



7-2012

## **Scholarly Reading and the Value of Academic Library Collections: results of a study in six UK universities.**

Carol Tenopir  
*University of Tennessee - Knoxville*

Rachel Volentine  
*University of Tennessee, Knoxville*

Donald W. King

Follow this and additional works at: [https://trace.tennessee.edu/utk\\_infosciepubs](https://trace.tennessee.edu/utk_infosciepubs)



Part of the [Library and Information Science Commons](#)

---

### **Recommended Citation**

Carol Tenopir, Rachel Volentine, and Donald W. King. "Scholarly Reading and the Value of Academic Library Collections: results of a study in six UK universities." *Insights, the journal of the UKSG (formerly Serials)*. 25(2), 2012:130-150.

This Article is brought to you for free and open access by the School of Information Sciences at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in School of Information Sciences -- Faculty Publications and Other Works by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact [trace@utk.edu](mailto:trace@utk.edu).

# Scholarly Reading and the Value of Academic Library Collections: results of a study in six UK universities

*Based on a study carried out for JISC Collections and presented by Carol Tenopir at the 35th UKSG Conference, Glasgow, March 2012*

Measuring the use, outcomes and value of the library's role in scholarly reading helps demonstrate the value library collections bring to scholarship. The Scholarly Reading and the Value of Library Resources project, funded by JISC Collections, measured the value and outcomes to academic staff members from access to scholarly publications. Six higher education institutions in the UK participated in the 2011 survey of scholarly reading. Over 2,000 academic staff members responded to the survey, which asked questions about reading of scholarly articles, books and other materials. Respondents read from a variety of materials, an average of 22 articles, seven books and ten other publications monthly, for an average of 39 scholarly readings per month. Readings from the library are more likely to be for research or teaching and the libraries' e-journal collections are the main source for article readings. Additional reading patterns and outcomes are discussed.

## Introduction

Academic libraries provide access to scholarly articles, books and other materials to support the work of academic staff and students, yet academics today also have many alternative ways to access scholarly information. Measuring the use, outcomes and value of the library's role in scholarly reading helps librarians make decisions about the future direction of their collections and services, and helps demonstrate the value library collections bring to scholarship.

The Scholarly Reading and the Value of Library Resources project<sup>1</sup> measured the value and outcomes to academic staff members from access to scholarly publications in six universities in the United Kingdom. It sought to answer questions such as: What is the value and outcome of scholarly reading for academic staff? How do academic library collections support research and teaching activities of academic staff? How do reading patterns of articles, books and other materials differ? What is the role of the academic library collections in teaching and learning? Six higher education institutions – Cranfield University, Durham University, Imperial College London, University of Dundee, University of East Anglia and the University of Manchester – participated in the 2011 survey of scholarly reading by their academic staff members. (See Appendix for survey questions.) JISC Collections funded this study led by the Center for Information and Communication Studies at the University of Tennessee.

This article summarizes the results of the combined findings, with a particular emphasis on those findings that focus on the value of the reading that comes from the library collections.

## Previous studies

The study builds on reading surveys conducted by Carol Tenopir and Donald W King in the United States since 1977<sup>2</sup> and in Australia and Finland in 2005 and 2006.<sup>3</sup> Together, these studies track scholarly reading patterns and the continued contribution of academic library collections to the academic enterprise.

Tenopir and King<sup>4</sup> and King and Tenopir<sup>5</sup> summarize reading patterns of academic staff members through the 1990s. These two sources provide extensive literature reviews and



CAROL TENOPIR  
Chancellor's Professor  
School of Information  
Sciences



RACHEL VOLENTINE  
Research Coordinator  
Center for Information  
and Communication  
Studies



DONALD W KING  
Adjunct Professor  
University of Tennessee

131 serve as background for the data presented in this report. Multi-university studies by others focus on how academic staff use electronic journals, online resources and libraries.<sup>6</sup> Further studies show that staff members in the sciences prefer and read more electronic journal articles than in humanities or social science disciplines.<sup>7</sup> Access and convenience, especially electronic access, are important to all academic staff.<sup>8</sup> A 2011 study by the Research Information Network (RIN) found a link between the library and the institution's research performance.<sup>9</sup> For the first time, the 2011 survey includes sections on reading from books and other publications and questions on the use of social media.

## Methodology

Earlier surveys examined just the reading of scholarly articles. This survey includes those questions, but expands the survey to look at reading books and book chapters and other scholarly materials, including conference proceedings, government documents, and other material from websites used for work-related reading. The questions include both reader-related (demographic) and reading-related questions. Reader-related questions include age, gender, percentage of work time spent on various activities, number of personal subscriptions and two measures of recent academic success: publication record and record of recent awards.

The reading-related questions are mostly based on the 'critical incident technique' first developed by Flanagan,<sup>10</sup> which has since been applied to many contexts, including libraries and readings.<sup>11,12</sup> We focus on the last scholarly reading as the 'critical' incident of reading.<sup>13</sup> This allows us to ask questions about a specific most recent reading, so the respondent will have a better memory of that reading, rather than having to reflect back on multiple readings over a longer period of time. The questions cover many details of that reading, including time spent on the reading, source of reading, purpose of reading, value of the reading to the purpose and outcomes of the reading.

Starting in March 2011, the head librarian or library representative at the six UK universities sent an e-mail message with an embedded link to the survey instrument housed on the University of Tennessee's server. We received 2,117 responses by the official closing date of 9 June 2011. Approximately 12,600 invitations were distributed in total, providing an overall estimated response rate of 16.8%. Of the 1,102 respondents who chose to give their academic discipline, 34% are in sciences, 24% are in social sciences, 16% are in engineering/technology, 13% are in medical/health, 11% are in humanities and 2% are 'other'. The ages of respondents varied from under 30 to over 60, with 18% under 30 and 7% over 60.

