

Trends in Academic Library Space

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Trends in Academic Library Space From book boxes to learning commons

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ABSTRACT

Top management in academic/university libraries must play a more significant role within the academic setting by reorganizing library spaces or building new libraries that will be aligned with the new teaching pedagogies and today's student's learning styles. The aim of this study is to present and discuss trends related to how librarians are redefining academic libraries' buildings and spaces in order to be better aligned to current pedagogies and students' learning styles and needs.

Today, learning occupies a prominent place in academic libraries' discussions. A google search using the terms "learning" and "academic libraries" resulted in 741.000.000 hits. Google scholar retrieved 2.070.000 documents. Using the same search strategy in the Library Literature database resulted in 103 hits. However, when the term "academic" is suppressed, the system retrieved 1,675 hits, but this is because we set the limit by *title*. If we limit it by Select a field (optional), we are overwhelmed by more than 10,200 hits.

However, it was not always like this. Learning has not always been the main concern of librarians. It seems that it only became a buzz word in the late 80s, although some will claim that learning was one of the *Museion's* objectives.

The literature provides terms such as learning centers, learning spaces, information commons, learning commons, and collaborative spaces. However, are they the same? If not, what are their main differences and how do these "concepts" affect space planning and provision?

However, in order to place the answers into a logical context, we need to delve into the history of library buildings, more specifically, the roles its structures and spaces were meant to accomplish, because, as Hickerson (2013) well expressed "spaces and roles are two sides of the same coin" (p. 15).

However, the main focus of this paper is not to describe in detail the different building styles, but rather, to discuss the roles represented by the spaces they provided.

The Book Boxes – A Little Bit of History

Until the 50's, the fixed-function character of academic library buildings was dominant on university campuses. Before WWII, these buildings were constructed to carry the weight of book collections in multi-tier structural stacks. This imposed the separation between reader areas and

stack areas. Thus, “a fixed-function building ties the use of floor areas largely to the purposes for which they were original designed” (Kaser, 1984, p. 68).

After WWII, a modular design began to be adopted by academic libraries and, by 1960, this architectural style had been fully accepted. This style is characterized by the equal rectangles by which the floor areas were divided. The main concern here, or better, the main role librarians intended to accomplish with this style, was efficiency of operations and flexibility. Now libraries could “easily” modify the floor plan as they needed to accommodate for changes.

However, in the early 60’s, displeased with the plain and boring looks of the “box,” librarians started to adopt a more romantic architectural style, introducing the use of atria, monumental affects, special lighting, and unusual shapes. As Kaser (1984) well noted, “Readers were no longer restricted to massive reading rooms with floor structures unable to support the weight of the books they wished to consult” (p. 268). Readers now had direct access to books on open shelves.

For at least two more decades, these styles served their role—store print collections. Fixed-function and modular-designed academic library buildings well into the early 80s planned their spaces by counting volumes owned and projecting their annual purchases into the future. Seaman (2006) noted, as he described the University of Colorado’s Norlin Library:

As print collections grew, stacks had randomly replaced user space, hiding key services behind shelving. The result was a dark, uncomfortable, illogically arranged library. There was very little work space for users, technology was not thoroughly integrated into the building, and there was no electronic classroom space. (p. 7)

This depicts a typical university library of the 40s and far into the 70s and early 80s. Thus, these structures prevailed, because historically, academic libraries were associated with the storage of print. It is interesting to note that in the middle of 2012, Booth, Scholfield, and Tiffen (2012) still warned librarians to “extend the purpose of the library from merely a storehouse of books” (p. 42).

During most of the twentieth century, staff work spaces, display of furniture, traffic flow, and storage of the collection and access were the main concerns of librarians planning and designing academic library spaces. According to Seal (2015), “the typical academic library of the mid to late twentieth century was a quiet but sterile place” (p. 559).

Since for many decades academic librarians considered their library buildings as primarily portals to information, libraries became dry and technical (Demas, 2005).

This paradigm led to libraries designed to hold the collections of the library efficiently, rather than libraries designed primarily to serve the needs of the patron. However, in the 1990s, change was in the air. “Due to technology, this paradigm now is being replaced by a learning-centered paradigm in which users once again hold the position of importance...meaning that the library now is free to shift its attention back to users and their needs” (Heitsch & Holley, 2011, p. 66).

The phrase, “library as place,” is defined today as “where students seek out intellectual interaction, informational exchange, and socializing in an academic environment, and even find the library a refuge from a world dominated by slick entertainment, the media sound bite, and pervasive commercial values” (Leighton and Weber, 1999, p. xxvii).

