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Malone College Faculty Journal Reading Patterns

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Factual Summary of Results of the Survey Conducted Fall 2005

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Introduction.

This is a question-by-question analysis of the results of the Malone College survey of faculty, conducted fall 2005 as part of a grant funded by IMLS (see Appendix for the questionnaire.) Final results may require further analysis or information about the library context for complete analysis. At the same time as this survey, a survey of reading patterns of Malone students was conducted, with results presented in a separate report. Also at the same time, surveys of faculty and students at three other Ohio universities and the University of Tennessee were conducted. Comparisons among these will be included in subsequent articles for publication. Ashland University results are the most comparable to Malone College. This report is for internal use at Malone or may be used to prepare presentations and journal articles.

In October 2005 an email message from the Malone College Director of Library Services, with an embedded link to a questionnaire housed on a University of Tennessee server, was sent to all Malone faculty members (106). In addition, the questionnaire was linked on the Malone library website and paper copies were made available to faculty.

We received 47 total responses to at least the first question, or 44.3% of all Malone College faculty members. Only 37 answered a majority of the questions as respondents were allowed to exit the questionnaire at any time or were timed out automatically if they began the questionnaire and did not complete it.

Demographics of Respondents.

Work Responsibilities.

Malone faculty members spend most of their time on teaching responsibilities, including preparing for courses. This is reflected in Table 1, which shows that half of the respondents spend 60% or more of their time on teaching-related responsibilities. The remaining time is split between research/writing, administration, service, consulting or advising and other. This is likely characteristic of a Master's university like Malone, where teaching is the primary mission. Our survey of Ashland University shows the same split of major responsibilities and all answers from Ashland will likely be the most comparable to Malone. We expect that both Ashland and Malone faculties will read fewer journal articles than their counterparts at research intensive universities, will publish less, and will do more reading for the purpose of teaching.

Table 1. Malone Faculty Percentage of Work Time Spent on Selected Activities

		Teaching	Research & writing	Administrative	Service	Consulting /advising	Other
Mean		56.22	14.44	15.00	12.19	6.96	10.33
Median		60.00	10.00	10.00	10.00	5.00	.00
Mode		60	10	0	10	5	0
Percentiles	25	50.00	5.00	5.00	5.00	3.50	.00
	50	60.00	10.00	10.00	10.00	5.00	.00
	75	70.00	25.00	18.75	15.00	10.00	6.50

Academic Discipline.

Of the 37 respondents who answered this question, nearly 60% were from social science disciplines, with another quarter (27%) from the humanities (Table 2). Although this question used an open-ended text box, we collapsed responses into broad disciplines for analysis.

Table 2. Subject Disciplines of Malone Faculty Respondents

	Frequency	Percent
Social Science	22	59.5
Humanities	10	27.0
Medical/Health	4	10.8
Sciences	1	2.7
Total	37	100.0

Degree, Age, Gender, and Rank.

A vast majority of respondents hold the title of either professor, assistant professor or associate professor (86.4%, Table 3), and three-quarters hold the doctorate or equivalent

degree (Table 4). Nearly half of all respondents who chose to identify their age (48.6% or 17 of 35) are age 46 or older and 41.7% are female. Female respondents are more likely to fall in the older than 45 age group (Tables 5 and 6).

Table 3. Rank of Malone Faculty Respondents

	Frequency	Percent
Professor	9	24.3
Associate Professor	17	45.9
Assistant Professor	6	16.2
Instructor/Lecturer	2	5.4
Adjunct	1	2.7
Other (please specify)	2	5.4
Total	37	100.0

Table 4. Highest Degree of Malone Faculty Respondents

	Frequency	Percent
Master's (M.A., M.S., M.B.A., M.F.A., or equivalent)	8	22.2
Doctorate (Ph.D., Ed.D., M.D., J.D., or equivalent)	27	75.0
Other (please specify)	1	2.8
Total	36	100.0

Table 5. Malone Faculty Respondent Gender across Age Groups

Row Row %	Male	Female	**Row Total**
<=45 years old	14 77.8%	4 22.2%	18 100.0%
>45 years old	7 41.2%	10 58.8%	17 100.0%
Column Total	21	14	35

Table 6. Age Range of Malone Faculty Respondents

	Frequency	Percentage
19-35 years old	5	14.3
36-45	13	37.1
46-55	10	28.6
56-64	7	20.0
Total	35	100.0

Productivity as Measured by Authorship and Awards.

