

2011 Global Student E-book Survey

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Introduction

This article reviews the responses from the second ebrary informal survey of students concerning their experiences with information resources, which was conducted in September and early October of 2011. The first survey concluded in May of 2008. The surveys asked essentially the same questions about student use of electronic and print resources—perceived strengths and weaknesses as well as preferences and attitudes about them. This analysis compares the student responses separated by the three and a half years. Tables 11, 12, 15, and 16 use data constructed from the 2008 survey that were not initially reported so that they could be compared to the 2011 report. Percentages of responses for the line items were calculated from the total number of respondents to the questions.

Overview of Survey Respondents

The first survey includes responses from 6,656 freshmen through doctoral students. The second survey had 6,329 participants. The respondent demographics included breakdowns of participants by country and academic discipline. In 2008, 40% of the participants were from the U.S. or Canada and in 2011 nearly 70% were. The student level from freshman to doctoral was nearly identical with approximately 70% undergraduate nearly evenly split

among 1st through the 4th years. Self-reporting on awareness of electronic resources was also about the same with a bit of an increase in the percentage reporting an excellent awareness of library resources (up from 14% to 20%).

How often do you use e-books that your library provides? If never, why?

Three years has seen a 2% gain in the use of library provided e-books and an 8% increase in awareness of library provided e-books. In 2008, 57% of students said their libraries had e-books and 52% said that they used the library's e-books—a difference between awareness and usage of 5%. In 2011 65% of the students said their libraries had e-books and 54% said they used them—a difference of 11%. The difference between awareness and usage grew from 5% to 11%.

In 2008, 49% of the survey respondents reported never using e-books. In 2011 the number decreased slightly to 47%. The reasons given for not using e-books stayed in the same order with some percentage shifts. The percentage reporting that they were not able to find e-books dropped by 11 points. The percentage reporting that their library did not have e-books dropped by 7 points and the percentage for difficulty reading dropped 6 points.

Table 1 – Reasons for Never Using E-books

Reasons	2011 %	2008 %	Difference
I do not know where to find e-books	47	58	-11
I prefer printed books	44	46	-2
My library does not offer e-books	10	17	-7
E-books are too difficult to read	8	14	-6
E-books are not available in my subject area	7	7	0
E-books are too difficult to access remotely	6	6	0
E-books are too difficult to use	4	4	0
My instructor requested not using e-books	1	2	-1
They are not a reliable source	1	1	0
No access to computer or Internet	1	1	0

What types of resources are you using and for what purpose?

At least five factors contribute to the reported use of resources by students for assignments—academic suitability (e.g. peer reviewed), assignment/subject need (a factor of depth/volume of resource), format preference (e.g. print book, e-journal), ease of use (simple/intuitive), and familiarity with the resource. Each resource likely has its own mix of these preference factors for each student within their respective environments and assignments.

For instance, 49% of students indicated that they use print journals for assignments (see table 2 below). Students were likely reporting that they would consider them suitable for academic use. They were not necessarily saying that they use them. Usage statistics at Western Oregon University show actual usage of print journals at less than 1% of total journal usage. Western offers less than 200 current subscriptions in print versus over 56,000 e-journals that are accessible immediately, whenever needed, and subject to online editing tools like copy/paste. By contrast, selection of e-journals by 69% of the students is largely an expression of the likelihood they will find the material they need. It is also a measure of ease of access and use compared to print journals. The scores of 69% and 49% respectively for electronic and print journals do not rank them

because of any one factor. The rankings are a combination of a variety of preference factors set within the resource experiences and expectations

of individual students within their academic environments and assignment needs.

With this cautionary note in mind, the rankings of personal use can insinuate student preferences for the academic resources beyond the ranking of academic suitability. Personal use is a measure of preference and familiarity. Resources ranked high in both academic and personal use are likely to be used more by students for research and assignments than academic resources that are not preferred for personal use. The two most obvious in the list are Google and Wikipedia. They are used by high percentages of students for personal use and they are usable for assignments. They facilitate the research process by leading to resources suitable for academic use and by providing background information.

