Standard 7.
Library and Other Information Resources

1. Overview

The mission of the Bentley Library is to support and enrich the university’s academic research and educational goals by developing and organizing information resources, providing information literacy instruction to faculty and students, and responding to the information needs of faculty and students. Through the integration of print and electronic resources, collection development, resource sharing, and student and faculty support, the library and the Academic Technology Center, along with Bentley’s resource-rich specialty laboratories, endeavor to ensure access to a continually expanding depth and breadth of knowledge and information.

2. Description

After a $17 million renovation in 2006, the library increased its patron gate count by 470%. The library has: 743 comfortable study seats, 112 public PCs, 24 collaborative study rooms with 19 offering large flat-screen LCDs connected to room PCs and student laptops, and wireless network access throughout the building. The library is currently home to the Deloitte Café (featuring Einstein Bros. Bagels); computing services and the information technology helpdesk; the English for Speakers of Other Languages Center; the McGladrey Art Gallery; a research instruction center; and the Writing Center.

The library’s $1.8 million academic resources budget sustains a comprehensive collection of print and online resources designed to support Bentley’s mission by focusing on the intersection of business and the arts and sciences. The library’s online resources for research and scholarship include more than eighty research databases linked to 60,000 online journals, allowing our community 24/7 access to a wealth of information. The collection also contains 170,000 volumes (mostly stored and accessed in public electronic compact stacks), 700 current periodical subscriptions, 600 audiobooks, 9,000 popular and faculty teaching videos, and 8,000 online (streamed) educational videos.

Through our membership in the world’s largest library cooperative, OCLC, we have access to over 284 million items contained in 72,000 libraries. The Bentley library focus on digital interlibrary loan (offering electronic delivery of requested items via email) enables it to leverage the 22 million volumes in academic research libraries in the greater Boston area as well as provide access to a truly global collection. Library collection development has shifted from a print focus (though there are still thousands of physical items checked out to thousands of patrons...
in a given month) to online resources that often provide asynchronous learning opportunities for Bentley’s hybrid-
online as well as traditional on-campus students.

2.1. Librarian instructional initiatives, research support, and curriculum integration

Library instruction and support for research and curriculum integration has been transformed by the incorporation
of a strong information literacy program with the use of advanced technology. For example, the library is offering
more of its services and resources via mobile devices, and with the assistance of the Academic Technology Center,
was the first unit on campus to offer a website designed for mobile devices. This includes mobile access to the
library’s webpage, LibGuides, ENCORE (the Library’s online catalog), and OverDrive (downloadable e-books), along
with several databases - EbscoHost, LexisNexis, IEEE, and JSTOR.

The reference librarians teach up to 260 customized research instruction sessions for faculty and students
annually, often developed in collaboration with faculty. The courses are taught primarily in the library’s research
instruction classroom (RIC) that is equipped with Crestron classroom technology to control an overhead projector,
academic and administrative software, and 36 student workstations. The reference librarians also utilize NetOp
classroom management software for teaching and monitoring student learning. Librarians evaluate and improve
their pedagogical effectiveness in instruction sessions and workshops by using evaluation forms, peer-to-peer
training, and attending outside conferences.

In addition to offering classes, librarians upload course reserves, articles, analysts’ research reports, and Library
Research Guides. Working in partnership with professors, Bentley’s librarians integrate tutorials, quizzes, and
presentations for specific classes into the Blackboard learning management system. The library coordinator of user
education also created an online tutorial and series of quizzes using Adobe Captivate for the general business core
classes.

The Bentley Library provides extensive instructional and research support that includes both formal and informal
integration into the curriculum. For example, all first-year students in the primary general business core course,
GB112: Tools & Concepts in Accounting and Finance, are required to complete online tutorials and quizzes on using
library information resources within the context of a course project. In Fall 2011, 98% of students demonstrated
proficiency either with a passing quiz grade or by attending a follow-up library instruction class.