Since Malone faculty responsibilities are weighted so heavily towards teaching rather than research and publication, our standard ways of measuring faculty productivity may not be valid in a teaching university. In our surveys of research universities and non-university research settings we use authorship as one measure of productivity, and consistently over the years we have found that faculty who publish more journal articles tend to read more. Not surprisingly, given Malone's emphasis on teaching, a slight majority of Malone faculty respondents (57.1%) have not published in scholarly journals in the last two years. The results for Malone are similar to those for Ashland, so different methods of productivity need to be formulated for master's level universities that emphasize teaching. Even a smaller percentage have recently published articles in trade journals, chapters in books or proceedings, or complete books (Table 7), but a few faculty members publish quite a lot. Taking all of these modes of publication together for the last two years and averaging all respondents, Malone respondents have published on average

1.7 publications and two-thirds have published at least one scholarly publication of some sort (Table 7).

Table 7. Number of Publications by Malone Faculty in the Past 2 Years

	Refereed Articles	Non-Refereed Articles	Chapters or Proceedings	Entire Books
0	20(57.1)	30(85.7)	26(74.3)	34(97.1)
1 ~ 2	9(25.1)	4(11.4)	8(22.9)	1(2.9)
> 2	6(17.8)	1(2.9)	1(2.8)	0(0)
Total	35 (100)	35 (100.0)	35 (100.0)	35 (100.0)

No significant differences were found in total amount of publications across different levels of discipline subject, rank, or gender.

Another measure of productivity in research universities is whether respondents have received recognition for their work. We asked if they had received any awards or received any special recognition in the past two years. (We did not ask them to specify what types of awards or recognition, simply to answer yes or no.) Since only 27.8% of respondents reported receiving award in the last year, we did not analyze this factor for Malone faculty.

Personal Subscriptions.

One last demographic question asked how many personal subscriptions to professional journals are received by each respondent, including those paid by themselves, received

free, or purchased by a grant or other source for personal or shared use in either print or electronic form.

Malone respondents have a typical number of personal subscriptions for faculty members today, with an average of 3.3 subscriptions per faculty member. This is nearly identical to our 2005 survey of faculty at the University of Queensland (Australia) and slightly lower than our other U.S. university surveys. Similar to other surveys over the last decade, print is still the predominant format for personal subscriptions (Table 8).

Table 8. Number of Personal Subscriptions of Malone Faculty Respondents

	Print-only	**Electronic-only**	**Print and Electronic**
0	6(17.1)	28(80.0)	29(82.9)
1	5(14.3)	5(14.3)	4(11.3)
2	6(17.1)	2(5.7)	0(0)
3	5(14.3)	0(0)	1(2.9)
> 3	13(37.2)	0(0)	1(2.9)
Total	35 (100.0)	35 (100.0)	35 (100.0)

No significant differences in total amount of subscriptions existed across disciplines or rank. There was no linear correlation between age and number of subscriptions. Gender did seem to make a difference; female respondents reported a significantly higher mean of subscriptions ($M = 4.67$) than their male peers ($M = 2.35$; $t = 8.534$, $p = 0.006$).

Scholarly Journal Article Reading.

Total Amount of Reading per Academic Staff Member.

Although it relies on personal recollection, one of the key questions in all of our surveys from 1977 to the present is an estimate of the total number of articles read monthly by each respondent. We have asked this same question since 1977, so we can compare over time and across populations. To assist memory, we ask for a relatively short period of time and define articles and reading carefully. The first question asked is *"In the **last 4 weeks**, 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 relative amounts are more interesting than the exact number reported. For convenience, we often report results as readings in a year, simply by taking the monthly number reported by a respondent and multiplying it by 12 for a crude approximation of the total amount of reading by respondent per year.

The average amount of scholarly reading in the past four weeks at Malone University was 10 articles (*SD* =20.684) with all 47 respondents included. There is a wide range in this reading, from 1 to 140 articles read in the last month. Although the mean is 10, the median is only 5. Extrapolated to an entire year for a crude, but consistent approximation of yearly reading, the average number of articles read per year by Malone faculty across all disciplines was 120.

