

St. Lawrence University
Report to the Andrew W. Mellon Foundation
Technology for Teaching Grant Project
2000-2002

Appendix III

Review of St. Lawrence University's
"Technology for Teaching Program"
Funded by the Andrew W. Mellon Foundation

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This report is based on a two-day onsite visit (April 29-30, 2002), the purpose of which was to assess the progress of St. Lawrence University's "Technology for Teaching Program" (TTP) funded by the Andrew W. Mellon Foundation. Rita Goldberg hosted my visit and provided many supporting documents about the Program, as did Sondra Smith. This assessment comes during the last year of the funded project.

I had the pleasure of reviewing this program after its first year in 1999. It was clear then that the TTP was on its way toward meeting the three-year goals. The work that has been accomplished since 1999 is nothing short of remarkable. Since my initial visit in 1999, the faculty and staff at St. Lawrence have undertaken an enormous range of activities to integrate technology into the curriculum, including TTP grants to faculty, topical symposia, workshops and training programs, new facilities, professional development for staff and faculty, new programs to leverage student skills and interests in technology, and more. At the close of my report (dated December 10, 1999), I suggested that St. Lawrence would, "... look back at this effort five years from now and see it as a genuinely transformative program." Returning again in 2002, I can tell that many transformations have happened, and that this has been a significant and successful effort to increase innovative uses of technology throughout the curriculum. The TTP has been the catalyst for many of these advances, supported by strong institutional commitments. Challenges lie ahead but it seems that the institution is prepared to respond to them.

Factors for success

There are several factors for success in the TTP.

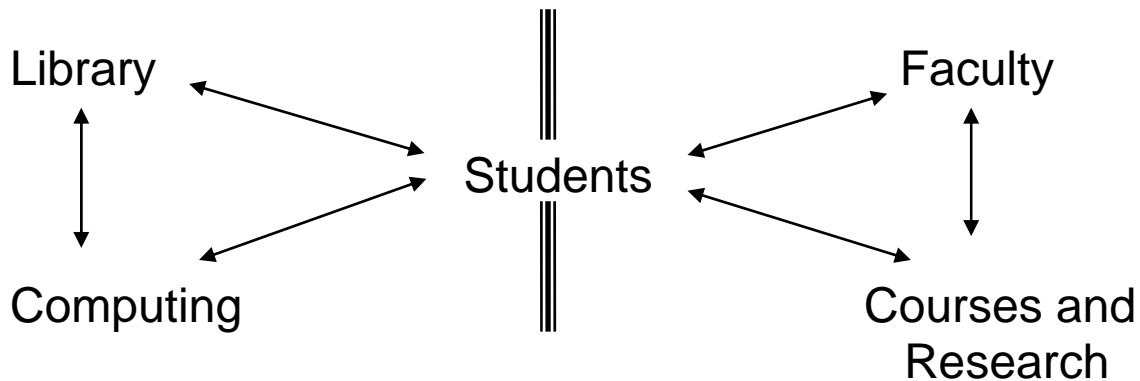
There have been staffing changes since 1999 related to this project. Mike Sedore has left St. Lawrence after having established the successful model on which the TTP is based. Rita Goldberg has taken the reins for the Program, and after some months, Mike's position was refilled by the promotion of Sondra Smith. It is easy to attribute much of the renewed success of this program to the efforts of Rita, Sondra, and, in Modern Languages, to Carine Ullom.

TTP grants have emphasized relatively low-cost and easily implemented projects that have sound pedagogical goals. An example is Linda Baughman’s work in Speech and Theatre, where she used a digital camcorder to get her students involved in seeing each other’s speeches. Ron Flores reports that the sociology major has been redefined in some ways through the assignment of student project web pages (thus combining visual and technical skills with quantitative work). Carlos Ramirez-Sosa described his students’ creation of a CD on tropical biology using digital cameras and CD burners. He reported that technology creates enthusiasm among the students and improved student involvement in their studies. Artur Poczwardowski said that his students are pleased with his efforts to use Microsoft PowerPoint to make his lecture materials accessible outside of class. These are all examples of positive gains in teaching and learning based on relatively small monetary investments in proven and easy-to-use technologies.

