Planning and Implementation
Considerations for the Information Commons in Academic Libraries

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Abstract

The presence of the Information Commons has been growing steadily in academic libraries in the past decade primarily due to rapid technological changes in society and the need to meet evolving student demands and expectations. Ultimately, the idea of the Information Commons forces the reconceptualization of the traditional librarian roles, services, resources and physical space of the academic library. “Blended librarians” and “roving librarians” alter the traditional roles of public service and reference librarians. Flexible and modular learning spaces and digital and mobile access to resources and services are also important tenets of an Information Commons. A well-designed and student-centered Information Commons necessarily integrates a range of campus partners to offer students centralized access to all of their academic needs. Student input and involvement are essential in the planning stages to help inform the design of the Information Commons. Mechanisms for ongoing feedback and input are critical to ensuring the Information Commons continues to meet students’ needs.

Introduction

Since 1995, the number of Internet users has risen exponentially from 16 million, representing less than 1 percent of the world population, to more than 2 billion in 2011, reflecting more than 30 percent of the world population (Miniwatts Marketing Group, 2011). The resulting access to a burgeoning world of electronic and information resources, in addition to the escalating demand and growing expectations for accessing these resources and library services 24/7, has challenged academic libraries around the world. It has forced them to re-think how they need to provide collections, services, resources and access to them in order to remain relevant and meet these emergent needs. Traditionally, in higher education, academic libraries have been responsible for the acquisition, organization, dissemination, evaluation and preservation of information. However, an expanding digital world and vast digital resources significantly impact how librarians perform these activities, and how faculty and staff utilize library materials and resources (Cowgill, Beam, & Wess, 2001). This has been further complicated by a new generation of students who have far different needs and expectations than previous generations. Their dynamic needs and growing expectations are largely unmet by existing academic libraries, structures, spaces, collections, services, practices and librarians (Prensky, 2006). (More details about the characteristics and needs of this new generation of higher education students can be found below in “The New Generation of Students in Higher Education”.)

Consequently, a dramatic transformation of academic libraries is critical. As is evidenced in the literature and as can be found on academic library websites, many libraries are well on their way. The challenge for many institutions is learning how best to create such a Commons amidst rapid and ongoing changes. Put another way, Donald Beagle (1999), a head librarian at the University of North Carolina–Charlotte and a well-respected and prolific author on the topic of the Information Commons, posed the question: “…how
do we adapt the library that has grown up around the print tradition to manage service delivery in the highly complex and fluid digital environment?” (p. 82) Although there have been many strategies employed by academic libraries and librarians to answer this question, none are more popular than the concept of the “Information Commons”. In the last decade, the emergence and proliferation of the “Information Commons” in the majority of the Association of Research Libraries (ARL) libraries has become a growing trend and a promising solution to address Beagle’s question and to address the implications of a changing world and increased expectations and needs from a digital native user base (Stuart, 2009; Bailey & Tierney, 2008). This paper explores the concept of the Information Commons through the following sections: definitions of the term; a description of the new generation of higher education students; the physical space of the Information Commons; collaboration with campus partners; the evolving role of the academic librarian, and the planning and design of the Information Commons.

Definitions of the "Information Commons"

Don Beagle (1999), one of the early proponents of the “Information Commons”, defined the concept as “a conceptual, physical, and instructional space” offering a “continuum of service delivery” in an “integrated digital environment”, and to include the “identification, retrieval, processing, and presentation of information in a variety of formats” (p. 82). Bailey and Tierney (2008) define it more broadly as “a model for information service delivery, offering students integrated access to electronic information resources, multimedia, print resources, and services” (p. 1). Beagle could not have anticipated in 1999 how ubiquitous technology’s impact would be on our personal and professional lives. Nor could he have predicted the rapid rate of transformation needed for our libraries to meet the dynamic needs of an ever-changing patron population. In 2011, even Bailey and Tierney’s definition appears to be dated as the Information Commons has evolved to much more than just information service delivery.