Since respondents were allowed to leave the survey at any time, skip questions, or were timed out automatically if they began the questionnaire and did not complete it, most of the questions have a lower number of responses than the total of 2,117 who answered at least one question. All respondents for a particular question equal 100% for that question.

Since surveys rely on self-reporting, the main limitation of this method is that we assume that respondents are replying accurately and the exact numbers should be viewed as approximations. Relatively low response rates may mean that those academics who do not read as much did not reply. The academics surveyed here, and in earlier surveys, are all affiliated with universities that have robust libraries with electronic and print collections available to all of their affiliated academic staff.

## Results and discussion

### Total amount of reading per academic staff member

Academic staff report reading from a variety of materials, but they read the most articles. Respondents read from an average of 39 scholarly readings per month, comprising 22 articles, seven books, and ten other publications. On this basis an annual total could

be estimated at 468 readings per year (i.e. 39 X 12). Academics who spend more time per book reading also spend more time per article and other publication reading. A significant relationship between the number of article readings and the number of other publication readings also exists. If a respondent reads a lot, they do not focus on one type, but read from all types of material. For example, academic staff members who read more articles than the average also read more books and other publications.

**“Successful academics read more on average.”**

A significant relationship exists between successful academics, defined as those who publish more and earned an award in the past two years, and the number of article, book and other publication readings. Successful academics read more on average. While we cannot draw a cause and effect relationship, these relationships show that scholarly reading is an important part of the work activities of successful academics.

When the average time spent per reading is multiplied by the average number of articles, books and other publications read each month, the average academic staff member spends 18 hours reading articles, 12 hours reading books and seven hours reading other publications (outliers excluded). The estimated annual total commitment to scholarly reading is at least 448 hours per academic, or the equivalent of 56 eight-hour days each year, illustrating the huge time commitment that the average academic staff member invests in scholarly reading each year.

Respondents who spend more time on per book reading also spend more time per other publication reading and article reading. Readers from every discipline report more article readings than from other types of scholarly material. Humanities respondents report the most readings – on average 58 scholarly readings. Scientists read many articles but overall report the fewest total readings, an average of 38 readings (Table 1).

	Article readings	Book readings	Other publication readings	Total readings
Social sciences	21	9	11	41
Sciences	27	3	8	38
Humanities	28	21	9	58
Engineering/technology	28	5	9	42
Medical/health	31	4	10	45

Table 1. Total scholarly reading by respondents' academic discipline

### How academic staff become aware and obtain scholarly material

Academics find more articles through searching, while books are often found through word-of-mouth. Citations are a useful tool for discovering articles and books (22% and 11% respectively). Overall, UK academic staff members use a variety of methods to become aware of articles and books (Table 2).

Excluding outliers, respondents spend on average 16 minutes browsing or searching for articles, 11 minutes for books, and nine minutes for other publications. Articles, on average, may require more time to find because there are so many published monthly and large databases include millions of articles. While academics appreciate the ease and accessibility of online access to articles, the sheer amount of information may be requiring more time to become aware of relevant material. One respondent states, “There is far too much information out there and very little time to screen through and read articles”. Respondents are also more likely to previously own or find out about books through another person, which may decrease the amount of time they spend.

	Article		Book	
	N	%	N	%
Found while browsing	134	11.2	61	6.5
Found while searching	392	32.9	218	23.4
Found through citation in another publication	211	17.7	106	11.4
Another person told me about it	205	17.2	262	28.1
Promotional e-mail or web advert	43	3.6	34	3.6
Don't know or don't remember	34	2.9	54	5.8
Other	173	(14.5)	197	(21.1)
Already owned or knew	–	N/A	73	7.8
For review or was a contributor/co-author	–	N/A	38	4.1
Others	173	14.5	86	9.2
<b>Total</b>	<b>1192</b>	<b>100.0</b>	<b>932</b>	<b>100.0</b>

Table 2. How academic staff respondents became aware of material

In Table 2 and all subsequent tables, 'n' represents the number of responses

Academics use different sources to obtain the different materials; articles are predominately found through the library, while books are often purchased and other publications are frequently obtained from either a free copy from a publisher or website (Table 3). While respondents are using the library to obtain the article, they are usually interacting with an electronic version (93.5%) and are rarely reading in the physical location (1.7%).

	Article %	Book %	Other Publication %
I bought it for myself/personal subscription	4.7	39.1	14.9
The library or archives collection	65.2	25.7	13.8
Inter-library loan or document delivery service	2.1	1.9	1.4
School or department collection	4.5	2.6	2.7
A colleague, author or other person provided it to me	5.6	10.5	13.0
A free, advance, or purchased copy from the publisher	–	14.0	17.8
Website/free web journal	13.4	N/A	26.6
Other source	4.5	6.2	9.7
<b>Total %</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 3. Where academic staff respondents obtain material

Academics spend more time on receiving, printing and other tasks involved in obtaining books than they do for articles or other publications. On average, they spend approximately six minutes to obtain an article or a publication, and 14 minutes to obtain a book. While approximately 5% of respondents spend over 30 minutes to obtain a book (not including printing, photocopying or other task), less than 1% spend over 30 minutes to obtain an article or other publication.

One explanation of why books and other publications, on average, take longer to obtain than articles once the reader is aware of the item is because articles are more often accessed through the library's electronic services, while books and other publications typically are obtained from other sources. The UK academic libraries' e-journal collections are saving the time of the reader in obtaining articles, and as one respondent comments, "without wide electronic access through library subscriptions

"... articles are more often accessed through the library's electronic services, while books and other publications typically are obtained from other sources."

134 many aspects of my work would either take substantially longer or be done to a lower standard”, and another respondent says, “subscriptions to electronic journals improves my research and makes it faster and easier for me to perform my job effectively”.