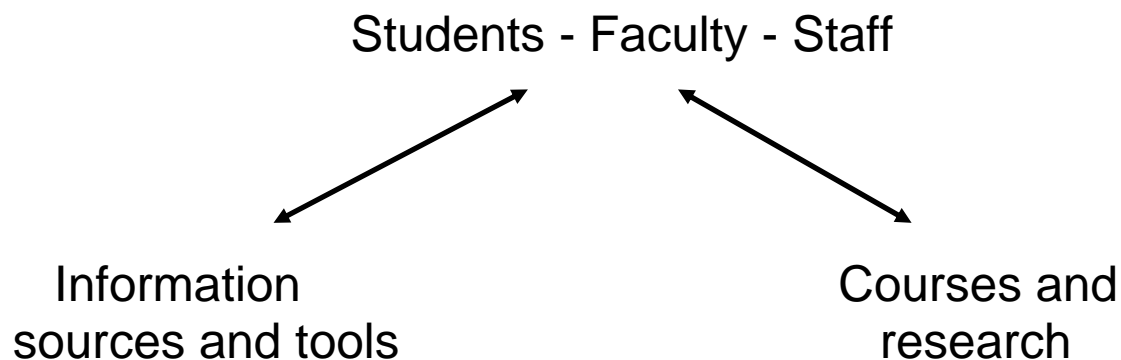
The faculty members with whom I met were well informed about the possibilities of technology, thus another success factor has been the diverse efforts to “get the word out.” The increase in the number of members on the steering committee may have helped this effort. The events sponsored by the TTP seem to have been very important to those St. Lawrence faculty members who participated. From the evaluations, it seems that the conference on “Critical Reflections on Technology and Pedagogy” in 2001 and the Blackboard conference in 2002 were both key to helping members of the faculty become aware of the possibilities offered by technology. Other sponsored events included TTP- or IT-funded training sessions with local and outside trainers, and the faculty development lunches sponsored by the Library, as well as events sponsored by the new Center for Teaching and Learning (CTL). The CTL will become a vital component in sustaining the TTP mission. Associate Dean Kim Mooney indicated that approximately 50% of CTL activities will be related to technology in teaching.

Services of the Library have supported the success of the TTP. Clearly the program in geographic information systems (GIS) is notable, with a GIS librarian and a GIS technician, as are the 60 to 70 sessions per year of course-integrated instruction that the librarians deliver in First Year Program courses. As content and technology become more interwoven, it is important that librarians, technologists, and faculty form partnerships in the classroom.

What one might call “traditional” relationships have existed in many institutions:



At St. Lawrence and other progressive institutions, these relationships are being replaced by new **partnerships**:



Students figure prominently in these partnerships for support. Students continue to be important resources to close the support gap, both as they actively participate in technology assignments in their classes and as compensated technology support assistants. The proposed Student Technology Assistant program will be an important means to provide consistent support for TTP and other technology projects. There are, however, many areas in which professional support staff is needed. In other words, St. Lawrence has used students successfully to support technology projects, but as with any approach, there are limits to this model (see “Recommendations, below).

Flexibility of funding has also been a factor for success of the TTP. TTP funds were from the outset matched with University funds coming from the McDonald Foundation for the purchase of hardware to support faculty initiatives. Vice President of IT Russell Merrill indicated that such funding (approximately \$15,000 per year) would continue. Faculty and staff development efforts (conferences, training, etc.) have been funded with TTP and University funds.

The “snapshot” picture that this reviewer took from this visit was one of a campus that has taken many steps to integrate technology into the curriculum in effective ways. Of course, not all projects have realized all their goals or potentials, but compared to a similar “snapshot” in 1999, St. Lawrence University has accomplished extraordinary progress through the Mellon-funded Technology for Teaching Program. To quote University Librarian Bart Harloe, “I don’t know where we’d be without the Mellon.”

Discussion and Recommendations

Several faculty members said that without the TTP, St. Lawrence probably wouldn’t have the “incredible momentum that we’ve built up.” Many such positive comments were heard throughout the site visit, and they all beg the question, “How will this be sustained?”