This compares to 206 articles across all faculties in three U.S. universities that were surveyed between 2000 and 2003. University of Tennessee in 2000 averaged 186, Drexel University in 2002 averaged 197, and University of Pittsburgh in 2003 averaged 215. In surveys of research universities in Australia and the U.S. in 2004-2005 we found an even greater amount of reading—approximately 250 articles per year, showing a continual increase in amount of reading in research universities since our first survey in 1977. The report comparing the U.S. universities concluded: "While there is some difference in average amount of reading among the three universities …Nevertheless, reading by faculty is substantial and, perhaps, increasing as shown in the section on 25-year trends in university scientists' use patterns." (See King, Tenopir, Montgomery, and Aerni.)

The relative low amount of reading on average per year at Malone is not surprising given the emphasis on responsibilities other than research and is similar to reading by research staff in non-university settings and is very similar to amounts of reading by Ashland faculty. In other universities most faculty read more for research and publication than for other purposes.

Last Incident of Reading and Novelty of Information in the Reading.

After the question that asks for recollection of amount of reading, we ask respondents to focus on the last scholarly article they read. This is a variation on the "critical incident" technique, where the last article read is assumed to be random in time, and gives us detailed information on a random sample of total readings by the Malone faculty. Again we try to give quite explicit instructions, by asking: *"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 patterns in reading."* To better focus their minds on this last article reading, we then ask for the title of the journal from which this last article was read or, if not from a journal, the topic of the article. This question is merely to focus their minds on the reading; we do not use it in our analysis.

Since this reading could be a first-time reading or a re-reading and because reading patterns differ for core journals in a discipline (those from which scholars read many articles each year), we ask if this is a re-reading and, *"if this article is from a journal," "approximately how many articles did you read from this journal in the **last 12 months**?"* A journal from which a reader reads more than 10 articles per year could be considered a core journal for that reader or that reader's subject discipline. We might examine differences in value, form, time spent, purpose, and method of locating articles for core journal readings vs. non-core.

A majority of the journal sources for the last reading were familiar to the readers. The mean number of articles read from this same source is 8.1, with a median of 5 (SD=8.661, range 0 to 36.) Over a quarter of the readings (28.2%, n=11) meet our criteria for coming from a core journal, with 11 or more readings from this same title (Table 9).

Table 9. Number of Readings by Malone Faculty Respondents from the Same Source

	Frequency	Percentage
0 – 4	18	46.2
5 – 10	10	25.6
11 – 25	8	20.5
Over 25	3	7.7
Total	39	100.0

Although they tend to read many articles from the same journals, the specific article was new to most readers; the vast majority of respondents (87.2%) reported that this was the first time they had read this article. On the other hand, the information contained in the article was familiar to over half (55.3%) of respondents. For the 21 respondents who indicated they knew about the information found in the article, one-third knew it from other journal articles, while the remainder learned about the information in other ways (Table 10.)

Table 10. How Malone Faculty Respondents found out about the Information in the Last Article Read Prior to This Reading

	Frequency	Percent
Specified sources		
1. Journal article	7	33.3
2. Conference/workshop	4	19.0
3. Informal discussions with colleagues	3	14.3
4. Website of author	1	4.8
Unspecified sources		
Other	6	28.6
Total	21	100.0

Date of Readings.

In our surveys from 1977 to the early 2000s, we found a consistent pattern of reading articles older than the first year of publication, with approximately two-thirds of readings within the first year of publication and the other one-third after the first year, tailing to quite old articles. There are, of course, some differences based on subject discipline, with medical faculty reading a higher proportion of current articles.

In our surveys of two Australian research universities in 2004 and 2005 and three research universities in the U.S. in 2005 (Case, Akron, and Tennessee), we have found an increase in the reading of older articles, with just slightly more than half of readings within the first year of publication. This may be due to a greater availability of electronic back files, an increase in searching, and search system features such as linking that allows older articles to be more easily accessed. Both Ashland and Malone University faculty follow the same pattern as our other recent surveys, with slightly over half of all readings within the first year of publication (Table 11). Since the survey was conducted in October 2005, we add approximately one-fourth of the 2004 readings to get current year of publication. Adding one reading to the 20 read from 2005, gives approximately 21 readings from the current year of publication, or we can say that approximately 53.8% of Malone faculty readings are from within the first year of publication. Approximately 46% of readings are after the first year, with only 10.2% (n = 4) from more than five years ago.

Table 11. Year of Last Article Read by Malone Faculty Respondents

Table 11a.