We did not explicitly ask if the book reading was from an electronic source, but from the responses to how they found out about and obtained the book reading, we assume the majority of book readings are done from physical copies. As a result, respondents must spend time getting to the book’s physical location, whether a bookstore, library, or a colleague’s office, requiring more time than downloading an article or government document from a website or electronic journal while sitting in an office or at home.

Overall, respondents spend more time reading from books than articles or other publications. Respondents, however, are reading more articles and as a result spend more time on total article readings than book or other publication readings (Table 4). Earlier we said academics spend 448 hours per year on scholarly reading, but their total commitment goes beyond the time spent reading to also include the time spent finding and obtaining the material. This illustrates an even greater commitment of time invested in scholarly reading. The figures in Table 4 are one measure of the ‘exchange value’ placed on scholarly reading. The average academic staff member spends over 300 hours each year on journal article readings, 180 hours on book readings, and around 120 hours on other publication readings, for a total commitment of 76 eight-hour days each year. If scholarly reading was not a valuable and useful aspect of their work, they would not spend as much time using articles, books and other publications.

	Article	Book	Other publication
Become aware	16	11	9
Obtain	6	14	6
Read	49	106	42
<b>Total time(in minutes) per material</b>	<b>71</b>	<b>131</b>	<b>57</b>
No. read per month	22	7	10
Total time reading per month	26 hours	15 hours	9 hours and 30 minutes
<b>Total time reading per year</b>	<b>39 eight-hour work days</b>	<b>22 eight-hour work days</b>	<b>15 eight-hour work days</b>

Table 4. Total time (in minutes) spent on scholarly materials by academic staff respondents

### Principal purpose of scholarly reading

Research and writing is the most frequent purpose for reading for all types of scholarly materials (Table 5). Teaching is the second most frequent purpose for articles and books. Other publications are more frequently read for current awareness/keeping up than are books and articles.

	Article % (n=1161)	Book % (n=921)	Other % (n=731)
Research and writing	74.3	57.6	45.2
Teaching	12.0	27.6	10.7
Administration	0.2	0.1	2.9
Current awareness/keeping up	5.9	2.5	28.3
Consulting, advising	0.9	2.2	2.5
Internal or external presentations	1.6	1.1	1.1
Continuing education for self	2.5	5.2	5.2
Engagement activities (to wider community)	0.3	0.8	1.2
Knowledge transfer or enterprise activities	N/A	0.4	0.5
Other	2.3	2.5	2.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 5. Comparison of principal purpose of scholarly readings by academic staff respondents

## Value of scholarly reading

Book readings were rated as 'very important' to 'absolutely essential' (49.6%), while other publications have the lowest importance ranking (Table 6). Approximately 45% of other publication readings are 'somewhat' or 'not at all' important. Only a few (approximately 1%) of article and book readings are considered not at all important.

	Article (n=1160)	Book (n=918)	Other (n=729)
Not at all important	1.1	0.9	5.3
Somewhat important	31.4	19.7	39.4
Important	29.5	29.8	26.5
Very important	25.1	31.3	18.1
Absolutely essential	12.9	18.3	10.7

Table 6. Importance of scholarly reading for academic staff respondents

We see a wide range of outcomes from scholarly readings, and less than 1% of article and book readings and 3% of other publication readings are considered a waste of time (Table 7). Inspiring new thinking and improving the result are the two most frequent outcomes.

	Article% (n=934)	Book% (n=935)	Other% (n=749)
Inspired new thinking	53.7	44.7	39.1
Improved the result	37.8	47.7	33.8
Narrowed/broadened/changed the focus	28.1	26.5	21.6
Saved time or resources	9.6	14.5	10.9
Resolved technical problems	9.9	21.8	10.1
Others	6.8	4.5	9.9
Resulted in faster completion	4.6	13.5	7.1
Resulted in collaboration/joint research	4.4	3.1	4.0
Wasted time	0.8	0.2	2.9

Table 7. Outcomes of scholarly reading for academic staff respondents\*

\*Respondents could select more than one answer

## The role of library collections

How academic staff members obtain scholarly reading material can be assigned to three basic categories: library-provided, personal source (e.g. personal subscription or purchase) and others. Most scholarly article readings are obtained from the library (67.3%), a finding that is consistent with previous studies.<sup>14</sup> In the UK, less than 5% of article readings come from personal subscriptions (Table 8), which is similar to the 2005 US findings. Unlike article readings, the majority of book readings are obtained through personal copies (39.1%), and only 27.6% are obtained from a library. Other publications are more likely to be obtained from another source, including other online sources (27%) or another person (31%).

	Article		Book		Other publication	
	N	%	N	%	N	%
Library-provided	800	67.3	257	27.6	111	15.2
Personal source	56	4.7	364	39.1	109	14.9
Others	333	28.0	310	33.3	510	69.9
<b>Total</b>	<b>1189</b>	<b>100.0</b>	<b>931</b>	<b>100.0</b>	<b>730</b>	<b>100.0</b>

Table 8. Source of reading by academic staff respondents

A 2011 study by the Research Information Network found a relationship between the institution's library and its research performance.<sup>15</sup> The RIN study concludes that easy access to high-quality content is a key foundation for good research, and when the library works in partnership with researchers it enables better library services and creates top

136 researchers. We found a similar association between the library's resources and its support of research. Approximately three-quarters (76%) of the articles obtained through the library are principally for research and writing (Table 9). Just over half (57%) of article readings from a personal subscription are for research and writing (29 of 54). Seventy-two percent of article readings obtained from other sources are read for research and writing. Approximately 73% of book readings and 68% of other publication readings obtained from the library are primarily for research and writing.