The TTP has provided support and technical resources for faculty exploration with technology, as well as a well-publicized forum for this work. All three elements – support, resources, and an institutional focus – need to continue. Without infinite budgets, there are tradeoffs to be made.

My recommendations do not address institutional tradeoffs but rather focus on the ways that support, technical resources, and an institutional focus can be maintained.

Support:

Support is probably the most challenging need because it is expensive and critical to the faculty's success. Support for instructional technology involves experienced, technical staff members who have strong skills in interpersonal communication. Such individuals are not common but are crucial if faculty members are to continue to make effective use of technology in teaching. The universal issue for our faculties is their lack of time to problem-solve technological tools that can enhance learning.

The importance of support for curricular projects was underscored by Rebecca Daniels's statement describing her several TTP-funded projects. They were "...exhilarating and demoralizing...exhilarating for what could be done, but demoralizing for how much support they required." She noted that many of her students are begging to do video projects but they can't get adequate support for their work.

Support for instructional technology resides in the Information Technology Division with two positions, the director of instructional technology and the coordinator of training (a vacant position as of this site visit). Their work is aided by the technical staff in Information Technology, and is supplemented by the CTL and through the work of trained student technology assistants. From the job descriptions that I've seen, these two professional staff members have other responsibilities in addition to instructional technology. Compared to institutions in the Consortium of Liberal Arts Colleges (CLAC, see <http://liberalarts.org>), St. Lawrence has fewer FTEs committed to *general* curricular support. The CLAC average is 3.0 FTE in curricular support (range is 0 to 10) for an average faculty of 204 FTE, or a ratio of 68 faculty members for each instructional technologist. Including the director of the language center, St. Lawrence has <3.0 FTE in curricular support for 192 faculty members (a ratio of 64 to one). However these calculations are misleading because they include the languages, where one professional staff member is supporting the 14 faculty FTE in that department. The director of instructional technology and the coordinator for training are supporting 178 faculty members. This is higher than the CLAC average and it is probably not a sustainable commitment.

Vice President and Dean of Academic Affairs Thomas Coburn indicated that there has been a significant makeover of the Information Technology Division resulting in a changed sense of what this division can do in terms of training and mentoring faculty. Dr. Coburn noted that IT is focused on infrastructure issues, and that St. Lawrence would rely on faculty to mentor and train other members of the faculty, aided by students.

Clearly, the integration of technology depends on a sound network infrastructure and support for systems and applications, so this focus for the IT division is most appropriate. However, if the momentum that the TTP has built up is to be sustained, staffing in instructional technology will have to increase.

Students are largely an underused resource and the upcoming “Student Technology Assistant” program offers exciting possibilities. However, there are aspects of technology support for faculty projects that require professional staff members rather than students (*e.g.*, project planning, definition and adherence to standards, budget management, complex projects). Students’ primary role at St. Lawrence is to fulfill their own educational goals, and while these may include developing technology and support skills, expectations for student support staff must be realistic. A large cadre of student technology assistants will require a substantial management and training effort as well. Management and training requirements are often underestimated in planning for student technology programs. They may have scheduling conflicts or important commitments that compete with their role as technology assistants.

Similarly, faculty members are desperately short of time with commitments to teaching, scholarship, and service. The expectation that they teach each other how to use technology may not be realistic for all.

Thus it is a worthy goal to have faculty teach faculty with student assistants in the mix, but it will be crucial to have adequate, professional staffing in instructional technology if the gains of the TTP are to be sustained.

Recent trends are apparent in CLAC and similar institutions:

- More staff FTE are being allocated to curricular support.
- Many institutions have organized curricular support within the academic division of the college, under the dean/provost or as part of a faculty-centered program such as the CTL.
- As has St. Lawrence, many CLAC institutions have an instructional technologist assigned specifically to support the modern languages departments as their uses of technology have grown exponentially in the last five years.
- Digital video technology has exploded in many classrooms, beyond the fine arts and communication into the sciences and humanities. St. Lawrence has been successful in this area to date, but continued success will demand expert support for these projects. Many schools are adopting the Macintosh iMovie software in selected settings to meet these needs for its simplicity of use.

