

City College of San Francisco

Library Technology Plan

2000-2005

The Library Technology Plan describes activities designed to expand and enhance access to services, proposes remedies for existing problems, and outlines strategies and activities for reaching our desired goals.

Goal 1: Information resources

1. Provide all CCSF students and staff with access to information resources offered by the Library in support of their curricular and independent learning needs.
2. Provide all CCSF instructors with access to information resources that support teaching and curricular needs.
3. Ensure uniform access to information for all CCSF students, faculty and staff at all campuses, and wherever feasible, at off-campus locations in support of student success.

Strategies

- Provide optimal universal access to print, non-print, networked electronic resources, other library resources, Bay Area library catalogs and the Internet.
- Widen the scope of accessibility to resources by increasing the range of networked, electronic resources.
- Provide networked printing capability for all library workstations.
- Continue development and maintenance of the Library's web page.
- Develop and implement an online interactive reference service to support our users, particularly distance learning, and remote use students and faculty.
- Explore system options supporting patron convenience – self check out, renewals, hold list management, etc.

Activities

Workstations

- Upgrade or replace hardware and software to avoid obsolescence (approximately every three years) in order to provide current and responsive resources.
- Provide all library staff with access to workstations and appropriate software; standardize hardware and software as much as possible for improved maintenance.
- Provide appropriate hardware/software for patrons with disabilities for every library site, including one workstation in each information skills classroom.
- Purchase, configure, and deploy additional workstations to extend access to library instructional programs, including workstations for an instructional lab in John Adams Room 202.

- Identify and acquire systems/software so that access for patrons and staff is reliable and responsive. (i.e. no multiple reboots per day, no interminable waits for response.)

Online Catalog and indexes

- Continue annual library system software maintenance.
- Evaluate library system vendors to identify standards-based systems utilizing open systems design for flexibility and user-friendly interfaces.
- Extend the utility of the online catalog by evaluating/implementing additional software functions for acquisitions, cataloging, media scheduling, and serials.
- Set priorities for the development, cataloging and indexing of local databases and collections including the Guardsman, College Archives, Learning Assistance Center, the Broadcasting Department, the Job Placement Center, the Language Lab, and the Diego Rivera collection.
- Catalog and index these collections according to the priorities set.
- Explore options and seek funding for authority control cleanup: automated correction and reconciliation of subject headings and authors' names.
- Extend the value of the online catalog by adding content to existing and new records, which may include tables of contents, book reviews and website addresses.
- Implement broadcast searching using Z39.50 technology.

Electronic information resources

- Identify and remove obstacles to the use of CD-ROMS that are already in City College Library collections and evaluate options for network CD-ROM access.
- Implement software to provide City College Library users with remote access to the online catalog and to subscription-based databases.
- Evaluate available options for electronic access to back issues of serials currently held in microfilm or print and select affordable solutions.
- Evaluate available options for expanding electronic access to networked versions of electronic reference resources and select affordable solutions.
- Evaluate available options for electronic access to City College archival material and the Diego Rivera collection.
- Develop a plan for future networked access to unique resources at various campuses.

Applications development and support

- Identify, acquire, and implement software or utilities that support or improve the work of library staff in making resources accessible and available to students.
- Continue membership and subscription to OCLC services for cataloging and ILL.
- Evaluate extension of dedicated TCP/IP connection to OCLC for ILL and reference databases.
- Continue support and development of extended Visual Basic macros for the automation of cataloging tasks.
- Implement networked access to Library of Congress software for cataloging work and for instruction (Library Information Technology program) and continue subscription to this software.
- Develop and implement centralized acquisitions interface between the library and the CCSF financial system for efficient processing of invoices and payment vouchers.

- Implement automated circulation for the Alice Statler Library, the Media Center, and the Teachers Resource Center Library.
- Provide librarians with release time to work with library system vendor on Joint Application Development to ensure development of applications that meet the needs of an academic library.

Goal 2: Instructional resources

1. Collaborate with discipline-based faculty and instructional support staff district-wide to develop students' information competency skills.
2. Provide faculty and staff with library resources/information technology training and provide course and assignment development support for faculty.

Strategies

- Provide CCSF students with instruction and assistance in becoming information competent.
- Create new learning opportunities and redesign existing courses and workshops district-wide to emphasize information competencies.
- Explore and offer, if appropriate, information competency courses and workshops through distance learning.
- Provide opportunities for faculty to update their information competency skills.
- Participate in activities with other departments and learning resource units to cooperate in providing instruction using 'smart' classrooms or high technology labs.
- Assist faculty in their research endeavors to support CCSF's curriculum.