Reported academic e-book use decreased slightly from 78% saying they used them for research or assignments to 74%. The general decrease in reported e-book usage over three years is surprising and conflicts with other data and trends. The reported use in the question on library-provided e-books showed an increase of 2% from 51% to 53%. Also, libraries have been increasing their e-book collections and providing instruction in their use. Experience at Western shows actual usage increase over the past four years by 474% from 1,782 to 8,443 annual e-book sessions. The collection also grew from 2,173 to over 70,000 e-books. ebrary usage statistics for libraries also show about a 30% increase year over year. As another indicator of the general increase in e-book usage over the four years, Amazon has been promoting e-books and e-readers thereby increasing general awareness

and acceptance of e-books. As a result, their e-book sales have surpassed print. Google and HathiTrust continue to increase e-book availability. At best student reports of using e-books are static, while reported evidence from ebrary, Amazon, HathiTrust, Google and library statistics indicates that their usage has likely increased more than moderately.

A possible explanation is that the students are not using them less but they have become more aware of the limitations of the subset of titles available in their subject areas. They are answering the question more as usability for their particular assignments rather than whether or not they are suitable for assignments. The answer reflects a more realistic assessment of how usable e-books are rather than how often they are using them compared to four years ago.

For example, at Western, student use of e-books available through the catalog is 22% of all book usage. E-books only comprise 21% of the collection so they actually have a slight usage preference, which is probably because of currency. The e-book collection at Western is much more current than the print collection and the results list is ordered for currency. Even though usage at Western shows a slight preference for e-books, the overall usage rate is four times higher for print because of the volume of print content and its associated likelihood that it contains hits for the search terms. Print books account for 79% of the collection and 78% of the usage. Since students are now more familiar with e-books and our statistics at Western show that they use them a lot more, the survey number tells me that the 4% dip in the number of students reporting their use for assignments is reporting something other than they were reporting in 2008. Since they

have more experience with e-books it may be that they are reporting a more realistic assessment of how usable they are for assignments.

Since the usage stats for Western are not necessarily reflective of the norm for the student who took the survey, this explanation does not explain, with any certitude, what students collectively expressed in the survey. It acts partially as a cautionary note for expecting definitive answers for surveys of this nature. It's more like viewing impressionist art than reading accounting information. The details need to be framed in the larger picture to make sense of them.

There have been some other notable increases and declines in reported use (see table 3 below). Lecture recordings (16% increase), course management systems (13%), Google Scholar (9%), and print textbooks (8%) had the largest increases in the rate of selection over 2008. Social web (Facebook, etc.), blogs and wikis, and e-textbooks increased 7%, 6%, and 6% respectively. Recording lectures has become much more prevalent in the last four years and course management systems continue to gain ground as central course information organizing tools. Instruction by librarians and faculty may explain some of the changes. Librarians have enlisted Google Scholar as a library resource discovery tool in greater numbers over the past four years and have been teaching students how to use it. They have also been cautioning students about using quoted material from Wikipedia in their assignments, which may explain the 11% drop in its reported use. More faculty have expanded their integration of the use of social web tools, blogs, and wikis into their teaching, which may explain their increases.

Table 2 - Student Resource Usage Sorted by Assignment Column from 2011 Survey

Resource	Research/Class Assignments % that Use	Personal Use % that Use	Combined Score
Google & Other Search Engines	85	78	163
Print books	79	54	133
E-books	74	34	108
Print textbooks	73	21	94
E-reference (online dictionaries, encyclopedias, maps)	72	43	115
Electronic databases (ProQuest, LexisNexis, JStor, etc.)	69	14	83
E-journals	69	21	90
Print reference	60	34	94
Google Scholar	56	20	76
Wikipedia	56	70	126
E-textbooks	54	15	69
Course Management System	56	13	69
Print journals	49	21	70
Lecture recordings	47	14	61
Corporate websites	39	42	81
E-newspapers	39	38	77
E-magazines	32	35	67
Print newspapers	29	42	71
Print magazines	26	44	70
Blogs & wikis	25	49	74
Podcasts	24	31	55
Social web apps (Facebook, etc.)	16	78	94
Personal websites	15	57	72