The terms “Learning Commons”, “Academic Commons” and “Knowledge Commons” are found throughout the literature and on academic libraries’ websites. Although these terms are often used interchangeably with “Information Commons”, the literature suggests there are some notable differences among them. The term “Learning Commons” is gaining popularity in the literature, which has stimulated discussions comparing this term with an “Information Commons”. For example, Roe (n.d.) states: “Learning Commons emphasize instruction and collaboration while Information Commons often emphasize technology and digital resources. Learning Commons is a more inclusive term that often includes the concepts emphasized by Information Commons” (p. 1). Beagle (2006) sees these concepts as different but on the same continuum. That is, he views the Learning Commons as an advanced stage of development of the Information Commons model. While the Information Commons represents the clustering of IT tools and resources to support learning, from Beagle’s perspective, the Learning Commons goes beyond that and necessarily coordinates and organizes learning initiatives in collaboration and cooperation with other academic units to support learning outcomes and goals. In his view, the Information Commons tends to be library-centric, whereas he considers the Learning Commons to be more institutionally focused and supported. I concur with this view, with the further conviction that the Learning Commons model will continue to garner appreciation and widespread support in higher education institutions. As this happens, I believe increasing numbers of institutions will strive to adopt a systemic approach to transformation through the commitment of substantial resources to realizing the value of the Learning Commons as the institutional academic clearinghouse for student needs and academic services.

In practical terms, it is often difficult to distinguish between the many “Commons” models and definitions in the literature. This is understandable considering this concept is still evolving. Efforts to further reconceptualize this concept will undoubtedly be continual as the rapid pace of constantly emerging technologies redefines the world around us. There appears to be no direct correlation between what the Commons manifests and its chosen name (Bennett, 2008; Lippincott, 2008), and there is no standardized definition of any term (Lippincott, 2010). Furthermore, a review of academic library websites with an implemented Commons model provides additional evidence that these names and concepts are not used consistently (Leeder, 2009). Because of this, for academic libraries choosing to embark with their own implementations of this concept and needing relevant research, it would be advisable for them to select a
range of these terms to maximize potential appropriate results. As a result of these inconsistencies, I have chosen to use the term “Information Commons” and “Commons” in this paper in a generalized fashion to represent the range of models, definitions and interpretations. I will retain the use of “Learning Commons” when referring to articles employing this term and institutions and libraries which self-identify their Commons as a Learning Commons.

The New Generation of Students in Higher Education

As indicated in the introduction, academic libraries have faced radical changes in technology. These, in turn, have impacted almost all library services and resources, including expectations of 24/7 anytime/anywhere access to a broader set of digital materials and support resources, service delivery and reference support. These enhanced expectations and rising demands come from a new generation of higher education students whose needs cannot be satisfied with traditional library services. These students, known as digital natives (Prensky, 2001), the net generation, generation Y or even millennials, have not known a world without the Internet (Oblinger & Oblinger, 2005), and have an unprecedented fluency and comfort with technology in all aspects of their lives. In addition, the generation Y students are well versed in social media and collaborative learning, and prefer to learn in a social context (Cabral, 2011).

Consequently, today’s students’ expectations and wants for academic libraries are vastly different from those of previous generations. This problem has been further compounded by the outdated design of the traditional academic library, which discourages collaborative group work, access to food and drink within the library and flexible learning environments. In addition, many of the academic librarians tasked with supporting these students tend to be from the digital immigrant population. That is, these librarians were born in the analog age, retain an “accent” and consequently often find it challenging to adopt and learn to use new technologies effectively in the digital era (Prensky, 2006). This has created a “digital disconnect” between tech-savvy higher education students of today and the digital immigrant librarians who are expected to serve and support their evolving research and learning needs. The growth and popularity of the Information Commons in academic libraries have been primarily as a means to respond to these critical issues and new challenges (Lippincott, 2010).

The Physical Space of the Information Commons

Initially, the Information Commons involves the collocation of at least information technology and library resources and services. While some Commons may begin as a computer lab with library resources attached to it, this is not the eventual goal. A much more integrated model is necessary in order to be effective. Sinclair (2007) describes the intent and potential of a well-designed Learning Commons:

It incorporates the freedom of wireless communication, flexible workspace clusters that promote interaction and collaboration, and comfortable furnishings, art, and design to make users feel relaxed, encourage creativity, and support peer-learning. To this add self-help graphics services, color imaging, audio and video editing, and other production and presentation software and it becomes a one-stop collaboratory for out-of-class assignments, writing, research, and group projects. (p. 4)

