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# ALIGNING COLLECTIONS AND SERVICES WITH USER NEEDS AND PRACTICES

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## Abstract

In preparing for a five-year president's advisory review of the library, the Carnegie Mellon University Libraries examined how users drew on the library collection and how they wanted to use information. We surveyed faculty and students to learn how they found and employed library resources for research, study and teaching. Circulation, interlibrary loan, and documented use of electronic resources provided one snapshot on the different ways that the campus community used information.

From a 2001 study [Bergman] we extrapolated how much information for scholarly and research purposes was obtained from the free web. For the advisory board review in late 2010, we again updated this information with results showing a larger web (no surprise) and an increased use of electronic information and free web, a decline in circulation and a small rise in interlibrary loan. Based on these use patterns—a decline in circulation and an overall increase in the use of electronic resources—questions about staffing services and operations needed to be examined.

In the summer of 2011, we explored these changes to understand their practical and operational ramifications. One line of inquiry was to re-examine the data collection process and collected data. Monographic circulation was extrapolated from all circulation data so that this type of use could be examined in more depth. Was the decline in circulation as dramatic as first thought? A second initiative—to put selection in the hands of users—was initiated to test and understand user behavior. Thus in fall 2011, a demand driven monographic acquisitions pilot project in computer science and electrical engineering was begun. This paper will report on the outcomes of those initiatives and initial steps taken to align collections and services.

Keywords: Circulation; reference services; information consumption

## Introduction

In the last thirty-five years, libraries have transformed from a quiet, paper centric collections with a focus on research and study to a vibrant discovery and research center having a diverse resource base. [Perceptions] Today circulation of library materials has declined in major libraries. [Anderson] Ebooks and electronic journals compete with printed materials for user attention. Fewer questions are asked at reference services points. Caught up in daily activities, libraries may not fully comprehend the manner in which use and user behavior has changed and is changing. For example, when confronted with changing patterns and a downturn in use of paper resources, some librarians surmise that lack of marketing accounts for the decline. Others suggest that improved outreach will address the reduced use. What keeps the university libraries from simply looking to marketing as a panacea is a mandatory organizational review conducted every four to six years.

## A System of Periodic Administrative Review

In 1990 the university established a practice of conducting evaluative departmental, college and non-academic unit reviews to align/realign these units to the university's mission. These reviews occur on a four to six year cycle. [President's Advisory Boards] The unit being reviewed creates a briefing book that outlines and reports on unit activities, and may outline issues of interest or

concern. Depending on the unit, sections of the briefing book present faculty research, new research centers, and departmental challenges—intellectual, academic, artistic, pedagogic, financial—are pulled together for review at the visiting board.

Typical composition of the board includes at least two university trustees (one of whom is co-chair) and eight to twelve distinguished or renowned individuals from academia, business, industry, and the arts—whoever is appropriate for the unit being reviewed. The president invites the participants and communicates the charge to the visiting board.

Topics and focus vary from review to review and from board to board; boards may be asked to address specific questions. On site review lasts for one or one-and-a-half days. Following the review, the board writes a report to the president and the reviewed unit. Reviews and reports are confidential to the participants. The university may or may not follow every recommendation from the board. The university libraries have found this review process to be helpful in addressing current challenges and in setting future direction.

#### Recent Data Trends

In preparation for the advisory board visit in December 2010, the university libraries gathered trend data to include in the briefing book. Trends about library use showed a decline in the use of onsite collections and services. Visits to the library facility increased and use of onsite materials declined. The Maggie Murph Café was opened in Hunt Library in FY 2007. In FY 2009, Hunt Library instituted new hours; the library is open 24 hours a day five days a week during the academic year. The addition of the café to the library combined with the extended library hours has drawn students into the library.