Activities

Workshops and courses

- Implement plans for redesigning Library Instructional Skills workshops A, B, and C.
- Implement plan for redesign of courses on the use of information resources for instruction at all City College Campuses and through distance learning.
- Build into the annual instructional development activities the review and possible revision of all formal student learning opportunities, such as basic skills workshops, LIS 10, LIS 51, etc. to reflect changing information technology resources and curricular needs.
- Develop and offer training workshops for faculty and staff to encourage collaboration with librarians in incorporating electronic resources into coursework.

Demonstration classrooms and laboratories

- Coordinate scheduling of existing information skills classrooms and laboratories (R414, R209) for maximum use.
- Plan and implement the distance education/information competency skills classroom at the John Adams campus in Room 202.
- Plan and implement information skills classrooms at new campus libraries: Chinatown-North Beach Campus and Mission Campus.
- Train staff in the use of information skills classrooms.

Goal 3: Infrastructure and facilities

Provide software, telecommunications, equipment, wiring, and architectural frameworks to deliver required technological services.

Strategies

- Work with College Information Technology Services staff to plan for and implement a wide area network for the District.
- Work with College Information Technology Services staff to improve local area network services to the Alice Statler Library, the Downtown Campus Library, the John Adams Campus Library, the Josephine Cole Library, and the Teacher's Resource Center Library.
- Maintain and continue to upgrade the Rosenberg network segments to support patron access to hardware and software resources.
- Evaluate the implementation of software to eliminate the need for a separately maintained library patron database. (i.e. system connections to CCSF student/staff records)
- Plan for network access for future library sites (Chinatown/North Beach campus, Mission campus)
- Evaluate staff work environments, workstations and furniture to make sure that they are healthy and ergonomically sound and to correct deficiencies.
- Advocate College development of "surf labs" for students using the Internet for non-academic pursuits, in order to relieve the workstation/human resource demand upon library settings and personnel.

Activities

Network hardware

- Install and maintain Novell servers for the Alice Statler Library, the Downtown Campus Library, the John Adams Campus Library, and the Josephine Cole Library and future libraries at the Chinatown and Mission campuses.
- Continue annual maintenance for existing network hardware (servers, routers, hubs)
- Purchase additional hardware and software to upgrade the Rosenberg Library network; creating additional subnets and implementing a switched networking technology.
- Configure Dynamic Host Configuration Protocol (DHCP) server to support network access for students with laptops in the Rosenberg Library/LRC. (Wiring already in place)
- Purchase additional equipment to provide access to library resources for all library sites.

Wiring

- Add electrical power and data wiring at Reference East to support adaptive workstations running speech and word processing applications for disabled students.
- Pull wire in existing conduits to add OPAC stations between Reference West and Reference East.
- Plan and install electrical power and data wiring in John Adams Room 202 for instructional classroom, integrating with plans for network infrastructure for the entire John Adams campus.

Facilities

- Re-evaluate locations for centralized networked printing services for patrons using Rosenberg library resources. (Reference and word processing.)
- Evaluate locations for centralized networked printing for patrons using the Language Lab and Learning Assistance Center on level 2. (Instructional software and word processing.)
- Identify and secure additional space for Library Automation Services staff, hardware and supplies in the Rosenberg Library/LRC.

Goal 4: Human resources

Raise the skill levels and information technology competencies of the library and learning resources staff, and the faculty and staff of City College.

Strategies

- Increase the technical expertise of all library faculty and staff.
- Provide adequate staffing to support optimal functionality of equipment and software for Library and Learning Resource Services.
- Develop human resources in the library to assure effective functioning of all units via the hiring of additional and/or the redeployment of existing faculty and staff.

Activities

Training and education

- Develop information awareness and technical skills of library faculty and staff by contracting for or promoting attendance at technical workshops and conferences.
- Provide adequate opportunities and release time for training of all library employees.
- Transfer current awareness gained from workshops and conferences to library faculty and staff through short workshops, orientations and focused discussions.
- Train librarians and staff in the loading, installation, and de-installation of CD-ROMs currently in our collections.
- Encourage all library faculty and staff to undertake training in the use of applications that will maximize our ability to serve student needs.