The new model, first commonly known as Information Commons, has four basic features: (1) technology in its many forms, (2) spaces for group work, (3) digital media and online collections, and (4) access to both librarians and technology experts. Later, in 1995, libraries started to provide areas for conversations and to permit food and drink within reason.

THE INFORMATION COMMONS ERA

Card catalogues saw their demise when they were replaced by computer stations in the 80s. (However, last year, I did see an academic library in Washington, DC still using them). In 1990, the World Wide Web was introduced to the world by a British computer scientist named Berners-Lee, and a revolution in libraries began—users could now access library resources from anywhere: home, work offices, and university dorms. This changed the “information eco-system as we know it” (Hickerson, 2014, p. 15).

With the introduction of this technology, librarians started to “breathe” crisis as university and college administrators, faculty, and students started questioning why libraries were needed, and many prophesized the end of university libraries. A well-known article, “The Deserted Library” published in the November 16, 2001 edition of the Chronicle of Higher Education declared the extinction of libraries.

According to Hickerson (2014), who with rich insights described this scenario, declared that “by the time the crisis passed, the Information Commons movement was well underway.” Earlier attempts were made at the University of Iowa to integrate technology into an academic library so students could access, gather, organize, analyze, manage, create, record, and transmit information. This was called the Information Arcade (www.lib.uiowa.edu/arcade/about/mission). Two years later, in 1994, the University of Southern California opened a 24-hour “Information Commons.” Others quickly followed suit.

The University of Calgary opened one of the first in Canada in 1999. Hickerson (2014) pointed out that “students rapidly rushed back into our buildings. High-tech, high-quality spaces supported by technical and intellectual expertise with a great service ethic were an unbeatable combination” (p. 16).

“Working off ideas first implemented by Creth in 1994 and conceptualized by Beagle in 1999, academic libraries began slowly migrating to an information commons approach to library reference services” (Steiner and Holley, 2009, 316).

A 2004 survey of members of the ARL showed that five of the 74 libraries that responded to the survey had established an Information Commons prior to 1995; eight additional Info Commons appeared during the years 1996-2000 and nine more between 2002 and 2004 (Haas and Robertson, 2004).

The genesis of the information commons movement was “rooted in the physical transformations brought about by the ‘library as place’ movement and accelerated by the digital revolution,” (growth of the World Wide Web; advances in computing technology; the popularity of Social media), the changing nature of the student body, the changing pedagogical methods, and a new emphasis on cooperative learning” (Steiner and Holley, 2009, 316).

According to Seal (2015), “since its inception, the concept has been influenced by the growth of the World Wide Web, advances in computer technology, the popularity of social media, and changing pedagogical methods and philosophy” (p. 561).

Information Commons Defined

To define an information commons is not an easy task. According to Harland (2011), there is no common definition among librarians in various institutions. Since it means different things to different people and researchers, the concept is a slippery one.

The difficulty lies in the fact that some see the information commons as being the same as a learning commons (Harland, 2011; Milewicz, 2009; Seal, 2010), while others see the latter being a development of the former and having quite different goals (Bonnand and Donahue, 2010; Somerville and Harlan, 2008; Accardia, Cordova, & Leeder, 2010; Roberts, 2007; Heitch & Holley, 2011).

Definitions abound. While Beagle (1999) emphasized the information common’s role in service delivery around the digital environment, requiring a specifically designed library, MacWhinne (2003) stressed it as being a place within the library where “technology and reference service is combined” (p. 244). Bennett (2005) adopted a very similar concept, underlining the power of digital technology to bring together “apparently disparate information resources as one” (p. 37).

“Information Commons can simply be an online portal for library users to learn about information literacy or library services such as a web site. It could also be a cluster of computer in the library that have access to the online catalog of other electronic databases” (Roberts, 2007, p. 805).

The information commons being considered as a learning agent is also noted. The definition proposed by Heitsch and Holley (2011) highlights the fact that the information commons *educates* and empowers students to “find information on their own” (p. 64). Beagle (2006) affirmed that its resources are “organized in support of learning” (p. xviii), whereas Harland (2011, as cited in Turner, Welch, & Reynolds, 2013) saw it as being a hub which meets the university community’s learning needs.

