

REPORT OF THE TECHNOLOGY COMMITTEE
FOR THE
STRATEGIC PLAN
DECEMBER, 2006

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REPORT OF THE TECHNOLOGY COMMITTEE

INTRODUCTION

The purpose of Libraries and Information Services (LIS) organization is to harness the power of information and technology to provide excellent services for faculty, staff, and students. To this end, LIS must continuously update equipment and servers as well as ensure that the network infrastructure is robust and secure to serve the University community. Funding must be available to maintain and enhance software licensing for basic computer applications and curriculum software. In the 21st century, we also must continue to promote the role of the library in building community on campus and the concept of the “Library As Place.” We begin to achieve this goal by understanding that technology will play an integral role in Beeghly Library as we plan to meet the needs of future generation of students. Incorporating technology and giving the library a face lift will require that we renovate and refurbish it and guarantee that the new design includes flexible spaces in the building. Any retrofitting of the building would include updating mechanical and electrical infrastructure, creating group study spaces, enhancing Audio-visual classrooms, and establishing a Faculty, Teaching, and Technology Center. To acquire, preserve, and provide access for electronic resources, funding will be required. LIS recommends that a new facility be constructed in a portion of the current green space between the Corns building and Beeghly Library for technology and Information Services, thus releasing the Corns building to the complete control of the Economics Department. This document includes technology ideas not only for LIS but the entire University.

BEST PRACTICES

The following institutions have been selected as an aspiring peer group for Ohio Wesleyan’s Libraries and Information Services Department because they either are a merged organization (library and IT) or they have library and IT departments that can be considered leaders in liberal arts institutions.

<i>Bates College</i>	<i>Bowdin College</i>
<i>Bryn Mawr College</i>	<i>Carleton College</i>
<i>Connecticut College</i>	<i>Dickinson College</i>
<i>Haverford College</i>	<i>Lafayette College</i>
<i>Middlebury College</i>	<i>Mount Holyoke College</i>

INFORMATION SERVICES

Information Services funding categories and amounts are listed below:

\$4.675 Million - Ongoing Annual Operating Budget Increase
\$200,000 - Campus Wireless Access Infrastructure (one-time expenditure)
\$5 Million - ERP System Overhaul (one-time expenditure)
\$7 Million - New LIS Campus Facility (one-time expenditure)

Staffing

Ohio Wesleyan University Information Services, as a member of the Consortium of Liberal Arts Colleges, can compare itself to 62 selective liberal arts colleges. In terms of IT budget and staffing, we are not even at the 25th percentile when compared with these peer institutions.

Question	OWU	Average	25th Percentile	Median	75 th Percentile
Total IT Budget	1,301,728	\$4,100,579	\$2,553,000	\$3,977,800	\$5,413,064
IT Budget % of Institutional Budget	2.66%	5.01%	4.14%	4.91%	5.78%
IT Budget per Student	\$682.61	\$1,966	\$1,397	\$1,990	\$2,506
IT Budget per Faculty Member	\$9,040	\$18,136	\$14,519	\$17,926	\$22,067
Institutional Budget per Student	\$25,696	\$39,409	\$30,383	\$36,889	\$45,790
Institutional Budget per Faculty Member	\$340,299	\$363,395	\$303,017	\$354,287	\$409,607
IT Salaries Percent of Total IT Budget	67.64%	41.06%	35.99%*	42.00%	47.10%
Professional Development Percent of Total IT Budget	0.07%	1.32%	0.80%	1.21%	1.67%
Hardware Percent of Total IT Budget	11.65%	18.72%	12.51%	18.54%	24.87%
Percent of Central IT Represented By Students	72%	28.15%	17.55%*	27.86%	37.61%
Students per Helpline Employee	1,271	617	336*	526	731
Students + Employees per Helpline Employee	1,202	821	454*	702	951
Faculty per Curricular Support Staff	N/A	66	32*	45	65
Students per Accessible Institutional Computer	6.46	5.03	3.83*	4.85	5.88

Source: 2005 Consortium of Liberal Arts Colleges (CLAC) Survey

*=our goal in this category is to reach the 25th quartile and then to continue to improve

Unless otherwise noted, all departmental additions and enhancements should take place within a 3- to 5-year timeframe.

