

Standard Five

Library and Information Technology

5.A Introduction: Purpose and Scope

The Library's program of instruction, its public services and its collections are dedicated to the goals of developing information-literate students able to do research for their academic needs in support of board goals of student proficiencies and learning skills. The Media Center supports the wired classrooms and the media needs of the faculty and the College. Its collections of video and audio works are available to faculty and students. Media supports the delivery of instruction throughout the campus and the College District Centers. The Library and Media are housed in a new building that opened in the spring of 1998.

Information Technology Services (ITS) is the centralized technology support organization on campus with broad responsibility for administration and operation of information systems, networks and telecommunications, and desktop computing. ITS manages a carefully integrated technology environment to support both the administrative and academic needs of the campus. A recent survey of technology environments at community colleges in Oregon indicates that our campus continues to occupy an overall leadership position in the use of technology-based information resources. In the last three years, implementation of state-of-the-art systems for administrative applications, academic computing and online communications (electronic mail, World Wide Web) have been matched by an estimated 50 percent increase in network-connected desktop computers and network servers. Continued growth of information resource infrastructure and services has been instrumental in accommodating the enrollment growth and organizational change currently underway. The goal of the Information Technology Services organization is to ensure that the planned use of technology is effectively embedded within the broader campus strategy for delivery of instruction and associated support services.

5.A.1 Library Resources

As the only academic library in the region, collection development has been highly focused on higher-education resources. It has endeavored to serve all higher education programs in the region including OSU-Cascades Campus programs, earlier incarnations

of the University Center and all independent programs related to the campus in any way. Print collections are not large, but they are carefully directed to serve the needs of our patrons and in most cases, provide an excellent beginning research collection for any area of interest. Reference collections are carefully selected in order to reduce duplication with local public libraries and provide scholarly resources in academic fields. Electronic resources such as selected online databases expand the access to scholarly information. The Library is active in all regional academic or joint public-academic consortia. The Library takes advantage of special pricing offered through cooperative negotiations with database vendors and information suppliers.

Media houses a good collection of videos selected by College faculty. Faculty and students heavily use these collections.

Print and video collections are searchable electronically through our Innovative Interfaces catalog. Bibliographic data is entered only after careful review and authority control is maintained in the system. All materials in the Library catalog are also entered in the Orbis Union Catalog and searchable there. Patrons can easily search the catalog, and with one button move, their searches into the Orbis database consisting of more than eight million items. Orbis is explained in section 5.B.1.

Collections

Volumes	69,952
Subscriptions	346
Microforms	75,481
Cartographic	3,536
Film	2,203
Databases	69

Figure 5-1

The Library is a selective depository of federal documents. Print collections are evaluated annually. Selection has increased to 11 percent.

5.A.2 Information Technology Resources

Technology Infrastructure

- **Facilities**
15 microcomputer labs/classrooms
15 multimedia classrooms
8 distance learning send/receive sites
- **Network/Telecommunications**
fiber optic backbone/gigabit bandwidth
Oregon Education Network Internet II
NEC NEAX 2400 telephone switch
- **Desktop Computers**
550 student-accessible systems
450 faculty/staff systems
Microsoft campuswide licensing
- **Video Production**
3 production studios
3 digital video editing booths

Systems Components

- **Banner Management Information Systems**
Payroll/Human Resources
Finance (Gen. Ledger, Purchasing, AR, AP)
Student Information/Scheduling/Catalog
Financial Aid/Cashiering
- **Instructional Technology**
Closed circuit television
Cable television broadcasts
WebCT course management
Video conferencing (ITFS; IP video)
- **World Wide Web**
Instructional Web resources
Information systems interfaces/online processing
Online communications (e-mail, conferencing)

Figure 5-2

5.B Information Resources and Services

The Library and Media Center blend traditional and electronic access and resources selected and developed to directly support all instruction at COCC and OSU-Cascades Campus. New technologies are adapted to the changing needs of higher education. The Library is committed to the goal of desktop delivery of as many electronic resources as possible directly to faculty and student computers whether on or off campus.

