

NEASC STANDARD SEVEN

LIBRARY AND OTHER INFORMATION RESOURCES

The institution demonstrates sufficient and appropriate information resources and services and instructional and information technology and utilizes them to support the fulfillment of its mission.

DESCRIPTION

Resources and Access

The Benjamin Franklin Institute of Technology operates two distinct departments for information resources: The Lufkin Memorial Library, an academic department whose director reports to the Dean of Academic Affairs; and the Department of Information Technology (IT), an administrative department whose director reports to the Director of Operations. This section describes the resources and services of the Lufkin Memorial Library and Instructional Technology at BFIT. Please refer to Standard 8 for information relative to the work of the IT Department.

The mission of the Lufkin Memorial Library is to provide the information and resources necessary to meet the needs of the College's educational programs. In support of this mission, the library offers collections, services, and programs facilitating effective use of information and acquisition of information literacy skills. The library provides information and instruction in multiple formats to meet these needs and embraces appropriate technologies to enhance research and learning.

The library is contained within one room in the Franklin Union Building and houses the reference, circulating, reserves, periodicals, audiovisual and other media collections, as well as eight computer terminals for student academic work and research. It fulfills patron needs by offering an environment conducive to quiet study and research, providing materials and resources appropriate to class work and to keep students informed of current events and advances in their fields of study. A secure wireless Internet connection is available in the library and in all publicly accessible areas of the College.

The library is open 59 hours per week Monday-Friday, allowing day, evening, and resident students the opportunity to utilize the library's resources. During all hours that the library is open it offers reference, circulation, and reserve services. Interlibrary loan is available and accomplished through the Boston Public Library's "ILLiad" service, and Bibliographic Instruction (BI) services are provided at the request of faculty members. One faculty ranked full-time, and two part-time librarians with MLS degrees from ALA accredited institutions oversee the implementation of all services to ensure the library's mission is being met in accordance with the needs of the College.

Lufkin Library is a member of the Massachusetts Library System (MLS) (<http://www.masslibsystem.org>), a "state-supported collaborative that fosters cooperation, communication, innovation, and sharing among member libraries of all types. The MLS promotes equitable access to excellent library services and resources for all who live, work, or study in Massachusetts."

Lufkin Library is also a member of Lyrisis (<http://www.lyrisis.org>), *“the nation’s largest regional membership organization serving libraries and information professionals. Lyrisis provides libraries with the tools they need to serve their communities most effectively today and in the future. Members benefit from collaboration with peers from diverse institutions, increased purchasing power, and access to more industry experts and peer-to-peer solutions.”* Most of BFIT’s database subscriptions and e-books are purchased through Lyrisis, or are free through the MLS and Massachusetts Board of Library Commissioners. Librarians also take advantage of continuing education opportunities through the MLS and Lyrisis.

The needs of BFIT’s students and faculty drive library planning at all levels. In accordance with this, the library collects and evaluates data annually through tools such as open dialogue with constituencies, user surveys, and thoughtful analysis of database, reference, interlibrary loan, circulation, and other statistics.

The library has approximately 5,800 physical volumes and 50 print periodicals and provides access to approximately 13,000 e-books and online databases containing over 16,000 full-text magazines and journals. Access to the library’s collection is open (except reserves) and mediated through a computerized catalog accessed via the library’s web page (<http://www.bfit.edu/Academics/Library/default.aspx>). Database and e-book access is available to students on campus either via IP authentication or barcode access (database dependent), and off campus by barcode access. Patrons can borrow materials and renew books that have not been placed on hold. Serials, reference material, and reserves may not be borrowed except under special conditions.

The BFIT catalog of books and serials in the physical collection is maintained with an online program, LibraryWorld.net, which also provides a system for patron records and circulation functions. Patron information is confidential and accessible only by BFIT librarians through a username and password. Database e-books, magazines, and journals are indexed using Serials Solutions e-management solution, 360 Resource Manager, and are accessible to patrons online (<http://dg9wx4hr9x.search.serialssolutions.com/>).

All cataloged materials are housed in the library, but many of the academic departments maintain separate, small collections, especially of technical manuals, videos, catalogs, trade publications, and textbooks. When materials are weeded or replaced in the library, they are given to individual departments to determine usefulness within that department. Additions and withdrawals from the library collection are made with input from each of the individual departments, and with consideration of the library’s Collection Development Policy.

The library’s website provides access to the online databases, information literacy tutorial, BFIT catalog, MLA formatting guide, research guides organized by BFIT major, FAQ of library hours and services, and information literacy data. The library publishes its own information to the website within the limitations of the College-wide content management system (CMS) produced by Elcom Technology, an Australian-

based company (<http://www.elcom.com.au>). In 2010 the Marketing Committee at BFIT set standards and guidelines for publishing to the CMS. Additional help or guidance using the CMS system or uploading data is done through the IT Department.