Other support issues:

Some faculty members that I interviewed indicated that their colleagues don’t know where to start in conceiving technology-based projects, or that they are anxious about technology. Careful coordination of technology promotion and training with technology support will likely help overcome these barriers. It is vital, however, that support for faculty projects keep pace with their interests and needs.

Other faculty members said they are not inclined to use technology because of past support problems. The history of inconsistent support for technology is a burden on all of our campuses, and it is resolved over time as the technology departments respond, as is the IT division at St. Lawrence.

Finally, several faculty members expressed reservations about policies that deflect support for technology (hiring student assistants, maintaining equipment) to the departments. Some activities are best managed and funded centrally (for instance, when technical standards are involved, or for economies of scale), while others are best managed at the departmental level. In a highly interdependent, standards-based world of networked services, these issues should be carefully considered. Centralized management of distributed resources has been a solid model for technologies in small colleges.

I recommend that college administrators consider the creation of a “service level agreement” for faculty technology projects. This agreement would articulate in general terms the levels of support that a faculty member should expect for a project involving technology. This agreement would articulate in specific terms what resources and support are needed, and what the outcomes of the project would be. The goal of any such agreement is to inform all involved parties so that expectations are informed, not imagined. Service level agreements also make it more clear how many resources are being committed and so a phased approach is often taken, with a focus on quality of support first and quantity of supported projects considered later.

Resources:

The TTP has been supplemented with funds from the McDonald Foundation for purchases of hardware and software, and as Dr. Merrill indicated, this support will continue. The CTL will be providing support as well. However, a faculty of 192 will certainly envision more projects than can be supported by the current budgetary commitments, so it will be vital for the success of this program to plan for increased costs, not only for new purchases but for hardware replacements and software maintenance.

At Kenyon College, I established a “Fund for Innovation with Learning Technologies” starting with \$10,000 that was awarded to peer-reviewed faculty projects using technology. This fund grew to \$100,000 per year after seven successful years, all funded in the institutional operating budget as part of faculty development efforts. At Denison, such efforts (including salary support for instructional technologists) are being funded or endowed by donations that specifically target curricular computing projects.

Focal point and Conclusion:

Rita Goldberg and her colleagues on the steering committee, along with Associate Dean Mooney, Dr. Merrill, and others, have clearly established the TTP and CTL as important initiatives. These form a strong presence, both physical and organizational, for faculty development that includes technology. This networked world calls for a high degree of coordination and collaboration among the technical staff in IT, instructional technologists, the

faculty, and the administration of the academic division. Where is the focal point for instructional technology? It may not matter, but the CTL may give instructional technology the sort of credentials and entrée that are needed today. It will be vital to engage a higher percentage of the faculty, including the technological skeptics, in programs and events that help them explore the possibilities. The CTL seems to be well positioned to be successful in this regard.

I was very impressed by the number of committees that have purview over issues of faculty development, teaching and learning, information technology, instructional technology, and more. This level of committee involvement should make it possible to develop a three- to five-year plan for instructional technology, a plan that asks not “how can we spend money” but rather, “where do we want to go with technology.” I suspect that St. Lawrence is already headed in that direction thanks in large measure to the very successful Mellon-funded Technology for Teaching Program.

As Vice President Coburn said at the conclusion of our interview, he “...cannot imagine St. Lawrence without this kind of resource anymore.”

Congratulations on an exemplary program!

Respectfully submitted,

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List of interviewees, April 29-30, 2002:

Erika Barthelmess
Linda Baughman
Guy Berard
Tom Budd
Roy Caldwell
Thomas Coburn
Rebecca Daniels

Jim DeFranza
Paul Doty
Ron Flores
Rita Goldberg, host
Bartley Harloe
Richard Jenseth
Russell Merrill

Kim Mooney
Susan Pankey
Artur Poczwardowski
Carlos Ramirez-Sosa
Natalia Singer
Sondra Smith
Carine Ullom