



Paying for Technology: Student Fees and Libraries

by Janet Webster and Cheryl Middleton

Technology resource fees provide a possible source of funding for library technology. Integrating these student funds into libraries' budgets requires strategic planning, good communication, and student involvement. Through a review of peer institutions and a broad student survey, this study explored how libraries may tap into these funds.

Many colleges and universities imposed technology resource (TR) fees during the 1990s, investing the generated funds in campus technology.¹ Libraries have used this new fee to fund electronic resources, enhance bibliographic instruction classrooms, and purchase new equipment. The emergence of TR fees as a funding source for library technology raises the issues of student satisfaction, maintenance of current resources, and strategic planning. Student fees are different from general funds or grants; students generate them, and students traditionally have had a major say in their distribution.² TR fees, on the other hand, are usually directed toward developing campus-wide infrastructure and have limited student involvement in decision making.³ This approach may be problematic; students may resent their lack of involvement, and the library and the campus need a more predictable level of funding.

Libraries can help shape the decision-making process by investigating how students benefit from the investment and by scanning the technology environment of peer institutions. This type of research can build a strong case for libraries' use of TR fees to maintain current electronic resources and fund experimental services. It will also serve to bolster the libraries' argument for increased base budgets. While these fees are important funding sources, they are not a panacea for stagnant or reduced budgets.⁴

In the first four years of TR fees at Oregon State University (OSU), over \$8,000,000 was collected and used for projects that ranged from student e-mail accounts to curriculum development to accessible full-text databases. Administratively, they also continue to seek the optimal combination of decision makers, including students, faculty, staff, and ad-

ministrators. When the latest round of funding was announced in the fall of 1998, the OSU libraries recognized the need to justify ongoing support for electronic library resources as well as future funding of new services for students.

The following questions remained unresolved:

- How can libraries be involved in the decision-making process or use the funds?
- Should student fees be used to fund experimental projects, ongoing resources and services, or both?
- What is the optimum level of student involvement in decision making?
- Does adequate communication with the entire campus community concerning these fees exist?
- Do other models of distribution and communication exist at peer institutions?

To examine these questions, TR fee programs at OSU and peer institutions were examined, and a sample of students was surveyed to assess awareness of the fee; use of, and satisfaction with, services funded; and perception of student involvement in decision making. It became apparent during this examination process that libraries have not consistently benefited from these new fees. TR fees provide another funding source that libraries can tap to serve student needs better. This article discusses how OSU libraries' are validating their use of TR fees as a means of paying for technology that students can use.

HISTORY OF TR FEES AT OSU

In 1995, TR fees were implemented at a time when OSU was struggling with a reduced budget caused by voter approved tax cuts and a declining enrollment. Cre-

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ative ways of generating income to sustain and improve the institution were eagerly pursued throughout the Oregon University System (OUS) campuses. Not all were pleased with the new fee. A tuition increase occurred simultaneously, and the fee implementation generated student protests. Students objected to the "inequitable fee, imposed on students without their having a say in the process, and used for the purpose of providing services that have previously been provided without a need for an added tax."⁵ In the summer of 1995, the fee was finally approved by the Oregon State Board of Higher Education which placed its "faith in campus leadership . . . [to provide] avenues for student input related to fees."⁶ However, no formal statewide guidelines for the implementation or use of TR fees were articulated.

The OSU administration started receiving an additional \$650,000 quarterly. At the same time, there was student wariness over increases in fees and tuition. Administrators had little direction beyond the broad rubric of improving instructional technology. In anticipation of the fee approval, OSU started spending the funds in the spring of 1995. For example, OSU readily implemented start-up projects included e-mail for all students, technically-enhanced classrooms, and dial-in and online help with technology questions. These projects demonstrated to students how their new fee would be used.