Table 3 - Student Resource Academic Usage Comparison between 2011 and 2008 Surveys

Resource	Research/Class Assignments % that Use 2011	Research/Class Assignments % that Use 2008	Difference
Google & Other Search Engines	85	81	4
Print books	79	77	2
E-books	74	78	-4
Print textbooks	73	65	8
E-reference (online dictionaries, encyclopedias, maps)	72	68	4
Electronic databases (ProQuest, LexisNexis, JStor, etc.)	69	62	7
E-journals	69	65	4
Print reference	60	60	0
Google Scholar	56	47	9
Wikipedia	56	67	-11
Course management systems	56	43	13
E-textbooks	54	48	6
Print journals	49	50	-1
Lecture recordings	47	31	16
Corporate websites	39	37	2
E-newspapers	39	36	3
E-magazines	32	31	1
Print newspapers	29	26	3
Print magazines	26	24	2
Blogs & wikis	25	19	6
Podcasts	24	16	8
Social web apps (Facebook, etc.)	16	9	7
Personal websites	15	13	2
Averages	49.74	45.78	3.96

What types of resources do you consider trustworthy (accurate and reliable) for research and class assignments?

Books, whether electronic or print, again provide assurance of validity to the highest percentage of students in this survey as in the 2008 survey. Five of the six top slots were given to books in both surveys. Print was also viewed as trustworthy by higher percentages of students than electronic resources with four of the top six resources in both years. The perceived viability of print is not surprising given the constant refrains of caution about, and personal experience with, the reliability of information on the Internet versus print. Students know that electronic information is transient and easy to produce

compared to the product and processes of print publication. The barriers to print publication afford an intuitive impression of higher integrity.

It is notable in this survey, as it was in 2008, that even though students reported that they trusted print resources more, they reported using e-resources more. While four of the top six trusted resources are print, four of the top six resources students reported using are electronic—Google, e-books, and e-reference in 1st, 3rd, and 5th place respectively with library databases, and e-journals tied for 6th place. Students will use the information resources that get the assignment done with the least amount of time and effort.

The top increases in trustworthiness occurred for lecture recordings (16% increase), library databases (12%), Google Scholar (12%), and e-textbooks (11%). Lecture recordings are up because of increase use by faculty, as noted earlier. Library data-

bases and Google Scholar are probably the result of instruction, which is also probably why Wikipedia dropped by 16%. The increased trust of e-textbooks is from their ascendancy in distribution.

Table 4 – Resource Trustworthiness – 2011 vs. 2008

Resource	% Finds Trustworthy 2011	% Finds Trustworthy 2008	Difference
Print books	92	90	2
E-books	89	88	1
Print textbooks	89	83	6
Print reference	85	79	6
E-textbooks	85	74	11
Print journals	82	76	6
E-journals	80	75	5
E-reference (online dictionaries, encyclopedias, maps)	79	73	6
Electronic databases (ProQuest, LexisNexis, JStor, etc.)	78	66	12
Lecture recordings	68	52	16
Print newspapers	67	61	6
Google Scholar	65	53	12
E-newspapers	63	57	6
Course management systems	57	47	10
Google & Other Search Engines	54	52	2
Print magazines	52	49	1
E-magazines	48	44	4
Corporate websites	42	43	-1
Podcasts	30	21	9
Wikipedia	24	40	-16
Personal websites	12	12	0
Blogs & wikis	11	11	0
Social web apps (Facebook, etc.)	11	11	0

How do you determine if a source of information is trustworthy?

Reassurance of validity was vested in the same entities as 2008 with increased percentages of selectors (see table 5). Eighty-eight percent of the students selected instructor as the primary source of information trustworthiness an increase of 3%. Librarians gained 10 points. And publishers increased 3%. As noted in the 2008 analysis, the selection of publishers suggests awareness of peer review processes, which in turn is an indication of

instruction by librarians and faculty in the use of information resources.