	Frequency	Percent
1993	1	2.6
1994	1	2.6
1996	1	2.6
1997	1	2.6
2000	2	5.1
2002	3	7.7
2003	5	12.8
2004	5	12.8
2005	20	51.3
Total	39	100.0

Table 11b. Age of Articles Read by Malone Faculty Respondents arranged by Date Groupings

Year	Frequency	Percentage
11 years ~ 15 years (1990~1994)	2	5.1
6 years ~ 10 years (1995~1999)	2	5.1
2 years ~ 5 years (2000~3/4 of 2004)	14	35.9
1st year (1/4 of 2004~2005)	21	53.8
Total	39	100.0

Time Spent Reading.

Malone faculty report spending an average of approximately 30 minutes per article reading (*SD* =26.756), an amount of time consistent with our other surveys. Although this

may sound like a short time to read an article, the median for Malone is just 20 minutes and the mode is even lower (10 minutes), with a range of from seven to 120 minutes per article reading. We have 95% confidence that Malone faculty on average spend between 20.65 to 38.49 minutes per reading. In our surveys over the years we have observed that the amount of time spent reading has gone down fairly steadily since 1977, when faculty reported spending on average nearly 45 minutes per reading. In our other surveys from 2005-2006 we have found at research universities the average amount of time spent reading has dropped to just 34 minutes, an amount consistent with the Malone faculty findings.

Table 12. Amount of Time Malone Faculty Respondents Spent on Last Reading

	Frequency	Percent
7	1	2.7
10	10	27.0
12	1	2.7
15	3	8.1
20	6	16.2
25	3	8.1
30	5	13.5
45	2	5.4
60	2	5.4
75	1	2.7
90	2	5.4
120	1	2.7
Total	37	100.0

Source and Location of Reading.

We also asked "how did you initially find out about this last article you read?" Many different choices, reflect today's complex information environment, where readers have

many ways of finding articles available to them. Choices 1-8 (see Table 13) can be categorized as browsing—that is starting with a table of contents or title of a journal and browsing through that print or electronic journal to locate articles of interest. More than half of all readings reported by Malone faculty (55.3%, $n = 21$) were found initially by one of these methods of browsing. Browsing through a print personal subscription was most common. Searching accounted for just 21.1% of all readings, while "other", including following a citation in another publication or hearing about the article from someone, accounted for 23.7% of all readings.

Table 13. How Malone Faculty Respondents Initially Found Out About Articles

	Frequency	**Percent**
Browsing	21	**55.3**
1. Print: Personal subscription	10	(47.6)
2. Free web	4	(19.0)
3. Print: Library subscription	2	(9.5)
4. Electronic: Personal subscription	1	(4.8)
5. Electronic: Library subscription	1	(4.8)
6. Print: School, department etc. subscription	1	(4.8)
7. Electronic: Other	1	(4.8)
8. Unknown	1	(4.8)
Searching	8	**21.1**
1. Indexing/abstracting database	4	(50.0)
2. Online journal collection	1	(12.5)
3. Web search engine	1	(12.5)
4. Current awareness service	1	(12.5)
5. Unknown	1	(12.5)
Other	9	**23.7**
1. Cited in another publication	5	(13.2)
2. Another person told me about it	3	(7.9)
3. Don't know or other	1	(2.6)
Total	38	**100.0**

Browsing or searching to find out about readings can also be categorized as coming from library provided sources or other; or from print, electronic, or unknown sources. The 21 instances of readings located through browsing, can be categorized as 11 coming from personal subscriptions, 4 coming from library or department subscriptions, and 5 from other electronic sources. Of the articles found by browsing, at least 13 (62%) came from print and at least 7 (33%) from electronic sources. Searching, on the other hand, is all from electronic sources, with 5 of the 6 instances likely coming from library-provided services and 1 from a web search engine. We cannot tell if the "other" readings come from print or electronic or from the library or other.

Just because an article is located using an electronic source, it does not mean that the final form of reading is on the computer screen. Only 2 of 36 (94.4%) readings reported by Malone faculty were actually read on the screen—all of the rest either originated in a print journal or were downloaded and printed on paper (Table 14). This percentage of reading from print is slightly higher than our other recent surveys, but consistent with our earlier survey results; although electronic journals are convenient as a means to locate relevant articles, for the most part they are not read on screen. Print on paper is still considered more convenient for reading, even the relatively quick reading of today's reader.

Table 14. Final Form of Reading for Malone Faculty Respondents

	Frequency	Percent
1. Print article in a print journal	17	47.2
2. Downloaded and printed on paper	12	33.3
3. Photocopy	5	13.9
4. Online computer screen	2	5.6
Total	36	100.0

Many libraries have observed that faculty rarely read in the physical library, even though their use of the virtual library collections may be substantial. Malone faculty, like others, rarely read from within the library. The vast majority of their article readings are from home or their offices (79.5%, *n*= 31) (Table 15.)