5.B.1 Library Support of Educational Programs

Collection development at the Library has historically focused on direct support of lower- and upper-division courses available to Central Oregon students through COCC and other institutions present in the region. The Library supports transfer

and professional/technical programs. Faculty and professional librarians select all books, journals, serials, media, government documents and electronic resources. A part-time government documents librarian works with faculty to develop collections directly related to instructional needs.

Faculty librarians teach 30 sections of the two-credit Information Research Skills class each year. The curriculum for this course is constantly evolving and kept up to date by the instructors. Eight of the 30 sections are offered in a Web format. The course is designed to develop overall information literacy, but it is closely tied to the students' other course work and educational requirements. The course, Library 127, is a prerequisite or corequisite for Writing 123.

Enrollments for Library 127 Sections*

Term	F 98	F 99	W 99	S 99	F 00	W 01	S 01	F 01
Sections	12	11	10	9	11	8	7	10
Seats Taken	302	291	225	174	282	223	182	296

Data is from fourth-week enrollment reports.

*The number of sections has declined due to lack of qualified part-time instructors.

Bibliographic Sessions

Library faculty also teach short sessions for individual classes at the request of faculty

Term	F 98	W 99	S 99	F 99	W 00	S 00	F 00	W 01	S 01
Sessions	6	5	0	6	4	2	7	3	3
Students	160	73	0	40	50	11	142	8	12

Figure 5-3

Our Library was among the first in Oregon to develop electronic reserves. First conceived to help students at a distance, it quickly became popular with many faculty who find it convenient to bring materials to the circulation office for scanning and processing. The public services librarian instructs faculty on copyright issues related to e-reserves and oversees the program. Students access the electronic materials from the Library Web page. Of course, print reserves are still processed and available at the circulation desk.

Another service is Orbis Borrowing. Students and faculty can place a request for items in the Orbis Union catalog by simply entering that request online while searching that database. Books are circulated among the 18-member institutions via a courier. Most books arrive within 48 hours after the request is placed.

The Library maintains a thorough set of Web pages covering our resources, services and policies. Access to electronic library resources from off campus

is available through a proxy system. Media maintains a set of pages covering these same areas, special programming and telecommunications services. See <http://www.cocc.edu/library>, and <http://www.cocc.edu/media>, respectively. The media pages contain up-to-date copyright information.

The Inter-Library Loan department offers advanced electronic systems for information retrieval and delivery. COCC is part of the OCLC inter-library loan program that is international in scope. COCC can acquire materials for patrons from all over the world. The Library runs the latest version of the Ariel program developed by the Research Libraries Group. The Ariel program scans print journal articles and transfers them across the Internet. By processing documents received electronically with another system called Prospero, we can deliver electronic ILL requests to the patron's desktop via e-mail.

Media Services to Students and Faculty

The COCC Media Center supports students and faculty by providing lamination, digital scanning, audio/video/CD mastering and duplication, AV equipment scheduling and setup, 35mm and digital photography, digital and 35mm-slide mastering, and audio and video encoding for Web services. The Media Center also provides digital video production services for the College, including scriptwriting, digital video taping and editing. Projects have included Library virtual tour, library skills video, Community Education promos, College commercials and technology video. The Media Center also purchases faculty videos, provides installation and technical support of multimedia rooms, as well as staffing and technical support of distance education classes. The Media Center has 32 individual video viewing stations and three AV rooms equipped with TVs and VCRs. Individual audio listening devices are available at the Media service counter.

Media Circulation

Videos circulated in-house to students and faculty

1998-99	1999-00	2000-01
866	1137	1221

Figure 5-4

5.B.2 Information Technology Services

ITS is comprised of five departments: management information systems, user services, network systems, telecommunications, and academic computing. ITS coordinates campus support of:

- administrative systems
- server management
- standards and policies
- data/video/voice networks
- technology purchasing
- project management
- desktop computing
- computer lab facilities
- digital media

A variety of online, World Wide Web capabilities provides faculty, staff and student access to resources and services for the five areas. A Web-based "Technology Service Index" (see <http://www.cocc.edu/adminservices/techservices/>) serves as the entry point to a comprehensive array of access links such as Helpdesk, course management tools, online training, technology policy/procedures, and the full set of Banner student/finance/administrative systems.