Strategic planning for implementing campus-wide technology by using TR fees did not begin in earnest until the fall of 1995. Students and teaching faculty were surveyed to assess their current use of technology.⁷ The results were used to develop a four-year plan, which would require more than just TR fees to implement. The three extremely ambitious goals were:

- All OSU students are full-fledged members of a university-centered electronic global community.
- OSU provides the infrastructure, support, and assessment services needed to inspire the adoption of instructional technologies.
- The academic, administrative, and infrastructure policies support faculty and students who utilize technology to gather information, learn intellectual skills, and expand the University into the external community.⁸

An allocation scheme and an implemen-

tation process were in place by the fall of 1995. Generally, TR funds were expected to benefit students paying the fee directly. The allocation was placed under the authority of the associate provost for information services, with 75% of the revenue going to enhance technology services on campus and 25% available to the colleges to support instructional technology.

All appeared to be moving along smoothly, with interesting projects proposed by faculty, and new instructional models being developed. The first two years of the funded projects all fit into the four-year plan, reflecting a commitment to address needs while implementing a broader vision.⁹ Throughout the project, the OSU libraries received funding for electronic resources, including full-text databases of interest to undergraduate and graduate students. By 1997/1998, the process disintegrated as deficit spending was revealed; too much had been attempted without enough ongoing financial support or adequate budgetary monitoring. Revising the process has been arduous. A committee, appointed by the provost, now has broader representation and makes the decisions over the total pool of funds. Still, the process is not timely or predictable.

In assessing OSU's history with TR fees, three critical elements emerge. First, strategic planning for technology and the consequent focusing of funds to accomplish the plan are essential. At OSU, the weakness of the long-term plan caused decisions to be made without an integrating purpose. Also, the overly ambitious goals were not tied to an appropriate timeline or to a realistic budget. Second, open and constant communication with, and the involvement of, students are needed. Little student involvement in the decision making, coupled with sparse communication describing the process and the funded projects, may have increased wariness for the program. Finally, TR funds are not a replacement for adequate base budgets—they can enhance them and fund experimentation. Some OSU units became over reliant on this supplemental funding source and faced difficult budgetary decisions when funds were redirected. These three critical elements begin to suggest how libraries can build their case for both the use of TR funds and the need for increased base budgets.

TR FEES AT PEER AND OTHER REGIONAL INSTITUTIONS

Examining how peer and regional institutions address TR fees is helpful. It illus-

trates whether strategic planning, communication, and budgeting are shared issues, or if they are problems unique to OUS. By comparing the OSU process with others, it became clear that some institutions have resolved some of the issues and developed models or "best practices."

The seven OUS institutions were examined first (see Table 1). Then, seven peer institutions were identified by using the 1998 *Peer Academic Library Statistics* (see Table 2). Finally, other regional models at the University of Washington and University of Idaho were considered (see Table 3). In the belief—including that the fees are aimed at electronic technology and infrastructure and that students, as active Web users, should be able to find information concerning their fees conveniently posted on the Web—that fee information should be accessible via the World Wide Web (Web), institutional Web sites were examined. However, Web-based information is only one source of an institution's information, so telephone contacts were attempted with institutions that had little or no Web presence.

The search methodology included accessing the institution's Web site, conducting a search by using its search engine with the terms "student technology fees" and "computer fees," looking through the tuition and fees section, and exploring logical links (e.g., computer advisory committee). The sites were reviewed several times between July 1998 and April 1999, accommodating the dynamic nature of Web-based information. The Web site examinations and the telephone interviews focused on the three critical elements:

- Planning, including the history of the fees and long-term plans;
- Communication, including mechanisms used, ease of access, and involvement of various constituents (students, faculty, administrators, librarians, and computer support staff); and
- Budgeting, including the allocation process, the relationship between fees and general budgets, and the funding of library-related projects.

All OUS institutions assess TR fees (see Table 1). However, there is a wide variety in the use of fees, in the decision-making process, and in communication. Of the seven institutions assessed, Oregon Institute of Technology provided the most interesting model. It included high student involvement and open communication of

opportunities and results. The 17-member committee, with 10 students, reviews and ranks all proposals according to perceived need and benefit to students on campus. Highly-ranked proposals receive a second review in a presentation format. The two weaknesses of this model are the lack of a strategic technology plan and poor use of the Web as a communication tool.

Of the seven peer institutions, two did not, at the time, assess a fee (see Table 2). Few examples of well communicated use of funds, easily accessible fee explanations, or complete historical contexts were found among the others. Although disappointing, this was not surprising because OSU has inconsistent TR fees information available via the Web.