Table 15. Location of Malone Faculty Respondents When Reading

	Frequency	Percent
Home	16	41.0
Office or lab	15	38.5
Library	6	15.4
Traveling	1	2.6
Other	1	2.6
Total	39	100.0

Purpose and Value of Reading.

Unlike usage log data, survey data provides a picture of purpose, value, and outcomes from reading. We asked respondents to describe one principal purpose for which *"you have used, or do you plan to use, the information obtained from the article you last*

read?" In research universities the most common principal purpose for most academic disciplines is research (although medical faculty read more for current awareness); not surprisingly, for Malone faculty the most frequent purpose of reading is to support teaching (Table 16).

Table 16. Principal Purpose of Reading for Malone Faculty Respondents

	Frequency	Percent
Research	10	27.0
Teaching	17	45.9
Current awareness/keeping up	4	10.8
Writing proposals, reports, articles, etc.	2	5.4
Continuing education for self	2	5.4
Other (please specify)	2	5.4
Total	37	100.0

Principal purpose of reading was found not to be significantly associated with amount of reading, reading time, and final form of reading. However, people with different principal purposes of reading significantly differed in amount of publications ($F = 2.939$, $p = 0.037$), which primarily reflected three groups: reading for research, teaching and other purposes. In the last 2 years respondents reading for research and teaching significantly published more than those with other unspecified purposes ($MD_{research\text{-}other} = 2.9$, $p = 0.03$; $MD_{teaching\text{-}other} = 0.938$, $p = 0.044$).[1] Yet no differences were found between the other pairs.

[1] The homogeneity of variances was not guaranteed. Tamhane's T2 that does not require equal variances across groups was used in ANOVA.

Principal purpose of reading was not correlated with gender. However, Fishers' exact test found that respondents at different levels of rank appeared to have different principal purposes ($\chi^2 = 27.349$, $p = 0.049$). Compared to associate and assistant professors, full professors appeared to be more likely to read for writing proposals, reports, etc., but less likely to read for research. (see Table 17).[2]

Table 17. Association between Principal Purpose and Rank of Malone Faculty

Count Row %	**Principal Purpose**					**Row Total**
	Research	Teaching	Current awareness	Writing proposals/ reports	Others	
Professor	1 11.1%	5 55.6%	1 11.1%	2 22.2%	0 .0%	9
Associate Professor	6 35.3%	9 52.9%	2 11.8%	0 .0%	0 .0%	17
Assistant Professor	3 50.0%	1 16.7%	1 16.7%	0 .0%	1 16.7%	6
Instructor / Lecturer	0 .0%	1 50.0%	0 .0%	0 .0%	0 .0%	2
Adjunct	0 .0%	1 100.0%	0 .0%	0 .0%	0 .0%	1
Other	0 .0%	0 .0%	0 .0%	0 .0%	2 100.0%	2
Column Total	10	17	4	2	3	36

Respondents were asked to rank the importance of the reading to the principal purpose of the reading on a 3-point scale of 1 (not important), 2 (somewhat important), and 3 (absolutely essential). On the whole, readings were rated important (M =2.35), a finding consistent with our past surveys. Nearly two-thirds of readings were rated "somewhat

[2] Yet the validity of such comparisons is not guaranteed because of the small size. The count numbers across cells are few.

important" (64.9%, *n* =24), with the remaining readings (35.1%, n=13) rated as "absolutely essential". Reading for research was rated more highly (*M* =2.6) than reading for other purposes.

Table 18. Mean of Importance of Reading for Malone Faculty by Principal Purpose

	N	Mean	Std. Error	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
Research	10	2.60	.163	2.23	2.97
Teaching	17	2.29	.114	2.05	2.54
Current Awareness	4	2.00	.000		
Writing Proposals	2	2.50	.500	-3.85	8.85
Continuing education for self	2	2.50	.500	-3.85	8.85
Others	2	2.00	.000		

In addition to rating the value of the reading to the purpose, respondents were asked to choose from a list of outcomes those that described the result of this reading to them. Respondents could select more than one outcome. Only one reading was described as not helpful, all others resulted in positive outcomes. Most often the readings "improved the result" or "inspired new thinking" (Table 19.)