Most Common Services Offered

The gamut of services offered by the information commons is very broad. Libraries offer a varied number of different services. These are the most common ones:

- information management software
- multimedia software
- expanded multimedia studio with assistance
- research consultations
- writing tutorials
- math tutoring
- work-stations furniture that facilitated both collaborative and individual work
- software and multi-media editing
- presentation preparation
- scanners
- DVD-R drives
- color printing
- digital environment
- collaborative learning spaces
- multimedia workstations
- hi-tech classrooms
- group study spaces
- variety of table configurations
- Tutoring and academic success services
- Writing Center (resume, cover letter revisions, writing manuals and style guides)
- Statistical Consulting
- Collaborative working spaces
- Services from the Academic Success Center
- Flexible approaches to reference services
- Training in Power Point, Adobe, Photoshop
- Rent digital cameras, video cameras, and tripods
- A Design Studio
- Large scale print
- Computer Help Desk
- Individual Class Sessions for Collaborative open learning space (with faculty)
- Classes
- Workshops
- Instructional spaces
- Quiet study area
- Coffee stand

These services and products are offered with the intent to provide “access to the richest possible set of information resources” (Bennett, 2005, p. 37); to allow “students to not only find information, but to work with it as well” (Seeholzer and Salem, 2010, p. 287); and integrate the information intellectually and technologically with their own work” (Seeholzer and Salem, 2010, p. 287).

A SHIFT TO LEARNING SPACES

However, things have changed. According to Demas (2005),

Academic libraries of the twenty-first century are reinventing themselves in response to digital libraries and to changes in learning and teaching [...] In recent years, we have reawakened to the fact that libraries are fundamentally about people, - how they learn, how they use information, and how they participate in the life of a learning community. As a result, we are beginning to design libraries that seek to restore parts of the library's historic role as an institution of learning, culture, and intellectual community. (p. 25)

In reality, it seems that scholars have always perceived the academic library as an important and essential component of the university and learning experience. Statements and observations reported in the literature in the last couple of decades attest that the academic library as a place plays an undisputable and indispensable role in higher education students' learning.

According to Edwards (2000), the architectural quality and physical structure of the library is a reflection about how the university understands itself as a higher education institution. In the same year, Strange and Banning (2000) observed that the institution's priorities and values regarding its main functions, such as learning, research, and teaching, can be assessed by the library's quality and allocation of physical space.

The role and value of the library as an integral part of the academic experience is well-summarized by Freeman (2005). As a physical place, the library plays an important role in

today's social and educational patterns of learning, teaching, and research. Whereas the Internet has tended to isolate people, the library, as a physical place, has done just the opposite. Within the institution, as a reinvigorated, dynamic learning resource, the library can once again become the centerpiece for establishing the intellectual community and scholarly enterprise. (pp. 2, 5)

Rather recently, Bilandzic and Foth (2013) challenged academic libraries to reshape their spatial planning to meet academia's changing needs and become actual facilitators of education and learning.

Libraries are truly becoming learning centers. Exploring the notion of "libraries designed for learning," at the beginning of the century, Bennett (2003) argued that librarians and other university staff responsible for campus construction and renovation projects needed to ask can library space advance the "core learning and teaching missions of their institutions" (p.1). Van Note Chism (2006) gave the answer. He believed that "we can facilitate deeper and richer learning when we design spaces with learning in mind" (p. 1).

According to Freeman (2005), "as developed for more than 200 years, academic libraries in the US and abroad have generally been designed first and foremost as places to collect, access, and preserve print collections" (p. 1). However, he continued,

The use of electronic databases, digitized formats, and interactive media has also fostered a major shift from the dominance of independent study to more collaborative and interactive learning. A student can go to this place called 'library' and see it as a logical extension of the classroom. And as such, library space needs to embody new pedagogies, including collaborative and interactive learning modalities. (pp. 3, 4)

During the last decade, other scholars were also advocating the idea of the campus library as a space for student-centred learning (Jamieson, 2005, 2009; Bennett, 2009) and that this was driving current efforts to reimagine its physical form and function. Thus, the idea of a campus as a learning environment requires that academic libraries become a space that facilitates a student centered pedagogy. (Kenney & Kenney, 2005). In addition, Webster (2009) even claimed that the library is a “key provider of learning space on campus” (p. 33).

The concept of library as place took on more significance and became part of the wider strategic ‘learning spaces’ initiatives which developed within universities” (Appleton, Stevenson, & Boden, 2011, p. 345) to ensure that it supports the principal teaching and learning missions of the institution (Dillon, 2008).