The general business core faculty collaborated with the instruction librarians on goals related to the use and
evaluation of information resources from the beginning of the core’s sequence (GB112) through a project-based
course, GB320: General Business Field Project that students typically take as juniors or seniors (Appendix 7.1). As
part of this course, students must utilize sophisticated strategies to conduct market, consumer, and industry
research to solve real world problems for a real company. They must interpret the information they find, and make
a case to that company for its utility and validity, fulfilling two of the general business core library learning goals:
for students to evaluate information for relevancy and accuracy, and organize information and apply it directly to
class assignments.

In 2010, the Expository Writing Program formally adopted a set of library literacy objectives (Appendix 7.2), co-
written by faculty and librarians, based in part on the Association of College and Research Libraries’ (ACRL)
information literacy competency standards for higher education. Librarians and faculty develop course
assignments based on these objectives primarily through two elective courses, Expository Writing I – Critical
Thinking and Writing, and Expository Writing II – Advanced Inquiry in Writing.
When librarians teach course-specific library instruction classes in other areas of the curriculum, they consult with both faculty and students to ensure that content and delivery method are appropriate to the students’ fields of study and level of knowledge. This consultation ranges from surveying students on their familiarity with specific databases to tailoring an activity on evaluating scholarly sources based on assessment of the students’ current knowledge.

2.2. Evaluation for continuous improvement

The library, with support from the Academic Technology Center, regularly assesses the changes in faculty and student expectations and information needs as well as the use and ongoing effectiveness of its services through surveys, student research journals, focus groups, and usability studies. Library-related studies and data-gathering efforts include (additional assessment efforts are described in Appendix 7.3):

- **14 Days to Have Your Say Blog** (2008, 2010, 2012) This biennial survey utilizes a blog, linked from the Library’s homepage, to encourage free and open discussion on issues and recommendations for the library’s services and research resources. After the two-week open forum period, the Library posts responses to the 100 or so comments.
- **The Bentley Library User Experience group** (BLUE) meets regularly to evaluate user experiences in the library and on its website through exploratory projects and usability studies.
- During first-year student orientation, roughly 900 students in introductory library sessions are asked a series of information-related questions that create a baseline of knowledge for their cohort that guides future instructional content.
- Faculty members are periodically surveyed on the effectiveness of library instruction (most recently in 2010).
- Students were surveyed after deployment of GB112: Tools & Concepts in Accounting and Finance tutorials. Their assignments evaluated and the library continues collaboration with faculty on evaluating the course project.

3. Appraisal

The library’s central location and state of the art physical and information resources have contributed to significantly increased usage by students and faculty since 2005 to the point where it has over 80,000 visitors during its busiest months. Exhibit 7.1 shows the growth over the most recent years.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patron gate count</td>
<td>442,404</td>
<td>570,414</td>
<td>698,665</td>
</tr>
<tr>
<td>Growth rate</td>
<td></td>
<td>28.9%</td>
<td>22.5%</td>
</tr>
</tbody>
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Dr. Phillip Knutel, Executive Director of Academic Technology, the Library, and Online Learning manages the library and also directs collaboration across his three major areas of focus. He works closely with the directors of the
Standard 7.

specialty laboratories (described in Standard 8) to assure the breadth and depth of discipline-specific curricular and research tools. Unified management of academic technology, the library, and on-line learning as well as close coordination with laboratories providing other information resources promotes Bentley’s ability to leverage state-of-the-art tools and information resources and respond quickly to evolving student and faculty needs. For example, librarians work with faculty from all departments to offer on-demand research-based assignments. In order to do this most effectively, librarians worked with academic technology staff to create over a hundred online library research guides that have been hosted as wikis and in other platforms. These LibGuides are student and faculty portals to high quality, topical information for successful research. Academic technologists have also ensured the research guides are mobile friendly, providing multiple ways of access to students. The guides receive an average of 3,000 hits during a semester. To the delight of students who often seem to live on their iPhones, iPads, and Android devices, the library and Academic Technology Center worked together to create the first mobile site at Bentley.

