The Quality Connection:

Academic users define the value of high quality eBooks to facilitate high quality teaching and learning outcomes.

Source: 2012 Global Academic User Value Study results from 10,000+ university instructors, researchers, students; Elsevier. August 2012
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2012 Global Academic User Value Study results from 10,000+ university instructors, researchers, students; Elsevier.
Introduction

Elsevier recently collected responses from over 10,000 instructors, students, and researchers at academic research universities worldwide via an online survey including multiple choice and open ended questions. The goal of this 2012 *Global Academic User Value Study* was to assess the value of online book content in facilitating the user-defined research workflow and outcomes. To that end, the study also aimed to uncover how today’s academic instructors, researchers, and students view the changing role of publishers in providing both quality content and platforms designed to meet their evolving needs. Finally, it intended to provide institutional librarians as buyers with clarity from a significant sample of university library patrons on their need for high-quality, publisher-provided online book content and platforms as an essential library resource. With this data, libraries will be better informed to choose the resources that their patrons want and need most to achieve higher levels of research outcomes and ultimately academic success, which also translates into higher prestige for the university library and its larger institution. In conducting and sharing studies like this, Elsevier intends to uphold its commitment to partnering with today’s researchers and academic libraries toward positive, productive transition from print to online delivery of content in today’s libraries, corporate and government institutions.

Methodology

The 2012 *Global Academic User Value Study* surveyed more than 10,000 students, researchers and instructors, including 4,000 graduate students; over 4,000 undergraduates, research or lab directors, post-doctoral fellows and research technicians; and nearly 3,000 instructors and other educators. Here is the breakdown of respondents to this survey, and their roles in academia:

<table>
<thead>
<tr>
<th>Primary Subject Area</th>
<th>Count</th>
<th>Title Count</th>
<th>Region Count</th>
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<td>Agricultural and Biological Sciences</td>
<td>750</td>
<td>Earth and Planetary Sciences</td>
<td>226</td>
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<tr>
<td>Arts and Humanities</td>
<td>61</td>
<td>Economics, Econometrics and Finance</td>
<td>183</td>
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<tr>
<td>Biochemistry, Genetics and Molecular Biology</td>
<td>429</td>
<td>Energy</td>
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<td>Engineering</td>
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<tr>
<td>Chemistry</td>
<td>500</td>
<td>Immunology and Microbiology</td>
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<tr>
<td>Computer Science</td>
<td>197</td>
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<td>Mathematics</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>TOTAL</strong></td>
<td>7,851</td>
</tr>
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</table>

<table>
<thead>
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<th>Region</th>
<th>Count</th>
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<tbody>
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<td>Postdoctoral fellow</td>
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<td>North America</td>
<td>4,227</td>
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<tr>
<td>Graduate Student</td>
<td>4,087</td>
<td>Europe, Middle East, Africa, Latin America</td>
<td>3,293</td>
</tr>
<tr>
<td>Research/Lab Director</td>
<td>1,236</td>
<td>Asia Pacific</td>
<td>2,697</td>
</tr>
<tr>
<td>Undergraduate Student</td>
<td>1,927</td>
<td>Unclassified</td>
<td>784</td>
</tr>
<tr>
<td>Research Technician</td>
<td>567</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher/Educator/Faculty/Teaching Assistant</td>
<td>2,923</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>11,384</td>
<td><strong>TOTAL</strong></td>
<td>11,001</td>
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Main topics covered in this study and the following white paper

- The relationship of high-quality sources to achieving teaching and learning-related research outcomes
- The comparative advantages of electronic vs. printed information sources
- The benefits of providing eTextbooks in the University Library
- The importance of book content and the need for publisher-provided content to build foundational knowledge at every stage of the research workflow
- Publisher platform attributes that help facilitate the research workflow and provide the most valued user experience
- The value of eBooks integrated with other online sources, such as eJournals
- The prevalence of cross-disciplinary research, and the importance of content accessibility in primary and related subject areas
- The top motivators behind patron demand for publisher-provided online book content & platforms

Findings Overview

The study results show that every category and subcategory of the surveyed audience is making extensive use of the high-quality sources available to them to produce quality work. Whether students, researchers or instructors, the large majority of respondents gain value from a wide range of materials, particularly those in electronic formats such as books and journals to facilitate their research workflow and outcomes.

Respondents clarified how they define and distinguish quality sources; a majority stated that high-quality content is the primary reason researchers, graduate and undergraduate students, and instructors ask their libraries to purchase specific resources. Participants also agreed that high-quality outcomes are best achieved by using high-quality, publisher-provided content and platforms. Respondents offered specific criteria as a means of selecting the highest quality sources they consider most important to meet their specific and evolving needs.