Hiring and reclassification

- Reclassify one staff position in the Language Lab from 3598 (classroom aide) to 3538 (technical support)
- Hire additional staff in the Periodicals unit (library technician II) and at the Statler library (half time library technician)
- Seek funding to increase library automation staff to achieve a ratio of one System Administrator Level 1, (class 1021) for every 75 workstations supported by the department.
- Seek funding for and hire instructional lab aides to assist at the Downtown, John Adams, and other campus library open-access computing labs.

- Review and revise job description to ensure that duties and responsibilities related to information technology use and oversight are clearly stated.

Implementation and funding

Provide appropriate resources in leadership, money and time to actualize the goals of this plan.

Strategies

- To make maximum use of regular district sources of funding.
- To explore funding opportunities via grants and other external sources.
- To obtain adequate funding for equipment needs, training costs, staffing, and the purchase of services, utilities, and vendors.

Activities

Organization of funding needs and sources

- Identify library technology costs and create an organized list of these costs.
- Identify current sources of library technology funding and create an organized list of these sources.
- Develop an articulated, coherent system for matching costs with funding sources.

Internal funding

- Create and maintain a coordinated list of library technology expenditures currently met through internal funding.
- Create and maintain a list of unmet library technology funding needs in anticipation of internal funding opportunities.

External funding

- Maintain contact with state agencies such as the California State Library, etc. to determine what funds may be available.
- Seek support from non-profit organizations or foundations.
- Standardize grant-writing procedures and cooperate with the City College Research and Planning office.
- Investigate collaborative efforts and consortia options to maximize funds and expertise.

Notes

¹ *City College of San Francisco Planning Atlas*, 1999.

² California Community Colleges Library and Learning Resources Programs. *Annual Data Survey, Fiscal Year 1998-99*.

³ The Rosenberg Library, opened in December 1995, recently celebrated its three millionth patron; average daily patron count for the Fall/Spring academic year (not including Summer sessions).

⁴ User Survey, Program Review of Library and Learning Resources (all campuses), 1997.

⁵ Accepted U.S. industry standard is 50 to 1.

Academic Year Timetable

Phase I - Immediate	1999 - 2000	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	Funding Issues
Purchase and install ADA-compliant workstations where appropriate in Learning Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				DSP&S (Disabled Students Programs and Services)
Provide funds for maintenance of OPAC hardware and software and for relational database conversion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget
Provide off-campus access to licensed web-based databases such as <u>InfoTrac</u> , <u>GaleNet's Literature Resource Center</u> , <u>Newsbank</u> and <u>Ethnic Newswatch</u>	<input type="checkbox"/>						TTIP
Purchase and installation of new Pentium IIIs to replace and augment obsolete workstations at the Reference area	<input type="checkbox"/>	<input type="checkbox"/>					College budget and instructional equipment grant funds
Expand outreach and training opportunities for faculty so they and their students may make optimum use of information and instructional resources available via CCSF libraries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				College budget and block grant funds
Continue the advocacy of information competency requirement at the College	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				College budget
Offer library system-wide training and informal mentoring to provide support staff and librarians with contemporary, essential skills in finding, filtering, evaluating and synthesizing information and teaching those skills to students, faculty and staff.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget and instructional equipment grant funds
Promote student success by offering all students, regardless of instructional site or disability, in accordance with the guidelines of the Office of Civil Rights, access to the resources of the CCSF libraries and other digital sources, and by providing appropriate referrals to other local libraries/resources when needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget

Expand student and faculty access by implementing changes in library workstation configurations to facilitate ease of use, and emailing and/or downloading of resources and content.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				College budget and instructional equipment grant funds
Promote more, faster and reliable Internet and College network access for students, faculty and staff by investigating and implementing alternatives for the acquisition of Internet services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget and block grant funds
Advocate developing campus “surf labs” for students using the Internet for non-academic pursuits, to relieve the workstation/human resource demand upon library settings and personnel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				College budget and block grant funds
Promote student and faculty success through the library-wide installation and technical support of a baseline of contemporary hardware, network and software resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			College budget and instructional equipment grant funds
Facilitate student and faculty access and success through the provision of training and readily available support services for Internet and library resource use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			College budget and instructional equipment grant funds
Expand the integration of technology in teaching and learning by providing training and support for faculty interested in locating and using discipline-specific Internet content and digital library resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			College budget and instructional equipment grant funds
Advocate required permanent instructional technology training and support staff to ensure student and faculty access and success in using current resources and technologies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				College budget and block grant funds
Plan for, acquire and support an adequate hardware, software, and support infrastructure for library and learning resource center personnel so that they can deliver the services and resources required of contemporary academic libraries in support of student and faculty achievement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget, block grant and instructional equipment grant funds