To effectively manage current resources and services as well as future initiatives, Information Services must create a reasonable staffing level that is more inline with peer institutions to better meet the technology needs of the campus community. **3- to 5-year target:** This short-term staffing enhancement will include the addition of two more PC support technicians for faculty and staff, two more database programmers, one more Help Desk coordinator/trainer, two new server administrators, one new network administrator, and two new educational technologists — for a total of 10 additional staff members. **10-year target:** This long-term staffing enhancement will include the addition of one more database programmer, one new lab manager/support coordinator, one new security

administrator, and two more educational technologists — for a total of 15 cumulative additional staff members. *Annual Operating Budget:* \$925,000 (3- to 5-year); \$1.3 million (cumulative 10-year)

Networking Hardware

To efficiently provide robust connectivity for University computing, Information Services must continuously upgrade and refresh a portion of the campus-wide wired and wireless networking infrastructure, including building switches, routers, and access points. Funding must be provided to allow for a 5-year lifecycle to replace all network equipment and services as needed. *Annual Operating Budget:* \$150,000

Server Hardware

To adequately provide a responsive and scalable infrastructure for mission-critical computing requirements on campus — such as file sharing, e-mail, Web, and ERP applications — Information Services must continually upgrade and refresh a portion of its primary servers. Funding must be available to establish a perpetual 3-year lifecycle to replace all server equipment and services as needed; this is inclusive of servers that are not necessarily under the direct control of Information Services. *Annual Operating Budget:* \$150,000

Security Hardware

To strategically provide secure access to mission-critical computing and to maintain the privacy and confidentiality of University data systems, Information Services must have security devices as well as threat monitoring/response systems that are perennially reviewed, adjusted, and enhanced as needed. *Annual Operating Budget:* \$75,000

Desktop and Laptop Hardware

To thoroughly provide a modern computing environment for every professional user or lab visitor on campus, Information Services must continually upgrade and refresh a portion of faculty, staff, and lab computers. Funding must be available to create a centralized financial pool for an ongoing 3-year lifecycle to replace all University-owned desktops and laptops as needed. *Annual Operating Budget:* \$750,000

Student Laptop Program

To fulfill student expectations for computing while establishing standards for managing technology, Information Services must shift toward an across-the-board student laptop program. Funding must be provided to establish a 4-year lifecycle so that incoming freshmen receive state-of-the-art, University-configured laptops that are assigned to them for the duration of their undergraduate academic careers. *Annual Operating Budget:* \$1 million (possibly offset by new student fees)

Server Software (Core Services)

To meet the overall administrative and logistical needs of the entire campus community — from the Registrar to Alumni Relations, from students to emeriti faculty — Information Services must invest in effective Enterprise Resource Planning (ERP), e-mail, Web, and file sharing/collaboration systems; this is inclusive of systems like the Mirapoint mail/calendaring appliance and the Resource25 facility scheduling platform. Funding must be provided to meet the ongoing and ever-increasing licensing fees associated with these powerful, mission-critical software packages. *Annual Operating Budget: \$500,000*

Campus-Wide Software (Site Licensing)

To utilize the hardware infrastructure across campus, Information Services must have access to equally state-of-the-art software. Without effective software, key functions of academic, administrative, and personal computing will suffer. Funding must be available to create a centralized financial pool to maintain and enhance software licensing for basic applications on every University computer — such as the Windows OS and Microsoft Office suite — as well as site licenses from vendors like Adobe, Apple, SPSS, and Wolfram Research. *Annual Operating Budget: \$500,000*

Campus Bandwidth

To maintain nominal throughput for data transfers between campus and the Internet, Information Services must make ongoing investments in University bandwidth and enhance it as necessary to accommodate emerging technologies. It is anticipated that network speeds will increase while costs decrease in the future. *Annual Operating Budget: \$75,000*

Professional Services

To leverage IT staffing, hardware, and software on campus, Information Services must engage in professional outsourcing and training. Consulting services are necessary to capture external expertise for specific IT projects when needed. Also, professional development services are necessary to enable staff to gain critical technical and professional skills to further enhance their campus functions. Funding must be available to allow professional service engagement. *Annual Operating Budget: \$50,000*