The goal is to create a flexible and modular learning environment that can accommodate different configurations and student group sizes, and ultimately captures and accentuates students’ propensities and need for social learning (Sinclair, 2009). Obviously, there are a myriad of possibilities within this definition. Descriptions of Information Commons at academic libraries and higher education institutions confirm that the variations of how these take form and are operationalized are unique. In other words, there is no “one-size-fits-all” approach to designing and implementing an Information Commons, although often themes emerge when comparing Information Commons across the U.S. For example, a recent survey of ARL Libraries (Stuart, 2009) revealed that these libraries organized their space in their Information Commons around these eleven themes: Collaboration with Campus Partners; Multimedia; Digital Centers; Faculty and Graduate Student Spaces; Branch and Subject Libraries; Flexible; User-Influenced Spaces; Classrooms, Workshops, Instruction; Galleries, Art, Exhibits, Performances, Events; Tutoring and Peer
Support; Cafes and Refreshment; and Presentation and Practice Facilities. Many factors dictate the extent of deployment and implementation of a Commons that involves such partnerships. These factors include the level of commitment and cooperation among the academic partners; commitment of the administration, leadership and librarians; space and configuration limitations; IT infrastructure requirements and locations; one-time funding for renovation of space, new equipment, resources, training, and support; ongoing costs for maintenance; upgrades and continual training of staff, and actual students’ needs and demands.

With unprecedented budget cuts in academic libraries and higher education institutions throughout the U.S. in the last few years and no reprieve in sight, it has become more difficult for institutions to realize their full vision of an Information Commons. Thus, identifying other sources of funding and developing internal and external relationships becomes essential for academic libraries. These sources can include academic partnerships, business sponsorships and donations. One example of a resourceful initiative occurred at the University of Southern Maine. Unable to acquire funds internally, a group of librarians and administrators proposed an ambitious application to the Strategic Investment Fund for the University of Maine System requesting $214,700 to implement its concept of a Learning Commons (Higgins, Dexter, Nutty, & Grubb, 2010). Sometimes, to offset high initial capital costs in the hopes of acquiring funding in the future, a phased approach is employed. This also offers an opportunity to pilot the Commons on a moderate scale, collect evaluative feedback from stakeholders, and then use these data to help re-design and fully operationalize the concept. This approach has the added benefit of assuring that the Information Commons is truly reflective of patrons’ needs and wants. Academic libraries at the Loyola University Chicago, Binghamton University, and the University of Southern Maine have successfully deployed their Information Commons in phases for a variety of reasons and benefits.

**Collaboration with Campus Partners**

Core to the concept of an Information Commons is the idea of “one-stop shopping” for student resources and services. As this concept evolves, it has expanded beyond simply supporting students’ Information Technology and Library needs. Library partnerships with a range of campus units under the Commons model are becoming more prevalent and valued. These greatly extend the services available to the students, and take the concept of “one-stop shopping” to a new level. Gabb and Keating (2005) argue that without university-wide support and academic partnerships aligned to a common movement toward learning-oriented and learner-centered education, the implementation of a Commons will have minimal impact on student learning.

Many examples exist of academic libraries that have successfully partnered with other campus entities in their Commons model. Alden Library in Ohio University partners with the Center for Academic Technology, the Center for Teaching Excellence, the Center for Writing Excellence, Dining Services, and the Undergraduate College. At the University of British Columbia’s Irving K. Barber Learning Center, students have benefitted from partnerships with a number of campus units, such as writing and research, study skills, multimedia creation, course tutoring, advising, and support for teaching and learning. At the University of Guelph, the library’s Learning Commons is based on a partnership model with Computing and Communications Services, the Office of Open Learning, Student Affairs, and Teaching Support Services. At York University in Canada, the Learning Commons’ initial implementation consisted of services to support students in learning skills, research, writing, and career services. In recognition of the value of campus partners, they report an intent to partner with more campus units including: Computing and Network Services; Information Technology Services; Student Community Leadership Development; English Language Institute; Faculty of Arts Centre for Academic Writing; Atkinson Faculty of Liberal and Professional Studies Writing Program; Bethune College Writing Centre; Faculty of Environmental Studies Writing Program; Faculty of Glendon Writing Workshop; Centre for the Support of Teaching; Office for Persons with Disabilities; Academic Technology Services; Office of the Vice President of Students; and the Counselling and Development Centre. Despite the value and benefits of coordinating and centralizing student resources and academic services with a Learning Commons model, managing these resources and people in such an environment from multiple units on campus is complex and often takes considerable negotiation, compromise, a common vision, and time (McMullen, 2008).
The Evolving Role of the Academic Librarian

