"I have always imagined that paradise will be a kind of library."

— Jorge Luis Borges

Standard Five — Library and Information Resources

Library
(www.library.weber.edu)

I. Purpose/Description

Overview (5.A.1, 5.A.2, 5.A.3)

The Stewart Library provides a broad range of information resources and services in support of WSU's mission and goals. Library services are provided at the Stewart Library at WSU Ogden and at the WSU Davis Library/Information Commons, a branch of the Stewart Library. Off-campus access to resources and services is available 24/7 through the library's website.

Collections include print, electronic, and audio-visual resources as well as access to an increasingly large number of electronic databases, books, and journals. A staff of 47.6 FTE provides service to the university community.

The library is a member of the Utah Academic Library Consortium and the Online Computer Library Center/ Bibliographical Center for Research (OCLC/BCR) network. It uses the Horizon integrated library system from Dynix, the 3-M Self-Check System, the Docutek E-reserve system, the EZProxy system for off-campus access to electronic resources and services, and the ILLiad interlibrary loan system.

Day, evening, and weekend hours are maintained to accommodate patron needs at both campuses. The Stewart Library is open 105 hours per week; the WSU Davis library is open 75 hours per week. Reduced hours are in effect throughout summer semester and during semester breaks. The library and its resources are open to the public. Borrowing privileges are available to members of the community through the purchase of a Community Borrower's Card.

The library supports and promotes the American Library Association's *Bill of Rights, Freedom to Read Statement, Intellectual Freedom Statement, Electronic Bill of Rights, and the ALA Resolution on the USA Patriot Act and Related Measures that Infringe on the Rights of Library Users.*

Mission and Goals

The Stewart Library's mission is to:

1) Advance the instructional, scholarship, and community service mission of WSU through the development of on-site collections, access to off-site resources, personalized assistance in the use of library and information resources, and instruction on research strategies and tools, and

2) Assess the services we provide and the relevancy and use of the collections and use assessment outcomes to continually improve our resources and services.

In support of WSU's mission to "provide students with high-quality comprehensive programs in professional and liberal arts areas as well as studies in advanced professional fields," the library has adopted the following strategic goals:

- **Continue to improve the quality and relevancy of the collection** by systematically assessing the information resources needs of the university community and developing a focused, core collection of print and electronic resources to support instructional and research needs.

- **Enhance access to information resources** by subscribing to electronic databases and full-text journals and, in consultation with faculty, canceling print subscriptions for titles available full-text online.

- **Provide a comprehensive information literacy instruction program** that includes for credit, online, and on-demand instruction in order to graduate students with information literacy competencies and skills that promote life-long learning.

- **Augment the library's budget** by increasing private donations by approximately 10% annually.

Resources & Services (5.B.1, 5.B.2, 5.B.3, 5.B.4, 5.B.5)

Based on feedback obtained from biennial surveys and interviews with WSU students and faculty, library resources and services are now adequate to support the university's curricular offerings. However, this was not always the case. The 1994 and 1996 Commission reports stated that there was "dramatic need for a major increase in support for library staff and materials" to meet accreditation standards. Our library staff and administration were in full agreement with those reports and took significant steps to assure that the library was in compliance with NWCCU standards. We:

- increased the library budget, in both state and gift funds,
- improved the collection (overall growth, greater use of technology, increased relevancy, increased user satisfaction), and
- increased FTE staff.

As a result of those efforts, the Commission's 1999 Regular Interim Report stated that: **"Much has been done to improve the Stewart Library since both the 1994 and 1996 visits. Improvements are clearly evident in three areas, Resources, Staffing (service), and Technology**. **Consequently, at this time there does not appear to be any question that the WSU Library meets the Standard IV, Library and Learning Resources."** As reflected in Table I on page 3, significant progress has been made in improving information resources since the 1994 review. While the number of electronic resources now available to students and faculty is particularly impressive, the collection has greatly improved in all areas. The print collection has increased 42%, the number of videos have nearly tripled, and the CD-ROM collection has grown from 32 to 1,552.

The Commission also stated in the 1999 NASC Regular Interim Report, "In the area of technology, [the Stewart Library] is no longer behind, but is most likely among the top 20% of electronically connected academic libraries in its class (i.e., comprehensive four-year colleges and universities)."

Library Holdings

Policies and procedures for systematic development and management of information resources in all formats are available on the library's website. These policies and procedures are reviewed and updated annually.

Electronic full-text is now our preferred method of providing journal articles, newspapers, and reference materials to library patrons. In 1997-98, the Utah legislature provided $900,000 of ongoing funds to the Utah Academic Library Consortium (UALC) for subscriptions to electronic databases. This funding provides students and faculty within the Utah system with access to a continually increasing number of electronic full-text titles. Using a computer with an internet connection, stu-

dents and faculty are able to access these resources from anywhere in the world at any time. Consortium funding of electronic databases has enabled the library to use funds previously spent on database subscriptions to acquire additional electronic and print resources and to make funds available to new faculty to secure core titles in their areas of interest.

As part of its ongoing transition to a more digitized library, the library will continue to increase its reliance on electronic full-text journals, supplemented by rapid document delivery for articles not available otherwise. It will also continue to monitor carefully the use of print subscriptions and, in consultation with academic departments, selectively cancel titles that are not heavily used or are available elec-

Standard 5: Table I. Library Holdings.