This concept embeds the notion that academic library spaces need to provide support aligned with pedagogical developments and practices (Kehrwald, Head, & Harper, 2013) such as blended learning (Appleton, 2013; Ellison, 2016); flipped classrooms (Ellison, 2016); experiential and collaborative learning (Spencer & Watson, 2017); where students can learn independently and become knowledge creators, leading to a “varied personal learning environments” (Ellison, 2016, p. 294), and resulting in learning outcomes which are required and the construction of their own knowledge. (Oblinger, 2006)

Thus, Stark and Samson, (2010) defended the fact that “librarians need to carefully reconsider the ways that users are engaged with information seeking and learning while they are occupying, or situated within, a particular physical space” (p. 260). Seaman (2006) advised that “library space, to be similarly relevant, must support the learning activities of the university” (p. 7). And Bilandzic and Foth, (2013) challenge academic libraries to reshape their spatial planning to meet the changing needs of academic and become facilitators of education and learning.

Thus, the literature is rather robust in demonstrating that whatever students use the library for, it cannot overlook its function as a place to enable them to enrich their learning experience.

According to Tervaniemi, Poutanen, and Lahdemaki (2015), “information commons are, due to technological and teaching developments and the development of libraries’ functions, changing their form increasingly into learning commons” (p. 306).

A timetable presenting the trends in the university library space from the pre-1970s to the 2000s was presented by Childs, Matthews, and Walton (2013). Rival learning spaces, besides library, supports changing pedagogy, such as group discussion space, more social space, learning commons and the like were identified as the trends for the 2000s.

THE LEARNING COMMONS

Due to the diminishing use of printed material and new learning styles, academic libraries today are being required to rethink and repurpose their space in order to adapt it into different “kinds of working and learning styles of students” (Tervaniemi et al., 2015, p. 306). For Roberts (2007),

the learning commons was how libraries responded, “as faculty and administration recognize that students learn in dynamic ways” (p. 803).

Demas (2005) fully supported this strategy, because for him, libraries were fundamentally about people “how they learn, how they use information, and how they participate in the life of a learning culture, and intellectual community” (p. 25).

Differences between Information Commons and Learning Commons

There is a discrepancy in the use of the terms “*information commons*” and “*learning commons*.” Sometimes, they are even used interchangeably. While there are authors who consider information commons and learning commons as having the same purpose and role, that is, as being basically the same (Montgomery, 2014, p. 304), others, such as Milewicz (2009) consider the library’s “recent” interest in learning as being simply a “re-dedication” to the principles on which “the information commons was founded” (p. 11).

However, Roberts (2007) affirmed that they are different and present a natural progression from the information commons. The literature is robust in presenting striking differences between both strategies. According to Stark and Samson (2010), “the transition from an information center to a learning commons requires a focus on design elements that extend a user focus beyond services into new considerations of how patrons are interacting with information while occupying a particular physical space” (p. 260).

For Bailey and Tierney (2008), an environment, which foster creation of knowledge and self-directed learning is more typical of a learning commons. Heitsch and Holley (2011) agreed. This type of space provides more than the transmission of information from information professionals to patrons.

Bonnand and Donahue (2010, p. 231) adopted the position that “the concept of learning commons has evolved with more complexity than its predecessor, the information commons.” Somerville and Harlan (2008) and Accardia, Cordova, and Leeder (2010) all concurred. Roberts (2007) even observed that “this tendency should not obscure the fact that these different models represent distinct paradigms characterized by significant technological, pedagogical and spatial design differences” (p. 805).

Holmgren (2010) went even further while trying to make this distinction clear: “Although similar in name to the information commons, the learning commons reflects a marked shift in our conception of the library, a shift that is driven by our evolving understanding of the library’s role in supporting student learning” (p. 177). “The library space should be seen more broadly than just as a space to find information, as is an information commons” (Tervaniemi et. al., 2015, p. 306).

According to Holmgren (2010), “Although similar in name to the information commons, the learning commons reflects a marked shift in our conception of the library, a shift that is driven by our evolving understanding of the library’s role in supporting student learning” (p. 177).

In addition, to ensure that the difference in the names of these two commons is not just a semantic one, learning environments must be designed specifically as spaces where learning takes place, and as a result, knowledge is created (Bennett, 2008, pp.183-84). Holmgren (2010) concurred. He believed that this was necessary due to the fact that

our teaching and learning paradigm is shifting from a focus on information transfer to one centered on the learner’s active construction of knowledge. New learning spaces reflect this evolution: many contemporary classrooms, laboratories, studios, and informal teaching spaces are designed to enhance collaborative interactions among learners and faculty, interactions that are linked to increased learning. (pp. 177-8)

Beagle (2010) explained that “the fundamental difference between the information and the learning commons is that the former supports institutional mission while the latter enacts it” (p. 10).