Information and Technological Literacy

A priority of both the College and the library is to ensure that students gain the skills necessary for information literacy and lifelong learning, as reflected in BFIT's Strategic Plan, College-wide Initiatives, and Information Literacy (IL) Standards. The IL Standards, based on the Association of College and Research Library's Information Literacy Competency Standards for Higher Education and The Association of College and Research Library's Information Literacy Standards for Science and Technology, were created as a tool to ensure the BFIT community develops the necessary skills to locate, retrieve, evaluate, and use information effectively, and to prepare BFIT learners to recognize the need for information as well as the varied pathways for gathering information, skills critical for academic success and lifelong learning.

The Information Technology Department (IT) at BFIT is outsourced to CMIT Solutions, Boston, an IT consulting and network management company with its headquarters in Allston, MA. A team of engineers and technicians from CMIT support BFIT, and the company's owner acts as the Director of Information Technology. CAMS Enterprise and the integrated Course Management System with student and faculty portals are primary information gathering tools at BFIT and provide faculty and staff with timely access to student information. CAMS Enterprise and the Course Management System is managed by CMIT Solutions, and BFIT faculty and staff representatives, called CAMS Managers, supervise the day-to-day operations and provide user support to faculty and staff.

A College-wide computer use policy is adhered to in all BFIT computing labs and the library. The computer use policy is included in the Student Handbook and Planner as well as on posters placed in various computing areas around BFIT. Notices of copyright laws as they pertain to photocopying of material are also posted on or near all copy machines and printers at BFIT (Please find further details on IT Department in Standard 8).

Instructional/Educational Technology (ET) plays an important role in student learning at BFIT, where students gain skills and knowledge through hands-on experience. As such, BFIT defines educational technologies as more than just the complex combinations of hardware and software, or course management systems that support teaching and learning activities, but include realia (objects from real life used in classroom instruction), such as models, equipment, and mock-ups in this definition. An analysis of the current budget indicates that 76.6% (excluding personnel expenses) was spent on educational technology, with the Electrical Technology, HVAC, and Electronics departments receiving the majority of funds for the 2010/11 academic year.

Primary responsibility for the oversight of educational technology funding and equipment allocation currently resides with the Department Chairs who determine ET needs and ways to integrate said technologies into their curricula as a means to meet learning outcomes. Technical support for ET

relevant to borrowing equipment, installation of specialized software, and maintenance is provided by the IT Department. Training for ET is mainly self-taught, although faculty reported in the Faculty Educational Technology Survey that they received training from peers, conferences, industry/manufacturers, and outside courses. The Faculty Development Committee (FDC) also periodically offers workshop training to develop the use of technology in the classroom. Usually taught by faculty members proficient with a certain application, these sessions are generally well attended.

APPRAISAL

Strengths

- The College library applies various assessment techniques to determine its success in meeting the needs of the academic program that include ongoing discussion with appropriate constituencies, collection analysis, reference statistics, circulation reports, Bibliographic Instruction session feedback forms and other information literacy statistics, and comparisons with benchmark institutions.
- Utilizing the National Center of Education Statistics' (NCES) most recently released data (2008) to compare BFIT to benchmark Colleges (Great Bay Community College, NH; Roxbury Community College, MA; Mass. Bay Community College, MA; New England Institute of Technology, RI; Quinsigamond Community College, MA; Springfield Technical Community College, MA; Vermont Technical College, VT; Massasoit Community College, MA; and North Shore Community College, MA) the BFIT library spent more dollars per FTE (\$228.98/student), outspending the average expenditure of the other Colleges by \$57.62. The number of E-books per FTE was above average, the number of books/paper material per FTE near average, and circulation transactions per FTE well below average. Comparison of IL presentations, reference transactions, and gate counts is difficult to measure since BFIT FTE (401) is over 50% lower than that of the benchmark Colleges. However, when compared with only Great Bay Community College (FTE-986), BFIT out measures GBCC in each of the aforementioned categories. BFIT gave 42 IL lectures, GBCC 39; BFIT averaged 52 reference transactions per week, well over the number of transactions averaged by GBCC at 16, and BFIT's gate count in a typical week was 1125, GBCC's 756.
- A collection analysis depicting age and content is completed every five years, with the most recent analysis dated November 2010. This analysis indicates that the bulk of library material in the physical collection was published between 2000-2010, followed by the 1960's and then the 1990s. The previous analysis indicated the bulk of library material was published in the 1960s, signifying the library met its goal of bringing the collection up to date. Subject analysis of the print collection shows that BFIT has a very high number of literature and history books (1340) in comparison to the rest of the collection. Of the programs offered at BFIT, the Computer Department is best supported (355) by the print collection, followed by Electronics (310) and Architecture (241). Newer majors, Opticianry (28), HVAC (37), and Pharmacy Technology (8), are extremely underrepresented.