	2002-03	2001-02	2000-01	1999-00	1998-99	1997-98	1996-97	1995-96	1994-95	1993-94
Bound Volumes*	509,597	493,744	479,225	458,115	436,431	418,497	403,206	388,947[**]	370,987	359,892
Electronic Resources***	197,761	192,937	192,782	190,628	189,128	17,613	N/A	N/A	N/A	400
Journals (Current Print Subscriptions)	2,353	2,331	2,309	2,278	2,248	2,224	2,196	2,100	2,062	2,056
Government Publications (Unbound)	225,411	219,690	218,006	215,277	212,468	210,222	208,338	206,001	198,001	197,301
Audio Recordings	9,794	9,406	9,084	9,015	8,923	8,399	8,319	8,083	2,908	2,593
Video Recordings	8,363	6,712	5,708	5,088	4,380	3,458	3,137	2,755	2,516	N/A
Maps	64,894	64,529	63,352	61,988	61,300	60,063	59,373	58,849	59,603	57,181
Microforms (Fiche & Film)	584,461	563,362	540,194	515,370	492,899	471,729	453,390	441,780	425,007	N/A
Kits	786	749	678	668	646	624	590	573	589	553
CD-ROMs	1,552	1,381	1,149	948	503	500	493	38	32	30

*Includes books, bound periodicals and bound government documents.
**Based on a physical count of the collection completed 11-95.
***Based on data provided by the Utah Academic Library Consortium. Figures listed are system-wide totals representing the sum total of electronic books, indices, and journals to which each UALC library has access.

tronically. Print subscriptions to relevant academic journals that are not yet available electronically will continue to be added as needed.

To ensure that the online and on-site resources added to the collection are relevant to curricular needs, a librarian is assigned to each college. Subject librarians are responsible for consulting regularly with faculty and students in their assigned subject areas to assess instructional and research needs and to collaborate with faculty in developing the collection. Assessment surveys of faculty indicate that as a result of librarian/faculty collaboration, the collection is increasingly more focused and relevant to the curriculum. (See section 5.E.3: "Assessment of Resources and Services" for further information.)

Both the Stewart Library and the new Information Commons area of WSU Davis provide students and faculty with the full-range

"Libraries are not made; they grow."
— Augustine Birrell

of services expected of any academic library, including expert reference assistance and an information literacy instruction program that includes for-credit, online, and on-demand instruction.

The purpose of our information literacy program, which was nationally recognized by the Association of College and Research Libraries (ACRL) in 2002-03, is to provide students with the skills and knowledge needed to effectively identify, find, evaluate, and use information for academic success and to support lifelong learning — in other words, to enable students to become independent users of library and information resources. All WSU students are required to demonstrate computer and information literacy competency. The information literacy component of this requirement may be met by taking one of the library's for-credit courses or a competency exam.

In addition to its for-credit courses, the library provides instruction sessions for English 2010 and First Year Experience (FYE) classes and a continually growing number of course-integrated, subject-specific sessions. Students in the English 2010 and FYE sessions complete an assignment demonstrating their ability to effectively use library databases and internet resources. An increasing number of senior-level capstone courses also include an information literacy component and assessment on information literacy.

Along with their collection management and faculty liaison responsibilities, subject librarians are committed to providing course-integrated instruction to inform students and faculty of library resources available in their areas of interest, which we believe is essential if those resources are to be used. Academic faculty and librarians collaborate on the information to be covered in these sessions and students demonstrate their ability to use the resources in their required research papers.

The library's commitment to subject-specific instruction is evidenced by a 138% increase in the number of sessions offered over the past seven years — rising from 71 sessions in 1994-95 to 169 in 2002-03. An annual growth rate of approximately 10% is expected for the next three to five years.

To help faculty maximize their use of library resources, subject librarians frequently provide individualized instruction sessions. They also offer specially designed workshops sponsored by the Teaching and Learning Forum.

Facilities and Access (5.C.1, 5.C.2)

The facilities at both WSU Ogden and WSU Davis are pleasant, inviting, and adequate for information resources, equipment, and personnel. The Stewart Library is centrally located at WSU Ogden within easy walking distance of classrooms and parking lots, and the Information Commons at WSU Davis is a

state-of-the-art facility ideally located to serve students and faculty. Both meet ADA requirements, are adequately wired to support library technology, and are "wireless" to support the computing needs of students with laptops. Electronic access to library resources and services is available to WSU students and faculty anytime, anywhere.

The renovation of the Jack D. Lampros Teaching, Learning & Technology Hall (Lampros Hall) and relocation of some non-library departments and a student computer lab previously housed in the Stewart Library will free up additional growth space for collections and space to add a much-needed third electronic classroom. Private funding will be sought to cover part of the remodeling costs.

Utilization of Information Resources and Services

As indicated in Table II on page 6, the library's resources and services are well used. Use of our electronic resources is reflected in the number of visitors to our website — up 13% over 2001-02. Page visitors to our EReserve system increased from just over 10,000 in 2000-01 to more than 44,000 in 2002-03. Use of printed journals continues to decline, which follows a national trend and confirms that students and faculty prefer to use electronic journals when given a choice.

Contrary to the decline other academic libraries in Utah are experiencing, the use of our book collection continues to increase. While "user assistance" types of questions answered at the various service desks rose, the number of reference/research questions answered continues to decline. We attribute this to an easier, more stable method of off-campus access and increased student familiarity with using technology to access library resources. Enrollment in our online course, the internet Navigator, has increased from 523 students in 2000-01 to 2,046 in 2002-03. Three part-time faculty members were hired in 2002-03 to help us meet student demand for the class.

Cooperative Arrangements

The library has a number of cooperative arrangements with other libraries and networks including the Utah Academic Library Consortium (UALC), which now includes several Nevada academic libraries, the BCR, the AMIGOS Library Network, and the OCLC. All of these arrangements enhance our resources and services. Copies of formal agreements and licenses are available in the library administration office.