What is a Learning Commons?

Seaman (2006) said the space-planning process at Norlin Library (University of Colorado) “would not be print-based, rather, would be user-based and focused on learning impacts rather than traditional library services” (p. 5). This new “philosophy” leads students to manage their learning instead of simply occupying themselves in managing information.

As Beagle (2004) asserted, “rather than highlighting access to computers, software, and multi-media support, a learning commons emphasizes a range of programs and services to support students in their learning tasks” (p. 243). Beagle (2010) presented a clearer picture of this concept a few years later. He stated that

The Learning Commons potentially offers a ‘continuum of service’ that can help the student move through and beyond the established regime of information access and retrieval, through further steps of interpretation, processing, and manipulation, and on to the development, packaging and presentation of new knowledge. (p. 10)

In this new model, the library’s role is to support and facilitate learning and create knowledge (Seal, 2015). This is quite different from traditional models which emphasized the consumption of knowledge. According to Loertscher and Marcoux (2015), “the first is more passive; the second more active” fostering more collaboration, creativity, and innovation (p. 8).

This is all accomplished through group-learning activities within informal spaces “borrowed from commercial internet cafes, airport lounges, shopping centres and modern office environments” (Appleton, Stevenson, & Boden, 2011, p. 345). This is very different from spaces characterized by long rows of study tables and isolated computer labs. Ellison, (2016) further described these spaces:

To accommodate to this new mandate, libraries revamp their spaces to “include a large foyer; a range of environments aimed at catering for both group and individual study, as well as a variety of learning styles; more space for social interaction; less for books and staff; good Wi-fi connectivity and computer availability; the provision of collaborative tools and the ubiquitous café. (p. 296)

This integrated environment promotes both silent and social communal study (Heitsch & Holley, 2011), bringing people together to collaborate on projects (Bennett and CLIR, 2003, p. 38).

Chan and Wong (2013) offered a very vivid image of what, ultimately, a learning commons looks like:

The Learning Commons is designed specifically to support new learning styles and trends, with emphasis on big screens, technology-rich environment, and varieties of space for different learning modes, relaxation and socializing. Students can easily move from quiet study in the open study area to taking a break in the refreshment zone; or start from talking with peers in the refreshment zone to forming an impromptu project discussion in a group study room. Wi-fi enables them to stay connected, with printing and scanning facilities around the corner. The Learning Commons is geared towards fitting the learning styles and needs of this new generation in the modern learning landscape. In short, the Learning Commons has helped transform library space into a stimulating inspiring and collaborative place. (p. 47)

The examples reported by Seeholzer and Salem (2010) and Roberts (2007) well summarize how libraries are enacting the learning commons concept.

According to Seeholzer and Salem (2010) at Kent State University,

rather than simply offering one space for students to interact with information in all stages of its life cycle, the library now offers spaces and services that support all types of learning on campus. Collaborative learning spaces, individual study carrels, quiet study areas, and large computer labs are all provided...the library now offers spaces for our faculty colleagues to create opportunities for learning in the library. (Seeholzer and Salem, Jr., 2010, p. 291)

Roberts (2007) affirmed that

this distinction between knowledge seeking and knowledge creation is important and informs the planning and implementation of a learning commons. An example of a learning commons offering the group/individual study room mentioned above could include a computer with overhead projector so that study groups or individuals could practice presentations or work on creating presentations for their projects. Another example is video production/editing rooms with equipment available for individual or group use. (p. 805).

Specific activities and services performed, tools offered, and types of spaces provided within the learning commons are mentioned in the literature (Appleton, Stevenson, & Bolden, 2011: Liverpool John Moores University and Glasgow Caledonian University; Holmgren, 2010; Chan & Wong, 2013: Hong Kong University of Science and Technology; Loerscher & Marcoux, 2015; Ellison, 2016: University of Chichester; Andrews, Wright, & Raskin, 2016: University of

Cornell, Mann Library; Stark & Samson, 2010: University of Montana, Mansfield Library; Schmidt & Kaufman, 2007: University of Guelph Learning Commons; Massis, 2010).