As noted, the Information Commons model demands modifications in physical space, access and services. In conjunction with these modifications, the role of the academic librarian in higher education must be re-conceptualized to meet the needs of the new generation of higher education students on the students’ terms. One meaningful re-conceptualization of this role in academic libraries is referred to as the “blended librarian” (Bell & Shank, 2004). A blended librarian describes a librarian who is well versed in both print and online tools, and who has the compliment of the traditional skill set of librarianship and the information and instructional technology knowledge and skills to effectively support and enhance the teaching and learning process for students and faculty alike. Accordingly, librarians’ professional development must be comprised of appropriate and effective instruction in information and instructional technology skills, as students will undoubtedly request assistance requiring librarians’ fluency in these skills. This focused professional development must be continual and monitored regularly to ensure librarians are mastering the needed competencies. In addition, the professional development content must be revised and updated as new and emerging technologies, instructional strategies, and teaching methodologies appear and are adopted (Cowgill, Beam, & Wess, 2001). In fact, academic libraries need to encourage a research-and-development mindset so librarians understand that keeping up to date in these skills is an integral component of their professional responsibility (Gibbons, 2007). Furthermore, opportunities for experimentation and creating a culture of thinking “out of the box” are critical for the success of sustained professional development of librarians. Accordingly, developing and sustaining strategic and collaborative partnerships with the information technology, the instructional technology, and the center for teaching and learning units are paramount to these efforts.

The reference desk and the reference librarian represent the most significant re-conceptualizations of existing areas and traditional roles in the academic library necessary for a successful Information Commons. Gone are the days where reference librarians would be “shackled to the library and print collection” (Wolfe, Naylor, & Drueke, 2010, p. 108) and would sit behind their desks and wait for students to come to them. In the past, the reference desk was “fixed” and reactive and, in many situations, even passive and non-engaging. Google and the Internet have forever changed this reference service model (Adlington & Chris, 2005). As a result, librarians, and reference librarians in particular, need to be prepared to adapt and transform along with it. Essentially, as Leslie Burger (2007), author of “Transforming Reference” puts it, “it’s as simple as us going to where the people are” (p. 1). Thus the term “roving librarian” is used to capture the revised role of a reference librarian whose function helps re-conceptualize references services from fixed and immovable to flexible, mobile and portable. As Huwe (2003) describes it; “we need to go to study areas and stacks to begin thinking about enlivening reading rooms with wireless reference on the fly” (p. 35). The “wireless reference on the fly” describes a reference librarian who, equipped with a laptop, approaches students in the Information Commons and assists them with a host of reference services. These services can include support in instruction, search strategies, research databases, evaluation of resources, and even an in-depth one-on-one consultation if requested (Moore & Wells, 2009). A study (Moore & Wells) investigating user preferences in the Learning Commons at the University of Massachusetts-Amherst, reported that students are in favor of receiving reference support in-person and are in support of this “roving librarian” or “wireless reference on the fly” model for reference needs. When asked about their preferred method of reference and research assistance, 85 percent of survey respondents indicated they preferred to receive this assistance face-to-face. When asked how they felt about librarian staff approaching them and offering them assistance while they are in the Library, one student responded, “helpful because if I need help, I might not want to get up and lose my place, or I might not know who to see.” Another student reported, “I appreciate the offer; I think it is great, especially for people who do not want to lose their spot, leave their stuff unattended, or are too timid to ask for help.”

One of the most dramatic and transformative changes needed in the role of the reference librarian in an Information Commons setting is in the support of students in their undertaking of research projects. The Association of College and Research Libraries’ (ACRL) information literacy definition (http://www.ala.org/ala/mgrps/divs/acrl/standards/informationliteracycompetency.cfm) emphasizes the student’s ability to:
• determine the extent of information needed; access the needed information effectively and efficiently;
• evaluate information and its sources critically;
• incorporate selected information into one’s knowledge base;
• use information effectively to accommodate a specific purpose;
• and understand the economic, legal, and social issues surrounding the use of information; and access and use information ethically and legally.

Using this model as an example, traditionally, reference librarians were involved in just the early stages of the research process; they would help the student determine the information need and show them how to access and acquire it. Now, with the availability of information technology resources embedded within the Information Commons, the “blended librarian” is able to assist the student with the entire research process from initial conception and research to the completion of the project (Cowgill, Beam, & Wess, 2001). The shift in the delivery of references services and the change in the role of reference librarians to accomplish this represent a major departure from existing practice. The impact of such a transition on library personnel cannot be overstated. Accordingly, it is imperative that librarians be invited to participate in the planning and design of the Information Commons. The hope is that with their voice in the design and implementation of the Information Commons, librarians will have greater “buy-in” and be better prepared to make the necessary transitions in their evolving roles.