Personnel, Management, Planning (5.D.1, 5.D.2, 5.D.3, 5.D.4, 5.D.5, 5.E.1, 5.E.2)

From 1995-96 to 1999-00, when much of the campus was in retrenchment, budgeted library staff positions increased from 39.2 FTE to 47.6 FTE (21%). Part of the increase came about with the addition of three staff in 1997-98 funded by new legislatively allocated Education and General (E&G) funds. Funds for a fourth position were used to extend contract commitments for existing employees, increasing the FTE for those employees. An internal reorganization, economies of hiring, restructuring of several positions, and extending some nine-month faculty positions to 11-month appointments have all contributed to the increase in FTE. Additionally, the library employs approximately 21 FTE student assistants.

To provide the quality and quantity of library services needed to adequately support the information resources and service needs of the university community, our goal is to increase staffing by five positions.

Library faculty and staff are well trained, have expertise in their areas of responsibility, and are committed to providing quality library services to the community. All have current and accurate position descriptions in which authority, responsibility, and expectations are clearly delineated. All faculty and staff are reviewed annually and mutually agreed-upon goals are set for the following year. Ongoing training and professional development are

Standard 5: Table II. Utilization of Library Resources.

For rows under "Instructional Sessions" and the sub-rows "For Credit Classes" / "Internet Navigator," values are shown as **Sessions/Classes : Students**.

	2002-03	2001-02	2000-01	1999-00	1998-99	1997-98	1996-97	1995-96	1994-95
Circulation Statistics	147,329	145,879	148,583	146,818	145,920*	161,684	157,757	153,820	145,799
Web Site Visitor Sess.	326,378	288,339	250,729	188,047	N/A	N/A	N/A	N/A	N/A
Reference/Research Assist.									
No. of Questions	12,276	12,670	15,931	20,417	24,412*	30,303	36,642	37,060	32,625
User Assistance									
No. of Questions	38,723	34,108	34,668						
Instructional Sessions _(Sessions : Students)_									
Subject Specific	169 : 2,419	159 : 2,902	163 : 3,045	134 : 2,529	116 : 2,251	102 : 1,778	92 : 1,444	95 : 1,501	71 : 1,433
English 2010	101 : 2,152	100 : 2,199	96 : 2,248	96 : 2,091	97 : 2,062	78 : 1,783	75 : 1,657	91 : 1,900	78 : 1,560
FYE (First Year Exp.)	29 : 609	19 : 383	28 : 595	35 : 727	31 : 709	21 : 420	24 : 330		
Other	33 : 442	24 : 260	46 : 970	36 : 498	35 : 610	59 : 745	85 : 1,216	21 : 394	29 : 580
TOTALS:	332 : 5,622	302 : 5,744	333 : 7,191	301 : 5,845	279 : 5,632	260 : 4,726	276 : 4,647	207 : 3,795	178 : 3,573
For Credit Classes _(Classes : Students)_	13 : 351	9 : 251	11 : 300	15 : 460	14 : 245	20 : 408	16 : 418	25 : 488	21 : 449
Internet Navigator _(Classes : Students)_	18 : 2,046	11 : 1,173	7 : 523						
EReserve									
Faculty	161	158	157						
Items Available	3,452	2,557	1,876						
Page Visitors	44,525	37,774	10,274**						
Interlibrary Loan									
Lending Requests	8,847	8,805	7,682	6,089	5,909	5,551	5,099	5,654	5,353
Borrowing Requests	4,351	4,338	4,560	3,861	3,735	4,099	3,054	3,651	3,634

*Decreases reflect the change from quarters to semesters in 1998-99.
**Figure is for spring semester 2001 only; earlier figures not available.

essential, and resources are allocated to support the costs associated with improving the knowledge and skills of faculty and staff. In any given year, over 95% of the library faculty and staff will attend conferences, workshops, and seminars. Satisfaction data indicate a high level of student and faculty satisfaction with the quality of assistance provided by library faculty and staff. (See section 5.E.3)

We are committed to the team concept and are organized into functional areas:

- Collection Management/Faculty Liaison
- Information Literacy Instruction
- Reference & Information Services
- Systems & Access Services (Circulation, Interlibrary Loans, Media/Reserve, Library Systems)
- Bibliographic Services (Acquisitions, Cataloging, Serials, Binding)
- Archives & Special Collections

Strategic plans for the various areas and teams are available on the library's website.

Library faculty serve on the Faculty Senate and on university committees. The most relevant committees include:

- Academic Resources and Computing
- Curriculum and General Education
- Teaching, Learning, and Assessment
- Research, Scholarship, and Professional Growth
- Salary, Benefits, Budget, and Fiscal Planning

Faculty and some staff are members of the Utah Library Association, the American Library Association, the Association of College and Research Libraries, the American Society of Information Science & Technology, and the Special Libraries Association. Faculty also serve on a number of Utah Academic Library Consortium committees.

As a unit within the Academic Affairs Division, reporting to the provost, the library is fully involved in institutional planning. The university librarian sits on the Deans' Council and is a member of a number of university committees. Subject librarians regularly communicate with faculty and students in the departments

for which they have collection management/faculty liaison responsibilities and serve as advocates for the information resource needs of those colleges/departments within the library.

Since 1996, the institutional curricular planning process has included mandatory consultation with the library. Subject librarians review all new course/program proposals in their subject areas to assess the adequacy of information resources to support the new course/program prior to its approval by the Curriculum and General Education Committee. On those very rare occasions when resources are determined to be inadequate, funds are allocated to acquire the needed materials prior to the time the new course is taught.

Excellent working relationships exist between the library and other departments on campus. As information resources are increasingly web-based, the library works especially closely with departments located in the Information Technology division and relies heavily on the strong support it receives from Computing Support Services, Systems and Networking, and Telecommunications.