Outside Security Audits and Disaster Recovery

To mitigate the possibility of a University data security breach, and to provide a geographically remote site for providing mission-critical University services such as e-mail and ERP access in the event of a local disaster, Information Services should collaborate with the Five Colleges of Ohio consortium efforts to establish vendor relations and locations for these business continuity projects. Funding must be provided for both ongoing security audits and ongoing equipment co-location/hosting. *Annual Operating Budget: \$150,000*

Residential Network Outsourcing

To elevate the performance and support of computing resources for students who live in on-campus residences — including halls and fraternities — Information Services must shift the technical and administrative management of the residential network (ResNet) to an outside firm that can better serve in the role of a traditional Internet Service Provider (ISP). Annual costs for such services could range anywhere from \$250,000 to \$350,000 per year for all students; these costs would need to be absorbed by additional annual student fees. *Annual Operating Budget:* Offset by new student “room and board” fees.

Campus-Wide Wireless Infrastructure

To respond to the increasing demands of students, faculty, and staff for mobile access to networked resources, Information Services must invest in a comprehensive wireless Internet (Wi-Fi) system for campus. Wireless network access provides increased flexibility, productivity, and convenience for academic and personal computing, and it will serve as a significant marketing and recruiting tool for the University. *One-Time Expenditure:* \$200,000

Enterprise Resource Planning (ERP) System Overhaul

To accelerate the power and flexibility of the University’s main ERP system — currently Jenzabar CX — Information Services must take the institutional lead in deciding on whether to significantly upgrade and rework the existing system or to invest in an entirely new ERP platform to address future academic and administrative needs. The former option would cost significantly less than the latter, but either option would span multiple fiscal years and require serious investment of manpower, software, and hardware. The best option would be for the Five Colleges of Ohio consortium members to all purchase the same ERP system which would allow the colleges to share staff and to cut expenses. *One-Time Expenditure:* Up to \$5 million

New LIS Campus Facility

To provide adequate growth space for the Libraries and Information Services departments, it is proposed that a new two-story (plus basement) building be constructed in a portion of the current green space between Corns and Beeghly. This facility could serve multiple functions, including a new home for a dedicated educational technology group with a Faculty, Teaching, and Technology Center; new computer lab training facilities; rich media production suites for students, faculty, and staff; additional office space for Information Services personnel; and storage for various books, media, equipment, and other LIS holdings. *One-Time Expenditure:* \$7 million

LIBRARIES

Libraries funding categories and amounts are listed below:

\$1.501 Million – Ongoing Annual Operating Budget Increase

\$1.939 Million – One-time-only expenditures for numerous projects

Staffing

Ohio Wesleyan University Libraries, as a member of the Oberlin Group, can compare itself to 80 selective liberal arts colleges. In terms of library staffing, we are well below both the average and median figures of these peer institutions.

	OWU	25 th quartile	Average	Median	75 th quartile
Professional staff salaries	\$441,181	\$403,845	\$627,546	\$525,924	\$788,216
Support staff salaries	\$271,131	\$193,306	\$391,699	\$337,608	\$462,285
Total staff salaries	\$712,312	\$591,815	\$1,019,565	\$910,980	\$1,215,213
Librarians	8.45	7.0	10	9.1	12
Other professionals	2.2	1.0	2	2	3
Support staff	8.05	7.06	14	12.5	15.56
Staff total FTE	18.7	15.74	25	23	30.81
Number of students per staff	102	66.91*	90	86.13	103

Source: 2004 Oberlin Group Survey

*=our goal in this category is to reach the 25th quartile; in all other categories we would like to reach or exceed the 75th quartile

We need to make our part-time Science Librarian full-time immediately. *Annual Operating Budget: \$50,000*

Within the next 3-years, we also need a full-time support staff member in the Science Library to help cover the additional hours when this facility is open. We currently have two part-time librarians for Rare Books and the OWU Historical Collection (approximately 2 days per week; one who only works during the academic year). We need a full-time Curator/Librarian and a support staff member in Special Collections. We currently have only an Audio Visual Services Manager in the Audio Visual Center. We need an Assistant Manager of Audio Visual Services with audio skills and a support staff member for this service point. *Annual Operating Budget: \$200,000*

Within five years, we should add a digital resources librarian (see Digitization and Institutional repository), a visual resources librarian and a support staff member in order to develop local initiatives in these areas. *Annual Operating Budget: \$150,000*