The most evident practices are:

- Large tables for working on posters
- Clear zoning and separation of group study from quiet study areas
- Areas for relaxation of the regulations on food, drink, and mobile phone usage
- Group activity spaces for informal learning
- No help desks; rather, staff roving the area
- Flexible spaces (micro-environments)
- Small group working zone
- Social learning spaces
- Semi-enclosed pods
- Technology support
- Library reference
- Areas for subject tutoring
- Services for students with disabilities
- First-year student programs
- Soft seating
- Group study rooms/zones
- Traditional study carrels
- Multimedia bays
- Tables for two or three on a computer
- Social spaces, lounge, casual settings
- Collaboration at project tables
- Technology or media staff
- Places to inspire learning with a variety of seating styles
- Information technology/Tech rich spaces
- Need for privacy in an open space for the use of screens, canopies, utility walls, and inflatable igloos, to screen off areas for consultation, interviews and academic support
- Silent study areas
- Plasma stations
- Smartboards
- Panboards
- Document visualizers
- Video editing suites/Media production
- Video and audio mixer
- Video cameras
- 3D projectors
- Photography suite
- Balcony areas with small tables
- Bean bags for group conversations
- Classroom facilities
- Video conferencing
- Symposium technology
- Open study zones
- Graphics design
- Refreshment zone
- Teaching Zone
- Furniture that can be moved
- Big screens
- Interactive projectors for presentation and group-sharing
- Training presentation practices
- Student consultation
- Mock-up interviews
- Math/language/media literacy tutorials
- E-Learning Classrooms
- On-line tests
- Curricular learning
- Skill development
- Research-related activities
- Flexibility of books shelves to give room for various learning configuration

- Flexibility of class spaces to provide for a maximum of both individual and group working spaces
- Robust Internet connections
- Spaces to make, create, build, and construct projects (scheduled or spontaneously)
- More about access than what is owned—online multimedia and digital access
- Everyone contributes, cares for, and learns to coexist
- Staff consists of other professionals
- Constant stream of co-taught learning experiences
- Flexible spaces to allow learners to spread out, move around, and enjoy help from multiple professionals
- Experimental learning center—makerspace
- Virtual learning
- Café area
- Makerspaces
- Presentation training area/room
- Teaching support services
- Learning Services—Self-management skills (topics: learning from lectures, exam preparation, improving concentration, critical reading, effective group work, self-management issues...procrastination...stress...time management.
- Research Help and Information Literacy
- Supported Learning Groups Program—student peer facilitated group study sessions that enrich the learning experience of students enrolled in historically challenging courses
- Peer tutor areas
- Teaching Support Services

Others, however, describe the types of spaces the learning commons provides in order to accommodate many of these features. Choy and Goh (2016) proposed four types of spaces: sanctuary spaces, interactions spaces, community spaces, and collaborative spaces. Beard and Dale (2010) valued the “creation of learning spaces that are flexible and responsive to the changing needs of users” and thus proposed five zones, each designed “to support a different pedagogical or learning focus: short stay individual information gathering; open-space flexible group work; individual silent study; small-group intentional collaborative work; and structured teaching and learning” (p. 480). In addition, Ellison (2016) reported that Bognor Regis Learning Resource Centre at the University of Chichester is divided into five main zones: Zone A – two IT rooms; Zone B – a café; Zone C – individual, group study rooms and booths, and social learning area; Zone D – quiet study areas (group working is allowed); and Zone E – silent study area with desk space and individual study carrels.

Collaboration with Other Campus-Wide Student Services

Another prominent and distinct role of the learning commons is the nature of its collaborative partnership nature with external learning service providers on campus, not necessarily provided by the information commons. Seeholzer and Salem (2010) defended that this learner-approach

partnership “helped to move the library from providing an information commons to acting as a learning commons” (p. 296). Beagle (2010) reported that the University of South Florida (Tampa) changed the name of its Information Commons to Learning Commons after adding services adjacent to theirs, such as the Writing, Tutoring, and Learning Centers.

Thus, partnering with other student-centered, campus-wide initiatives is a marked distinction between the learning commons and information commons. This concept is strongly defended by Bailey and Tierney (2008); Tervaniemi et al. (2015); Montgomery (2014); and Beagle (2010), among others. Booth, Schofield and Tiffen (2012) even emphasized that “the move to the new library” at UTS City Campus “will provide increased opportunities for collaborative service delivery” (p. 38).

As Beagle (2006) highlighted, “The IC becomes an LC when its resources are organized in collaboration with learning initiatives sponsored by other academic units, or aligned with learning outcomes defined through a cooperative process” (p. xviii). This collaboration makes available a varied number of essential learning student services.