Library Budget (5.D.6)

The library receives operating funds from three sources:

- E&G monies allocated to WSU, both ongoing and one-time
- State monies allocated to the Utah Academic Library Consortium (UALC)
- Gifts

E&G

Ongoing E&G monies to support library resources, services, and staffing increased from $2,185,955 in 1994-95 to $3,045,141 in 2002-03, a 39.3% increase. The $82,848 decrease in E&G funds from 2001-02 to 2002-03 reflects a university-wide decrease in legislative funding.

As illustrated in Table III on page 8, the total library budget from all three sources has

Standard 5: Table III. Stewart Library Budget.

	2002-03	2001-02	2000-01	1999-00	1998-99	1997-98	1996-97	1995-96	1994-95
E & G Base:									
Salaries	1,471,594	1,483,766	1,379,951	1,304,235	1,238,049	1,214,231	1,083,262	1,048,014	976,151
Resource Information	987,217	1,066,347	1,066,314	1,084,314	966,476	794,973	784,015	810,736	700,000
Operations	0	0	18,000	25,560	60,000	100,292	92,013	75,000	50,368
Hourly Wages	25,000	12,945	29,203	34,169	54,169	87,288	84,746	76,164	73,731
Travel	0	0	0	0	8,500	8,500	8,500	8,500	8,500
Benefits	561,330	564,931	526,864	498,514	450,302	444,543	418,843	404,899	377,205
TOTAL	**3,045,141**	**3,127,989**	**3,020,332**	**2,946,792**	**2,777,496**	**2,649,827**	**2,471,379**	**2,423,313**	**2,185,955**
Legislative One Time:					55,800				
UALC									
One-time/ Ongoing*	219,204	220,606	183,000	183,000	183,000	183,000		155,900	
One-time/ Not - Ongoing		27,500							
Horizon Software								25,431.72	5,731.55
Horizon Hardware								86,540.23	22,634.50
Horizon Server								(64,263.00)	
Horizon PCs								21,132.90	21,300.00
Horizon TOTAL								**140,338****	
Gifts	176,329	571,840	423,061	366,166	595,410	281,336	421,820	215,276	110,269
TOTALS	**3,440,674**	**3,947,935**	**3,626,393**	**3,495,958**	**3,611,706**	**3,114,163**	**2,893,199**	**2,934,827**	**2,296,224**

*For information resources **Total includes 1995-1997

increased substantially, rising from $2,296,224 in 1994-95 to $3,440,647 in 2002-03, an overall increase of 49.8%. These increases in E&G, UALC, and gift funds have enabled the library to make significant progress in improving its collection of information resources.

With the exception of funds to acquire additional staff, the library's overall budget (E&G, UALC funding, and gifts) is minimally adequate to meet current basic operational needs. This assessment of adequacy is based on the assumption that if information resources and facilities are perceived to be adequate, as is indicated in our various assessment surveys, then the budget providing them must also be adequate. (Funding to maintain and secure the network and information technology is addressed in Information Resources later in this Standard.)

Assessment of Resources and Services (5.E.3.)

Assessing the quality of our resources and services and making improvements based on the information received from our assessment efforts is an ongoing priority. The data cited reflect, from a user's perspective, recent efforts to enhance library services and improve the collection and make it more relevant to the curriculum. Additional information on our assessment efforts is available under "Assessment" on our website (programs.weber.edu/assessment).

Student Feedback

The Noel-Levitz Student Satisfaction Inventory (SSI), which WSU administers every three years to approximately 1,000 students (weber.edu/ir/surveys.htm) includes two statements relevant to the library: "Library staff are helpful and approachable," and "Library resources and services are adequate." Based on a Likert scale, trend data indicate students' satisfaction levels with library resources, and services have increased from 1997 to 2003.

Results from in-house interviews conducted in 1998-99 and again in 2002-03 with over 200 students who were using the library indicated strong satisfaction with library resources and services. Approximately 90% of the students interviewed in 1998-99 and over 93% of those interviewed in 2002-03 said they were satisfied with both the assistance they received and the resources available to them.

Biennial in-house surveys are conducted to assess student satisfaction with the services provided in the public service areas of the library. The results of these surveys indicate an overall high level of student satisfaction. Over 95% of the respondents in 2002 indicated they were satisfied or very satisfied with the quality of service provided in the various Access Services areas. Student satisfaction with Reference & Information Services was similarly high. Over 94% of the respondents indicated overall satisfaction with the assistance provided by reference staff, 89% were satisfied with the electronic resources, and 88% expressed overall satisfaction with the library's website. Following the redesign of the site in 2003, we expect overall satisfaction will be higher in the future.

Student evaluations are collected for all library courses, for the sessions provided for English 2010 and FYE classes, and for a repre-

Standard 5: Table IV. Student Satisfaction Data.

Noel-Levitz Question	1997	2000	2003	Difference between 1997 and 2003
13. Library staff are helpful & approachable.	4.97	5.50	5.34	0.37
18. Library resources & services are adequate.	4.49	5.26	5.32	0.83

Scale: 1=not satisfied at all, 7=very satisfied

sentative number of subject-specific sessions. In 2001-02, 96% of students surveyed in English composition and First Year Experience courses indicated satisfaction with the course-integrated instruction provided by library faculty and staff.

Faculty Feedback

Faculty satisfaction with library resources and services is assessed biennially also. Consistent with the student feedback cited earlier, the results of our faculty surveys indicate strong faculty satisfaction overall with library resources to support their teaching and student assignments and with the general knowledge, efficiency, and helpfulness of library staff. On a one to five satisfaction scale, nearly two-thirds of the faculty respondents in 1998-99 and over 80% of the respondents in 2001-02 indicated they were satisfied or very satisfied with library resources, and 95% (1998-99) and 97% (2001-02) indicated similar levels of satisfaction with the library staff.