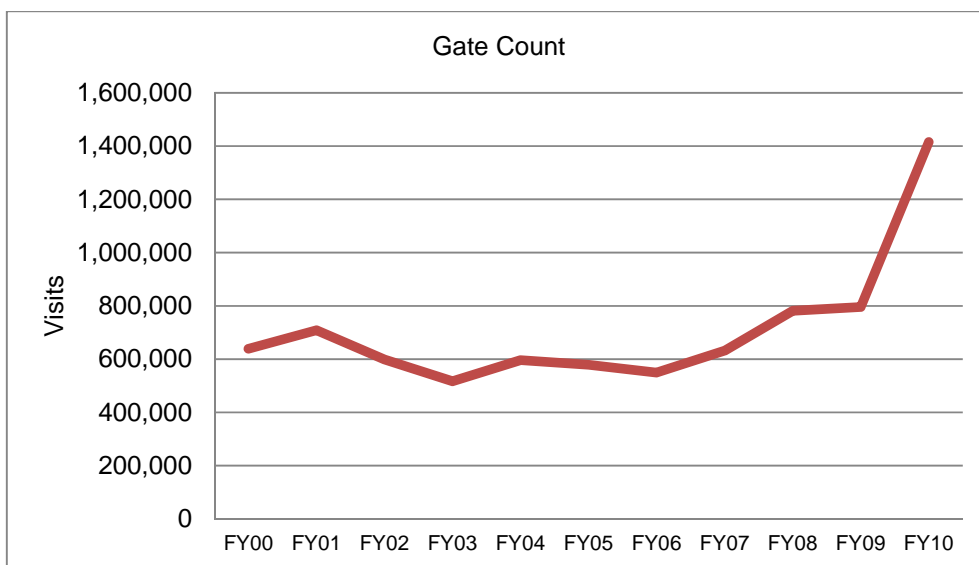


Figure 1

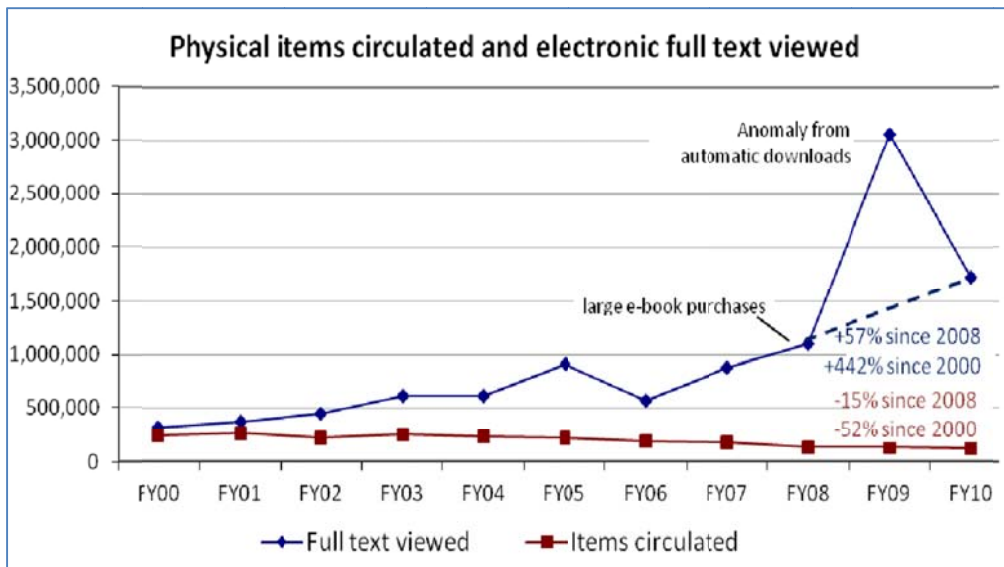


Figure 2 [Carnegie Mellon University Libraries]

Data from licensed electronic resources showed a generally steady increase in use, partially driven by the purchase or licensing of additional online resources.