The most typical student services which academic libraries are incorporating within the learning commons space are:

- Writing Centers
- Counseling and advising services
- Disability Services
- Speech center
- Technology Support Center
- Library reference
- Career Development Center
- Student Learning Center (Student Success)
- Student Affairs
- Virtual Learning
- Tutoring Services
- Computing and Communications Services
- Teaching Support Services
- Library Center for Students with Disabilities
- ESL Services
- Diversity Center

Several benefits result from engaging the library in these collaborative initiatives through multifunctional spaces. For example, it

- broadens the role of the library (Tervaniemi et al., 2015);
- enhances students’ learning experience;
- aligns the library strategically with the institution-wide vision and mission (Turner, Welch, & Reynolds, 2013);
- integrates the library services with other campus units with ties to student success, retention, and inclusion of diverse populations (Sutton, 2008);
- allows students to “take responsibility and control over their own learn” (Beagle, 2010);
- bridges the in-class experience of students (Schmidt & Kaufman, 20017);
- promotes integration of e-literacy learning (Beatty & White, 2005);
- promotes social inclusion (Beagle, 2006, p. 35);

- facilitates knowledge creation as it collaborates with pedagogy experts (Somerville & Harlan, 2008);
- brings synergy among the array of support services (Demas, 2005);
- can be more efficient and more satisfactory for students (Appleton, Stevenson, & Bolden, 2011);
- promotes transformative changes (Sullivan, 2010);
- gives students control of their learning (Sinclair, 2007, p. 4); and
- leads to knowledge creation (Horelli, 2002, p. 614).

Today, students are taking advantage of flexible, self-governed, informal, and interactive/collaborative/social learning spaces for group or individual/quiet studies in a communal or sheltered environment (Hunter & Cox, 2014), arranged with different types of tables and seating, high-profile ambience structured to allow proximity (DeClercq & Cranz, 2014), and high-end technology and media production rooms and tools.

Many academic libraries also create a virtual commons to keep up with technological developments and meet students learning styles and expectations (Santos & Hill, 2016). Sharing space with academic student services enhances the learning experience and facilitates knowledge production in today's academic libraries.

However, what does the future hold? Andrews et al. gave us a glimpse of what the future might look like. They pondered:

Rethinking the commons may include consideration of other library spaces as smaller learning commons. With commons spaces generally designed around the model of support service, content, and technology combined in one easily accessible location, it makes sense to have a particular location or space designated as the learning commons. Students or other patrons working in the space have easy access to service points, technology, and certain types of content. However, chat) availability of laptop checkout and wireless printing, as well as the move of reference collections into the regular stacks, it is unnecessary for patrons to be physically present in the traditional commons space to make use of tis services, content, and technology. Students can check out a laptop, meet up with friends in gather favorite library location, instant message or text a librarian to get help tracking down a reference, instant message the computer help desk to configure a software application, access online reference resources or obtain a needed reference resource from the stacks, send their completed project for printing via the wireless network, and never set foot in the commons except for pick up a print job before heading home in the wee hours of the morning. (p. 281)

Thus, in order to enhance the multidisciplinary discovery process, libraries will become innovation labs and makerspaces and the “re-crafting of the space necessary to new collaborations will necessitate the ongoing repurposing of spaces” (Hickerson, 2014, p. 17).

It is quite possible that this ‘repurposing of spaces’ will actually lead the learning commons into an academic commons, as Fallin (2016) foresaw.

CONCLUSION

Universities today are focusing and allocating a high portion of their resources and efforts to promote the social dimension of learning. With this, the library can act as a transformative agent, from mere collaborators of change to partners in creating meaningful knowledge, and not merely to prepare students to become information consumers.

The spaces of academic libraries today are being designed not only to stimulate and support “creativity, reflection, exploration, and innovation but also impact learning” (Spencer & Watstein, 2017, p. 389).

As Holmgren (2010) well posited, “the emergence of the learning commons as a central element in contemporary library design offers an opportunity to transform the library’s role on campus from a provider of information to a facilitator of learning” (p. 177).

In a learning commons which provides flexible and multi-purpose learning spaces, the interaction between students, faculty, specialists in many subject areas, and campus-wide student services prevails. This collaborative environment not only unleashes the students’ potential to manage and create their own knowledge, but also contributes to enrich one’s social learning and life.