Focus Groups

The library routinely uses student, faculty, and its Friends of the Library advisory board as focus groups to assess and help improve specific services. A recent example is usability testing of our website. Focus groups provided important input on what they didn't like about our old site and that information was used in developing the new site. Focus group testing of the new site resulted in additional improvements that made the site more intuitive, user friendly, and graphically pleasing.

II. Significant Changes Since 1994

Although our library mission has not changed significantly since 1994, we have made a number of important changes—some in response to recommendations contained in accreditation reports, and others as a result of our various assessment activities. Significant changes relevant to our stated goals include:

Continue to improve the quality and relevancy of the collection:

- Improvements made to the on-site and online collections (see Table I on page 3).

- Because of the growing importance of web-based resources, the library's website was redesigned and professionalized and ongoing usability studies were instituted.

- A document delivery service now delivers library-owned and interlibrary loan materials to faculty and staff.

Enhance access to information resources:

- A full range of library services is now available at the WSU Davis Information Commons.

- Off-campus access to electronic resources was significantly improved and simplified with the installation of EZProxy software.

- An electronic reserve system (EReserve) was implemented, which allows students to have 24-hour access to materials placed on reserve by their professors. The use of the system has increased from approximately 10,000 users in 2000-01 to more than 44,000 in 2002-03.

- More than 65 additional computers have been placed in the public areas of the library to better meet the computing needs of students. The library is also completely wireless.

- Library hours have been increased to 105 hours per week, up from 93, during regular semesters. This is comparable to hours at the University of Utah, Utah State University, and Brigham Young University libraries.

Provide a comprehensive instruction program:

- Our instruction program was redesigned to meet information literacy standards established by the Association of College and Research Libraries (ACRL) and the American Association of Higher Education.

The newly designed program was acknowledged nationally in 2002 when it was selected by ACRL as one of the top ten programs that model best practices in information literacy programming for undergraduates.

Augment the library's budget:

- The Friends of the Stewart Library organization was established and has grown to approximately 350 dues-paying members.

- Ongoing Utah Academic Library Consortium funding.

III. Strengths and Challenges

Strengths include:

- Continue to improve the quality and relevancy of the collection — improvements in online and on-site collections, systematic assessment process that informs efforts to improve services and enhance resources, and user satisfaction.

- Enhance access to information resources — availability of an increasing number of electronic resources with easier off-campus access.

- Provide a comprehensive instruction program — information literacy focus of instruction program.

- Augment the library's budget — funding sources.

Challenges include:

- Continue to improve the quality and relevancy of the collection — address the increasing needs of students and faculty for library resources and services.

- Enhance access to information resources — increased demand for online resources.

- Provide a comprehensive instruction program — maintain quality service to meet expanding needs.

- Augment the library's budget — increase private funding.

IV. Next Steps/ Action Items

We hope to accomplish the following in the near future:

- **Continue to improve the quality and relevancy of the collection.**

  - Continue to collaborate with faculty in developing and managing the collections

  - Hire a Health & Life Sciences Librarian

  - Hire an Arts & Humanities Librarian

  - Integrate assessment procedures and outcomes more fully into all Bibliographic Services processes (acquisitions, cataloging, serials, and binding); develop departmental outcomes and assessment plan; implement plan

- **Enhance access to information resources.**

  - Continue to increase access to electronic resources

  - Develop a comprehensive technology plan and budget for technology upgrades and replacements

  - Hire a Library Technology Support Assistant

  - Re-configure Reference & Information Services to combine the best features of the information commons concept with those of traditional reference services; assess patron needs, explore different staffing patterns, develop plan; reconfigure space

- **Provide a comprehensive instruction program.**

  - Explore viable options for shifting staff from static growth areas to growth areas such as collection management/faculty

liaison and information literacy
instruction

- Incorporate information literacy concepts
into more upper-division and online
courses. Work with faculty to develop
assessment procedures and learning out-
comes

- **Augment the library's budget.**

  - Seek E&G funding for five additional
  positions over the next three years

  - Increase fund raising and grant writing
  efforts

  - Seek to move up in priority on the USHE
  capital improvements list

Information Resources

(departments.weber.edu/list)

I. Purpose/Description

Overview (5.A)

Our Division of Information Technology came into being in 1994 with the hiring of our first vice president of information technology or "Chief Information Officer." This was one of the primary recommendations of the Edutech consultants hired in 1993 to help us plan and prepare for the next wave of technological change. Ten years later, it is clear that information technology will continue to be a significant force in 21st century higher education.

Organized in 1994 to provide centralized support for critical information technology services, the IT division was formed by bringing all but one of our existing technology support departments together under one administrative structure. These included:

- Academic Computing
- Administrative Computing
- Communications Arts & Technologies (previously A/V, now evolving into Multimedia Services)
- Telecommunications

The lone exception was Electronic Systems & Repair, which remains in Facilities Management. Electronic Systems & Repair staff maintains the physical properties of our telephone and data networks and performs limited desktop computer repairs, both as "charge-back" services.

A decade later, after a series of consolidations and reorganizations, the IT division in 2003 contains the following information technology support departments:

- CIO Office
- Administrative Computing (Application Support & Data Administration)
- Systems & Network Management

- Technology Services (Computing Operations, Computing Support & Multimedia Services)
- Telecommunications
- Web Development

One of the major trends driving these changes was the gradual evolution of higher education computing from the centralized academic computing models of the 1970s and 1980s to the decentralized desktop computing model of the 1990s. A more recent driving force was the emergence of the internet as a major medium for instruction and the transmission of knowledge.