One institution, Iowa State, appears to have a well articulated process and a focused program. The program is focused on the development, maintenance, and enhancement of computer facilities. So, rather

than a strategic plan directing funding, Iowa State has decided to focus funding. The allocation process is clear, with the funds being split between two pools—the College Pool and the Central Pool.¹⁰ In the former, proposals are reviewed and prioritized within each college, then sent to a campus-wide Fee Allocation Committee. This committee reviews all proposals from the colleges and makes recommendations to the broader Computation Advisory Committee (CAC). Proposals to the Central Pool are made directly to the Fee Allocation Committee, which forwards recommendations to the CAC. Set percentages are allocated to the library and the computing center. The entire process, its history, and its budget are posted on a central Web site. The program appears to be consistent and predictable and addresses student needs.

The University of Washington and the University of Idaho also provide models for handling TR fees. Information is easy

to find on each institution's Web site. Both sites include a discussion of the fees' history, a listing of funded projects, an electronic request for proposals and applications, an explanation of the process, and the names of the members of the decision-making body. Of the two, University of Idaho provides a more general model. The University of Washington's program is unique in its state mandate and complete control by students. The University of Idaho focuses funding on open-access computer labs. An 11-member review committee includes five students and uses a clear and open proposal process. The communication emphasizes the purpose and demystifies the process.

Contrasting OSU to other institutions suggests general "best practices" for TR fee programs. Further examination of programs may reveal additional issues, problems, and solutions. This limited review, though, provides useful strategies for ad-

Table 1
TR Fees at OUS Institutions

OUS Institutions	TR Fee per term (1998/1999; \$)	Web Address
Eastern Oregon University	50	http://www.eou.edu/~blarison/tfhome.html
Oregon Health Sciences University	25	Not available
Oregon Institute of Technology	24	Not available
Oregon State University	50	http://osu.orst.edu/dept/academic/aa/TRF/TRF.htm
	48/undergraduate	
Portland State University	49.50/graduate	http://www.oit.pdx.edu/ftac/index.htm
Southern Oregon University	24	http://www.sou.edu/trfvalue.htm
University of Oregon	50	http://cc.uoregon.edu/edtechfee.html
	24/undergraduate	
Western Oregon University	18/graduate	http://www.wou.edu/President/Self_Study/htmldone/acrc.htm

Notes: OUS, Oregon University System; TR (technology resource).

Table 2
TR Fees at Peer Institutions

Peer Institutions	TR Fee per term (1998/1999; \$)	Web Address
Colorado State University	Varies by College 50–131	http://www.colostate.edu/Depts/ACNS_Pubs/ACNS_Home/itecc/fee.html
Iowa State University	51	http://www.public.iastate.edu/~cac_info/
Michigan State University	59	Not available
North Carolina State University	145 (semester)	Not available
Purdue University	16	Not available
University of Arizona	None	Not available
University of California/Davis	None	Not available

Notes: TR (technology resource). Data from the Library Research Service, 1998 *Peer Academic Library Statistics* (Denver, CO: University of Denver, 1999).

Table 3
TR Fees at Other Regional Institutions

Other Institutions	TR Fee per term (1998/1999; \$)	Web Address
University of Idaho	28	http://www.uidaho.edu/csr/labs/student_fee.html
University of Washington	40	http://webcr.u.washington.edu/~techfee/

Notes: TR (technology resource).

addressing the three critical issues of planning, communication, and budgeting.

Planning

Evaluations and strategic plans are useful planning and implementation tools. Thoughtful planning is valuable, especially if plans are followed and reviewed. Focused funding on hardware and software can replace strategic planning, although a broader vision is sacrificed. Those programs that focused the use of TR fees and adhered to that focus appeared to be more cohesive and predictable.

Student participation, when integrated

with a well stated purpose, can be a valuable component of the planning and decision-making process. It encourages acceptance of the fees, provides a means of measuring satisfaction with funding decisions, and does not preclude long-term planning.

Communication

All TR fees information should be well communicated both electronically, through the institution's Web site, and locally, through news articles, newsletters, and campus presentations. The basic elements to include are who makes decisions, the context of those decisions, and the actual uses

of the fees. Tuition and fees should also be clearly posted.