There is a disjuncture in the number of students who placed trust in Google as a trustworthy resource (54% in the last question), the trust they assign to Google in this question (12%) comparing it to faculty and librarians, and the number who report using it as a resource for assignments (85%). The disjuncture can be understood as duplicitous. Or, it can be understood as student awareness of

the need for information integrity, an expression of trust in the knowledge of faculty and librarians, and

confidence that they know how to effectively use Google.

Table 5 - Sources of – 2011 vs. 2008

Source of Trust	2011	2008	Difference
If my instructor recommends it	88	85	3
If available in my library or recommended by a librarian	77	67	10
If it's from a well-known publisher	73	70	3
If it's available in print	25	27	-2
Google or other search engine	12	14	-2
Information is information – don't worry about it	3	6	-3

When you have the option of using either the electronic or print version of a book, how often do you opt to use the electronic version?

The student preferences for using e-book versions of a book were nearly the same in 2011 and 2008. Both surveys show a skew toward e-books with 80% and 83% respectively for students selecting

sometimes to very often. The preferences for using e-books make sense in an academic environment. The students who prefer using electronic resources likely have research and authoring tools that are computer-based for most of their work. Students use at least e-mail, MS Word, and PowerPoint. They also use search terms within the text for navigation.

Table 6 - Preferences for e-books over print books

2011	2008
48% very often or often	51% very often or often
32% sometimes	32% sometimes
20% rarely or never	17% rarely or never

Which of the following statements are true for e-books, print books or both?

E-books increased in the percentage of reported advantages relative to print books. As students discover and become familiar with the characteristics of e-books, their favorable ratings increase relative to their comparison with print books. The average selection percentage for the top six positive e-book characteristics increased from 57% to 58% and the top six percentages for print declined from an average of 36% to 30%. The top six characteristics students selected as true for both rose from 46% to 50%. While ease of reading only rose 2% as a characteristic for e-books, it dropped 12% for print books and rose 12% as a characteristic for both.

Environmentally-friendly (72%) ranked highest again in the 2011 survey as a characteristic of e-

books (up 10%). Anytime, anywhere access (64%) gained 2 points as the runner-up. A group of 4 characteristics garnered between 55% and 48% of the votes in descending order for storing, searching, sharing, and using with multiple documents. They dropped and average of 3%.

The top selected characteristic associated with print books was 'easy for cover-to-cover reading' at 40%. It replaced the favored 2008 selection of 'easy to read', which dropped 12% from 45% in 2008 to 33% in 2011. The positive reading characteristics associated with print probably decreased in comparison to e-books because of increased experience reading e-books and with improved e-book reading software and hardware.

Table 7 – Six E-book Characteristics with Highest Scores – 2011 and 2008

E-books 2011	%	E-books 2008	%
Environmentally friendly	72	Environmentally friendly	62
Anytime, anywhere access	64	Anytime, anywhere access	62
Easy to store	55	Easy to search and find info	58
Easy to search and find info	54	Easy to share	56
Easy to share	52	Easy to store	54
Easy to use multiple documents at once	48	Easy to use multiple documents at once	51
Average	58	Average	57

Table 8 – Six Print Book Characteristics with Highest Scores – 2011 and 2008

Print Books 2011	%	Print Books 2008	%
Easy for cover-to-cover reading	40	Easy to read	45
Ability to highlight	34	Easy for cover-to-cover reading	43
Easy to read	33	Ability to take notes	40
Ability to take notes	30	Ability to highlight	37
Wide selection of titles	29	Wide selection of titles	33
Easy to use	15	Easy to use	20
Average	30	Average	36

Table 9 – Six Characteristics Associated with Both E-books and Print Books

Characteristic	2011	Characteristic	2008
Easy to use	53	Clear graphics and images	50
Clear graphics and images	51	Easy to use	47
Easy to cite	51	Easy to print or photocopy	46
Information is current	51	Easy to cite	45
Wide selection	49	Information is current	44
Easy to print or photocopy	45	Wide selection	42
Average	50	Average	46

How important are the following features to e-books?