As noted above, the library also has many effective programs to promote information literacy in students, and has an action plan to maintain, assess and improve their effectiveness (Appendix 7.4). Library staff members actively develop additional programs that adapt to the changing needs of faculty and their curriculum. In addition, the library has been able to respond to the needs of the growing online student population by providing curricular materials to those who won’t be physically on campus/in the library. The library has doubled the number of journals accessible online over the past few years (from 30,000 to 60,000). Academic technology staff also trained and provided administrator access to library staff on our campus Blackboard learning management system so the library could digitize reserve materials and post them directly to course sites.

Regular evaluation of services and instructional effectiveness provide a rich source of data for continuous improvement. For example, 14 Days to Have Your Say has led to policy changes including the expansion of library hours (now 108.5 hours per week), 24-hour building access during finals periods, and revised loan periods for popular items. A 2011 ethnographic study of students’ research methods and habits led to several changes in policies, instructional approaches, collection development and access (such as choosing a discovery solution for searching library content) and the library website. Policies relating to student employees and reserves are currently undergoing vigorous revision based on stakeholder input.

The effectiveness of the library has been recognized externally and The Princeton Review ranked it #14 in the U.S. in 2011. The Bentley research essentials tutorial was chosen by the Association of College and Research Libraries (ACRL) as the May 2011 PRIMO Site of the Month.

Another source of strength is the library staff. According to the latest ALA-APA Salary Survey, professional or degreed librarians (those with Master in Library Science degrees) account for about 30% of the total FTE staff in the typical academic library. At the Bentley Library, the focus over the past ten years on increasing staff quality and professionalization has resulted in 66% of staff holding a Master in Library Science (MLS) - 11.5 FTE library staff members have ALA-accredited MLS degrees compared to six FTE non-MLS degreed staff. This enables the library to provide more knowledgeable service to faculty and students. While the percentage of degreed librarians is a point of pride, the increase in library usage by the Bentley community is putting a strain on staffing resources. The reference department is still staffed at its 2005, pre-renovation, pre-doctoral program level and the library is also supporting more academically inclined students and significantly more research-oriented faculty.
The increase in library usage has also put pressure on the physical resource. During peak periods, the demand for group study rooms, terminals, and seats exceeds capacity. In addition, increased curricular and research needs have put pressure on the operating budget. Should Bentley decide to expand its successful online programs by advertising them locally, regionally, or nationally, providing online students with a robust infrastructure of library and other services will add to these pressures.

The Bentley Library stands at the crossroads of significant change. Over the past seven years, the library has been transformed by technology, both in its appearance and in the way it delivers services. While the library staff has kept pace with information technology, and shifted traditional services to reflect the use of new technology, it is important to be ready for newer innovations and changes in the way information is published, accessed, used and paid for in the future. It is essential, as well, to plan how these changes will affect the learning, teaching, and research that are fundamental to Bentley’s overall mission.

4. Projection

In order to adapt to and adopt new and emerging technologies and prepare the library of the future, the Bentley Library will:

Craft a Bentley Library strategic plan with input from library staff, faculty and students. **Timeline:** September 2013 through May 2014: Manager of Reference Services guided by the Library Director

Establish a cross-departmental committee and evaluate and develop strategies to respond to the effects on library and academic technology resources of changing teaching methods, increased student and faculty demand for access to materials on-line, and the potential increase in on-line course delivery. **Timeline:** Academic year 2013-2014: Manager of Library Services.

Conduct a staffing and facility analysis to explore the costs and implications of various strategies for responding to increased use of the library as a place-based resource. **Timeline:** Spring 2013 through Fall 2013: Executive Director of Academic Technology, the Library, and Online Learning, and Library staff.