		Personal subscription	Library provided	Others	Row Total
Principal Purpose	Research & writing	31 57.4%	600 76.4%	230 71.9%	861 74.2%
	Teaching	7 13.0%	99 12.6%	33 10.3%	139 12.0%
	Current awareness	8 14.8%	39 5.0%	22 6.9%	69 5.9%
	Others	8 14.8%	48 6.1%	35 10.9%	91 7.8%
	<b>Column Total</b>	<b>54</b> <b>100.0%</b>	<b>786</b> <b>100.0%</b>	<b>320</b> <b>100.0%</b>	<b>1160</b> <b>100.0%</b>

Table 9. Association between principal purpose for which obtained by academic staff and source of article

Article readings from personal subscriptions are more likely to be of recent publications. Eighty-three percent of articles obtained through a personal subscription are published in the past year (2010–2011). Over half of the library-provided and other source articles are 18 months old or older (55.4% and 53.3% respectively). No articles obtained through personal subscription are over ten years old (Table 10). Regardless of the age of the publication, library-provided article readings are primarily from an electronic subscription. Eighty-six percent of pre-1996 library-provided articles are obtained from an electronic library subscription (76 of 88), and 95% of the library-provided articles in their first year of publication are from an electronic library subscription (315 of 331).

	Personal subscription	Library provided	Others	Row Total
Before 1996	0 0.0%	95 12.5%	32 10.0%	127 11.2%
1996–2000	0 0.0%	53 7.0%	18 5.6%	71 6.3%
2001–2005	3 5.6%	109 14.4%	42 13.2%	154 13.6%
2007–2009	6 11.1%	163 21.5%	78 24.5%	247 21.8%
2010–2011	45 83.3%	338 44.6%	149 46.7%	532 47.0%
<b>Column Total</b>	<b>54</b> <b>100.0%</b>	<b>758</b> <b>100.0%</b>	<b>319</b> <b>100.0%</b>	<b>1131</b> <b>100.0%</b>

Table 10. Association between source of article and year of publication by academic staff

One way to represent the value of the library for scholarly work and research is to formulate how many hours per year each academic staff member dedicates to library-provided reading. Based on past methodology that creates a formula to measure academic staff output based on library input,<sup>16</sup> we measured the library's value by the time spent using library reading material, assuming that scholarly readings are important for quality research, teaching and other work activities. By using a simple formula of time spent reading each material multiplied by the number of each material read per month multiplied by 12 to calculate an annual total, we can illustrate the total amount of reading by each academic staff member. We then multiply the total amount by the percent obtained from the library to determine

137 the number of hours per year each staff member devotes to library-based work (Table 11). Most time is spent on library-provided article readings, approximately 144 hours each year. Approximately 40 hours is spent on library-provided book readings and 13 hours on library-provided other publication readings each year. Annually, academic staff spend 197 hours of their work time with library-provided material, or the equivalent of 25 eight-hour days.

	Minutes per reading	Number read per month	Multiplied by 12 months	Percent from library	Total
Article	49	22	12	0.67	144 hours
Book	106	7	12	0.27	40 hours
Other publication	42	10	12	0.15	13 hours

Table 11. Value of library resources

## Conclusions

Academic staff members use multiple sources of information every day from scholarly articles, books and other publications for their teaching and research. As a result, time has become an increasingly important deciding factor for where to obtain desired material. Academic staff members spend a large portion of their work time on scholarly reading and reading has many positive outcomes on their research and teaching. The amount of time they spend on reading from the library's collections is evidence of the importance of library-provided scholarly materials to academic work.

“Annually, academic staff spend 197 hours of their work time with library-provided material, or the equivalent of 25 eight-hour days.”

A vast majority of article readings come from the library's e-journal collection, while personal copies are popular for print books and the open web for other materials. Convenience and ease of accessibility is likely the most important factor in making choices of where to get material to read. In order for the library to maintain its function as a central source of information at the university, it must strive to keep its collections as accessible and convenient as possible. Providing access through the library to e-resources is crucial to the research and teaching missions of the university, and collections which include back-files in addition to current subscriptions are a key investment. Scholarly library-provided e-books have not yet reached their potential and may drive changes in reading behavior if they are convenient and relevant to the academic staff.

Library usage data from COUNTER reports and SCONUL confirms that usage is high and the number of articles downloaded has steadily increased over time. The library may be providing more readings than people are aware of because often it is not possible to distinguish library-provided resources from free ones. There is often a perception that more content is 'free on the web' than is actually the case. Especially as the library's role in providing access to content becomes less visible, it is more difficult for users, funders and librarians to judge the library's value using only usage measures. Branding of the library's role in e-collections will help academics more fully realize the benefits of their academic library. The value academic reading has on the outcomes of the work of the university is apparent, and the university library, especially for article readings, is essential to the quality of the academic enterprise.

### Acknowledgements

*We would like to thank our funding agency in the UK, JISC Collections, with particular thanks to Lorraine Estelle. This study is part of a larger study, Lib-Value, funded in the US by the Institute of Museum and Library Services. Representatives from the six universities that participated in this study helped at all stages. We would like to thank Simon Bevan (Cranfield University), Christopher Skelton-Foord (Durham University), Frances Boyle (Imperial College London), Denise Jackson (University of Dundee) and Dominic Broadhurst (University of Manchester), and especially Nicholas Lewis, Library Director, University of East Anglia and Hazel Woodward, Library Director, Cranfield University, who shepherded this effort from the beginning to end.*