As part of the preparation for the advisory board, the institutional research and analysis office of the university with input from the library conducted a survey of faculty and graduate students to understand how important library resources are to research and teaching. For example, the study confirmed that databases that the library provided helped both faculty and graduate students stay current in their field, were helpful in finding information in other subjects, were instrumental in being productive and saved time in their work. [Carnegie Mellon University Libraries]

The university libraries, using data available from annual surveys and research about the size of the web, began to think about the range of materials used by individuals seeking information. [Troll Covey] The library knew users went to the web to seek information—for as researchers we did it ourselves. In a study entitled *A Model for Campus Information Consumption*, the use of free web content by scholars at Carnegie Mellon was broadly quantified. [Troll Covey] This exploration is an initial attempt to understand the information universe available to and used by our constituents.

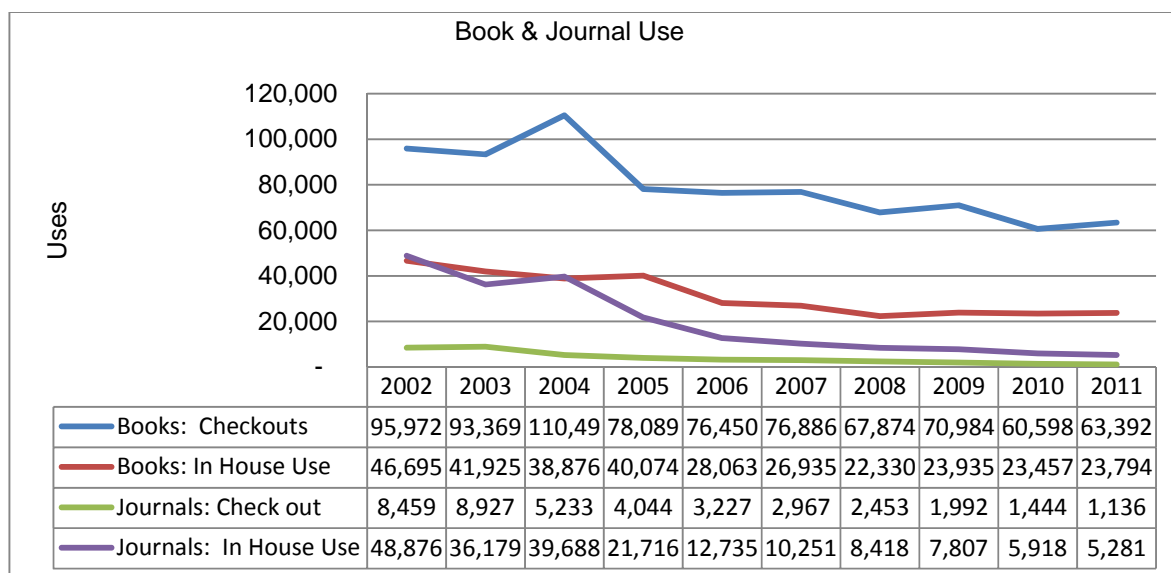
### Information Consumption Trends

	2002		2009
Actual library circulation	265,551	↓	161,673
Actual borrowed through ILL	15,069	↑	22,017
Actual library full text accessed	378,069	↑	1,410,879
Estimated free web content used for scholarly purposes	81,411	↑	449,750
Gate count	598,892	↑	1,242,816
Reference questions	14,539	↓	11,138

More users came to library, checked out fewer items and asked fewer questions. Use of licensed full text increased. Some increase is likely due to new products purchased or licensed thus increasing the pool of available content.

## Circulation and Collections

Library bibliographers were concerned about the decline in circulation. Some posited that the decline was simply fewer journal volumes circulating, as the libraries had a rigorous program to license journal content for user convenience and to deepen journal backfiles. Investigating circulation data showed that paper journal circulation declined as did book circulation. The decline in the circulation of journal volumes and the reduction of in house use of journals correlates with the increase in the licensing of electronic journals.