The top five features remained the same from 2008 to 2011 though the percentage of selection among them changed (see table 10). Ability to download to a laptop or workstation moved ahead of multiple-user access. Downloading e-books is becoming important with increased tablet use. Downloading is also important for using e-books in a more agile and responsive environment both for reading and working with resources for assignments. It is becoming increasingly important to have resources available to software tools for organizing, analyzing, author-

ing, and sharing in the context of assignments. Group problem solving has also become increasingly important as part of assignments and requires sharing resources.

In sixth place, zoom and scale increased 10 points and replaced copy/paste. Although it ranked below the middle of the desirable features, the features that increased the most in selection were downloading to a handheld device (by 16 points) and the ability to email (by 15 points). Tablets were not common four years ago. Downloading e-books as well as zoom and scale are features that are associated with them. The only feature that

decreased was printing—from 75% to 69%. If you can download the e-book and email text, printed

copies are less needed for work in groups or to give presentations.

Table 10 – Change in Selection of Features Between 2008 and 2011

Characteristic	2011 %	2008 %	% Difference
Anytime access	91	86	5
Search	88	87	1
Off-campus access	88	82	6
Ability to download to workstation	86	80	6
Multiple user access	83	81	2
Zoom and Scale	75	65	10
Copy and paste	73	75	-2
Highlighting	70	62	8
Printing	69	75	-6
Automatic citations	63	56	7
Ability to email text	60	55	15
Download to handheld device	58	42	16
Annotating	49	45	4
Multimedia	47	44	2
Ability to share notes	46	44	2
Book reviews	45	45	0
Collaborative tools	44	40	4
Shared bookshelves	30	30	0
Personal bookshelves	44	38	6
Average	64	60	4

What do you feel would make e-book usage more suitable for use in your area of study?

The focus of this question was improving the usability of e-books (see table below). It is a version of the previous two questions in that it addresses features of e-books. The first of the previous two questions examined a broader range of e-book functionality relative to print books and the second compared the relative desirability of another set of e-book features and functionality.

This question compares a smaller subset of six factors related more specifically to improving e-book use for studying within disciplines. The selection pattern separated into two groups with the top group garnering about two-thirds of the votes and the other group important to only about a third of the students.

The top group included increased subject area titles, less restrictions on printing and copying, and more current titles. The features ranked in the same order as the 2008 survey. They, however, lost an average of 4 points each. The decline could be the result of advances in these areas—increased numbers of titles at academic libraries and improved access through collections like Google Books and HathiTrust as well as increased flexibility in printing and copying.

The bottom four features remained nearly constant with the exception of PDA accessibility, which gained 9 points. Although PDAs have faded in relevance with the rise of tablet computers, the rise in interest for accessibility reflects the growing importance of portability for e-books. In the previous question examining feature preferences, downloading to a handheld device gained 17 points over the 2008 survey.

Table 11 - Preferences for improvements to e-books

Characteristic	2011 %	2008 %	% Difference
More titles in my subject area	73	76	-3
Less restrictions on printing and copying	60	65	-5
More current titles	56	59	-3
Better e-book readers	39	35	4
Better training and instruction	34	32	2
PDA accessibility	33	24	9
Multimedia capabilities	31	30	1

How do you usually find and access e-books (i.e. what is your starting point)?

While the library website is still the initial access location for e-books for most of the respondents, it dropped 9 points compared to the 2008 survey. The library catalog and Google still come in second and

third respectively. Google Scholar, course management systems, and vendor websites all gained an average of 7 points. Instruction in person and through tutorials in course management systems and LibGuides may account for the changes in discovery patterns.

Table 12 - Finding e-books

Characteristic	2011 %	2008 %	% Difference
Library website	65	74	-9
Library catalog	56	55	1
Google and other search engines	50	48	2
Google Scholar	33	25	8
Course management systems	21	15	6
Vendor or publisher website	17	11	6

How important is instruction or training in finding and using information resources to your research and learning?

