funding sources and much more.

Technology specialists, faculty, and librarians are the instructors. For some of these instructors, Enriching Scholarship is above and beyond what they normally do. Most, though, routinely conduct training either one-on-one or in classroom settings throughout the year and, strongly supported by the administration within their units, Enriching Scholarship has now become part of their annual routine. None of the instructors is paid anything above their normal salary. Their labor is essentially donated to the TTC by the unit for which they work.

The Enriching Scholarship program needs many facilities throughout the week. Space is donated by the unit as part of the in-kind cost of the program, and an effort is made to have sessions on each Ann Arbor campus so that faculty have access to sessions nearby. Except for the first year (when a subcommittee of TTC members did it), each unit takes responsibility for finding locations for its sessions. This helps to keep costs low and also functions as a showcase for service points all over campus. While economics were not the main motivation for initiating a campus-wide program, there have been economic benefits—for a relatively small amount of money, existing units are able to pool expertise and staff and are able to reach a large number of faculty members.

#### **Evaluating Enriching Scholarship**

Participants in Enriching Scholarship activities have been asked each year to include information about themselves when they register. In addition to their name and contact information, they also indicate whether they are faculty, staff, or graduate student instructor, and their departmental affiliation. In each session they are also asked to complete evaluation forms, which also ask for their status as faculty, graduate student instructors or staff, as well as department. From these sources, TTC members have extracted considerable information about who has attended, what kinds of sessions received the most interest and participation and by whom, and changing patterns over the course of the five years Enriching Scholarship has been held. Enriching Scholarship registration information has been gathered in a variety of ways each year-in FileMaker Pro, Lotus Notes and Excel. For the purposes of this paper, data for each year's participants, registrations and sessions was imported into FileMaker Pro and Excel. The data was crosschecked with the University of Michigan online directory, and titles (professor, lecturer, etc.), affiliations, and status (staff, student or faculty) were either confirmed or added. Identical reports were created in each

Table 1. Year-to-Year Overview						
	1998	1999	2000	2001	2002	
Number of Sessions	50	64	60	71	92	
Number of Individual Participants	149	207	316	387	501	
Number of faculty participants	108	134	166	256	299	
Number of Registrations	803	913	1079	1223	1412	
Average number of sessions per participant	5.4	4.4	3.4	3.2	2.8	
Capacity (total number of openings in all sessions)	1358	1502	1635	1816	2182	
Percent Capacity Filled	59%	61%	66%	67%	65%	

FileMaker database so the same information could be compared in each. In addition, relationships were created between the participant data and the registration data to ensure that the same individual was counted the same way in both databases. The data from the evaluations was analyzed using SPSS as well as Excel. (Sample evaluation form appended.)

As shown in the table 1, each year the number of participants and registrations has grown. Interestingly, though, the average number of sessions per individual has gone from over five down to just under three even as the number of choices has grown. It is possible that work lives have become too hectic for participants to attend as many sessions. Another explanation might be that Enriching Scholarship does not provide the needed sessions or skill levels attendees want. Alternatively, the campus may have hit a saturation point and, after initially sampling from a wider range of options, many faculty may have learned much of what they need to know to feel comfortable and confident using technological applications for teaching and learning and they are only targeting sessions to meet specific needs. There is some support for this latter interpretation: in a survey of faculty conducted by ITCS in 2001, about 85 percent of respondents agreed or strongly agreed that they were more technologically proficient than they had been two years previously.<sup>7</sup> Clearly, at least the self-perception is one of growth and development in the use of new technological tools.