The library acquisitions budget grew from 2002-2011. Generally budget increases had been directed to journal licensing. At the same time, funding for monographs remained steady and book acquisition did not decline. The library purchased the same number of books, yet book usage declined as shown in the graph above. Carnegie Mellon has had a long-standing arrangement with The University of Pittsburgh University Library System (ULS). The main library is located within a ten minute walk from the Carnegie Mellon campus. Students and faculty from Carnegie Mellon can secure a borrowing card to use the University of Pittsburgh collection. In 2001, Carnegie Mellon users borrowed 6,178 monographs from ULS and by 2010 that number had dropped to 2,225. Clearly a pattern confirmed—today users are not checking out or using printed books as they had formerly.

Library bibliographers had been cautious in purchasing electronic books. [Ashcroft, Dewan] It was their view that students and faculty were loath to use them; however in the face of declining monograph use and the increase in use of electronic resources, the libraries decided to experiment with a demand driven acquisitions program. [Dialogue] Our intent had been to initiate the program in fall 2011. The official start of the program was January 2012. The subject areas covered by the program included statistics, electrical engineering, and computer science. Specific publishers would be included in the program and a cost ceiling of \$200 was established. As of April 2012, 252 bibliographic records for ebooks in the program were added to the library catalog. The library and the vendor worked on the triggers that would initiate a purchase. The standard trigger matrix included a mix of views, duration (time used), prints and copies. Thus far of the 252 ebooks loaded into the online catalog, fifty two ebooks had been used and of those, thirty four had been purchased.

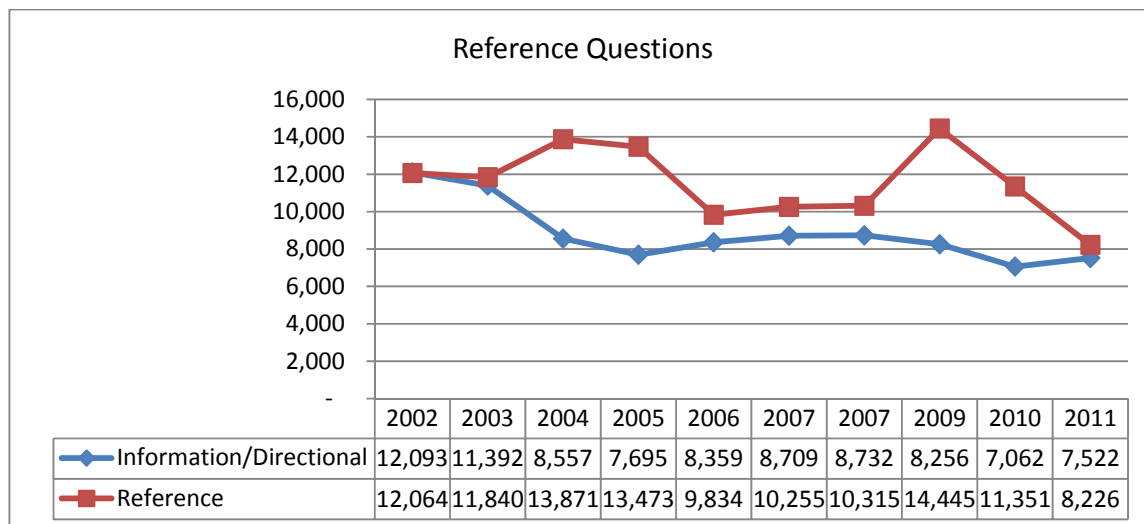
Books in the field of statistics are in high demand. Another experiment to calibrate the readiness and receptivity to ebooks was initiated. In this instance, a prominent publisher of books in mathematics and statistics was identified, and the library agreed to purchase all their titles as ebooks. This program too began in January 2012. Usage data gathered is less compelling. A side

issue that has emerged is under what circumstances will the libraries purchase in paper a book already received as an ebook. Another version of the same issue is whether we should borrow a book in paper if the reader prefers a paper book to an ebook, particularly one that has been licensed for multiple users.