## References

1. Tenopir, C and Volentine, R, *UK Scholarly Reading and the Value of Library Resources: Summary Results of the Study Conducted Spring 2011* Study on behalf of JISC Collections, 2012:  
<http://www.jisc-collections.ac.uk/Reports/ukscholarlyreadingreport/> (accessed 24 April 2012).
2. Tenopir, C and King, D W, *Towards Electronic Journals: Realities for Scientist, Librarians and Publishers*, 2000, Washington DC, Special Libraries Association.
3. Tenopir, C, Wilson, S, Vakkari, P, Talja, S and King, D W, Cross Country Comparison of Scholarly E-Reading Patterns in Australia, Finland and the United States, *Australian Academic & Research Libraries* (AARL), 2010, 41(1), 26–41.
4. Tenopir, C and King, D W, ref. 2.
5. King, D W and Tenopir, C, Using and Reading Scholarly Literature. In: *Annual Review of Information Science and Technology* 34, Ed. Williams, M, 2001, Medford, NJ, Information Today, Inc.
6. Healy, L W, Dagar, L and Wilkie, K M, *Custom Report Prepared for the Digital Library Federation/Council on Library and Information Resources*, 2002, Burlingame, CA, Outsell.
7. Brown, C M, The Role of Electronic Preprints in Chemical Communication: Analysis of Citation, Usage and Acceptance in the Journal Literature, *Journal of the American Society of Information Science and Technology*, 2003, 54(5), 362–371.
8. Maughan, P D, Library Resources and Services: A Cross-Disciplinary Survey of Faculty and Graduate Student Use and Satisfaction, *Journal of Academic Librarianship*, 1999, 25(5), 354–366.
9. Research Information Network, *The Value of Libraries for Research and Researchers*, A RIN and RLUK Report, 2011.
10. Flanagan, J C, The Critical Incident Technique, *Psychological Bulletin*, 1954, 52(4), 327–358.
11. Bradford, M L, The Critical Incident Technique and the Qualitative Evaluation of the Connecting Libraries and Schools Projects, *Library Trends*, 2006, 55(1), 46–64.
12. Andrews, J, The Use of the Critical Incident Research Technique in an Academic Library, *Library & Information Research News*, 1991, 14(50), 22–27.
13. Griffiths, J M and King, D W, *A Manual on the Evaluation of Information Centers and Services: NATO, AGARD*, 1991, New York, American Institute of Aeronautics and Astronautics.
14. King, D W, Tenopir, C, Montgomery, C H and Aerni, S E, Patterns of Journal Use by Faculty at Three Diverse Universities, *D-Lib Magazine*, 2003, 9(10):  
<http://www.dlib.org/dlib/october03/king/10king.html> (accessed 24 April 2012).
15. Research Information Network, ref. 9.
16. Luther, J, University Investment in the Library: What's the Return? A Case Study at the University of Illinois at Urbana-Champaign, *Elsevier Library Connect White Paper*, 2008:  
<http://libraryconnect.elsevier.com/sites/default/files/lcwp0101.pdf> (accessed 24 April 2012).

**Article © Carol Tenopir, Rachel Volentine and Donald W King**

Corresponding author: Carol Tenopir, Chancellor's Professor, School of Information Sciences; Director of Research and Director of the Center for Information and Communication Studies, College of Communication and Information

University of Tennessee, 1340 Circle Park Drive, 423 Communications Bldg, Knoxville, TN 37996-0341, USA  
Tel: 001 865 9747911 | e-mail: ctenopir@utk.edu

To cite this article:

Tenopir, C, Volentine, R and King, D W, Scholarly Reading and the Value of Academic Library Collections: results of a study in six UK universities, *Insights*, 2012, 25(2), 130–49, doi: 10.1629/2048-7754.25.2.130

To link to this article:

<http://dx.doi.org/10.1629/2048-7754.25.2.130>

## Appendix

### Scholarly Reading and the Value of Library Resources: A Survey

#### Section 1: Scholarly Article Reading (Print and Online)

1. In the past month (30 days), approximately how many scholarly articles have you read? (Articles can include those found in journal issues, Web sites, or separate copies such as preprints, reprints, and other electronic or paper copies. Reading is defined as going beyond the table of contents, title, and abstract to the body of the article)

\_\_\_\_\_

The following questions in this section refer to the SCHOLARLY ARTICLE YOU READ MOST RECENTLY, even if you had read the article previously. Note that this last reading may not be typical, but will help us establish the range of reading patterns across a range of academic staff, disciplines, and institutions.

2. What is the title of the journal from which this last article was read or, if not from a journal, what is the topic of the article?

Title: \_\_\_\_\_

OR

Topic: \_\_\_\_\_

3. What year was this article published/posted?

\_\_\_\_\_

4. How thoroughly did you read this article?

I read all of it with great care

I read parts of it with great care

I read it with attention to the main points

I read only specific sections (i.e. figures, conclusion)

I skimmed it just to get the idea

5. About how much total time (in minutes) did you spend reading this last article in the past month (30 days)?

\_\_\_\_\_

6. Had you previously read this article, i.e., is this a re-reading?

Yes

No

7. Prior to your first reading of this article, did you know the information reported or discussed in this article?

Yes, all of it

Yes, some of it

No (GO TO Question 9)

8. If not through the article, how did you first find out about the information?

Conference or workshop

Informal discussion with colleagues

Listserv or news group

Journal article

E-mail from colleague

Preprint/e-print service (e.g. arXiv.org)  
 Web site of author  
 An Institutional Repository  
 Other : \_\_\_\_\_

9. How did you or someone on your behalf become aware of this last article you read?

Found while browsing (without a specific objective in mind) (GO TO Question 9a)  
 Found while searching (i.e. by subject or author's name) (GO TO Question 9b)  
 Found through a citation to it in another publication  
 Another person (e.g. a colleague) told me about it  
 Promotional email or web advert  
 Do not know/ don't remember  
 Other (Please specify) : \_\_\_\_\_

9a. Found while browsing:

Personal subscription  
 Library institutional subscription  
 Department/School subscription (i.e. not managed by Library)  
 Web site  
 Online Search Engine (i.e. Google, Google Scholar, etc.)  
 Don't know/Don't remember  
 Other (please specify) : \_\_\_\_\_

9b. Found while searching:

Web search engine (e.g. Google, Google Scholar)  
 Electronic indexing/abstracting service (e.g. Web of Knowledge, Scopus Lexis Nexis, British Humanities Index (BHI), etc.)  
 Print index or abstract  
 Online journal collection (e.g. JSTOR, Science Direct, Wiley Online, etc.)  
 Current awareness service (e.g. Zetoc Alerts, ticTOCs, Current Contents (ISI), etc.)  
 Preprint/e-print service (e.g. arXiv.org, PubMed Central, etc.)  
 Online institutional repository search (e.g. OpenDOAR.org)  
 Don't know/Don't remember  
 Other (please specify) : \_\_\_\_\_

9c. Did you find the article through a print or electronic medium?

Print  
 Electronic

10. As a result of searching or browsing for this article, how many other articles have you read or plan to read?

\_\_\_\_\_

11. Approximately how much time (in minutes) did you or someone on your behalf spend browsing or searching for this article?

\_\_\_\_\_

12. After you became aware of this article, from where did you obtain it? (Choose only the one best answer)

Personal subscription  
 Library subscription  
 Department/school (i.e. not managed by Library) subscription  
 Subject or institutional repository (e.g. arXiv.org)  
 Free Web journal (e.g. open access or partial open access journal)  
 Copy of the article from a colleague, author, etc.

141 Interlibrary loan or document delivery service (GO TO Question 12a)

An author's Web site

Other Web site (please specify) : \_\_\_\_\_

Other source (please specify) : \_\_\_\_\_

12a. Did you obtain your article from a print or electronic medium?

Print

Electronic

13. After you identified this article, about how much time (in minutes) did you and/or someone else on your behalf spend in each of the following activities? (If no time was spent, please enter "0"):

Obtain, request, receive, or download and display article \_\_\_\_\_

Photocopy or print the article \_\_\_\_\_

Other (please specify): \_\_\_\_\_

14. From this same source (e.g. journal, author's Web site, preprint archive), approximately how many articles did you read in the last twelve months (1 year)? (If the answer is zero, please enter "0" instead of leaving a blank)

\_\_\_\_\_

15. Thinking back to the source of the article (e.g. library collection, department collection, interlibrary loan, etc.), where would you obtain the information if that source were not available?

I would not bother getting the information (GO TO Question 16)

I would obtain the information from a colleague

I would obtain the information by using/visiting another library (e.g. via SCONUL access scheme or equivalent)

I would obtain the information by purchasing my own copy

I would obtain the information from another source (please specify): \_\_\_\_\_

15a. I would expect to spend how long (in minutes) obtaining the same information from this new source (If the answer is zero, please enter "0" instead of leaving a blank): \_\_\_\_\_

15b. I would expect to spend how many pounds obtaining the same information from this new source (If the answer is zero, please enter "0" instead of leaving a blank): \_\_\_\_\_

16. In what format was this article when you read it?

Print article in a print journal

Photocopy or Fax copy

Online computer screen

Previously downloaded/saved and read on computer screen

On a mobile, e-reader or tablet screen

Downloaded and printed on paper

Other (please specify) : \_\_\_\_\_

17. Where did you store a copy (electronic or print) of this article? (Select all that apply)

Did not store the article

Bookmarked it (e.g. in Web browser or online book-marking software)

Saved in a file on my computer

Stored in an online folder (e.g. on a networked drive or own/shared filestore)

Stored on an external storage device (e.g. USB drive (memory stick), CD, etc.)

Stored on paper in a filing cabinet or other paper storage

Other (please specify) : \_\_\_\_\_

18. Where were you the last time you read this article?

Office or lab

Library

Home

Travelling

Elsewhere (please specify) : \_\_\_\_\_

19. For what principal purpose did you use, or do you plan to use, the information obtained from the article you last read? (Choose only the one best answer)

Research

Teaching

Administration

Current awareness/keeping up

Writing proposals, reports, articles, etc. (e.g. funding/grant proposals)

Consulting, advising others

Internal or external presentations (e.g. lecture or conference paper)

Continuing education for self

Engagement activities (extending teaching and/or research into the wider community)

Knowledge transfer or enterprise activities in partnership with commercial organisations

Other (please specify) : \_\_\_\_\_

20. How important is the information contained in this article to achieving your principal purpose?

Not at all important

Somewhat important

Important

Very important

Absolutely essential

21. In what ways did the reading of the article affect the principal purpose? (Choose all that apply):

It improved the result

It narrowed/broadened/changed the focus

It inspired new thinking/ideas

It resulted in collaboration/joint research

It wasted my time

It resulted in faster completion

It resolved technical problems

It saved time or other resources

Other (please specify) : \_\_\_\_\_

22. Did you cite this article or do you plan to cite it in another publication (e.g. article, report, book, published proceeding)?

No

Maybe

Already cited

Will in the future

**Section 2: Book Reading (Print and Online)**

23. In the past month (30 days) approximately from how many books or parts of books did you read for work? Include reading from a portion of the book such as skimming or reading a chapter. Include classroom text, scholarly, or review books read in print or electronic format. (If none, please enter "0" instead of leaving blank).

\_\_\_\_\_

The following questions in this section refer to the BOOK FROM WHICH YOU READ MOST RECENTLY. Note that this last reading may not be typical, but will help us establish the range of reading patterns across a range of academic staff, disciplines, and institutions.