Close the information literacy assessment loop begun in the freshman year by conducting research with seniors and alumni, and by deepening assessment of graduate student learning and undergraduate finished projects beyond the anecdotal level. **Timeline:** Completed Summer 2014: Executive Director of Academic Technology, the Library, and Online Learning and Library staff.

5. Institutional Effectiveness

The Bentley Library is effective in fulfilling its mission to support the institution in reaching its scholarly and educational goals. Its facilities, print and on-line collections, and partnerships with faculty help to support student learning as well as faculty pedagogy and research. The Library collects information from its stakeholders to gauge its effectiveness and makes changes based on this information.
Standard 7.
Appendix 7.1
General business field project

**Area 1: Understand the concepts of company and industry research**

Students should be able to:

- Become familiar with the ways information is organized in the business field
- Understand the specialized nature of business publications
- Search for specific entities, such as manufacturers of a product
- Analyze the competitive forces within an industry
- Access materials necessary to conduct research on industries and companies

**Area 2: Use the Bentley Library’s resources effectively to conduct research**

Students should be able to:

- Understand the value of Bentley Library resources in answering a research question
- Increase their confidence and expertise in utilizing Bentley Library resources for research needs
- Determine which type of resource, and which resource in particular, can best answer a particular type of research need
- Identify resources specific to business research, such as trade associations and industry profiles
- Distinguish between the free Web and Library-owned resources
- Distinguish between the Library catalog and databases, and among particular databases

**Area 3: Select and search resources effectively**

Students should be able to:

- Identify different types of information and where they appear (e.g., government regulations, statistics, expert opinion)
- Use multiple sources, and multiple types of sources, to get the best coverage of a topic
- Identify appropriate search terms
- Use controlled vocabularies and codes to search effectively (e.g., subject headings, industry classification codes)
- Recognize that how a search is constructed will influence the quality and number of results retrieved and build search strategies based on Boolean logic
- Understand that the search process is iterative; know how to narrow or expand results

**Area 4: Use information effectively and ethically**

Students should be able to:

- Evaluate information for relevancy and accuracy
- Organize information and apply it directly to class assignments
- Understand what constitutes plagiarism
- Acknowledge and credit resources according to standard citation practices
Appendices.
Appendix 7.2
Expository Writing program library literacy objectives

A. Understand concepts related to research and information resources

Students should:
- Understand the function of search terms
- Be able to distinguish among primary, secondary, and tertiary sources
- Be able to distinguish between the free Web and library-owned electronic resources
- Understand the difference between scholarly and popular sources
- Recognize the different types of sources (e.g., reference books, scholarly essays, blogs, interviews, electronically published articles)
- Be able to identify the disciplines according to which information is categorized (e.g., Literature, Psychology)

B. Conduct research effectively

Students should know how to:
- Develop a research question and generate related search terms
- Use the library’s website and research guides to locate resources
- Use Boolean searching, indexes, and subject headings
- Narrow or broaden the scope of a research question as necessary, based on initial search results
- Assess quantity, quality, and relevance of search results
- Select appropriate methods for extracting information (e.g., exporting, taking notes)
- Use the interlibrary loan
- Take advantage of library reference services
- Use a program such as RefWorks™ to manage, organize, and store information

C. Use information ethically

Students should know how to:
- Evaluate sources for reliability, authority, bias, and relevance
- Document sources in a manner consistent with the highest standards of academic integrity
- Use conventional citation practices

1: These library information literacy outcomes for the Expository Writing curriculum were adopted on November 29, 2010.
Appendices.

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Appendix 7.3
Library-related assessment

User Experience Study (Spring 2008, Fall 2008, Fall 2011)
Eleven students participated in the Library’s most recent user experience study. Faculty and students were selected based on diversity, academic discipline and familiarity with the library webpage from hundreds who responded to an email survey. The goal was to develop a Library web page that was more efficient and effective. Usability testing software was employed to record user actions while answering specific questions about accessing information on the Library’s webpage.