Just as many of today's pocket computing devices and telephones have substantially more computing power and data storage than the multimillion dollar glass-house computing behemoths of the late 1960s, tomorrow's computers promise to be even more amazing. With the growing availability of high bandwidth networks in the U.S., the ability to share and transmit images and information of all kinds will also continue to expand significantly. The IT division is prepared to help our students, faculty, staff, and administrators use these new capabilities to the fullest extent.

Mission and Goals

Since 1994, the IT division's mission and goals have evolved within a participatory planning process involving students, faculty, staff, and administrators (see departments.weber.edu/it/itplan/). The current mission and goal statements are from the 2002-04 IT Planning Cycle. The IT division's mission is:

". . . to ensure that WSU students, faculty, staff, and alumni are able to securely and reliably access and update WSU information from any web-enabled device, anywhere in the world."

The IT division's goals for 2002-04 are to:

- Provide effective guidance and support for continued technology evolution.

- Ensure a solid technology base for teaching, research, and public service.
- Achieve maximum benefit for our community from emerging technologies.
- Implement effective strategies to improve IT division service and performance.

Resources & Services (5.B)

Our primary information technology support resource is the highly qualified professional staff of the IT division. In a decade of generally declining resources, the number of professional IT staff has grown from 25 in 1993 to 45 in 2003. This has been accomplished through careful planning and reallocation of resources, including reassignment of some positions from other administrative units. Administrative overhead has been kept to minimum, with only the CIO and two classified support staff in the CIO office and the six managers/directors of the IT departments. In 2003, after the retirement of a long-term employee, an additional consolidation reduced the number of managers to five. Competitive searches following resignations and retirements have raised both the overall skill-set quality and salaries of the IT professional staff.

The second most important IT support resource is the quality of our data/telephone network. Three phases of the data network development plan begun in 1995 have been completed. Students, faculty, staff, and administrators currently enjoy the benefits of a highly reliable fiber optic-based Switched Fast Ethernet (Gigabit) data network among all major buildings. Wireless access to our network is becoming increasingly available. In 2003, approximately 24% of the Ogden campus offered wireless connectivity. WSU Davis has complete wireless access in addition to numerous high-speed hard-wired connections.

Phase IV of the network plan is underway and will result in general availability of 100 Mb network connections to the desktop, through gradual replacement of wiring in older buildings. It will also increase network reliability through addition of diesel generator emergency backup power to the network operations center, addition of redundant internet access

connections, and completion of the last segment of the campus network ring. The emergency power backup and redundant internet connections were completed by summer 2003, while the other tasks will continue into 2004.

Our digital telephone network includes many advanced features including a message management system that combines voice and data messages. Telephone rates charged to the departments are the lowest in the Utah System of Higher Education for both equipment and services.

Another important resource is the Utah Education Network (UEN). UEN provides and maintains our access to the internet and other electronic resources. Working with UEN engineers, we have been able to identify and implement creative solutions to network access problems. For example, integration of the WSU Davis and WSU Ogden networks was accomplished through cooperative efforts among WSU, UEN, and the telecommunications provider.

When completed, the WSU "Lynx" suite of administrative systems will constitute both a significant accomplishment and important new resource. The new core SCT Banner finance, human resource, student, and alumni/development systems provide a level of data integration well beyond that of the previous software. This includes combined functionality with our portal (Luminis) and learning management system (WebCT Vista). By fall of 2005, students, faculty, and staff will have access to information and services that offer higher levels of self-service and richness of scope and detail.

Utilization of IT Resources & Services

Central computing facilities for students, faculty, and staff boast excess capacity, resulting in few, if any, user complaints. Network bandwidth is carefully monitored and controlled so that overall usage is generally less than 25% of capacity. Other centralized resources, including mainframe computing resources and expensive software (e.g., Oracle database), are

more than adequate with usage rarely exceeding 15% of capacity. In addition, WSU recently joined the Internet2 Consortium as an affiliate member, providing virtually unlimited high performance computing and networking capabilities to science faculty and students.

Decentralized computing facilities have grown significantly over the past ten years. The first multimedia-equipped classroom was created at WSU Ogden in 1993. In keeping with the
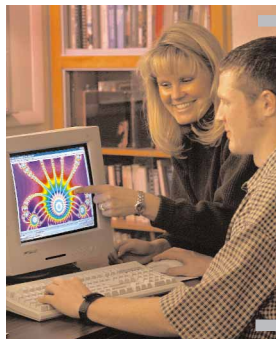
"Between now and the year 2010, best practices in knowledge sharing will be substantially reinvented in all settings …"
— Norris, Mason & LeFrere, Transforming e-Knowledge (Ann Arbor: Society for College and University Planning, 2003)

Academic Computing Plan at the time, nine more classrooms were multimedia-equipped beginning in 1995. There are now approximately 50 heavily scheduled multimedia classrooms at WSU Ogden and five at the Gordon Avenue facility in Layton. At WSU Davis, there are 31 additional state-of-the-art multimedia classrooms, 10 of which have computer student stations.

The total number of desktop computers has increased significantly. In 1993 there were approximately 1,700 desktop computers university-wide, including 168 in open student computer labs and 330 in departmental computer labs. In 2003, Property Control reports approximately 2,500 desktop computers, including 400 in open student computer labs and 450 in almost 20 departmental computer labs. In that period, the number of open computer labs grew from five to nine. Student use of both the open and departmental labs is consistent and steady. The long lines of students waiting for a computer in the early 1990s have disappeared, except in the testing centers during mid-term and final exam periods.

Computing support is provided through a combination of mechanisms. The Technology

Services professional staff is limited to four individuals and a manager. However, they work cooperatively with the academic colleges, four out of seven of which have a dedicated technical support person (the College of Applied Science & Technology has two). Technical workshops are offered regularly by Multimedia Services in a wide variety of software packages and applications. In addition, the Help Desk is staffed by trained undergraduate students who are certified at different levels of training and experience. In addition to staffing the Help Desk, these "student techs" also go to individual faculty and staff offices to help resolve computer problems. The response time on any particular problem rarely exceeds 24 hours.