5.C Facilities and Access

5.C.1 Library Facilities and Access

A bond measure was passed in 1995 to build a new state-of-the-art library. The Library moved from a 17,000-square-foot building to one of 72,000-square-feet in spring 1998. The new building is designed as two joined wings of three floors each. The main building houses media and tutoring and testing on the lower floor. The second floor is the main entrance and houses circulation, ILL, reference, government documents and periodicals. The top floor houses the circulating collections. The building has seven group-study rooms and three group-media rooms. In addition, the North and South Oregon Rooms provide a special area for quiet reading and reflection. Decorated in the Mission style, they offer comfortable leather chairs and couches.

There are 814 chairs, 18 couches, 81 worktables and 156 carrels available in the building. There are enough quiet reading areas designed into the building that students can find a secluded place to work even if an event is taking place in the Library rotunda.

The library wing houses technical services and receiving on the lower level. The second level has a specially designed computer lab and electronic classroom. This floor has a separate entrance that can be

used when the rest of the Library is closed. The top floor has faculty offices and Library administration.

There are 28 public workstations in the main Library. The lab and classroom each have an additional 30 workstations. Live network and data jacks are situated throughout the building allowing patrons to bring in their own laptops and connect into the campus network.

Shelf fill rate is at 66 percent using only five of seven shelves. Calculations indicate the maximum collection size the building can hold with current available shelving is about 120,000 volumes.

The Library increased its hours during the regular terms at the beginning January 2001, adding 8.5 hours to its schedule resulting in 76 open hours each week of the term. Reference services are available 70 hours per week. The additional hours were the result of a student survey of library needs.

The COCC Library was granted Orbis membership in late 1999. Orbis is a regional consortium of 18 college and university libraries all sharing a similar systems platform. All the public universities of Oregon are part of the consortium, as well as many private colleges in Oregon and Washington. COCC is the only community college at this time, although several others are making application. The Orbis Union catalog holds records for more than 8 million items. In spring 2000, the COCC database was added to the Union catalog. Orbis Borrowing was opened to COCC students and faculty in May 2000. Orbis Borrowing is based on the powerful Inn-Reach system developed by Innovative Interfaces. Students can see the holding of every library in the system and determine what items are available for loan, requesting the items they choose directly within the same search session. Books are circulated with a courier system under contract with Orbis and patrons generally receive requested items within 48 hours. Orbis negotiates database licenses for its members, and COCC has taken advantage of discounted rates for some databases the College would otherwise be unable to afford. The Library offers more than 60 databases covering all subject areas. Most of these databases are available remotely so students can access them from home or anywhere they have Internet access.

OCLC Interlibrary Loan and COCC Book Circulation

	1998	1999	2000	7/01/01– 10/30/01
Borrowed	2,883	2,696	2,521	599
Loaned out	991	1501	1630	673
Total	3,874	4,097	4,151	1,272
COCC Circ	22079	22423	21058*	N/A

*Conservative projection based on probable circulation for two months lost data

Orbis Circulation

	4/15/00– 6/30/00	7/1/00– 6/30/01	7/01– 10/30/01
Borrowed	411	1976	579
Loaned out	209	1287	437
Total	620	3,263	1,016

Reference Statistics

	1997/98	1998/99	1999/00	2000/01
Directional	2,299	3,128	2,903	3,527
Reference	7,873	6,901	6,060	5,566
Research	607	397	166	215
E. Reference	0	18	78	90
TOTAL	10,779	10,444	9,207	9,398

Figure 5-5

The Library continually revises its Web pages to keep them current. Numerous services beyond the catalog and Orbis are available from the Library's Web pages. The Library offers a streaming video tour of the Library, access to electronic reserves, e-mail reference and Web forms for requesting materials from ILL. The art collection in the building is also represented on the Web.