#### Session Topics

Identifying participant interests in technology training is often challenging to the planners of the Enriching Scholarship program. Evaluation forms from previous programs are studied for suggestions, enrollment information from the previous year is considered, faculty and instructors are polled, and TTC member observations about the kinds of questions received during the year are all incorporated into planning the next program. Instructor availability is also a critical concern. There have been noticeable changes over the years. The number of classes sponsored by the Library has dropped, for example, in part because numerous sessions about library services that were held in the first year of Enriching Scholarship were eliminated after that year. (These included sessions on course reserves, interlibrary loan and others.) Library sessions now focus on information retrieval and use: such as strategic Internet searching for health care information, accessing news sources online, incorporating electronic texts into web pages and course management software, and handling student plagiarism in a "wired" world. Other sessions taught by library staff members include classes on bibliographic management software (EndNote and ProCite), grant-seeking, and other software applications for information management and presentation (e.g., PowerPoint and web pages).

Some categories of workshops have seen considerable growth in the number of offerings, based in large part on enrollment information and participant requests from previous years. Interest in digitizing and manipulating video has expanded considerably in the five years of Enriching Scholarship programming – the number of sessions categorized as "video," for example, has gone from one in 1998, which filled, to eleven in 2002, seven of which filled. (In 2001, four video classes were offered and two filled.) The number of discussion sessions grew from three in 1998 to 12 in 2002. Sessions labeled graphics or multimedia, the largest category of sessions in 2002, had doubled from 11 in 1998 to 22 in 2002. While popular sessions continue to be reprised, each year brings new ideas, new classes and new concepts in planning to meet faculty needs.

#### Session Levels

Instructors assign a level to each of their sessions: Beginner, Intermediate, Advanced, or Open. (Open sessions require no skill level. These are usually sessions such as keynote addresses, workshops on funding, drop-in sessions, and discussion sessions.) Each year the TTC tries to ensure that there are enough sessions at each level: TTC members evaluate whether or not there are enough offerings at each level in each category, if there are enough participant seats at each level and category, and, based on previous years, which session are most likely to fill and, thus, should be offered more than once if possible. After 1998, effort was made to present sessions in sequence: introductory sessions were earlier in the week and the more advanced sessions were at least a day later so that participants could create their own set of classes to meet their specific needs. In the first year, 92 percent of the sessions were rated either "beginner" or "open". Since then, in response to repeated faculty requests on the session evaluation forms, there have been more and more intermediate and advanced sessions. Nevertheless, the beginner and open sessions still make up an average of 73 percent of each subsequent year's offerings and are still, along with the open sessions, the sessions that are the most likely to fill.

The online program management system used in 2002 allowed TTC members to add new sessions as sessions filled and at the discretion of instructors. Of the six added that year, there were two each of open, beginner and intermediate, and three of these late additions filled before the week was out—the two open sessions and one of the beginner sessions. Clearly there is still a demand for entry-level technology training even after five years of the intensive instruction offered via Enriching Scholarship.

# A Profile of Faculty Participants in Enriching Scholarship

Enriching Scholarship is marketed every year to the faculty of the University of Michigan Ann Arbor campus. On average each year, 63 percent of the participants are faculty members. However, staff members, graduate students, and a number of visitors from University of Michigan campuses in Flint and Dearborn have also consistently participated in Enriching Scholarship. There are faculty representing every school and college on the Ann Arbor campus. Faculty in the natural, engineering and health sciences join with humanities, arts and social sciences faculty and faculty from the professional schools to learn the same skills and discuss the same issues.

The number of full professors who attend has remained fairly constant over the five years, thus each year they make up a smaller and smaller percentage of the growing number of faculty taking advantage of this annual event. A small handful of emeritus faculty also attend, challenging the stereotype of senior faculty members' resistance to new technologies. The number of junior faculty (lecturers and assistant professors) attending Enriching Scholarship has grown over the years, so that they consistently have comprised about the same percentage of faculty participants. In 1998, junior faculty were 49 percent of the 109 faculty participants; in 2002, they again were 49 percent of the much larger faculty total (299). It might be assumed that junior faculty-the next generation and, on average, the youngest group of faculty members-might have higher skill levels with technology than the senior faculty, but junior faculty are equally represented in each level (beginner, intermediate, etc.) at about 50 percent of the faculty participants. They are also proportionately represented in the multimedia, information management, nonEnglish language and course development sessions, though they tend to make up a slightly higher percentage of the faculty who attend teaching and technology sessions, web sessions and proposal/grant writing sessions. The tools taught in these latter workshops might appeal more to junior faculty members, who are generally new to teaching and new to grantsmanship, and are, therefore, more likely to be drawn to sessions on those topics.