Table 19. The Way That Reading Effects Principal Purpose for Malone Faculty

Effect on Principal Purpose	Responses	
	Frequency	Percentage
It improved the results.	19	52.8
It narrowed/ broadened/ changed the focus.	11	30.6
It inspired new thinking/ideas.	17	47.2
It resulted in collaboration/ joint research.	0	.0
It resulted in faster completion.	1	2.8
It resolved technical problems.	0	.0
It saved time or other resources.	1	2.8
It wasn't helpful; it wasted my time.	1	2.7
Other	3	8.3

N = 47. Respondents were allowed to choose more than one option.

Differences of Reading Patterns by Demographic Factors.

Differences in Reading Patterns by Subject Discipline, Rank, Highest Degree, Age, and Gender.

Different discipline subjects did not make a difference in terms of amount of reading, reading time, amount of publications, amount of subscriptions, principal purpose, source for finding out articles, and reading form. We also found no significant associations between amount of reading, sources of reading, or other reading patterns and age, rank, gender, or highest degree earned.

Role of Library Collections.

As mentioned earlier, how someone found an article can be re-categorized into three basic categories: library-provided, personal subscriptions, and other. Malone faculty rely on their personal subscriptions (average number 3.3) to locate nearly half of all the articles they read (Table 20). This finding varies in our other surveys, with medical faculty on the whole more reliant on personal subscriptions than others. Readings from the library tend to be from electronic journals more often, with personal subscription readings mostly from printed journals. Library-provided readings are typically more often for research and less often for current awareness purposes.

Table 20. Sources of Finding Articles for Malone Faculty

	Frequency	Percent
Library-provided	11	28.2
Personal subscriptions	18	46.2
Others	10	25.6
Total	39	100.0

Table 21. Mean of Amount of Reading for Malone Faculty by Resource of Finding Articles

	N	Mean	Std. Error	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
Library-Provided	11	5.82	1.127	3.31	8.33
Personal Subscriptions	18	15.61	7.396	.01	31.22
Other	10	9.20	4.402	-.76	19.16

Open Ended Responses

As part of this study, faculty members at Malone College were asked to comment about if and how their use of scholarly resources has changed over time. By and large, comments reflected a growing tendency to make greater use of electronic resources to access scholarly materials. This tendency was exemplified in several comments:

- I'm making much more use of electronic journal resources and inter-library loans (all through OhioLink).
- Ease of accessing on-line journal articles, increase in the number of available sources electronically
- I am reading more scholarly materials via the electronic format, over the Internet, via my library's electronic subscriptions, whereas just a few years ago, I would have had the interlibrary loan librarian access/send the print copy for me.
- Rather than merely browsing, I tend to find materials through searching electronic databases, and have colleagues send me email attachments of articles.
- Almost exclusively web based searches for materials
- Yes, I find articles online now mostly through JSTOR.

Faculty also took the opportunity to provide other comments, sometimes focusing on the survey itself. One such comment is particularly helpful in describing the differences between humanities and sciences or social sciences and sheds some light on the differences in the use of journal articles among disciplines:

- The way that most of the questions were worded in the first half of the survey… referred to the information in scholarly journals as if it were a commodity that would be removed, accessed and utilized in very discrete ways. While I'm sure that this language

is helpful for the hard (and maybe even soft social) sciences -- it was utterly unhelpful for the way that a humanities and/or critical studies scholar uses journals.

Unfortunately the respondent did not elaborate on how such a scholar does use journals, but it must be remembered that journals and journal articles are only one source of scholarly information. Faculty rely on scholarly information sources of various types for their work of teaching, research, writing, and keeping up with their discipline. The relative value of different types of sources varies with the subject discipline and the principal purpose of reading. Journals are one important source, but not the only one.

Conclusion.

Malone faculty are similar to others we have surveyed in many ways, but also distinct. The main difference lies in the purpose of a College like Malone. At a teaching intensive, master's level College or University (like Malone and Ashland), reading for teaching is much more prevalent by faculty than at research intensive universities. The total amount of reading is also less, closer to the amounts of readings by practitioners we have studied, such as pediatricians in clinical settings.

Like other faculty members, however, Malone faculty use electronic journals from the library, still prefer print for personal subscriptions, and tend to print out and read from printed sources even when the original source is electronic.

Further conclusions and comparisons will be made as the 2004-2006 findings from all 5 U.S. universities and 2 Australian universities are readied for publication.

References.