Compared to the last analysis, the College is closing the gap of literature/history books compared to the rest of the collection, and continuing to increase the number of books for new programs.

- The E-book collection analysis completed for the first time in November 2010 indicates the majority of books published between 2000-2010 (6552), followed by the 1990s (6161). E-books represent the Computer Department well (773), because computer collections have been purchased in bulk. The other majors remain underrepresented with Architecture (41) ranking second among the majors.
- Statistics on database sessions, searches, and full-text retrievals are collected monthly from vendors and reviewed quarterly. Evaluation of these statistics indicates that the BFIT community were using the databases at increasing levels per FTE from 2000-2008. A marked drop in the 2008/09 academic year reflected a loss of the EBSCO database that had been funded through the Boston Library Consortium and indicates that the BFIT community was relying heavily on this resource. However, 2009/10 totals surpassed any previous year, without the addition of any new databases. These data correlate with the success of BFIT's Information Literacy Program, which through spring 2010, was offered during Computer Applications (CT100), an entry-level computer class taught to every first-year associate's degree student.
- Computer Applications (CT100) was eliminated in fall 2010, and each major created an introductory course for their program. Some of the major programs have continued to invite librarians to their classes to teach IL sessions. Other departments have chosen not to keep the IL class but are still expected to provide data in their annual reports and 5-year academic program reviews that illustrate how students are obtaining information literacy skills. This academic year, students in EN130 College Composition I courses were also given 30-minute database instruction sessions, taught by librarians, where they learned to search one of the more technically oriented databases, using "insider" vocabulary specific to their individual majors. A Reference/Instructional Technology librarian was hired part-time in fall 2010 to design and implement an online information literacy tutorial with the goal of replacing the initial IL session provided during CT100. This tutorial will include end-of-module quizzes with data reported to the library for ongoing evaluation of the tutorial and information literacy competencies. Bibliographic Instruction (BI) services will continue to be offered, particularly for faculty requesting librarians to teach to a specific project.
- A new measure of the IL program is to analyze Works Cited for specific projects. An analysis was conducted last year of the Automotive Bachelor students' senior seminar project, which is a 40-60 page paper written over the duration of the academic year. Analysis of the citations indicated that students used a near equal mix of print (35%), database (30%) and web (35%) sources. Of the web sources .com was used most often, followed by .org, .gov, .edu, and .mil. The mix of sources combined with the types of websites indicates that students are blending appropriate and credible resources when writing academic papers.

- In September 2008 the College upgraded the CAMS Enterprise System to include course management. The Course Management System, which includes faculty and student portals, is extensively used to manage course documents, materials, assignments, attendance and grading. The course management system has seen steady adoption by faculty, being used in 53 courses in spring 2009 (a small group of faculty tested the system), 196 courses fall 2009/spring 2010, and an estimated 262 courses this academic year.

Concerns

- The library space has been a concern for many years. As the student body population continues to grow, there is an increased need to provide appropriate space where students can quietly study in an academic oriented atmosphere. Being in a single and open space consisting of multiple elements, the task of maintaining an atmosphere appropriate to an academic library becomes increasingly difficult. The 2011-2016 Strategic Plan has noted in section 2.1.5 that the College will on an ongoing basis, *“provide state of the art classrooms, laboratories, library, and other instructional and academic resources.”*
- The library, open more hours than any department at BFIT, was staffed at levels of 1.63 or below prior to fall 2010, and as a result, administrative planning, such as strategic and technology plans, were deferred to focus on reference, instruction, and technical services. Although a Reference/Instructional Technology Librarian was hired part-time in fall 2010 to focus on creating information literacy online programming, providing reference services, and assisting in teaching BI/IL classes, the library continues to be understaffed. As the student population grows, and more students move into the residence halls, there is a need to offer additional library hours. Staffing levels must increase in order to maintain the high priority the library places on services and support, while introducing new services and appropriating time for administrative planning and evaluation.
- Department Chairs, with input from the Dean of Academic Affairs, oversee the Educational Technology program for their individual programs at BFIT. The College recognizes that students within technical majors are primarily visual and hands-on learners and more likely to understand concepts when educational technology is included as an element of teaching. As such, educational technology is actively used in BFIT classrooms and laboratories. The majority of faculty utilize multiple technologies to engage students. A survey conducted of full-time and adjunct faculty in fall 2010 (with 64% reporting) indicated that 84% use desktops or laptops in their classes, 72% use digital projectors, 58% show DVDs or films, 44% use software specific to their major, 42% use web-based learning, 26% use smart boards and/or the Electronic Classroom, 19% use a digital camera or camcorder, 9% use interactive self-paced software, and 16% indicated they utilized other educational technologies such as computer simulations, Wikis, social media, and programming automated machines. However 40% of faculty indicated that they do not get adequate technical support for ET, with the majority reporting that they teach themselves or seek help from peers.