Institutional Repository

In order to participate in statewide initiatives creating an institutional repository, we will need the staffing of a digital resources librarian and the curator/librarian in Special Collections. An institutional repository is needed for pre and post print and scholarly communication and support for electronic thesis and dissertations (ETD). Also, we must assist the campus in preserving born-digital documents. At this time there is no organized effort to preserve materials within the University that originate as and are distributed electronically. *Annual Operating Budget: \$10,000*

Scholarly Communication

With the shift from a reliance on traditional journal publications to different scholarly publication models such as initiatives by the Scholarly Publishing and Academic Resources Coalition (SPARC) and other open source efforts, we need to plan to pay faculty author publication fees. *Annual Operating Budget: \$15,000*

Assistive/Adaptive Technologies

To enable universal access to all community members, regardless of disabilities, we must have assistive/adaptive devices, software, and services available throughout campus — such as electronic whiteboards in all classrooms, screen readers on all publicly accessible computers, and interactive closed captioning technology in lecture/event locations.

Funding must be available to supplement and enhance this as new technologies emerge.

One-Time Expenditure: \$100,000 + Annual Operating Budget: \$50,000

Instructional Technologies

To implement technology as a pedagogical component of the curriculum, we must focus on providing innovative software and services to the faculty and their teaching and research spaces. More conventional “smart classroom” devices — such as data projectors, multimedia control podiums, and tablet computers — can help build this framework. In concert with the hiring of educational technologists, funding must be available to specifically address technology integration across all academic disciplines.

One-Time Expenditure: \$150,000 + Annual Operating Budget: \$100,000

Pedagogical Software

It is important to provide the backbone for using technology in the classroom with a course management system such as Blackboard. In addition, software solutions for incorporating technology in the instructional process range from management software such as Content DM to emerging rich media offerings. *One-time expense: \$100,000.*

Annual Operating Budget: \$125,000

Digitization

To digitize materials in Special Collections such as the J. B. Finley letters and Thomas Morris letters in the Archives of Ohio United Methodism collection (AOUM), the pastor service records and photographs in the AOUM collection, and the Whitman photographs in the Rare Book Collection, we must purchase digitization equipment and obtain training for staff. Digitized materials must be cataloged using metadata, which is the process of describing collections and helping people find what they need through the online catalog.

The support staff member for Special Collections is required for this project. *One-time equipment purchase: \$25,000*

Enhancing Access (Cataloging and Metadata)

To make uncataloged library materials accessible to students and faculty, we must expedite the book ordering process by having new books cataloged before they arrive in the library. We must also catalog older material either in-house or by outsourcing retrospective cataloging projects for the Dewey books, historical government documents, Archives of Ohio United Methodism books, special collections books and digitized materials, and music materials. Metadata is a method of making electronic information more accessible. The failure to catalog or add metadata to materials means that important

resources are not available to the University through the online catalog, which essentially makes these materials non-existent. *Annual Operating Budget: \$50,000*

LIBRARIES

Facilities

To present an attractive, inviting environment that fosters a sense of community, we must refurbish and remodel Beeghly Library. There are several specific projects that need to be undertaken in order to provide our users with the latest in technology.

Information Commons

The furnishings, carpet and reference desk/student computer help desks must be replaced and redesigned to be more user friendly. This area might serve as the single service point for information services and library services. *One-time expense: \$150,000*

Bashford Lounge

The look and feel of the Internet Café needs to extend to the Bashford Lounge. A complete change in furniture and carpeting is needed to update this space, including the addition of a flat screen TV for current news and special programming. *One-time expense: \$125,000*

Beeghly Library's Upper and Lower Floors

We currently have only two group study areas: the Green Room and the Red room on Beeghly's second floor. We need additional group study areas on the lower level and the third floor. These group study areas need to be equipped for technology. Also, more electrical outlets need to be added throughout Beeghly so students can plug in laptop computers and use other technologies. New furniture will also help in making the best use of technology throughout the building. *One-time expense: \$500,000*

Audio Visual Center

The classrooms on the lower level must be reconfigured, renovated, and refurbished to create attractive, flexible and multi-purpose rooms suitable for both education and entertainment. All classrooms should be upgraded to include HDTV Plasma display panels, satellite/cable/ethernet reception and HD Blu-Ray DVD playback. Additionally, a plasma monitor should be installed in the lobby area of the AV Center to display current new events AV Center classroom assignments and new acquisition information. *One-time expense: \$150,000*