#### Traditional Reference Service: The Desk

Questions at the reference services points have declined. [Applegate] Reference desks are staffed by a combination of professional reference librarians and trained information assistants. Information assistants are graduate students enrolled in a master’s program in library and information science. The library has 14 reference librarians who staff three reference desks, one in the sciences and engineering, one for the arts, and a third covering business, humanities, public policy, social sciences and general topics.

Reference traffic at each of the reference services points varies, and as a consequence each service point has a different solution to address the declining traffic. Reference service traditionally extended into the evening and was offered on weekend afternoons and Sunday evenings. In 2011, the heads of the reference departments assessed the data and their respective departments decided to experiment with differing ways to staff the service points.



With the convenience of the web to answer many informational questions and some reference questions, library users have been disintermediated from the reference desk, or have little knowledge of it. In fall semester 2011, the Sorrells Engineering and Science Library decided to remove the reference desk. The library is situated in a building that is part of engineering and science quadrant of campus. The facility is compact, all on one floor. The librarian offices are situated in close proximity to the circulation desk and adjacent to the primary entry to the library. Few questions were asked at the reference desk. Librarians considered it was a poor use of their time to be stationed at a desk with very low activity. In the new configuration, directional questions are answered at the circulation desk. Reference librarians established a schedule and rotation when each is “on-call.” When a reference question is asked at the circulation desk, the circulation staff escorts the student or faculty member to the office of the librarian on-call. Reference service is now provided 9 a.m. – 5 p.m., Monday through Friday. This service model appears to be working well. Faculty and students alike have responded favorably to this new mode of service. Anecdotally, some library users having repeat questions go directly to the librarian’s office.

At the business, humanities and social sciences reference desk (one desk) and at the arts reference desk, reference transactions have also declined. In both instances, hours of service have

been reduced. Reference desks open later in the morning and close earlier in the evening. One desk is staffed by information assistants during the slower periods of the day.

The arts reference desk, located on the 4<sup>th</sup> floor of Hunt Library, maintains a reference desk but with a reduced staffing schedule. As there was little traffic early in the day, weekday hours are 11 a.m. to 6 p.m. A backup service point on the same floor, the audio collection desk, serves as an information and referral desk when the arts reference desk is closed.

The main reference service in Hunt Library recalibrated their service hours after an analysis of reference statistics and of a special study in 2011, examining the questions asked at the desk. From this information, the desk hours were altered. Service at the desk is available Monday through Thursday 10 a.m. to 7 p.m.; Friday 10 a.m. to 5 p.m. and Sunday 1 p.m. to 5 p.m. Morning hours are generally staffed by an information assistant. On Sunday afternoon, a library specialist provides reference services.

The future direction of the information assistant program calls for re-evaluation. One of the predominant attractions to this program is the opportunity to gain reference experience. With the overall decline in reference questions and the move to a modified reference service and reduced reference hours, how should the program be shaped?

The decline in monograph circulation poses a conundrum. Faculty and especially students have asked for "more books." Exploring that decline in the face of healthy monographic funding will be studied in the second half of 2012. Questions to be addressed include are we purchasing the right monographs and are they being purchased in the right format.

Another way to explore the decline in monograph use is to engage faculty on how they use monographs today, both for research and in teaching. Have assignments from faculty, particularly in the book-related disciplines, changed? Does the emphasis on experiential learning-by-doing influence whether students turn to monographic literature? With the availability of online books freely available on the web, do users "seek the snippet" when faced with limited time and looming deadlines?

## Conclusion

As the university libraries consider short and long term service and collection directions, flexibility and agility are essential. Libraries want to be nimble and responsive to change, but do not want to become the flavor of the week. Users are changing—how are we changing? Ironically, higher education can be a hot bed for ideas but less welcoming to systemic change. The library as it stood thirty five years ago is history. A new time has come, encouraging experimentation and fresh ideas that can re-position the library.

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