King, Donald W.; Tenopir, Carol; Montgomery, Carol Hansen; and Aerni, Sarah E. "Patterns of Journal Use by Faculty at Three Diverse Universities." *D-Lib Magazine* 9, 10 (October 2003). http://www.dlib.org/dlib/october03/king/10king.html

Tenopir, Carol; and King, Donald W. *Communication Patterns of Engineers.* NY: IEEE/Wiley InterScience, 2004.

Tenopir, Carol; and King, Donald W. *Towards Electronic Journals: Realities for Scientists, Librarians, and Publishers*. Washington, D.C.: Special Libraries Association, 2000.

Tenopir, Carol; King, Donald W.; and Bush, Amy. "Medical Faculty's Use of Print and Electronic Journals: Changes Over Time and Comparison with Other Scientists." *Journal of the Medical Library Association* (JMLA), 92(2), April 2004 , 233-241.

Tenopir, Carol; King, Donald W.; Boyce, Peter; Grayson, Matt; Paulson, Keri-Lynn. "Relying on Electronic Journals: Reading Patterns of Astronomers." *Journal of the American Society for Information Science and Technology (JASIST)* 56, 8 (June 2005): 786-802.

Tenopir, Carol; King, Donald W.; Clarke, Michael; Na, Kyoungsik; and Zhou, Xiang. "Journal Reading Patterns and Preferences of Pediatricians." Accepted for publication in the *Journal of The Medical Library Association*, 2006.

Appendix.

Survey of Scholarly Journal Article Reading and Use
Faculty and Academic Staff

Your responses are confidential and data will be reported only in aggregated form. Because your answers are extremely important to the accuracy of our study, please submit the questionnaire even if you are unable to answer all the questions. We have tried to keep the questionnaire as short and simple as possible and yet achieve our study objectives. If you have any questions, please contact Carol Tenopir (ctenopir@utk.edu).

Section 1: Scholarly Article Reading

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.

   Number of articles read/used in the past month: _____ articles

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 patterns in reading.

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?

   Journal Title _____
   -or-
   General Topic of Article _____

3. What year was this article published/posted? _____

4. From which source/form did you read this article? (Choose only the one best answer.)

   ☐a. Personal subscription: □Print □Electronic

   ☐b. Library subscription: □Print □Electronic

   ☐c. School, department, etc. subscription: □Print □Electronic

   ☐d. Free Web journal

   ☐e. Preprint copy of the article: □Print □Electronic

   ☐f. Personal copy of the article: □Print □Electronic

   ☐g. Copy of the article from a colleague, author, etc.: □Print □Electronic

   ☐h. Interlibrary loan: □Print □Electronic

   ☐i. Document delivery service: □Print □Electronic

   ☐j. An author's Web site

   ☐k. Other Web site (please specify) _____

   ☐l. Other source (please specify) _____

5. Thinking back to the source of the article, where would you obtain the information if that source were not available?

   ☐a. I would not bother getting the information

   ☐b. I would obtain the information from another source
   Please specify source here: _____

   If b. is checked:
   In order to obtain the same information, if this source were not available, I would expect to spend _____minutes of time and/or $ _____. (If the answer is zero, please enter "0" instead of leaving a blank.)

6. Where were you when you read this article?

   ☐a. Office or lab

   ☐b. Library

   ☐c. Home

   ☐d. Traveling

   ☐e. Elsewhere (please specify) _____

7. From this same source (e.g., journal, author's Web site, preprint archive), how many articles did you read in the last year (12 months)? (If the answer is zero, please enter "0" instead of leaving a blank.)
   _____ Articles

8. How thoroughly did you read this article?

   ☐a. With great care

   ☐b. With attention to the main points

   ☐c. Just to get the idea

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

   ☐a. Yes

   ☐b. No

10. How long did you spend reading this article most recently?
    _____ Minutes

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

    ☐a. Yes

    ☐b. No (Skip to Question 12.)

11a. How did you first find out about the information?