Faculty participation at each level has remained proportionate to their representation in the program overall, making up between 62 and 65 percent at each level, though year to year the percentage in each level might fluctuate between 52 and 75 percent. As an example, in 2002, only 52 percent of the advanced sessions' participants were faculty, down from 72 percent the year before, while faculty participation in the other levels stayed about the same. This may be in part due to the fact that some of the advanced sessions were the same as the previous year, or it could be because of the very narrow focus of the advanced sessions in 2002.

The College of Literature, Sciences and the Arts (LSA) and the Medical School have the largest faculties on the Ann Arbor campus and comprise the largest groups of participants in Enriching Scholarship. In 2002, for example, 42 percent of the participants were from LSA or the Medical School (the average over five years has been 46%). Comparing LSA-the "liberal arts" school which covers languages, literatures, natural sciences, history and social sciences-with the Medical School offers some interesting contrasts. The Medical School participants have been consistently more interested in the bibliographic management classes, such as EndNote and ProCite. In 1998, ten percent of the Medical School participants registered for sessions on bibliographic management compared to four percent of the LSA participants. The pattern has remained steady: in 2002 11 percent of the Medical School participants and three percent of the LSA participants registered for bibliographic management sessions. Registration in other categories of sessions is similar for each school over the years with the notable exception of the basic computing sessions. Basic computing sessions were offered in only two years, 1999 and 2000. (These were sessions on transferring electronic files and a basic introduction to Windows geared to new users.) There were participants from LSA in those eight sessions, but none from the Medical School. Medical faculty, already highly reliant on technology to conduct their jobs, may have a higher comfort level and familiarity with information technology as well. This shows up in the levels of the sessions they take: on average, 30 percent of the medical faculty attended intermediate or advanced sessions from 1998-2002, while an average of 19 percent of the LSA faculty attended the advanced and intermediate sessions each year. While all faculty groups need access to a wide range of training opportunities at all skill levels, training programs need to be weighted, depending on the faculty group involved. Some liberal arts faculty are still entering into technology use even as some of their colleagues may have been early adapters and need assistance at the advanced level. Few, if any, medical science faculty appear to want the entry level skills and are looking for advanced and focused training (e.g., bibliographic management software) to help them to get their work done.

Within the LSA faculty, of those who registered for the basic computing classes in 1999 and 2000, only one was not a member of the humanities faculty. Humanities faculty, however, also participated in every other category of session as well-web, graphics/ multimedia and teaching and technology sessions being highly popular as they were with other faculty groups. And, while a larger percentage of the LSA humanities faculty members select beginning level classes compared to the percentage of science and social science faculty in LSA that do so, that percentage is only slightly higher than it is for the other faculty members. In 1998, 65 percent of the humanities faculty registered for beginning level classes compared to 58 percent of the science faculty and 50 percent of the social science faculty. In 2002, those percentages were 21 percent in humanities, 17 percent in sciences and 16 percent in the social sciences. Again, while humanities faculty technology training needs might be more weighted toward introductory levels, it is clear that on the University of Michigan campus we must take care to avoid stereotyping disciplines and recognize that their needs are diverse and wide-ranging.

#### Faculty Perspectives

Every year program participants were asked to complete evaluation forms after each session. Questions varied somewhat each year but respondents were always asked to rate and comment on the value of the session to their teaching and research. Highest marks tended to go to classes on video (e.g., digitization, incorporating into PowerPoint, etc), though the programs overall received remarkably high points<sup>8</sup> given the nature of the program as an entirely volunteer effort on the part of the organizers and instructors.