There is also a Student Technology Assistant (STA) program sponsored by the faculty Teaching & Learning Technology Roundtable (TLTR) and funded by Academic Affairs. The STAs participate with faculty on pre-defined cooperative technical projects. Cooperative projects are also carried out between faculty and the professional staff in Multimedia Services. The number of these partnered projects has increased from approximately 267 in 1995-96 to approximately 450 in 2001-02, representing a continuing annual growth rate of approximately 10%.

Facilities and Access (5.C)

In addition to the multimedia classrooms described in the preceding section, current facilities include attractive and functional open and departmental student computer labs, an open faculty experimental computer lab, and two attractive dedicated training facilities equipped with the latest multimedia equipment. Almost all are ADA accessible. WSU Davis includes a state-of-the-art technology commons that is physically isolated from the rest of the building for 24-hour access when need and resources require and allow.

Funding, programming, and architect/contractor selection were completed in 2003 and construction initiated for a new technology center in Lampros Hall at WSU Ogden. This will bring together a combination of student and faculty technology support elements, including a 24-hour open student lab, additional testing center, faculty experimental facilities, and Technology Services and WSU Online support staff.

"Virtual" information technology facilities are provided through a combination of sophisticated databases, networks, and software tools. For example, our highly successful online university, WSU Online, is a complete virtual university environment including tools for instructional development/presentation, tracking, testing, and grading student progress. Because it has proven so successful (with approximately 8,000 class enrollments in spring 2003), it outgrew its humble home-grown beginnings. In spring 2003, the university began migration to the commercially developed and supported WebCT Vista learning management system.

Other virtual facilities are provided through the combination of integrated electronic messaging systems (including lifetime e-mail accounts for students, faculty, staff, and alumni), student and faculty/staff "portals," numerous web-based self-service applications, and new web-based administrative software. Just a few examples of the impacts of these heavily used systems include:

- Availability of a "Direct to the Web" personalized web page for prospective students
- Most students are now admitted and register online
- Grades (both submission by faculty and distribution to students) are now totally online

In cooperation with the Utah System of Higher Education (USHE), we began a highly participatory process in 1999 to select new online administrative data systems. Two outside consulting firms were employed (one by USHE, the other by WSU), and interviews and focus groups were conducted with hundreds of students, faculty, and staff. Students agreed to a modest dedicated tuition increase to help fund

the project, and a system-wide contract for SCT Banner software was signed. The implementation process is now underway, beginning with the implementation of the Campus Pipeline Luminis student portal in March 2003 and Banner financial system software in July 2003, and ending with implementation of the student information system (fully integrated with the new WebCT learning management software described earlier) in 2005.

Personnel, Management Planning (5.D.1, 5.D.2, 5.D.3, 5.D.4, 5.D.5, 5.E.1, 5.E.2)

As indicated earlier, the IT division is responsible for university-wide information technology support, including:

- Administrative systems
- Telephone network
- Data network
- Internet access
- Online services
- Multimedia support
- Help desk
- General computing support

In general, schools, colleges, divisions, and programs are responsible for acquiring information technology resources for their individual units, with assistance from the IT division only as needed. Therefore, our IT plan focuses primarily on university-wide IT services and issues.

IT division employee evaluations are conducted annually and performance is measured against division goals and individual department objectives. This is done within the context of a two-year "rolling" planning cycle. Major IT division objectives tend to be multi-year, requiring a broader view of progress than is typically afforded by an annual planning cycle. The lead article in the May 2002 Edutech Report provided the foundation for the IT division's 2002-04 planning and assessment cycle. One of its observations was particularly pertinent: "No constituency on campus except the IT staff is likely to ask explicitly what [the IT] vision is . . . To most others, it is sufficient that things work."

Effective use of information technology requires qualified and dedicated professional staff capable of combining the various elements required to provide services and functionality. Our IT professional staff are constantly engaged in professional development activities of various kinds. These include professional certifications, training and seminars, online instruction, and professional conference attendance. IT staff strive to assure high levels and quality of service while constantly working to improve the technical base and keep it solid. They have exhibited success in positioning to anticipate and accommodate change while discontinuing obsolete technologies and services that are no longer needed. For example, elimination of microfiche, Scantron grade reporting sheets, printed grade reports, and telephone registration have improved service and reduced costs.

From a formal organization and planning perspective, the IT division works closely with the faculty Academic Resources and Computing Committee (ARCC) on academic computing issues and the Administrative Technology Advisory Committee (ATAC) on administrative computing issues. The CIO chairs the IT council, which meets twice a month. It includes representatives from ARCC, ATAC, WSU Online, and the IT division directors and managers. The CIO is a member of President's Council and serves as liaison between the various groups.

The first formal IT plan was coordinated and developed by the CIO and published in June 1995. Since then, the plan has evolved and been updated approximately every two years. The 1998-00, 2000-02, and 2002-04 plan documents are all available on the web. Policies, regulations, and procedures for development and management of IT resources are made available to the university community via:

- Online policies and procedures manual (PPM)
- Periodic bulletins (both electronic and hard copy)
- Various web sites
- Faculty/staff portal unveiled on November 4, 2002

Information Technology Budget (5.D.6)

The IT division receives operating funds from five sources:

- State-appropriated E&G funds (81.5 %)
- Telecommunications self-support revenues (7.5 %)
- A portion of the WSU Online course delivery fee (7.5 %)
- The Utah System of Higher Education Telecommunications & Distance Education Initiative (2.7 %)
- Gifts and overhead cost recovery fees (.8 %)

Since 1993, the IT division budget has doubled, from approximately $2.3 million to approximately $4.6 million.