5.C.2 Information Technology Facilities

Information Technology Services has committed to improving on- and off-campus access to technology for all faculty, staff and students as the primary goal for the biennium just entered. ITS has implemented a multi-phase project for improving network and desktop computing infrastructure involving:

- four-year lifecycle replacement of desktop computers;
- campus network backbone upgrade to gigabit bandwidth; and
- migration of wide-area network connection and service to the Oregon University System state-wide backbone with Internet II service.

Access and use of campus computing capabilities has increased dramatically in the last three years. On campus, roughly half of currently enrolled credit students have active accounts on the campus electronic mail system, which are free and available to all. An instructional Web authoring system now addresses faculty needs for developing online course materials and classes. Appropriately, 550 of the estimated 1,000 desktop computing systems at COCC are located in student-accessible areas such as microcomputer labs and classrooms.

To further improve access and use of network-based systems, Information Technology Services has begun a full migration to the Windows 2000 network operating system. Improvements in access and services for faculty, staff and students will include integrated electronic mail/calendaring, student Web pages, and shared network storage space for on- and off-campus access to stored files.

5.D Personnel and Management

Library and Media Services is under the management of the Library director who reports to the vice president of instruction.

5.D.1 Library Personnel and Management

The Library and Media departments are managed by the Library/Media director, two administrators and two full-time faculty. Library personnel consist of the director, the coordinator for systems and technical services administrative position, coordinator for public services, and the coordinator for collection development and instruction. The coordinator of systems and technical services is a 12-month professional administrative contract. The other two coordinators are regular

faculty positions following the standard promotion and tenure guidelines of the College.

The director of Media is an administrative position. The Library has six classified staff covering the areas of circulation, ILL, serials, secretary, acquisitions, and cataloging. Media has three classified, one in media services and two in technical support.

The Library hires part-time faculty librarians to teach Library 127 and work at the reference desk. This is approximately an additional 1.4 FTE of professional librarians. We hire an additional 6.1 FTE in student help using irregular wage and work-study funds. This information is available in the 1999 IPEDS report and the Fall 2001 American Library Directory listing (Exhibits 5.1 and 5.2). These figures do not include staffing for the computer lab in the Library.

The Library has a weekly departmental meeting with all full-time staff in the Library and Media. The Library/Media management team consists of the three full-time librarians, the director and the Media director. This team, called AIM, also meets weekly. AIM works on long-term planning, department needs and goals, and general problem solving. It decides policy and makes decisions about databases and large purchases.

Library professionals are deeply involved in regional library work either through Orbis committees, other statewide committees serving library, or through professional organizations such as the Association of College and Research Libraries (ACRL) division of the Oregon Library Association (OLA). The Library director serves on the Orbis council of directors.

The Library director is a member of the department chairs' committee, Chairmoot, the instructional team, and the co-team. The department chair committee consists of the instructional chairs, the deans and the vice president for Instruction. The instructional team consists of the deans, the vice president for instruction, the chief information officer and the head of registration. The co-team is the committee directed to manage coordination with OSU for developing OSU-Cascades Campus.