Participants were also asked to assess how much they had learned in each session by judging first what their knowledge level was before the session (on a scale of one to six with one being a low level) and then estimate their level of learning after the session on the same scale. On average participants moved two points up this subjective scale, though the largest perceived leap of learning was in the video sessions. The video classes seemed to have struck a vein of interest on campus. For many, digitizing and editing video is probably the least known new technology, something likely to appeal to students and attractive to early adopters as well as to others, with considerable room for the acquisition of new knowledge.

Many who completed the evaluation forms during the Enriching Scholarship program contributed comments like the following: "Very helpful. I wish there had been a workshop like this when I first started my project." and "Very valuable (both this workshop and the whole week's organization)." Faculty respondents noted that they planned to use their new skills in the classroom, in course web sites, in professional presentations, collaborations and more. In the first year and beyond the excitement and appreciation for Enriching Scholarship came through clearly in faculty evaluations:

- "I learned a lot this week..."
- "Great endeavor, this week program!"

• "The Enriching Scholarship workshops, conference, open houses, are amazing. This one week program brought the expertise available in the LRC [Language Resource Center] in particular and other institutions like F[aculty] Exploratory, Library, CRLT [Center for Research on Learning and Teaching] and Science Learning Center in general. Congratulations to all..."

Part of what they found valuable were the many opportunities for hands-on training as well as the handouts, materials and examples that were distributed in each session. They also valued connecting with a specialist who could answer specific questions about the application taught in the session as well as provide follow-up help throughout the year.

#### **Developing Collaboration**

Partnership and collaboration with other campus units can create an effective mechanism for providing the needed faculty support in using technology. There are many potential partners on campus. A creative outlook can reveal numerous units that provide relevant services. Information technology groups, teaching and learning units for faculty and students, language learning centers, media centers, human resource development departments, even possibly some academic departments or schools might make suitable partners. Starting with an open invitation to an informal gathering of service providers can be a good place to begin the collaboration process. From that first meeting, other unit names might appear that had not been thought of before, as well as ideas of what the group as a whole might want to achieve. Each participant in such a meeting would bring their unit's unique perspective on faculty use of technology and what training would meet the needs of the faculty users they encounter.

Areas to cover early on in meetings would include sharing information about what each unit does, what resources can be brought to a collaborative effort, and what, if any, joint programming could fit the campus community. A few University of Michigan faculty have suggested a semi-annual Enriching Scholarship program, a near impossibility for the TTC given many other demands. But smaller programs throughout the year are another approach to systematic training that might work well in some environments.

#### Restructuring the TTC

In its first two years, the operation of the TTC and planning of Enriching Scholarship were unstructured and informal. As the organization and its annual program grew, the TTC developed a mission statement and a set of criteria, or requirements, for membership that was shared with potential new members. The mission statement and member criteria also helped to clarify and codify a common understand of what the TTC was for both current and new members.

#### **Mission Statement**

"The mission of the Teaching and Technology Collaborative (TTC) is to assist faculty to navigate the complex campus technology landscape in order to enrich the quality of teaching and research at the University of Michigan. The TTC accomplishes this through sharing and disseminating information about the resources of member units, collaborating on events and projects, and focusing services on specific niches to avoid duplicating services. By working together in this successful cross-campus collaboration, we are able to do together what none of our units could do individually."

#### **TTC Member Criteria**

1) "Commitment to meeting, collaborating and participating regularly; i.e., (including but not limited to) bi-weekly meetings and responsibility for various sub-committee efforts for Enriching Scholarship.

2) "Real and "in-kind" contributions to TTC work in the form of funds and staff effort, i.e., yearly contribution of approximately \$1000 for Enriching Scholarship in addition to staff time and other resources (like photocopying, mailing labels, student web support, etc.)