Budgeting

The allocation of funds should be consistent in timing and process. Such consistency fosters participation because people can anticipate the funding cycle and can expect decisions in a timely fashion. This allows TR funds to parallel the regular budgetary cycle. If possible, set percentages should be allocated to those parts of the institution regularly providing electronic services to students. Finally, the projected amount of TR funds should be announced as early as possible.

Figure 1
Graduate Students' Perception of Benefit and Satisfaction

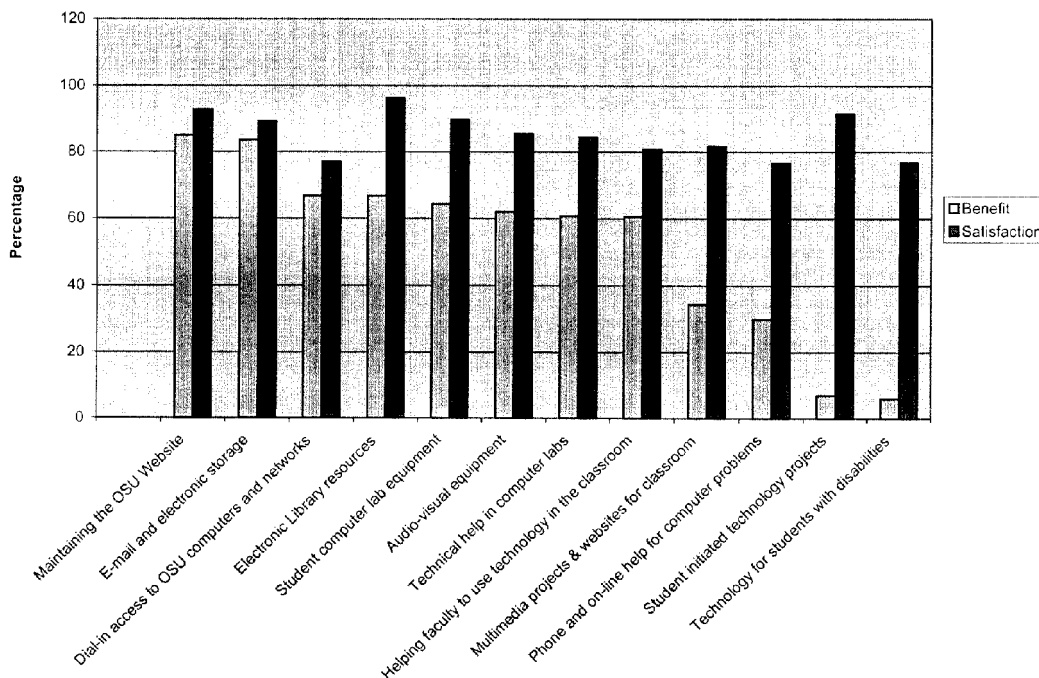
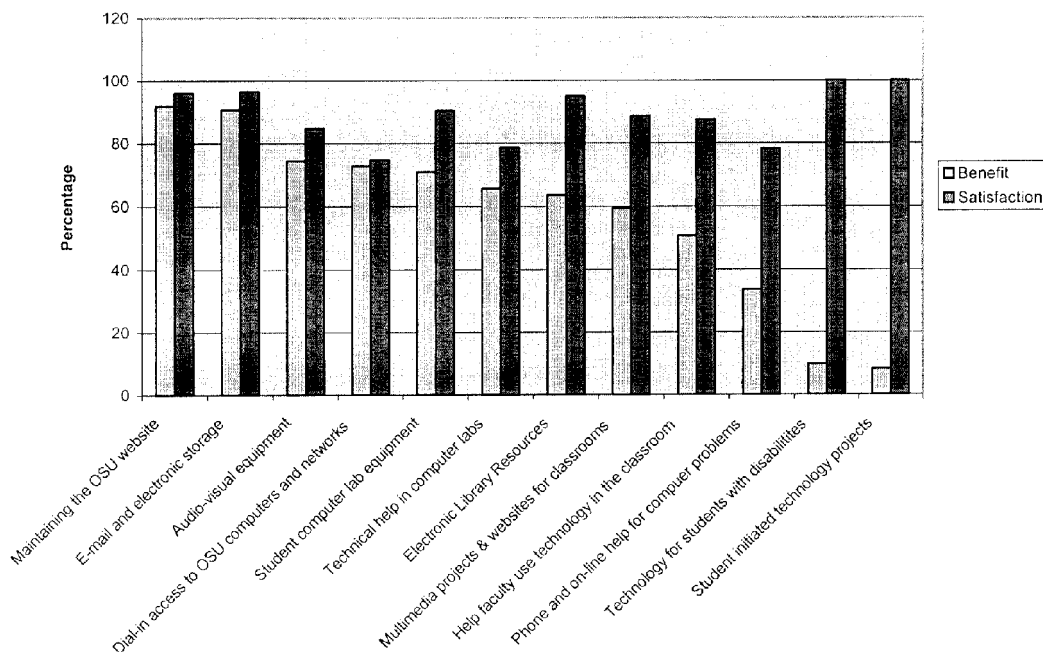