An excellent learning space provides students’ not only curriculum support, but also a plethora of student services” (Massis, 2010, p. 161) such as “a studio room which will allow them to record presentations with the push of a button and carry away the results on a flash drive” (Andrews et al., 2016, p. 668). It will also provide opportunities for students to display their work, practice their presentations, move from their classes straight to flexible learning zones, network with their peers, interact with a tutor in an relaxed and comfortable informal environment with food and drinks, or perhaps have a makerspace with great electrical and network connectivity.

In this multi-purpose space, the student can also make use of “workrooms supporting real-time, multi-device interaction, to high-end graphics computing and full support for audio and visual media” Hickerson, 2014, p. 16).

These environments need to be responsive to the diverse learning styles and abilities of the students who can readily be assisted by a team of hovering staff who have a holistic perception of the impact these learning spaces have on the achievement of the students’ learning goals.

As academic libraries re-design their spaces with the purpose of advancing self-guided learning, the focus is on being more learner-centered. They “should focus on the role of support and assistance...of using information and transforming it into knowledge” (Anglada, 2014, p. 609).

Thus, it is imperative that in this intensive learning setting, librarians possess a holistic understanding and knowledge of how students learn in the spaces they prefer to use and what their learning goals are.

The learning commons paradigm, according to Loertscher & Marcoux (2015), indicates “a major shift in purpose from consumption to creation; passive to active; peripheral to central; mildly interesting to [a] completely indispensable” (p. 9) facility within the university which promotes learning as its ultimate goal.

Library Use, Student Success, and Retention

The impact of the learning commons on retention, which today is one of the main concerns for higher education administrators, needs to be recognized and commended. According to Massis (2010), “the Commons encourages engagement with information in its various forms, reinforces that value of collaborative inquiry, creates new opportunities for community interaction, and supports students to adjust to and succeed” (p. 162).

This view is also prompted by Holmgren (2010). He advocated that the learning commons at Allegheny College is “expected to assume a leadership role in improving student success, and, ultimately, retention” (p. 177).

The data collected from a study conducted at the University of Wollongong Library “reveals a strong correlation between students’ grades and use of the information resources the library provides” (Cox & Jantti, 2012, p. 3). Zhong and Alexander (2007), Wong and Cmor (2011), and Wong and Webb (2011) obtained similar conclusions as they studied the California State University Bakersfield Walter W. Stien Library and the Hong Kong Baptist University Library. These were all considered measures of student success and performance.

Results of recent studies reveal a positive predictive association between use of library services, GPA, and retention (Murray, Ireland, & Hackathorn, 2016; Stemmer & Mahan, 2016; Thorpe, Lukes, Bever, & He, 2016; Teske, DiCarlo, & Cahoy, 2013; Stone & Ramsden, 2013). In a recent study, Phillips (2016) insured that library learning, that is, information literacy initiatives, improves outcomes for students and May and Swabey (2015) perceived that “the use of library facilities may be associated with student retention and persistence” (p. 789), whereas Allen (2014) declared that academic libraries have partnered with other departments as a means to boost student retention. For Allen (2014), “the future of library efforts in student retention will lie as much in reaching out to other departments as allowing other departments in the library” (p. 17).

Specific services provided by today’s learning commons are also singled out as contributing to positive retention rates. Catalano and Phillips (2016) posited that students’ “ability to demonstrate information literacy skills contribute to retention and graduation” (p. 3). They found that students who pass the information literacy tests are most likely to persist, and this is a meaningful measure of student success.

Eng and Stadler (2015) defended that students are more likely to persist if they engage with learning, with library services, “interact with library staff, and spend more time using libraries” (Haddow & Joseph, 2010, p. 234).

Hagel, Horn, Owen and Currie (2012) proposed that a “close working relationship between librarian and student” and “working collaborative with other support services across the campus to provide students with integrated support” (p. 219) will have an impact on student retention.

All of these studies confirm what Bell (2008) proclaimed almost a decade ago that “the good news is that research does demonstrate that libraries contribute to student retention” (p. 1).

Andrews et al. (2016) rightfully expressed what libraries should be today: “Rather than thinking about the commons as a single destination, we need to start thinking that wherever students are in the library is now their learning commons” (p. 281).

What is the trend in academic library space today? I’d like to answer, as a typical librarian would, with keywords: social engagement, knowledge production, interaction, collaborative learning, social learning, self-directed learning, connectivity, direct own learning, learning styles, makerspace, spontaneous learning, knowledge creation, active learning, flexible spaces, user-centered library, and individual study.

Please read your library’s 2016 Strategic Plan and Annual Report again. However, this time, count the number of times the word “learn” or “learning” is mentioned.

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