    ☐a. Conference or workshop

    ☐b. Informal discussion with colleagues

    ☐c. Listserv or news group

    ☐d. Journal article

    ☐e. E-mail from colleague

    ☐f. E-print server (e.g., arXiv.org)

    ☐g. Web site of author

    ☐h. Other (please specify) _____

12. How did you become aware of this last article you read?

☐a. Found while browsing (i.e., started with a journal name, journal issue, or table of contents):

☐ Personal subscription: □Print □Electronic

☐ Library subscription: □Print □Electronic

☐ School, department, etc. subscription: □Print □Electronic

☐ Other (please specify) _____ _____: □Print □Electronic

Approximately how much time did you spend browsing? _____ Minutes

As a result, how many articles did you read and plan to read? _____ Articles

☐b. Found while I (or someone on my behalf) was searching (i.e., by subject or author's name):

☐ Web search engine (e.g., Google, Yahoo!, AltaVista)

☐ Electronic indexing/abstracting service (e.g., Academic Search Premier, ERIC, PsycINFO)

☐ Print index or abstract

☐ Online journal collection (e.g., HighWire, OhioLINK EJC, JSTOR)

☐ Current awareness service (e.g., Current Contents): □Print □Electronic

☐ Preprint/e-print service

☐ Other (please specify) _____: □Print □Electronic

Approximately how much time did you (or someone on your behalf) spend searching? _____ Minutes

As a result, how many articles did you read and plan to read? _____ Articles

☐c. Cited in another publication

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

☐e. Do not know

☐f. Other (please specify) _____

13. In what form was the last article you read?

☐a. Print article in a print journal

☐b. Photocopy

☐c. Facsimile copy

☐d. Online computer screen

☐e. Previously downloaded/saved and read on computer screen

☐f. Downloaded and printed on paper

☐g. Other (please specify) _____

Section 2: Purposes and Consequences of the Last Article Reading

14. 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.)

☐a. Research

☐b. Teaching

☐c. Administration

☐d. Current awareness/keeping up

☐e. Writing proposals, reports, articles, etc.

☐f. Consulting, advising others

☐g. Internal or external presentations

☐h. Continuing education for self

☐i. Other (please specify) _____

15. Do you think the reading of the article affected the principal purpose?

☐a. Yes

☐b. No (Skip to Question 16)

15a. In what ways did the reading of the article affect the principal purpose? (Choose all that apply):

☐a. It improved the result

☐b. It narrowed/broadened/changed the focus

☐c. It inspired new thinking/ideas

☐d. It resulted in collaboration/joint research

☐e. It resulted in faster completion

☐f. It resolved technical problems

☐g. It saved time or other resources

☐h. Other (please specify) _____

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

☐a. Not at all important

☐b. Somewhat important

☐c. Absolutely essential

17. Did you cite this article or do you plan to cite it in a paper or report?

☐a. No

☐b. Maybe

☐c. Already did

☐d. Will in the future

Section 3: Demographics

18. What is your academic discipline (e.g., chemistry, history, sociology, etc.)?

_____

19. What is your rank?

☐a. Professor

☐b. Associate Professor

☐c. Assistant Professor

☐d. Instructor/Lecturer

☐e. Adjunct

☐f. Other (please specify) _____

20. What is the highest degree you have earned?

☐a. Bachelor's (B.A., B.S., or equivalent)

☐b. Master's (M.A., M.S., M.B.A., M.F.A., or equivalent)

☐c. Doctorate (Ph.D., Ed.D., M.D., J.D., or equivalent)

☐d. Other (please specify) _____

21. What year did you receive your highest degree? _____

22. What is your age? _____

23. What is your sex/gender?

☐a. Male

☐b. Female

24. 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
_____% Administrative
_____% Service (to department, college, and wider community)
_____% Consulting/advising
_____% Other (please specify) _____
100 % Total

25. In the past two years, 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
_____ Non-refereed articles
_____ Scholarly books
_____ Chapters in scholarly books, proceedings, etc.

26. What sources did you use for the last substantive piece of information you used for work? (Select all that apply.)

☐a. Journal article

☐b. Conference proceeding

☐c. Web site

☐d. Magazine article

☐e. Book or book chapter

☐f. Personal contact

☐g. Other (please specify) _____

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

☐a. Yes

☐b. No

28. How many sections of courses did you teach in the last academic year? (If the answer is zero, please enter "0" instead of leaving a blank.)
_____ Fall
_____ Spring
_____ Summer

29. Estimate the number of journal articles assigned to your students or likely to be read by your students in all your courses this year. (If the answer is zero, please enter "0" instead of leaving a blank.)
_____ Undergraduate courses
_____ Graduate courses

30. 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

31. How has your use of scholarly materials changed in the last few years?

32. Other comments:

33. How many minutes did it take you to complete this survey?
_____ Minutes

Thank you for your time!

Please return to:

Scholarly Reading and Use Survey
ATTN: Stanford Terhune
Malone College Library