Figure 2
Undergraduate Students' Perception of Benefit and Satisfaction



It was also clear from the review that libraries have not been major participants in the development of TR funds on many campuses. Information officers tend to be involved, but rarely librarians, except on smaller campuses. In part, this is due to the trend to use TR funds for open-access computer labs or other hardware uses. OSU's vision of using TR fees to shape the campus technology infrastructure and provide content, as well as access, is broader than that of most institutions. This breadth has encouraged the OSU Libraries to apply for, and use, over \$400,000 in funds for electronic, full-text databases and electronic indexes. Few of the libraries examined had made significant use of TR fees for electronic resources, although several had secured funding for hardware.

Although the "best practices" of other institutions are useful in revising the OSU allocation process and communication of results, they do not justify ongoing funding of library resources. Except for Iowa State's allocation of a library pool, none of the libraries surveyed singled out the library as an important provider of tech-

nology for students. Yet, at OSU there was a belief among campus administration, as well as an historic commitment, that some TR funds should be allocated to the Libraries for services and resources benefiting students.

1998 SURVEY OF OSU STUDENTS

To evaluate the libraries' claim on part of this funding stream, OSU undergraduate and graduate students were surveyed about their perceptions of a wide suite of services and resources funded with their fees.

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Student attitudes towards fees, as well as their input, is given little attention in the published literature. Although the literature occasionally suggests some ap-

proaches to student input, it often focuses on appropriate use issues. Annette Gibbs discusses the justification of mandatory fees and court challenges to fee usage.¹¹ Other papers suggest ways to monitor student activity fees and keep institutions out of court.¹² *A Student Activity Fee Primer*¹³ provides an excellent framework for the implementation of fees, but was written prior to the advent of TR fees and, consequently, does not mention them. Only one study that surveyed students in depth to discover their attitudes and desires towards fees was found.¹⁴

Little information on TR fees exists in the literature. William Graves¹⁵ reports on a successful campaign to implement TR fees. Other discussion is limited to news articles in the *Chronicle of Higher Education*¹⁶ describing programs and debates over the philosophy of TR fees.

The paucity of information in the business and library literature, coupled with the current limitation on OSU student input in the TR fees process, suggests a hesitation about student involvement. To examine whether this conclusion was justified and to assess student satisfaction

Table 4
Graduate Students' Perception of Appropriate Use of TR Fees (%)

Service	Should	Should Not	Don't Care
E-mail and electronic storage	94.4	2.3	3.3
Providing student lab equipment	91.4	5.2	3.3
Dial-in access to OSU computers and networks	89.5	3.3	7.1
Technology for students with disabilities	86.7	3.8	9.5
Technical help in student computer labs	81.4	9	9.5
Audio-visual equipment for classrooms	75.6	16.7	7.7
Phone and online help for computer problems	73.9	10	16.1
Electronic library resources	73.3	12.9	13.8
Maintaining the OSU Web site	70.3	22.2	7.5
Funding student-initiated technology projects	59.1	21.6	19.2
Helping faculty to use technology in the classroom	55.1	29.5	15.5
Multimedia projects and Web sites for classroom instruction	41.3	40.4	18.3

Notes: TR (technology resource).

with electronic library resources as part of a greater suite of funded services, OSU students were surveyed. The objectives were to gain a snapshot of students' opinions on the TR fees, and the services they funded, and to see how library resources rated against other services. Recording feedback on how students wanted to be involved in the decision-making process was another objective. Students are critical to the success of technology infrastructure development; they generate the fee; they are supposedly the direct beneficiaries; and they are becoming sophisticated technology users.