As indicated, since we are not a research university and only one donor contributes to IT on a regular basis, revenue from overhead cost recovery and gifts represents less than one percent of the budget. The largest increases have come from the online course delivery fee (which did not exist prior to 1997 and is being used to fund our online learning management system) and a dedicated tier two student tuition increase (initiated in 2000 and used to fund most of our new web-based "self-service" administrative systems).

Our IT budget is less than the Gartner-recommended 5% of the overall institutional budget for an institution of this size. However, it is better than all but the research universities in the Utah System of Higher Education. Currently we enjoy the benefit of a relatively stable revenue stream that is adequate for current levels of service.

Assessment of Resources and Services (5.E.3.)

Our most important assessment efforts are those that occur as part of the ongoing IT planning process. Draft update documents are posted on the web related to achieving current goals, and new goals, objectives, or initiatives are published for review and comment. Most frequently, specific student, faculty, or admin-

istrative groups are assembled to provide input into current plans. For example, we worked closely with student government leaders and other representatives in the selection and implementation of a student portal. This included discussion before the Student Senate, vendor demonstrations, and solicited feedback. These settings provide opportunities for comments on both current services and future plans.

Technical resource evaluations take place on a regular basis. For example, technical tests are applied periodically to ensure that firewall protection of our data network is functioning properly and the safeguards protecting sensitive data are doing their job. Other technical evaluations are used to determine network load patterns and usage levels by constituents. During peak processing times (e.g., the first two days of open registration for any given semester), usage levels and response times are monitored more or less continuously. Adjustments in system parameters are made as needed to ensure user needs are being met. Several times in the past eight years, new hardware was acquired when it was clear that increased usage had exceeded, or was about to exceed, system capacity.

Continuous feedback is solicited from IT division web sites and eBulletin announcements. A responsible party and contact e-mail address is required for all bulletins and web pages. User comments are usually responded to within a few hours, but in no case more than 24 hours. Electronic feedback works extremely well for us because it is spontaneous and immediate. Issues that surface are addressed without delay while they are fresh and most pertinent to those concerned.

On a less regular basis, common service evaluation mechanisms have been used with some positive results. For example, customer satisfaction reply cards have been left by student technicians upon completing a Help Desk service call. Also, open meetings and focus groups have been attempted to solicit comments and

suggestions. These have proven less effective and are not generally well attended in the absence of a crisis or specific problem. As was indicated earlier, the nature of information technology is that if it is working, people generally take it for granted. When it is not, the level of interest spikes momentarily but quickly recedes as soon as the presenting problem is resolved.

II. Significant Changes Since 1994

Many of the significant changes in information technology support since 1994 have already been mentioned in the preceding discussion. These are summarized in the following list:

- Creation of a president's council-level position (CIO) to lead and guide IT development; initiation of a formal institutionalized IT planning process; consolidation and reorganization of IT support departments to provide coordinated and efficient services

"Now to what higher object, to what greater character, can any mortal aspire than to be possessed of all this knowledge, well digested and ready at command?"

— John Adams

- Elimination of five disparate e-mail systems in favor of standardized and integrated e-mail systems for students, alumni, faculty, and staff, including lifetime e-mail accounts

- Consolidation of several disparate networks into unified, university-wide telephone and data networks

- Initiation of a five-phase network development plan and completion of the first three

phases, resulting in increased reliability and a thousand-fold increase in available bandwidth

- Creation, maintenance, and enhancement of the WSU web site; numerous new self-service applications, such as online admissions, registration, testing, grading, scholarship tracking, and payment of fees; WSU Online

- Selection and implementation of new administrative data processing systems

- Movement away from one-time fund "crisis" purchases of computing hardware to an established ongoing revenue stream for planned information technology purchases

- Significant increase in expenditures related to network security (e.g., firewalls and firewall administration), spam filtering, and network access and control

III. Strengths and Challenges

Strengths include:

- Qualified, dedicated and motivated staff, including a strong IT management team.

- A cooperative work environment, with a tradition of collaboration between faculty and staff.

- Strong central leadership, with recognition of IT as a strategic university asset and clearly communicated vision for the future.

- A well-established IT planning tradition.

- A reliable, high bandwidth data network.

- Stable funding for open student computer lab hardware/software replacement and support.

- A successful online university.

- A solid up-to-date technology infrastructure.

Challenges include:

- Keeping current with continually evolving technologies and technology trends.

- Maintaining and strengthening communication channels between technology experts and faculty and staff.

- Sustaining necessary funding and support levels in times of economic stress/budget reductions.

- Effectively managing the physical, emotional, and social impacts of changes brought about by implementation of new technologies.

- Managing and accomplishing the transition from locally developed WSU Online to WebCT Vista; identifying and implementing an effective identity management strategy.

IV. Next Steps/ Action Items

- Complete the major IT projects in process, including:

  - Implementation of the new Campus Pipeline Luminis student, faculty/staff, and alumni portals

  - Opening the technology-rich WSU Davis campus

  - Completion of Phase IV of our network plan

  - Completion and occupation of the new student/faculty technology center in Lampros Hall

  - Transition to the new WebCT learning management system (replacing WSU Online and providing significant new capabilities for both online and hybrid courses)

  - Implementation of the new SCT Banner state-of-the-art Web-based administrative data systems

- Reorganize and consolidate to accommodate the current budget cut; take full advantage of the opportunities presented by Lampros Hall

- Refine and enhance communication channels/mechanisms between faculty/staff and the IT technical staff

- Work together to develop reasonable equipment replacement cycles for faculty and staff desktop computers