Academic Year Timetable

Phase II - Short Term	1999 - 2000	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	Funding Issues
Migrate from Epixtech's Pac for Windows (running under Windows NT) to Epixtech's WebPAC (web-based OPAC)		<input type="checkbox"/>					College budget / Time and effort
Explore and evaluate OPAC vendors as alternatives to existing Dynix OPAC		<input type="checkbox"/>	<input type="checkbox"/>				Time and effort
Advocate the installation of a WAN (wide area network) to accommodate sharing of non-web based electronic resources among the campus libraries		<input type="checkbox"/>					College budget and block grant funds
Rewrite the library's mission statement and collection development policy to reflect the incorporation of web-based, electronic resources and distance learning		<input type="checkbox"/>					Time and effort
Expand access to CD-ROM and DVD-ROM resources and explore the acquisition of satellite-delivery of internet services		<input type="checkbox"/>	<input type="checkbox"/>				TTIP and College budget
Hire additional librarians to accommodate expansion in library programs and online services		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		College budget and Partnership for Excellence
Hire additional and reclassify/redeploy existing library staff to accommodate expansion in library technology and programs		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		College budget and Partnership for Excellence
Improve and expand bandwidth of existing networking infrastructure to accommodate anticipated growth in internet use		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget, block grant funds and TTIP
Incorporate web sites and meta data into cataloging processes to expand access to electronic resources		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget, instructional equipment grant funds and TTIP

Provide learning opportunities and training materials in a variety of formats, to enable students to acquire and use skills for current academic pursuits and for life long-information-seeking activities.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget, and TTIP
Develop, support and maintain currency of a facility and technology infrastructure to deliver distance learning in a variety of modes (video, Internet, etc.)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget, block grant funds and TTIP
Promote student access and success and curtail currently long waits for resources, by assisting the College to plan for and achieve the State's goals of 1 computer for every 20 students and 15 multimedia classrooms for every 10,000 FTES.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget and block grant funds
Provide an ongoing program of training and upgrading of skills of learning resource center personnel so that they are equipped to implement and deliver the resources and services necessary in libraries which support instruction and learning.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget, instructional equipment grant funds and TTIP

Academic Year Timetable

Phase III - Long Term	1999 - 2000	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	Funding Issues
Continue the acquisition and upgrade of hardware, network and software resources to accommodate changing technologies required for information access				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget, instructional equipment grant funds and TTIP
Provide learning resource services which approach the State's goal to "meet or exceed those services available through a student visit to the campus."			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget and TTIP
Advocate the replacement or upgrading of public access and instructional hardware and software within College library settings on a three-year cycle to maintain an environment conducive to student and faculty success.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget, instructional equipment grant funds and TTIP
Advocate, as recommended, the funding and implementation of the State's goal of "seamless access to information, regardless of format and location" and "move toward a virtual library and learning resources program."						<input type="checkbox"/>	College budget, instructional equipment grant funds and TTIP
Promote extending hours at all open-access computer labs and seek additional space for the creation and maintenance of more labs				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	College budget, block grant and instructional equipment grant funds

This document was composed by the Library Technology Committee comprising the following members:

Rita W. Jones, Dean of the Library and Learning Resources

Karen Saginor, Reference Librarian

Julia Bergman, Librarian, Coordinator of Automation

J. R. Hall, Supervising Technician, Automation

Chris Kox, Librarian, Periodicals Librarian

Charles Fracchia, Librarian, Downtown Campus Library

Ann Roberti, Librarian, Alice Statler Library

David Gallerani, Assistant to the Dean

James Lim, Librarian, Coordinator of Reference Services

João Barretto, Librarian, Coordinator of Acquisitions and Collection Development

Mission Statement for the City College of San Francisco Library

- To provide students, faculty, staff and community members with the information and information services they need to pursue areas of study in the City College credit and noncredit curriculum
- To provide students, faculty, staff and community members with assistance and instruction in the use of library resources for their present studies and lifelong learning.
- To provide materials and to develop services for students with a wide range of scholastic abilities, learning styles, and comprehension levels.
- To support, reflect, and to be responsive to the changing needs of people with diverse ethnic, cultural, social and economic backgrounds.
- To advocate faculty and staff participation in building and enhancing resources and services.
- To publicize available services and activities.