Survey Methodology

With the assistance of the OSU Survey Center, a two-page survey, consisting of four questions, was created (see Appendix). The first question queried students on their familiarity with TR fees. The second and third questions focused on resources and services that technology fees provide. Students were asked whether or not they used, benefited from, and were satisfied with services and resources. In addition, students were asked to rank current services and resources in order of preference for funding. Finally, they were asked to what extent they wanted to be involved.

Students responded to the questions in the context of 12 services that had received TR fees over the last two funding cycles:

- Providing technical help in student computer labs;
- Providing student lab equipment;
- Providing phone and online help for software/hardware problems;
- Maintaining dial-in access to OSU computers and networks;
- Having electronic materials available in the library;
- Maintaining the OSU Web site as a central site for University services and news;
- Creating multimedia projects and Web sites for faculty to use in classroom instruction;
- Providing help and encouragement to faculty to use technology in the classroom;
- Making technology accessible to students with disabilities;
- Providing computers and audiovisual equipment for classrooms;
- Funding student-initiated technology projects; and
- Providing e-mail and electronic storage space for students.

To obtain an estimated response rate of 50%, a random sample of 405 undergraduate and 319 graduate students was selected. The sample size was within $\pm 10\%$ of the population values for OSU. Information Services Operations generated mailing labels from Banner, the University Student Information System.

Several mailings were done to increase

the response rate. In November 1998, the libraries' administration sent a pre-survey letter asking for the students' participation and providing background on the upcoming survey. The survey was mailed several days later on November 24, 1998. The first mailing of the questionnaire was followed by a "Thank You" post card. In mid-December, an additional mailing was sent to students who had not yet responded to the survey. Graduate students' response rate (58.2%) was higher than that for undergraduates (49.6%). This is consistent with the results of other student surveys conducted by the OSU Survey Research Center. The 406 completed surveys allowed 95% confidence that the survey results have a sampling error of $\pm 6\%$.

SURVEY RESULTS

Student Awareness of TR Fees

The first question on the survey asked students if they were aware that they paid a technology resource fee. Only 36.6% of the surveyed students knew they paid TR fees; however, they were more knowledgeable when prompted with a list of currently funded services and resources.

Student Benefit and Satisfaction with Use of TR Fees

All students surveyed rated maintaining the OSU Web site and providing e-mail as the most used or beneficial services (see Figures 1 and 2). Graduate and undergraduate students differed on their

Table 5
Undergraduate Students' Perception of Appropriate Use of TR Fees (%)

Service	Should	Should Not	Don't Care
Providing student lab equipment	93.2	1.6	5.2
E-mail and electronic storage	89.5	3.7	6.8
Dial-in access to OSU computers and networks	83.2	5.8	11
Audio-visual equipment	79.2	9.9	10.9
Technical help in computer labs	76.6	11.5	12
Technology for students with disabilities	75.5	12	12.5
Maintaining the OSU Web site	73.3	15.7	11
Electronic library resources	67.7	13.5	18.8
Phone and online help for computer problems	64.2	12.8	23
Helping faculty to use technology in the classroom	61.9	21.2	16.9
Student-initiated technology projects	51.8	22.5	25.7
Multimedia projects and Web sites for classroom	44.3	28.1	27.6

Notes: TR (technology resource).

third choice. Graduate students chose the availability of electronic resources in the library and dial-in access to OSU networks. The undergraduates' third choice was the availability of audiovisual equipment in the classroom. This was the graduate students' sixth choice. The availability of electronic resources in the library was the undergraduates' seventh choice.

The three least used or beneficial services for all students were making technology available to students with disabilities, followed by the funding of student-initiated technology projects, and providing help with software/hardware problems.