Standard Five Library/Media Organizational Chart

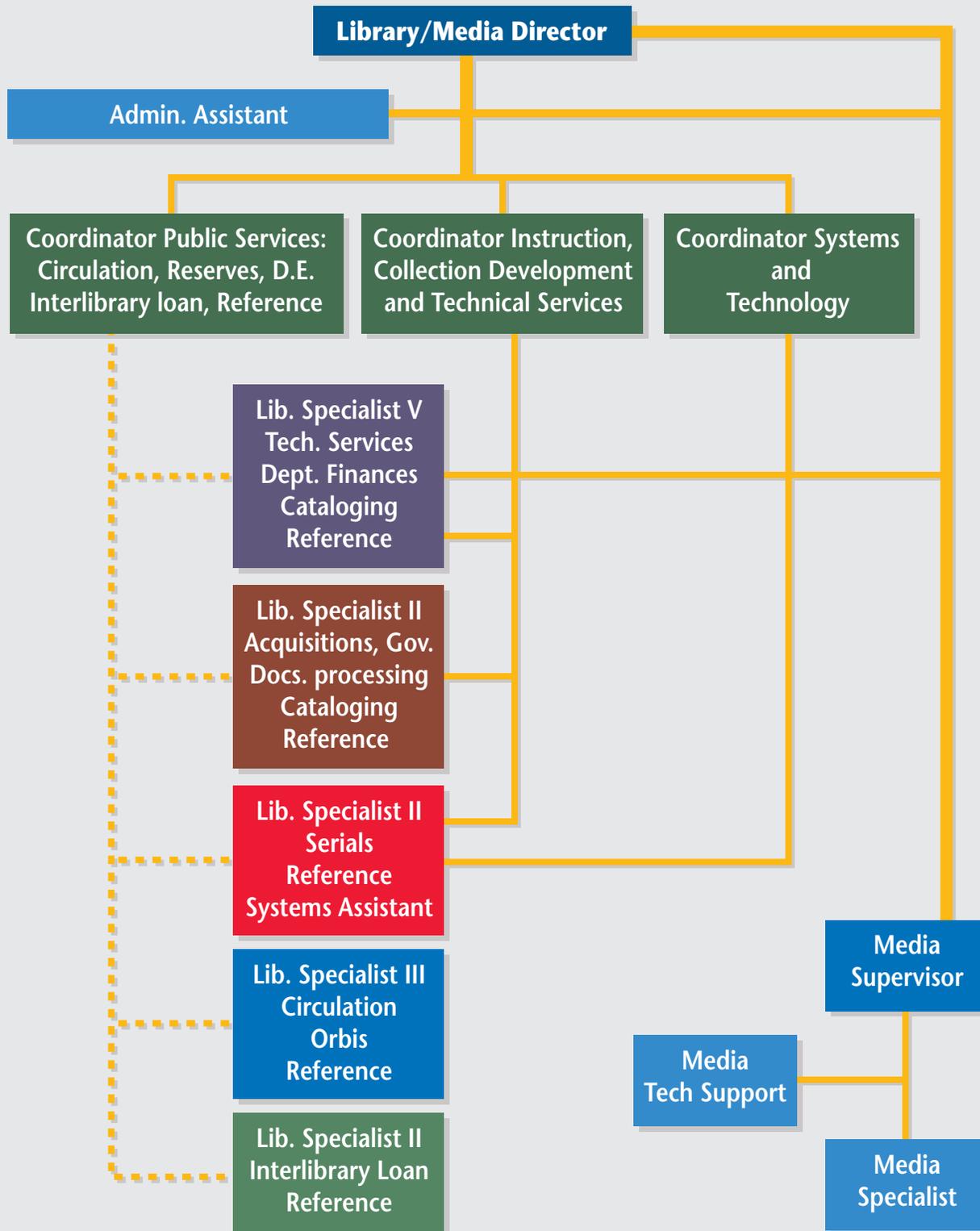
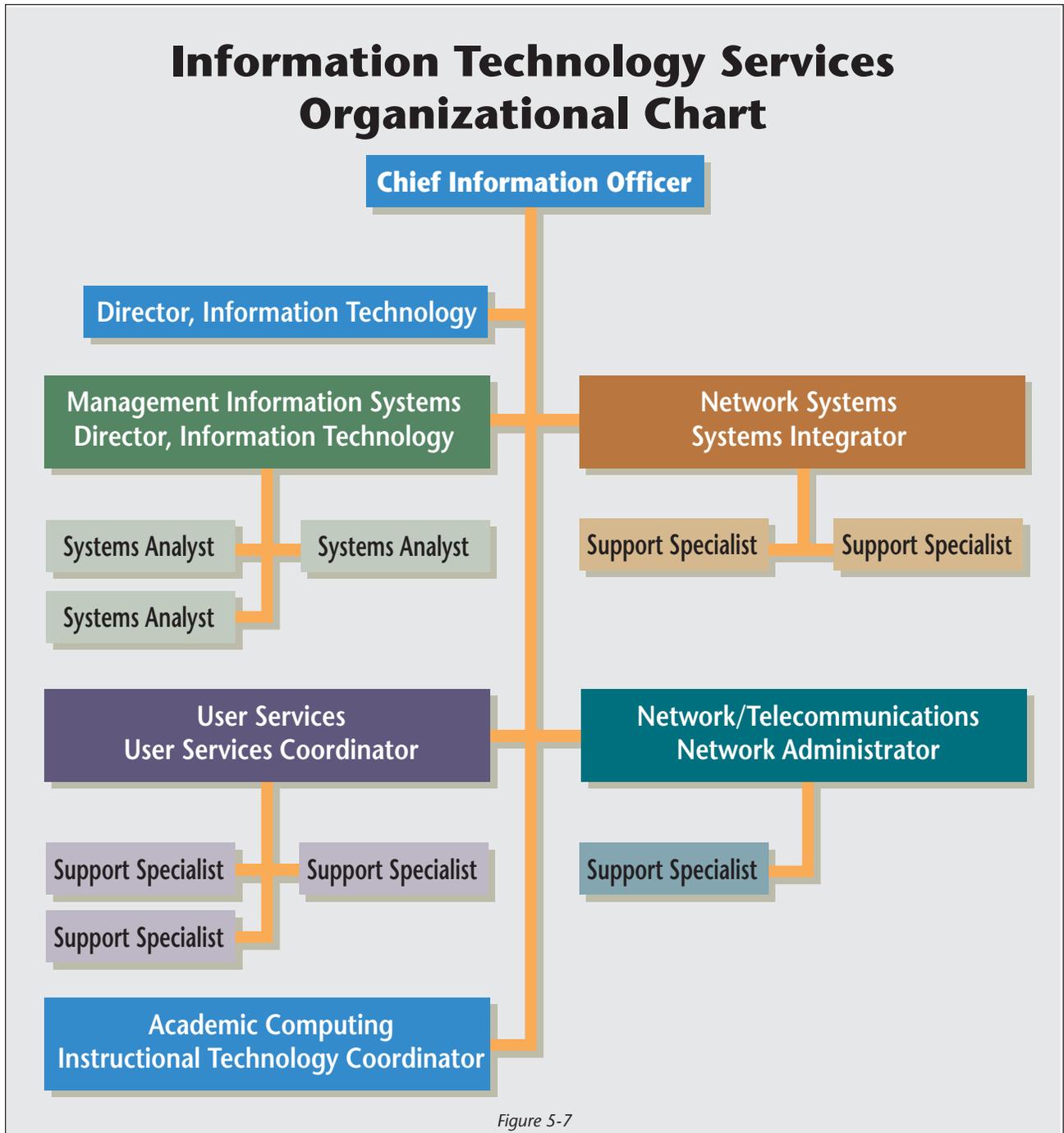