The Design, Planning and Evaluation of the Information Commons

Although space limitations prevent a full discussion of the details involved in the design, planning, and evaluation of the Information Commons, some of the relevant research and resources in these areas will be discussed.

When planning for an Information Commons, it is vital to begin with a vision statement crafted and endorsed by all relevant participants, including the stakeholders. Unfortunately, although this approach may seem obvious, one study found that only 65 percent of respondents indicated their Information Commons was influenced by any vision statement; clearly, too often the physical layout of the space and associated equipment and furniture drive the design (Bennett, 2003). In addition, the design is often based on perceptions of public-service librarians and not on any formal needs assessment or student input (Lippincott, 2010). Fortunately, the ARL has developed a comprehensive set of needs assessment techniques and resources that have been well received and adopted by many academic libraries throughout the world (Stuart, 2008). Furthermore, many institutions have developed robust needs-assessment models of their own and have made them available online with the intent of sharing them. These institutions include the University of Rochester (known for their anthropological approach for studying students), the University of Massachusetts-Amherst, Georgia Institute of Technology, Ohio University (focusing on technology and services) and New York University (focusing on graduate students) (Lippincott, 2010).

One of the dominant strengths of an Information Commons lies in its ability to accommodate a variety of space configurations to meet a broad range of users’ needs, learning styles, and study preferences. However, many Information Commons are so focused on meeting the needs of digital natives, which tend to be their primary audience, that some end up not meeting the needs of other groups, many of which are marginalized to begin with. Other important populations to consider consist of older adults, commuter students, foreign students, career-switchers, and students with disabilities and special needs. One method to confirm their requirements are met in the Information Commons is to engage them to actively participate in the planning and implementation processes. The University of British Columbia (UBC) has succeeded in this approach. At UBC, students in collaboration with library staff are actively involved in suggesting, building, designing, writing, dreaming, and implementing every aspect of its Learning Commons (UBC, 2010).
Another example of the benefit of incorporating student input is in the case of the University of Massachusetts–Dartmouth. A study (Weiner & Weiner, 2010) was conducted there to determine students’ perceptions of services relevant to learning in preparation for the deployment of a Learning Commons. Since the Commons was designed for students, administrators wanted to collect student data as input in the planning process. Data collection was conducted through two methods: interview/observations of best practices and purposive surveys of Library users. The study findings were most surprising: they revealed that 76 percent found the existing environment acceptable (i.e. prior to any remodeling or redesigning of space), and 61 percent felt that lounge areas were satisfactory. More importantly, the data showed that students ranked their need for tutorial services higher than the need for any environmental changes. These informative data altered the initial sequence in the deployment of elements of the Learning Commons; it was decided that tutorial services would be implemented first.

The success of any Information Commons and its services is predicated on continually updating and revising its functions and services in tandem with the dynamic needs and practices of its patrons. Accordingly, formative evaluation must be an integral component of the implementation and maintenance plan for an Information Commons. To capture a wide range of users, it should include patron surveys, interviews, feedback forms, and focus groups, and even the use of social networking sites to engage students in understanding their preferred needs. Only through the regular collection of data, analysis and subsequent action can administrators be satisfied that the Information Commons is relevant and will continue to promote, support and enhance student learning and evolve as students’ needs evolve.

**Conclusion**

The Information Commons model has existed for several decades but has only recently gained momentum in academic libraries. The rapid and continual technological revolution in our society and the escalating needs and evolving expectations of our higher education students have helped drive its proliferation. Institutions are realizing that the Information Commons is not a passing fad; it has become a needed response to our ever-changing world and the dynamic needs of our library patrons. Consequently, increasing numbers of academic libraries are choosing to create their own version of an Information Commons. As they do so, it is critical that, in addition to their review of the plethora of research literature available and the extensive online documentation of current Information Commons, they invest the necessary time and resources in proper planning, which should include data and input from potential stakeholders and users of the Information Commons. To safeguard its relevancy and sustainability for years to come, mechanisms and processes must be implemented to periodically and regularly evaluate the efficacy and value of the Commons for current patrons, and then leverage these data to revise the Commons accordingly. A commitment to these processes and measures will help the Information Commons transform our academic libraries to its new role and function in our digital age.

**References**


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