Overall, students were quite satisfied with all services (see Figures 1 and 2). The most satisfactory services for graduate students were the availability of electronic resources in the library and maintenance of the OSU Web site. Undergraduate students were most satisfied with student-initiated technology projects and accessible technology for students with disabilities. Providing e-mail, maintaining the OSU Web site, and making electronic resources available in the library also ranked high in undergraduates' satisfaction.

Using TR Fees to Fund Services

Graduate students selected providing e-mail as the most important service for funding with TR Fees, followed by student computer lab equipment (see Table 4). Undergraduates selected student lab equipment as their top funding choice, with providing e-mail as their second choice (see Table 5). Both graduates and

undergraduates ranked maintaining dial-in access to OSU networks as their third funding choice. Only 13% of graduate students and 14% of undergraduates surveyed indicated that making electronic resources available in the library should not be funded.

Ranking of Importance of TR Fees-Funded Resources or Services

Equipping the student labs was the students' most important use of TR fees. Providing e-mail and maintaining dial-in access to OSU networks rank second for funding (see Tables 6 and 7). Making electronic resources available in the library fell into the midrange of services that graduate and undergraduate students' felt were important to be funded.

Student Involvement in TR Fee Decision-Making Process

Ninety percent of graduate students and 91% of undergraduate students felt they should be involved in the decision-making process. Both groups supported letting students vote to select programs. Undergraduates favored holding open hearings on TR fee proposals slightly more than did graduate students, who indicated that student delegates should be selected to help determine which programs should be funded by TR fees.

DISCUSSION

The survey results indicate that the student population had used and benefited from many TR fees-funded services. The

students were also quite satisfied with most services. Exploring student perceptions helped identify highly used and beneficial services that need continual funding as well as the less used ones that are candidates for discontinuation or funding from outside of TR fees. Student responses also indicate issues with communication and involvement.

There are no surprises in the most beneficial services—the OSU Web site, e-mail service, library resources, and audiovisual equipment in classrooms. All registered students are provided with e-mail service and a computer account. In addition, students are encouraged to use the Web to register, drop and add classes, and obtain schedules and grades. Graduate students are more likely to use electronic library resources because they are doing more research than are undergraduates. Conversely, undergraduates probably have more need for adequate audiovisual equipment in their classrooms. Two services, e-mail and maintaining the OSU Web site, also were among the top three services that students felt should be funded (although not necessarily with TR fees), and e-mail figured prominently in the three most important services that TR fees fund. Graduate and undergraduate students also considered providing electronic resources in the library among the top six services that should be funded with TR fees. None of these services represent innovative or unique technology, but they need ongoing funding. Equipping

the student labs, use of TR fees ranked as most important by all students, is also not innovative, but requires annual funding for adequate maintenance and upgrading of both software and hardware.

The use of TR fees ranked as least used were technology for students with disabilities and special student projects. Both target small groups. Satisfaction varied, perhaps indicating that those involved are very satisfied, while others are either supportive or believe the funds could be used more effectively elsewhere. Discussion in the literature

on student activity fees indicates problems with using student fees for the benefit of a limited population.¹⁷ The use should be consistent with institutional goals as well as those of the TR fees. Funding could be proportional to use. In some cases, TR funds may not be the appropriate source, and alternatives could be considered.

Inconsistency in the survey results suggests problems with some services. Although students ranked dial-in access as very important for funding, they were not completely satisfied with the service. In-

consistencies that involve lack of student satisfaction merit closer examination and assessment.

"The most startling result of the survey was that only one third of the student population knew they paid technology fees."