Figure 5-6

5.D.2 ITS Personnel and Management

Information Technology Services is directed by the chief information officer (CIO) who reports to the vice president for Instruction. As a member of the president's managers team, the CIO represents the information resource management viewpoint in strategic discussions. The CIO also chairs the campus technology advisory council, which is comprised of instructional and administrative leadership from across campus.

Information Technology Services consists of the five organizational units shown below, and with the exception of management information systems, each is directed by a separate midlevel manager. The management information systems group is led by the director of information technology, who doubles as the chief technology officer to assist the CIO in administration of the organization. Unit managers maintain budget responsibility for their area and serve as direct supervisors of staff in the unit.



5.E Planning and Evaluation

The Library director participates in the department chair meetings, as branch team leader and co-team participant.

5.E.1 Library Planning and Assessment

The Library realized that by 2000 it had reached most of its goals and needed to review where to go next. To do this, the staff planned a major event and did several follow-up surveys. The event, called the Library Advisory Meeting, was held in October 2000. The Library and Media departments invited key people from all areas of the campus to meet at a conversation-friendly and comfortable off-campus site for three hours one evening. All librarians prepared 10-minute presentations on the development and challenges in their particular areas. Staff then invited brainstorming in order to collect ideas from the group to take back and consider in planning. The five pages of collected comments resulted in some immediate changes (more workshops for faculty) and helped staff understand what the College thought should be the broad mission of the Library – service to the campus and the College sites in Madras and Redmond. But the comments also revealed that many of the Library's services are unknown by many faculty. A faculty survey was then widely distributed to determine what areas the faculty were uninformed about. The results of this survey confirmed that the Library needs to do more marketing of its services to the faculty.

In the spring of 2000, the public services librarian worked with the student council to devise a survey to gauge student interest and support for additional hours. Respondents clearly wanted more hours. The librarians met with student council and devised a schedule of increased hours that meet specific needs outlined by the council. Because many classes make assignments early in the week and ask for work to be turned in by the end of the week, students felt that longer weekday hours were the most important. The staff took this information to the president with the result that Library hours were increased by 8.5 hours per week during the regular terms. Students also indicated that more hours were needed in the Library lab and at the media services desk. Hours for the lab now match the Library's open hours, and the media desk hours were increased by one hour each night. Head counts and service data from each area indicate that the extended hours are being used.

The Orbis consortium has decided to allow interested members to circulate video materials in the

Inn-Reach system. The Media department and Library public services polled COCC faculty about this policy change. Staff then contacted each library in Orbis that was circulating or considering circulating videos. The result was a decision to allow our collections to circulate beginning in 2002.

Strengths

The Library and Media departments have had the opportunity to expand their operations in a building nearly four times the size of the old facility. The Library also has had the time to become accustomed to the building and fully grow into the use of it. At the same time staff members were planning and moving into the building, many advances in technology became available.

Part of the funding for the building went to new materials. In 1998-9 we added \$500,000 worth of materials to the collections. The Library has attracted excellent professional and classified staff to the Library and Media departments. Their abilities have allowed the COCC Library to advance services with the latest technologies. Staff taught some of the first Web-based classes at the College. The Library also implemented electronic reserves and electronic document delivery before most colleges in Oregon.

The instructional program is constantly revised for changes in information access. Many opportunities are offered to the Library as a member of the Orbis consortium. Funding from the University Center, and now OSU-Cascades Campus, has allowed the addition of many electronic resources not usually found at small colleges. The COCC Foundation also has attracted funding that helps both general collections and science collections. The Library is moving quickly ahead with the new Friends of the Library, which falls under the 501(c)(3) status of the Foundation. Hopefully, this will serve to attract additional donors to the Library.

Media services has standardized classroom equipment to include a TV/VCR, overhead projector, and wall screen and standardized multimedia classroom equipment to include multimedia projector, DVD/VCR player, audio amplifier with speakers, computer, multimedia cart/podium and wall screen. Faculty know what to expect when they walk into a classroom. Media advises faculty about copyright law and maintains a Web page of copyright law and resources, and the department offers a high level of expertise to technical support for upper- and lower-division distance education classes. The audio- and videotape collection is heavily used in support of

lower-and upper-division classes. Media materials are cataloged in the Library system and are checked in/out using the Library circulation programs.

Challenges

Although some one-time funding and Foundation support have helped the collections at COCC, the capital budget for books and journals has remained at \$80,000 annually since 1992. The Library is far from its goal of doubling the size of the collections five years from opening the new Library. This goal was set in preparation for increased upper-division offerings. However, the partnership with OSU may help increase collections, although COCC will not own these items.

While the new building may appear to be the biggest change for the Library, it is actually the membership in Orbis that has meant the most to advancing services in step with other colleges and universities in the region. Our membership in Orbis allows us to be considered for cooperative opportunities and new ventures not typically available to a community college. Orbis projects are advanced by the standing committees that investigate opportunities and make recommendations to the Orbis Council in a one-institution, one-vote management structure. Every professional in the Library is contributing to Orbis regularly. The director is on Orbis Council and each librarian serves on at least one Orbis committee. This is a significant drain on staff time and travel budgets.

