

# Academic Libraries in the Digital Age



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## INTRODUCTION

This article provides an overview of the changes to the physical space of academic libraries and moreover, a discussion of the ways in which academic libraries are addressing the needs of online and remote access learners who are in distance education programs. With an increase of enrollment and the growth of online education, academic libraries are altering shape to serve learners in the digital age who rely on digital text and social media. The article briefly describes how academic librarians are utilizing new teaching and learning technologies by creating digital content and physically evolving the library itself to support the modern collaborative needs of digital learners. The objective of the article is to explain the expansion of library services and collection development practices as they currently pertain to academic libraries in the digital age.

## BACKGROUND

The academic library is designating more social information spaces (Beard & Bawden, 2012). The physical spaces of libraries are expanding to incorporate a learning commons, which is a center designed to encourage collaborative group learning and stimulate intellectual interactions. Moreover, these “intentionally created spaces are designed deliberately to shape and encourage the formation of knowledge by the learner” (Stewart, 2009, p. 15). The space is re-conceptualized to imagine activities beyond the traditional library space into an active collaborative space.

Christopher Stewart, in his dissertation on Academic library buildings in the digital age, explored theories of educational architecture and emerging design themes which include collaborative spaces in new library buildings. He argues that in order for the academic library to survive, one must look at how libraries are building their space to serve their community’s

needs having been influenced by technology. It is technology that “has reshaped library services, collection, and, of course, the library’s physical space” (Stewart, 2009, p. 14). He states, “The emergence of the Internet as a vehicle for delivering scholarly information has altered the way people use the library and has caused library planners to rethink the library’s traditional role in academic life” (Stewart, 2009, p. 14).

The academic library’s mission is to serve the students and faculty in support of the curriculum. Library instruction and information literacy programming enhance the overall institutional mission and contribute to students’ academic success and retention. Added classrooms and other instructional space emphasize the library’s pedagogical function to address challenges of complexity of information in the digital age. As the curriculum evolves, so must the academic library transform to accommodate the high-level technologies and multi-use of library spaces. For example, math and writing tutor labs are set up in the library. So now a student can go to the library as a one-stop-shop. Start at the reference desk for research, head over to the writing lab for assistance on the project, and end at the IT desk for help to produce the project in digital format.

The information commons has been a solution for many academic and research libraries that provide technology related services populated by both librarians and technology experts. Some technology services offered include tablet and laptop checkout as well as plug-ins to accommodate patrons who bring their own portable computing devices. Wireless computing and printing is also a component in many learning commons technology arenas.

A survey of sixty-six ARL libraries by the Association of Research Libraries in 2009 found indicators of successful uses of innovative spaces such as a learning or information commons. From this survey, the learning commons has been proven to provide increased productivity and usage of the library, greater flexibility in spaces used, positive feedback from faculty, staff, and students, and a positive impact on the entire academic

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culture. Thus, the learning commons has become an influence on building community on campus.

Donald Beagle, author of “Learning commons to learning outcomes: Assessing collaborative services and spaces” featured in an *EDUCAUSE Bulletin*, reported that learning commons had higher use by undergraduate students and found that as students’ study skills began to improve, it was now the primary destination for research (Beagle, 2011, p. 4). Beagle argues that it’s not enough to focus on the design aspects of the learning commons spaces but the model must be evaluated by effectiveness of service and its delivery through an assessment of learning outcomes (Beagle, 2011, p. 1). Beagle calls this phenomenon an “Affect of Service” because the control of information has improved significantly. He states:

*Information control relates to how effectively the library empowers students to use tangible toolsets in that physical domain to query, access, retrieve, and manipulate information from the virtual domain. Student perceptions of “Affect of Service” are interpreted within physical and virtual contexts but extend to a wider cultural arena, including their understandings of the legal and ethical aspects of information use. At the same time, this cultural domain is also the source of a constant influx of innovative media and technologies (video games, smartphones, tablets, cloud-resident content, etc.) that filter back and continually reshape tangible toolsets and constructivist pedagogies within the physical domain of the commons (Beagle, 2011, p. 6).*

The American Library Association publishes an annual library design showcase listing in its magazine *American Libraries*. Some of the academic libraries listed for the year 2013 attribute to the state of the art designs in new library constructions and remodeling or expansions. For example, the James B. Hunt, Jr. Library at North Carolina State University at Raleigh boasts a \$93.75 million new construction of 221,122 square feet with a film studio, video conferencing and tele-presence facilities, high definition walls, and an exhibit gallery (Morehart, 2013). In addition to award winning new constructions and designs, academic libraries are expanding their existing spaces. For example, Saint Joseph University in Philadelphia has expanded the Drexel Library by 35,000 square feet to include a learning commons. In addition to offering comprehensive research content, the new space offers

faculty and students a digital media zone with the latest technologies and software including an audio visual multimedia lab and a room with video capabilities for practicing presentations (Morehart, 2013).

Multi-use space includes reading rooms and reference book print collections adjacent to the spaces designed to accommodate computing devices. The purpose here is to create a collaborative culture. Non-traditional library facilities such as coffee houses are incorporated within the design of multi-use learning commons to promote intellectual stimulation, conversation, and to ignite collaborative efforts.

To accommodate diverse needs of patrons, quiet study spaces for “serious, solitary learning and discovery as well as group learning” are still important factors in designing academic libraries (Stewart, 2009, p. 17). However, the “collaborative and communal learning space has emerged as one of the most important design elements in the new academic buildings” (Stewart, 2009, p. 18). Thus, the library “serves as a new kind of learning space: a social gathering space, a meeting space, and a technological space” (Stewart, 2009, p. 28-29).

As libraries and information technology centers continue to unite, more digital content will be created through digital learning objects and digital libraries. Beagle states “The commons aligns the library with the university’s strategic goals in the digital age through collaborative service delivery that supports digital content identification and retrieval, digital content manipulation and interpretation, and original digital content creation and presentation by students and faculty” (Beagle, 2011, p. 2). As content retrieval, identification, and manipulation become ingrained in research and technology applications, open source software and open access publishing through the institutional repository may increase their acceptance in academia. Some institutions have begun favoring cloud computing using Google docs, iCloud, Dropbox, Box or the like to manage files for collaborative projects. Libraries’ online catalogs can be accessed by an open source online database called Worldcat.org, often used by librarians to further access the world’s information within the member’s network to the OCLC (Online Computer Library Center, Inc.). Sites such as YouTube.com and slideshare.com are portals for librarian created digital learning objects created to be used as open access online asynchronous tutorials.

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