- Of the faculty who completed the above-mentioned survey, 42% indicated that they do not receive adequate resources to evaluate ET, and 40% indicated they do not get adequate training. Many faculty expressed in their surveys frustration over a lack of professionally qualified staff members from whom to seek help with both technical and curriculum support for integrating technology more comprehensively within their courses. The current network policy disallowing faculty the ability to download and test new technologies on their office computers without approval and implementation from the IT Department is seen as an additional concern from 40% of faculty surveyed, indicating that this policy is detrimental to their ability to test and implement new applications in their courses. Additionally, faculty reported that they utilize personal or home equipment for this purpose.

Projection

- The library is currently understaffed, particularly given the need for increased technical services and support for today's "Net Generation". In fall 2011 the part-time Reference/Instructional Technology Librarian position will become full-time, with faculty rank. This position will focus on reference services, library instruction and instructional technology, and web page development/management.
- The Dean of Academic Affairs will create an Educational Technology position, which will be hired part-time subject to funding. The ET hire will work to help faculty infuse educational technology within their curricula, provide training and support, and bridge the gap between educational departments and information technology personnel.
- The print collection will continue to be strengthened, particularly for new programs offered at BFIT. Budgetary book and e-book expenses for AY 2011 will be itemized by major to ensure appropriate coverage. With current shelving capacity, space is limited, so librarians will continue tweaking the collection by weeding volumes from the two biggest subjects that are little used at BFIT: literature and history. Ultimately, the print collection will continue toward becoming a solid core collection for each technology major, and supplemental texts will be purchased through BFIT's e-book collection. Collections will also continue to be tweaked and maintained for general education requirements at BFIT.
- Circulation statistics for BFIT are consistently lower than at other Colleges. In fall 2011 the library will engage in a marketing campaign to publicize BFIT collections, including e-books. The library will utilize the student portal and other marketing tools such as the website and information literacy tutorials to educate and engage students in library offerings.
- EBSCO continues to be a popular database and periodically requested by faculty and students, particularly coming from other Colleges. In spring 2011 the Director of Library Services will engage in a study of EBSCO database offerings and negotiations through Lyasis to determine the benefit to BFIT constituencies. If appropriate, budgetary funding will be secured to add this resource to current database offerings in fall 2011.

- The library continues to seek ways to enhance database usage and integrate them more conveniently into the user experience. For this purpose, Serials Solutions was purchased a few years ago. However, students continue to get lost navigating through the databases, particularly at the journal level, because of the need for authentication. The library purchased EZProxy in fall 2010. During spring/fall 2011 the Director of Library Services and the Reference/Instructional Technology Librarian will work with the IT Department to integrate the system with current database offerings.
- This year the Cataloging Librarian began evaluating Works Cited from an Automotive Bachelor's degree course. Beginning in fall 2010 the Cataloging Librarian will evaluate two courses from the Associate degree level, EN 130 College Composition I and EN140 College Composition II. These courses have been chosen for evaluation because they extend across the freshman year and may indicate how student learning relevant to information literacy is progressing. These data will be confirmed by course evaluation data collected from each student, recording what library resources they utilized conducting research for each course. Technical courses from each program's second year of study will be evaluated through the course evaluations to determine if students are returning to library resources when not prompted and how they are using library services within their major programs.
- Since Computer Applications (CT100) was eliminated from the program of study and the introduction to information literacy component with it, the Reference/Instructional Technology Librarian with assistance from the Director of Library Services will implement an online information literacy tutorial in spring 2011. Courses that will utilize the tutorial as a mandatory part of their curriculum will be identified in spring 2011 to insure all students are receiving adequate training early in their academic careers.
- In fall 2011 the Director of Library Services will reconvene the Information Literacy Committee to update information literacy standards and facilitate the information literacy cross-curriculum initiative by helping faculty integrate information literacy strategies in their curriculums. The Director of Library Services with the support of the Reference/Instructional Technology Librarian will begin preparing a library strategic plan in fall 2011 and a technology plan in spring 2012.
- The Dean of Academic Affairs will request funding through the Director of IT for the 2011/12 academic year for an additional five classrooms to be equipped with digital projectors, screens, and instructional computers. In fall 2010 ITAC will research the feasibility of equipping additional classrooms with smart boards

INSTITUTIONAL EFFECTIVENESS

Librarians assess student and faculty needs through a variety of means. On the basis of these assessments, the library regularly updates and refines its collection, both in print and online, and offers information literacy skills to enable students to find and use information effectively.