3) "Departmental [i.e. service units] focus on supporting Faculty instruction and research. Focus on supporting the teaching/learning mission of the University.

4) "Accessibility to large campus constituencies OR serves multiple departments."

By establishing a mission statement and membership criteria, participating units have a clear understanding of the group's goal as well as clear expectations of themselves and others. Such statements might be created early to help the group establish itself, or they may develop slowly as the group develops.

#### TTC Leadership

Depending on the needs of a campus and the goal of the group as a whole, the evolution of the group's leadership may vary. After the first two years, leadership of the TTC changed annually. A volunteer fills the position of Chair, although it has sometimes required some persuasion to find a volunteer. The role of chair now rotates through each unit, not to individual members. Rotating the leadership position extends each unit's responsibility to the group and it helps to ensure that all units share the workload and the opportunity for equal involvement.

The group also realized that Enriching Scholarship had come to dominate all meetings and discussions. While it was the most significant effort of the TTC, it was not the sole purpose of the group. After the first three years, Enriching Scholarship planning meetings were separated from TTC meetings so that other business could be accomplished. Finally, in 2002 two chairs were selected, one to oversee discussions and activities related to TTC and one for Enriching Scholarship. The structure of the group remains informal and outside of the direction of any single campus administrative structure.

#### Conclusions

Faced with ever-changing technology, many faculty members are confused and frustrated. Outreach and collaboration between faculty support units can help to remove some of the impediments faculty face and the Library can be a full participant in developing technology training for faculty without losing its special mission. While each unit in the TTC offers workshops and other training opportunities throughout the year, the collaborative training offered during Enriching Scholarship expands the range of options faculty have in a concentrated period of time and leads them to points of service for future reference.

In planning what to teach each year, the TTC has found that new and cutting edge technologies and software are attractive to both instructors and participants. Nevertheless, most sessions are not so specialized. It would be unwise overlook lower level skills, for there are still many—both brand-new and senior members of the faculty—who are just starting to apply technology tools to teaching. While Enriching Scholarship has seen a shift over time to more advanced applications, the beginning level sessions still fill. The foundation sessions remain important for the professional development of faculty, and excluding such sessions would leave a hole into which many faculty members would sink.

The collaboration born from the TTC has been beneficial to all of the units involved. Faculty traffic has been better directed to appropriate service points, reducing both faculty and staff frustrations about where to get help. Smaller collaborative efforts that were direct outgrowths of the TTC have occurred throughout the year as well-such as occasional workshops and program development. Campus instructional issues have been addressed through collaboration: for example, the increased requests from faculty for software training in their courses (e.g., teaching students to use PowerPoint or to create web pages). The University of Michigan campus as a whole is more aware of the Library as a place for technology training and support. Through relationships initiated in the TTC, Library staff members work more closely with units on campus that develop technology tools and ensure that the campus has the benefit of the Library's leadership and perspective. For example, Library staff members are now involved in the University's Future Learning Environment group, which is considering the impact of technology on the University's teaching and learning. The positive outcomes of collaboration have been numerous and the costs—both direct and indirect—have been minimal. The Library is enriched through strengthened relationships with other units as well as with the faculty.

Today's faculty members face the challenge of identifying, learning and effectively using technology, but many find themselves floundering in a sea of too many choices, too much to learn and too little time. The safety net of support created by collaborative measures not only buoys their efforts, but also eases their passage toward meaningful use of technology in higher education.

#### Notes

1. "Faculty Survey: Information Technology Uses, Resources and Support," sponsored by the University of Michigan Senate Advisory Committee on University Affairs and the Chief Information Officer August 1999, 4. Found at <http://carat.umich.edu/carat/it\_surveys>

2. "The 2001 Faculty Survey, Results by question." University of Michigan, slide 22. Found at <a href="http://carat.umich.edu/carat/it\_surveys">http://carat.umich.edu/carat/it\_surveys</a>

3. The Faculty Exploratory and the Knowledge Navigation Center are units within the University Library, although the Faculty Exploratory was initially established, funded and staffed by the Office of Academic Outreach prior to becoming part of the Library.