Ethnography Study (December 2011)
Patron experience and interactions with the Library as “place” was the subject of a one-time study done by a graduate student that included interviews, follow-up interviews, and surveys to better understand the interaction between patrons and the library. Reference

Research Journal Study (February – March 2011)
Fifteen students, selected from among hundreds of respondents, kept a record of every time they engaged in an information-seeking activity related to their studies. The goal of the survey was to determine the effectiveness of the library’s information resources and instruction program. Results were analyzed using the text analysis software NVivo, supported by the Academic Technology Center, and utilized for a variety of faculty qualitative research projects.

Information Design and Corporate Communication Course Project (once per academic year)
Students in an upper-level management communication course recommend enhancements to the library’s physical and virtual spaces based on observation, user experience, and peer surveys. The culminating project is a presentation of recommended improvements to Library staff members.

Reference and Library Services Evaluation
Circulation: The reference department uses electronic records of reference transactions, including chat logs, to evaluate effectiveness of service. Statistics such as head counts, gate counts, and in-library use of materials are used to evaluate policies such as staffing, hours, and space planning.

Collection Development
Reference librarians periodically evaluate the library’s collection for relevance, currency, and format, using faculty input, curricular initiatives, circulation and usage statistics, and patron suggestions as guides. Statistics on physical and electronic reserve usage and interlibrary loan borrowing and lending, are used to expand collections to better serve the research and recreational reading needs of faculty and students. The library also participates in the Massachusetts Board of Library Commissioners’ statewide Library Snapshot Day, which combines quantitative and qualitative data to capture a typical day’s use of library services and resources.
Appendices.
Bentley University Information Literacy Program: Action Plan 2012-2013

In her report *The Value of Academic Libraries*, Megan Oakleaf (2010:14) urges librarians to communicate the connection between their efforts and students’ learning. *To effectively establish the role of libraries in student learning*, she writes, *systematic, coherent, and connected evidence is required. The best learning assessments are authentic, integrated, performance assessments focused on campus learning outcomes including information literacy.* The library instruction program at Bentley is thriving, and like many library instruction programs, has been built upon a foundation of strong relationships with faculty and individual instruction sessions. Library staff members feel that they are doing a good job. The questions to be answered are: How do they know, and how do they communicate that fact to those outside the library? Consequently, to ensure the information literacy program in the Bentley library remains current and continues to be effective in promoting information literacy in Bentley students, the Coordinator of User Education will begin a year of exploration and review of Bentley’s information literacy program. The current year will be used to assess existing practice and to explore ways to be more strategic in shape future years’ action plans.

The following principles should guide will guide this activity, but not be mistaken for a mission statement, which should be developed by the group, not by one person:

- Focus on student learning
- Openness to a variety of approaches to, and methods of, library instruction
- Achieving consensus on major goals while allowing individual prerogative in the classroom
- Commitment to continuous improvement in teaching and learning

**TIMELINE**

**Fall 2012**

- Conduct focus groups on the subject of information literacy – one for faculty and one for students – to assess our efforts in teaching, reference service, and contribute to the future goals of our information literacy program
- Librarians create learning outcomes and assess one instruction class
- Librarians complete peer review of one class for each librarian
- Introduce curriculum-mapping exercise in a meeting or training; encourage librarians to work on their liaison departments throughout the year
- Once a month, one librarian suggests a reading/resource on teaching and learning, leads a discussion on that reading during reference meeting

**Spring 2013**

- Gather ideas for possible peer review exchange with Bentley faculty or librarians at other institutions
- Conduct an assignment design workshop for faculty jointly led by faculty member
- Attend capstone presentations of students who utilized consultations

**Summer 2013 instruction retreat (full or half day):**

- Review what has been learned this year
- Identify targets for instruction and integration for coming year, including introducing assessments in all 260 library-information literacy sessions offered each year
- Finalize mission, vision, and goals – submit to director for final approval
- Revisit personal improvement plans and brainstorm how the institution can support these
- Develop at least the outline of an action plan for 2013-2014