The partnership with OSU will be both exciting and as demanding as the many other changes we have experienced to date. The COCC Library will be providing services to OSU and its partners in the OSU-Cascades Campus.

Professional staffing in the government documents area remains a struggle. The Library has been fortunate in finding very qualified part-time professionals to keep this area moving forward, but it has never been adequately staffed. Staff has focused more work on marketing access to government information, but has allocated only the hours needed to just keep this area from sinking. Coordination with Oregon State University-Cascades Campus is a possibility, however. There is significant need for the Library to ensure that local federal agencies send publications related to the region. The Library would like to make a commitment to acquiring, cataloging and holding these items in perpetuity.

The Library relies heavily upon qualified part-time professionals in reference and instruction for the

Library 127 courses. The College regularly advertises for more part-time instructional faculty, but these positions are difficult to fill.

The Media Department is challenged to migrate its video collection to DVD. Costs for this are under consideration. The department is also working to transition faculty from 35mm slides to electronic slides and to increase the number of campus multimedia rooms from 12 percent to 25 percent. Dramatic changes in technology obviously make it difficult to stay current with new media and distance education technologies.

5.E.2 ITS Planning and Assessment

ITS staff collects ongoing utilization and performance data related to campus infrastructure and systems, including network and systems performance reports and downtime/outage logs. User support services are assessed through the automated helpdesk, which generates reports on work orders submitted, time to completion and user satisfaction (online satisfaction surveys are forwarded automatically to users at the time of work order completion). An equipment inventory database is maintained for tracking hardware location, ownership, description and configuration data.

Inventory and assessment information is used to compare COCC's technology infrastructure, systems and support services to reported averages from state and national surveys. The following table of benchmark comparisons constitutes a feedback loop for operational and strategic planning:

Benchmark	Target	Current
Ratio of students (head count) to lab/classroom desktop workstations	10:1	13:1
Percent of faculty/staff with desktop workstations	100%	98%
Percent of classrooms with network access	100%	95%
Percent of classrooms with multimedia capabilities	25%	10%
Replacement cycle for general student lab/classroom workstations	4 years	None
Replacement cycle for specialized student lab/classroom workstations	3 years	None
Replacement cycle for full-time faculty/staff desktop workstations	4 years	None
Replacement cycle for part-time instructor/staff desktop workstations	5 years	None
Ratio of all desktop workstations to user support/helpdesk staff (FTE)	175:1	250:1
Ratio of student workstations to lab/classroom technical support staff	50:1	100:1
Ratio of faculty/staff desktop workstations to desktop/network support staff	50:1	50:1
Maximum (peak) data/video network utilization	70%	90%

Figure 5-8

Standard 5 Figures, Appendices and Exhibits

In Text

Figure 5-1: Collections Statistics

Figure 5-2: Information Technology Resources Chart

Figure 5-3: Library 127, Information Research Skills and Faculty Training Enrollment Statistics

Figure 5-4: Data on Media

Figure 5-5: Data on Interlibrary Loan usage, Orbis circulation and reference statistics

Figure 5-6: Library Organizational Chart

Figure 5-7: Information Technology Services Organizational Chart

Figure 5-8: Benchmark Chart

Exhibits

5.1 1990 IPEDS report

5.2 ALA Directory listing

5.3 Policies, regulations, procedures for developing Library and information sources, including collection development and weeding

5.4 Assessment measures utilized to determine the adequacy of holdings, information resources and services to support the educational programs both on and off campus

5.5 Data regarding number and assignment of staff

5.6 Comprehensive budgets

5.7 Vitae of professional Library staff and ITS staff

5.8 Formal written agreements with other libraries

5.9 Electronic database Access chart

5.10 Gate counts

5.11 Studies or documents describing the evaluation of Library and information resources