Planning Context

The College is currently committing major funding to building its computer infrastructure, including a fiber optic network and providing office computers for all faculty who request them. The College is currently revising its Education Technology Plan (1997). An Education Plan is being developed under the guidance of consultant Denton Crews. It is expected that this Library Technology Plan will be included by the Technology Learning and Teaching Round Table in informing the Education Plan and the Education Technology Plan revisions.

The Technology Learning Center is offering a broad array of staff-development courses. The Learning Assistance Center recently opened a new facility to promote faculty use of the Internet and technology in instruction; it has been a roaring success. The College is preparing to offer more distance instruction using various delivery systems.

The Library Technology Plan emanates from and is consonant with:

February 2003

- The Mission of City College’s Library and Learning Resource Center (1997)
- The College’s Strategic Plan (1997)
- The College’s Education Technology Plan and initiatives (rev. 2000)
- Library/Learning Resources Program Review (1997)
- CCC Academic Senate and Board of Governors Resolutions on Information Competency (2000)
- ACRL Junior College Standards (1994) www.ala.org/ACRL/guides/jrcol.htm.
- Industry trends and new technologies for delivering instruction and information
- Current academic library practice.

This plan recognizes and tries to address issues related to but not limited to:

- The growing importance of information literacy competency and computer competency as lifelong skills.
- The impact of digital technologies on instructional resources, information services and access to them coupled with the goal of shrinking the digital divide between the computer haves and have-nots.
- The need to provide a baseline of responsive computer access and services for each student and college employee.
- The rippling effects of technology upon those who provide services: librarians, technicians, support staff; including continuous change and frequent updating of skills.
- The demand for access to reference and instructional materials at non-college locations and non-library locations within the CCSF district.
- The need for technical support for the hardware and software required to offer the services expected by the college community.
- The need to enhance support for traditional resources and services while expanding technology-based offerings.
- The need to maintain an academic environment which supports intellectual property rights, individual privacy, the security of information, and protection from harassment.
- The importance of sharing resources and expertise, when possible, with other libraries and educational institutions.
- The fiscal impact of technology on library budgets – electronic and digital resources, software, personnel, and computing infrastructure.
- The need for all Library and Learning Resources staff to maintain up-to-date information technology skills.

Service Context

The following numbers provide a framework for understanding the ramifications, size, and impact of Library Technology services and infrastructure – hardware, software, user instruction, technical support, and training requirements – on the quality of learning and teaching at City College.

Patron Base

- Serves an unduplicated credit and non-credit student enrollment of 88,572; serves 2350 faculty and staff.¹

- Offers resources to 1,060,192 patron annually,² serves an average of 3989 patrons per day at the Rosenberg Library, Phelan campus (as measured by the security system).³
- Serves a diverse clientele with important goals and needs; 62% of users surveyed were pursuing a degree program and 13% were earning a vocational certificate or acquiring job training.⁴

Infrastructure

- Provides services to students at 10 campuses; now operates 5 ‘campus libraries’ and will begin construction of 2 more in the Chinatown and Mission districts of San Francisco soon.
- Supports access to 338 public service computers for information retrieval, services and student projects; offers access to library resources from remote locations via the Internet; maintains 13 servers to support patron services.
- Employs a staff of 50 librarians and library technicians who use 65 computers and 23 terminals for library functions such as cataloging, circulation, periodicals management, instructional materials and acquisitions.

Services

- Instructs students and faculty in information competencies and library research skills – in the 1999/2000 academic year 208 basic library skills, course related, and faculty workshops were presented; responds to 1660 bibliographic instruction-related questions per semester.
- Answers 47,300 reference and computer assistance questions annually; responds to 12,885 directional queries annually.²
- Circulates an average of 11,100 print and non-print items per year.²

The above numbers provide a snapshot of the operating environment of library technology at City College. They do not convey the serious deficiencies and substandard components of the current library and information technology support system, which include:

- Student per open access computer workstation = 52 to 1.
- Inadequate technical support to maintain daily operational status; frequent technical and network failures inhibit learning and teaching.
- Computers/peripherals per technical support employee ratio = 125 to 1.⁵
- Insufficient funding for digital information resources and subscriptions.
- Inadequate staff training due to lack of funds and backup/substitute personnel.
- Uneven access to information literacy instruction and digital resources at campuses.
- Campus and Automation staff resources are unduly constrained, due to the library’s continuing support of open access computing labs.