4. "Faculty Survey: Information Technology Uses, Resources and Support," sponsored by the University of Michigan Senate Advisory Committee on University Affairs and the Chief Information Officer August 1999, 4. Available at: <1999umfacultysurvey.pdf>

5. "The 2001 Faculty Survey, Results by question." University of Michigan. http://carat.umich.edu/carat/it\_surveys, slide 22.

6. Link to Enriching Scholarship sites for each year from <a href="http://www.umich.edu/~teachtec/">http://www.umich.edu/~teachtec/</a>

7. "The 2001 Faculty Survey, Results by question." University of Michigan. http://carat.umich.edu/carat/it\_surveys, slide 17.

8. Scales varied by year. In 1998 participants were asked to rate the value of the program on a 7-point scale, with one as the lowest score. The average value given by faculty over all sessions was 5.9. In 1999–2001 participants were presented with a 6-point scale and the average values given by faculty over those years were 5.2, 5, and 4.9 respectively.

### Hook, Line and...Sinking? Helping Faculty Stay Afloat in the Sea of Technology

2. Rate your overall satisfaction with this session ...... *low* 

Date:       Session name:       Sponsor:    CRLT    FE    ITES    KNC    LANGRES      MED    LRC    MU    SLCULIB    all	Enriching Scholarsl Teaching, Information *May 20	hip: Integrating and Technology 002*
1. Rate the overall value of this session to your resear and teaching	rch <i>low medium</i>	high

### Please rate this session by marking your level of agreement or disagreement with the following statements:

3. Objectives of this session were clear agree	neutral	l disag	gree n	n/a
4. Objectives of this session were achieved agree	neutral	l disag	pree n	n/a
5. Handouts or supporting materials, if any, were useful agree	neutral	l disag	gree n	n/a
6. I feel confident I can now do what was covered in this session	neutral	disag	<i>pree</i> n	/a
in the brochure agree	neutral	disag	<i>pree</i> n	/a
8. The pace of the session was <i>too slow</i>	appr	opriate	too fast	<u>.</u>
9. The amount of information covered was too little	appr	ropriate	too muc	h
low				high
10. Rate your knowledge level on the workshop content <i>before</i> the session	2 3	3 4	5	6

high

medium

12. What additional comments do you have about this session?

- 13. What topics would you like to see offered in future "Enriching Scholarship" programs?
- □ Information management (e.g. EndNote, GIS and the Internet)
- □ Graphics (e.g., Photoshop, image scanning)
- □ Multimedia (e.g., digitizing audio and video)
- Desktop publishing (e.g., PageMaker, Illustrator)
- □ Web technologies (e.g., Dreamweaver, Flash)
- □ Teaching and learning (e.g., online teaching and discussions)
- □ Discipline-specific resources and technologies (e.g., Web of Science, foreign language and literature IT projects)

Details or other topics:

<ul> <li>14. Please indicate your U-M</li> <li>lecturer</li> <li>assistant professor</li> <li>associate professor</li> <li>professor</li> <li>researcher</li> </ul>	affiliation staff GSI visitor Other			
15. What is your department/	unit? (please spell out acronyms)			
16. Have you attended an "En	riching Scholarship" program in a previous year?	9yesno		
17. How did you hear about the "Enriching Scholarship" program?				
$\Box$ Word of mouth $\Box$ E mail	$\square$ Postcard $\square$ Brochuro	$\Box$ Other website		
$\Box$ University Record	$\Box$ Enriching Scholarship website			
Other				
<ul> <li>18. How would you like to hea</li> <li>□ E-mail</li> <li>□ Direct mail</li> <li>□ University Record</li> <li>□ Other</li></ul>	r about future "Enriching Scholarship" program	s and related events?		