24. What is the approximate title or topic of the book from which you last read?

Title: \_\_\_\_\_

OR

Topic: \_\_\_\_\_

25. On how many occasions did you read from this book in the past month (30 days)?

\_\_\_\_\_

26. About how much total time (in minutes) did you spend reading this book in the past month (30 days)?

\_\_\_\_\_

27. How did you or someone on your behalf become aware of this last book from which you read?

Found while browsing (without a specific objective in mind)

Found while searching (i.e. by subject or author's name)

Found through citation in another publication.

Another person (e.g. a colleague) told me about it

Promotional email or web advert

Don't know or don't remember

Other (please specify) : \_\_\_\_\_

28. Approximately how much time (in minutes) did you or someone on your behalf spend browsing or searching for this publication?

\_\_\_\_\_

29. After you became aware of this book, from where did you obtain it?

I bought it for myself

The library or archives collection (including main or branch)

Interlibrary loan or document delivery service (e.g. British Library Interlending and Document Supply Service, etc.) (Go To Question 29a)

School or department collection (i.e. not managed by library)

A colleague, author or other person provided it to me

A free, advance, or purchased copy from the publisher

Other source (please specify) : \_\_\_\_\_

29a. Did you select a print or electronic Interlibrary loan or document delivery service?

Print

Electronic

30. After you identified this book, about how much time (in minutes) did you and/or someone else on your behalf spend in each of the following activities? (If no time was spent, please enter "0")

Obtain, request, receive, or download and display book \_\_\_\_\_  
 Photocopy or print the book or sections of the book \_\_\_\_\_  
 Other (please specify): \_\_\_\_\_

31. Thinking back to where you obtained the book (e.g. library collection, department collection, interlibrary loan, etc.), where would you obtain the information if that source were not available?

I would not bother getting the information (Go To Question 32)  
 I would obtain the information from a colleague  
 I would obtain the information by using/visiting another library (e.g. via SCONUL access scheme or equivalent)  
 I would obtain the information by purchasing my own copy  
 I would obtain the information from another source (please specify): \_\_\_\_\_

31a. I would expect to spend how long (in minutes) obtaining the same information from this new source (If the answer is zero, please enter "0" instead of leaving a blank): \_\_\_\_\_

31b. I would expect to spend how many pounds obtaining the same information from this new source (If the answer is zero, please enter "0" instead of leaving a blank): \_\_\_\_\_

32. For what principal purpose did you use, or do you plan to use, the information obtained from the book you last read? (Choose only the one best answer)

- Research
- Teaching
- Administration
- Current awareness/keeping up
- Writing proposals, reports, articles, etc. (e.g. funding/grant proposals)
- Consulting, advising others
- Internal or external presentations (e.g. lecture or conference paper)
- Continuing education for self
- Engagement activities (extending teaching and/or research into the wider community)
- Knowledge transfer or enterprise activities in partnership with commercial organisations
- Other (please specify) : \_\_\_\_\_

33. How important is the information contained in this book to achieving your principal purpose?

- Not at all important
- Somewhat important
- Important
- Very Important
- Absolutely essential

34. In what ways did the reading of the book affect the principal purpose? (Choose all that apply):

- It improved the result
- It narrowed/broadened/changed the focus
- It inspired new thinking/ideas
- It resulted in collaboration/joint research
- It wasted my time
- It resulted in faster completion
- It resolved technical problems
- It saved time or other resources
- Other (please specify) : \_\_\_\_\_

145 35. Did you cite this book or plan to cite it in another publication (e.g. article, report, book, published proceeding)?

- No
- Maybe
- Already cited
- Will in the future

### Section 3: Reading of Other Publications (Print and Online)

36. In the past month (30 days), approximately how many other publications or parts of publications (non-article or book readings) have you read for your work? Include conference proceedings, government documents, technical reports, magazines, trade journals, etc. (If none, please enter "0" instead of leaving blank).

\_\_\_\_\_

The following questions in this section refer to the PUBLICATION YOU MOST RECENTLY READ. Note that this last reading may not be typical, but will help us establish the range of reading patterns across a range of academic staff, disciplines, and institutions.

37. What type of publication did you most recently read?

- Conference proceeding
- Government document or other technical report
- Magazine/trade journal
- Other (please specify) : \_\_\_\_\_

38. About how much time (in minutes) did you spend reading this last publication in the past month (30 days)?

\_\_\_\_\_

39. Approximately how much time (in minutes) did you or someone on your behalf spend browsing or searching for this publication? \_\_\_\_\_

40. After you became aware of the publication, from where did you obtain it? (Choose only the one best answer)

- I bought it for myself
- The library or archives collection (including main or branch)
- Interlibrary loan or document delivery service (e.g. British Library Interlending and Document Supply Service, etc.) (Go To Question 40a)
- School or department collection
- A colleague, author or other person provided it to me
- A free, advanced, or purchased copy from publisher
- Other (please specify) : \_\_\_\_\_

40a. Did you select a print or electronic Interlibrary loan or document delivery service?

- Print
- Electronic

41. After you identified this publication, about how much time (in minutes) did you and/or someone else on your behalf spend in each of the following activities? (If no time was spent, please enter "0")

- Obtain, request, receive, or download and display publication \_\_\_\_\_
- Photocopy or print the publication \_\_\_\_\_
- Other (please specify): \_\_\_\_\_

146 42. Thinking back to where you obtained the publication (i.e. library collection, department collection, interlibrary loan, etc.), where would you obtain the information if that source were not available?