Table 6
Graduate Students' Perception of the Importance of Services to be Funded (%)

Service	Most Important	2nd Most Important	Least Important
Student computer lab equipment	39.0	16.0	4.8
E-mail and electronic storage	16.2	20.4	11.5
Dial-in access to OSU computers and networks	15.7	15.5	5.5
Electronic library resources	7.6	10.7	5.5
Technical help in computer labs	4.3	9.7	6.1
Maintaining the OSU Web site	3.8	5.8	10.3
Technology for students with disabilities	3.3	5.3	3.0
Student-initiated technology projects	3.3	1.5	18.2
Phone and online help for computer problems	2.4	1.9	7.9
Audio-visual equipment	1.9	8.7	7.9
Helping faculty to use technology in the classroom	1.4	3.4	9.1
Multimedia projects and Web sites for classroom	0.5	0.5	10.3
Other	0.5	0.5	

Table 7
Undergraduate Students' Perception of the Importance of Services to be Funded (%)

Service	Most Important	2nd Most Important	Least Important
Student computer lab equipment	37.6	16.6	3.1
E-mail and electronic storage	17.1	18.8	10.2
Dial-in access to OSU computers and networks	17.7	13.3	6.3
Electronic library resources	6.1	5.5	1.6
Technical help in computer labs	7.7	9.4	13.4
Maintaining the OSU Web site	1.7	8.8	10.2
Technology for students with disabilities	3.3	4.4	1.6
Student-initiated technology projects		2.2	16.5
Phone and online help for computer problems	1.7	4.4	10.2
Audio-visual equipment	4.4	8.3	5.5
Helping faculty to use technology in the classroom	2.2	5	13.4
Multimedia projects and Web sites for classroom	0.6	1.1	7.9
Other		2.2	

The most startling result of the survey was that only one third of the student population knew they paid technology fees. This lack of awareness translates into ignorance of the actual TR fees-funded services and resources. It also explains some of the contradictory information found in the survey results. This is particularly true with student-initiated technology projects. For example, undergraduate students were highly satisfied with the funding of student-initiated technology projects, yet they ranked these as the least important service for funding.

Awareness of the fees and their uses should be a concern to those administering the funds. To increase awareness of the student-initiated projects, governing bodies that administer TR fees distribution could work with recognized student organizations to assess the need for funding of student projects. If a need is identified, a targeted funding cycle, with adequate publicity, may increase interest and benefit more of the student body. Once funded, the projects would be publicized.

A more general student awareness program could also be initiated to educate students regarding how their TR fees are used. The program would have several components. All projects and services funded with TR fees would be publicized and, when appropriate, labeled. A comprehensive Web page that contains the statement of purpose, the history, lists of projects and services funded in the past, the members of the TR fees distribution decision-making group, a downloadable application form, and an overview of the decision-making process would be developed. The Web site would be highly visible and easily found from the institution's home page. A regular newsletter or e-mail communication that announces what has been funded and provides evaluations of the services would be distributed.

The final topic the survey addressed was student involvement in the TR fees distribution process. Over 90% of the students thought that they should be involved in determining how TR fees are used. Students voiced support for open hearings and an actual vote on proposals. Once information regarding TR fees is more accessible to students, the university could work with the various student organizations to develop effective mechanisms for student involvement in the decision-making process. The TR fees distribution decision-making group should consider reviewing student member-

ship in the group, holding meetings in public, requesting proposal presentations, and communicating funding decisions promptly to students, faculty, and staff of the institution.

CONCLUSION

At OSU, TR fees were implemented at a time of escalating technological needs and declining budgets. As the needs continue to shift and grow, the demands on the TR funds increase. The library is one of many units on campus with a legitimate need for the fees to enhance students' access to technology and electronic resources. All units must make a clear case for their portion.

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Student opinion provides a valuable indicator of the success of TR Fees. However, it is only one means of justifying funding of library technology. A more complete justification includes probing institutional history, addressing student opinion, and incorporating best practices of peer institutions. OSU's history reveals much enthusiasm for library funding, including new and continuing services. Student opinion, particularly graduate student opinion, shows high satisfaction with electronic resources provided by the libraries.

More generally, the library can assist the entire campus in developing a responsive TR fees program. Strategic planning can be routine, and regular evaluation of services can be less threatening. Adequate campus-wide communication strengthens the program as more projects are explored. Increased student involvement with decision making, while diminishing administrative control, can increase student perspective and acceptance. With planning and evaluation in place, the TR fees can become a distinct means of enhancing technology for students rather than a crutch for inadequately funded basic services. Libraries can consider TR fees as an additional source to

enhance existing services and to explore new possibilities.

NOTES AND REFERENCES

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