Two digital classrooms are needed. Librarians currently have only a laptop with LCD projection for their teaching. We need two classrooms configured with computer workstations, wireless connectivity and upgraded/flexible lighting so that students can have hand-on opportunities as part of library instruction. *One-time expense: \$100,000*

A Multi-Media Production room is needed to take advantage of using rich media in the educational process. The integration of audio, video, and graphics within a browser has made possible new interactive forms and experiences for teaching

and learning. Computers, digital video-editing workstations, software, cameras, software, scanner, and black and white and color laser printing will be part of this space. This printing provides point of needs services supporting the multi-media applications that students will be using. With proper physical plant upgrading, storage area AV39 would provide an adequate space for such a facility. *One-time expense: \$110,000*

The Audio Visual Center should begin circulating “PodCasting Kits” enabling faculty and campus organizations the opportunity to produce their own live online multimedia programming. Three portable kits would include digital camcorders, iBook computers, simple podcasting software and instructions for use. *One-time expense: \$9,000*

As videoconferencing becomes more prevalent on campus, we will need to upgrade our current system and provide desktop conferencing solutions to be checked out for use campus wide. Satellite and cable television systems should also be upgraded for digital reception. Equipment needs would include two 42” Plasma monitors, PolyCom upgraded videoconference systems, newly installed digital satellite dish and related receiver equipment. The cable TV hub and related equipment should be repaired and updated as well. *One-time expense for equipment: \$70,000. Annual amount for on-going maintenance and satellite subscription services: \$1,000 per year.*

The lobby of the AV Center should be refurbished to create a welcoming and attractive service area for our patrons. Additional media display shelving is needed as well as carpeting, furniture, decorative media related artwork/signage, track lighting, and updated wall coverings. *One time expense: \$50,000.*

Special Collections

Space needs to be provided for digization projects and renovation for better access to materials in the Archives of Ohio United Methodism. *One-time expense: \$100,000*

Kinnison Music Library

An enhanced listening room located in a different space will allow for compact shelving to be installed for this crowded collection. *One-time expense: \$200,000*

Resources

Technology is dramatically impacting access to library resources. Every day we learn about new offerings of not only electronic journals but electronic books and other material available in new formats. In order to acquire, preserve, and provide access to library collections in all formats that support the curriculum, the University must increase and then maintain funding for such resources. *Annual Operating Budget: \$750,000*

CONCLUSION

Given the rapid pace of change, the concept of a twenty-year timeline for technology is meaningless. Currently, Information Services is drastically under funded, especially in the areas of operating budget, equipment, security, and staffing. Our goal in the coming years should be to allocate sufficient funding to ensure that no institution in the country would be technologically ahead of Ohio Wesleyan in twenty-years. We desire to be on the cutting edge but not bleeding edge of technology. Technology serves as the infrastructure of the university in a digital world. Its impact is profound on both academic and administrative functions and it is one of the most critical factors in recruiting and retaining students. The University must improve and maintain a financial commitment to technology in order to thrive in the 21st century. Providing proper funding for technology would result in the Libraries and Information Services Department developing transformational services for the University.

ADDENDUM A

Top-Ten Current IT Issues

1. Security and Identity Management
2. Funding IT
3. Administrative/ERP/Information Systems
4. Disaster Recovery/Business Continuity
5. Faculty Development, Support, and Training
6. Infrastructure
7. Strategic Planning
8. Governance, Organization, and Leadership
9. E-Learning/Distributed Teaching and Learning
10. Web Systems and Services

Source: Dewey, Barbara I. and et al, "Top-Ten IT Issues, 2006," *EDUCAUSE Review* 41.3 (May/June 2006): 62.

Top-Seven Current Academic Libraries Issues

1. Recruitment, education, and retention of librarians
2. Role of library in academic enterprise
3. Impact of information technology on library services
4. Creation, control, and preservations of digital resources
5. Chaos in scholarly communication
6. Support of new users
7. Higher education funding

Source: Hisle, Lee, "Top Issues Facing Academic Libraries: A Report of the Focus on the Future Task Force," *College & Research Libraries News* 63.10 (November 2002): 714.