I would not bother getting the information (Go To Question 43)

I would obtain the information from a colleague

I would obtain the information by using/visiting another library (e.g. via SCONUL access scheme or equivalent)

I would obtain the information by purchasing my own copy

I would obtain the information from another source (please specify): \_\_\_\_\_

42a. I would expect to spend how long (in minutes) obtaining the same information from this new source (If the answer is zero, please enter "0" instead of leaving a blank): \_\_\_\_\_

42b. I would expect to spend how many pounds in order to obtain the same information from this new source (If the answer is zero, please enter "0" instead of leaving a blank): \_\_\_\_\_

43. For what principal purpose did you use, or do you plan to use, the information obtained from the publication you last read? (Choose only the one best answer)

Research

Teaching

Administration

Current awareness/keeping up

Writing proposals, reports, articles, etc. (e.g. funding/grant proposals)

Consulting, advising others

Internal or external presentations (e.g. lecture or conference paper)

Continuing education for self

Engagement activities (extending teaching and/or research into the wider community)

Knowledge transfer or enterprise activities in partnership with commercial organisations

Other (please specify) : \_\_\_\_\_

44. How important is the information contained in this publication to achieving your principal purpose?

Not at all important

Somewhat important

Important

Very important

Absolutely essential

45. In what ways did the reading of the publication affect the principal purpose? (Choose all that apply):

It improved the result

It narrowed/broadened/changed the focus

It inspired new thinking/ideas

It resulted in collaboration/joint research

It wasted my time

It resulted in faster completion

It resolved technical problems

It saved time or other resources

Other (please specify) : \_\_\_\_\_

46. Did you cite this publication or plan to cite it in another publication (e.g. article, report, book, published proceeding)?

No

Maybe

Already cited

Will in the future

**Section 4: Demographics**

47. Please select your institution:

Cranfield University  
Durham University  
Imperial College London  
University of Dundee  
University of East Anglia  
University of Manchester  
Other (please specify): \_\_\_\_\_

48. Which of the following best describes your academic discipline?

Life sciences  
Physical sciences  
Medical science  
Computer science  
Mathematics  
Engineering  
Social sciences  
Business  
Psychology  
Education  
Humanities  
Fine Arts  
Law  
Other (please specify) : \_\_\_\_\_

49. What is your position?

Professor  
Associate Professor / Reader  
Senior Lecturer  
Lecturer  
Honorary Lecturer / Teaching Fellow  
Research Associate / Assistant / Officer / Associate Tutor  
Other (please specify) : \_\_\_\_\_

50. What is your age? \_\_\_\_\_

51. Are you:

Male  
Female

52. What was the last information source you used that substantively informed your research work?

Journal article  
Conference proceeding  
Web site  
Magazine article  
Book or book chapter  
Personal contact  
Other (please specify) : \_\_\_\_\_

53. How often do you create each of the following electronic or social media tools for work related purposes (teaching, research, etc.):

	Daily	Weekly	Monthly	Occasionally	Never	No Answer
Blogs	<input type="radio"/>					
Videos/Youtube	<input type="radio"/>					
RSS feeds	<input type="radio"/>					
Twitter feeds (tweets)	<input type="radio"/>					
User comments in article	<input type="radio"/>					
Podcasts	<input type="radio"/>					
Other	<input type="radio"/>					

53a: Please specify the other social media tools you create: \_\_\_\_\_

54. How often do you read, view, or participate in each of the following electronic or social media tools for work related purposes (teaching, research, etc.):

	Daily	Weekly	Monthly	Occasionally	Never	No Answer
Blogs	<input type="radio"/>					
Videos/Youtube	<input type="radio"/>					
RSS Feeds	<input type="radio"/>					
Twitter feeds (tweets)	<input type="radio"/>					
User comments in article	<input type="radio"/>					
Podcasts	<input type="radio"/>					
Other	<input type="radio"/>					

54a. Please specify the other social media tools you read, view or participate: \_\_\_\_\_

55. What percentage of your work time do you spend doing the following? (The total should equal 100%. If the answer is zero, please enter "0" instead of leaving a blank.)

- % Teaching \_\_\_\_\_
- % Research and writing \_\_\_\_\_
- % Administration (for department, School or institution) \_\_\_\_\_
- % Service (to wider community beyond the immediate institution), e.g. engagement activities \_\_\_\_\_
- \_\_\_\_\_
- % Knowledge transfer or enterprise activities, e.g. partnership activities with commercial organisations \_\_\_\_\_
- \_\_\_\_\_
- % Consulting/advising \_\_\_\_\_
- % Other (please specify): \_\_\_\_\_

56. In the past two years, approximately how many of the following have you published? (If the answer is zero, please enter "0" instead of leaving a blank.)

- Articles in refereed scholarly journals (Go To Question 56a) \_\_\_\_\_
- Non-refereed articles \_\_\_\_\_
- Scholarly books \_\_\_\_\_
- Articles in published conference proceedings \_\_\_\_\_
- Chapters in scholarly books, etc. \_\_\_\_\_

56a. For the last refereed scholarly article that you published, how many co-authors did you have, if any? (If the answer is zero, please enter "0" instead of leaving a blank)

\_\_\_\_\_

56b. How was the effort funded? Select all that apply.

Government research grant

Funding Council grant (e.g. HEFCE)

Research Council grant (e.g. Research Councils UK, Scottish Funding Council, etc.)

University-provided (Internal) grant

Foundation or Charity grant

Industry grant/contract

Not specifically funded

Other (please specify) : \_\_\_\_\_

57. In the past two years, have you received any awards or special recognition for your research or other profession-related contributions?

Yes (Go To Question 57a)

No

57a. Briefly describe your awards.

\_\_\_\_\_

\_\_\_\_\_

58. How many personal subscriptions to professional journals do you receive, including those obtained as a member of a professional society? (Personal subscriptions are those that are personally addressed to you at your home, office, or lab.) If the answer is zero, please enter "0" instead of leaving a blank.

Print-only subscriptions \_\_\_\_\_

Electronic-only subscriptions \_\_\_\_\_

Subscriptions that include both print and electronic versions \_\_\_\_\_

59. What role do scholarly articles play in your research, teaching, or other scholarly activities? Please comment.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

60. Final Comments.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_