The responses were nearly the same as 2008. Again, a majority of students (57%) view instruction as very important; 36% acknowledge that it is somewhat important; and 7% see it as unimportant. In the ebrary 2007 *Global Faculty E-book Survey*, 85% of the

faculty indicated that instruction was very important, 14% somewhat important, with only 1% reporting it as unimportant. The faculty view instruction as the antidote for the invalid or inappropriate resources used in assignments. Students are commenting more on the value of instruction that they have experienced. Not all instruction is very helpful.

Table 13 – Student & Faculty Print Perceptions of the Importance of Instruction

Rating	2011 %	2008 %	% Difference
Very important	57	56	1
Somewhat important	36	39	-3
Not important	7	5	2

How did you learn about e-books?

Students still report librarians and instructors as their introduction to e-books. But the library website and catalog fell from 3rd and 4th place to be replaced with peers and Google. The largest changes

in how students reported learning about e-books were an increase of 9% for peers and a decrease in the library website by 8%. The increase in emphasis on assignments designed to increase peer learning may have contributed to the change.

Table 14 – Source of E-book Awareness

Source	2011 %	2008 %	% Difference
Librarians	56	53	3
Instructors	50	47	3
Peers	41	32	9
Google or other search engines	41	38	3
Library catalog	36	39	-3
Library website or blog	35	43	-8
Library orientations	20	22	-2
Email notifications from library	13	12	1
Training sessions	13	15	-2
Departmental web pages	11	16	-5
Posters and other promotional materials	9	8	1

What do you think are the most effective support and training tools for learning how to find and use e-books?

In 2008, online tutorials ranked highest with 62% of students selecting them as an effective method for learning about e-books. Tutorials continue to rank number one with 65% of the vote. In-person instruc-

tion and online help pages continue in the 2nd and 3rd slots but they switched places and swapped 4 points. Training videos, paper guides, and online chat all received less than a third of the vote with paper guides losing 3 points and training videos and online chat both gaining points—10 and 4 respectively.

Table 15 – Most Effective Instruction

Method	2011 %	2008 %	% Difference
Online tutorials	65	62	3
In-person instruction	55	51	4
Online help pages	52	56	-4
Training videos	32	22	10
Paper guides (i.e. user guides)	27	30	-3
Online chat	19	15	4

Summary

With respect to a comparison of reported academic resource usage between the 2011 and 2008 surveys, there was a 4% average increase for the list of 23 resources. Student reports of library provided

e-book use for class assignments increased by 2% over the 2008 survey. For those accessed through the library as well as other sources (e.g. Google books or the Hathitrust), reported use of e-books dropped by 4%.

Google Scholar and print textbooks showed the largest gains in reported usage. Lecture recordings, e-textbooks, and library databases showed the largest gains in reported trustworthiness. Instructors, librarians, and publishers again garnered the highest percentage of votes and all gained over 2008 as sources of trust for students with respect to resource evaluation.

Nearly half of the students indicated a preference for using e-resources over print with another 30% sometimes preferring them and only 20% preferring print. There was a 3% shift toward print from the 2008 survey.

Reported favorable e-book characteristics and features like ease of use and citing gained about 7 percentage points relative to print books over 2008 for the top six characteristics of each. E-books gained 1% and print books lost 6%.

Anytime access, search, off-campus access and the ability to download to a workstation again were the features that collected the highest percentage of votes. Download to a handheld device, email text, and zoom and scale made the largest gains in desirability—up 16%, 15%, and 10% respectively.

Preferences for improving e-books remained about the same with the top three being more titles, less restriction of printing and copying, and more current titles.

The library website (65%), catalog (56%), and Google (50%) are still the primary means of access for e-books. The largest changes were to the library website, which dropped 9%, and Google Scholar (33%), which increased 8%.

Over 90% still view instruction as very or somewhat important. The preferred methods of instruction continue to be online tutorials, in-person instruction, and online help pages.

Report and full survey data available online at:
<http://site.ebrary.com/lib/surveys/docDetail.action?docID=80076107>