It seems that all academics are looking for ways to achieve greater efficiency and productivity, as shown by their preference for electronic sources. For example, instructors said they prefer eBooks over print books by a significant two-to-one margin.

The study identified many reasons that electronic media have achieved a high level of acceptance and preference with these academic audiences. The rational for this evolution from print to electronic delivery is best reflected in the most commonly stated benefits highlighting the need for dynamic versus static resources: 24/7 accessibility (including availability on mobile devices), as well as the discoverability, searchability and integration with other online sources that specific platforms can provide.

“Publisher provided book content gives me more confidence in using the material to teach.”
Mohammed Baba Saba, University of Nigeria
Study respondents made it clear that cross-disciplinary research from multiple sources is critical. In fact, 87% of instructors and students reported that they require foundational knowledge in new or related areas at various stages of their workflow. While content traditionally gained from research books helps academics establish solid foundations in both primary and secondary areas of expertise, that of journals supply peer perspectives on real-world scientific applications. And finally, users seek ease of use and accessibility of a wide range of trusted source material from which to search and find answers quickly—and conveniently.

Thus emerges the evolution of the book into clearly defined user needs, and the essential connection of high quality, publisher-provided content and platforms to achieve high quality teaching and learning outcomes. In the midst of migration from print to electronic delivery of content, change is evident as user needs evolve based on technological advance. This further implies changes to the traditional role of publishers and university libraries to provide research sources to facilitate researchers’ workflow and outcomes.

As implied in this study, there seems to be one obvious constant amidst inherent changes: academic researchers seek high quality foundation knowledge to achieve high quality teaching and learning outcomes they can trust.

“Publisher-provided book content is the most valuable source for validating my work, and it is good for referencing.”
Vivienne Ekpo, Middlesex University
The value of quality eBooks to facilitate quality teaching and learning outcomes

University instructors surveyed indicate that they value the content from books more than any other source for teaching—and when it comes to preferred online sources, eBooks and eJournals carry near equal weight. Books help “refresh (their) knowledge” in their primary area of research or help them “teach the basics” in their secondary areas of expertise.

Graduate students say publishers and publisher-provided book content plays a significant role in helping them facilitate research outcomes and reach their goals.

How do eBooks help academics facilitate their workflow and outcomes?

Researchers/Students
- Refresh my knowledge on the “basics” in my primary area of research
- Teach me the “basics” in new/related areas of research

Instructors
- Refresh my knowledge on the “basics” in my primary area of teaching
- Helps me teach the “basics” in areas outside of my primary subject area of expertise

Response percent/count - totals may not equal 100% due to rounding.
Response count: 3,427 researchers/students
Response Count: 1,085
Instructors define high quality publisher-provided content:

**What does highest quality mean to you?** (Please select your top three choices)
- Content contains very recent updates, new edition – 60.5%
- Contains the most trusted foundation knowledge, even if an older edition – 55.7%
- Quality of authorship – 51.6%
- High citations – 37.3%
- Easy to find – 34.4%

Researchers and students define high quality publisher-provided content:

**What does highest quality mean to you?** (Please select your top three choices)
- Contains the most trusted foundation knowledge, even if an older edition – 50.1%
- Content contains very recent updates, new edition – 49.5%
- Quality of authorship – 38.2%
- Easy to find – 37.3%
- Easy to use – 30.0%

**Fact:** 69% of instructors, researchers, and students surveyed rate Elsevier as having the **highest quality** book content of the large STM publishers.

Anecdotal comments from both instructors and students provide insight into the user-defined value of publisher-provided content to maintain “high standards and quality of both the material and the presentation,” as well as “the quality of information for literature review,” which they say provides a “credible basis on which to build research.”

There is a strong connection between efficiently accessing high-quality publisher-provided eBooks and students’ ability to produce quality results. A few students said what many implied in the open-ended parts of this study: that publisher-provided content and platforms make it “easier and faster for me to lay my hands on what I need” and “. . . enhances my study efficiency,” and offer “the chance to get more information from fewer sources.” Instructors commented that publisher-provided eBooks provide “relevant information from the first principles to state-of-the-art,” and “makes it easier for the students to find the biographic sources I recommend.”
Emergence of the eBook: Academic users’ growing preference for online delivery versus print

Instructors value electronic platforms for content delivery over print books and journals—preferring eBooks over print books 2 to 1. One of the main reasons for this preference is “ease of integration with other online sources.” Other top reasons for preferring eBooks over printed books include availability on mobile devices, DRM-free content, and availability to students for free and when the library is closed.

Response percent/count - totals may not equal 100% due to rounding.
Response Count: 1,268 instructors

Instructors rank the benefits of eBooks (over printed books) in the library

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Rating Average</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easier to search</td>
<td>2.51</td>
<td>1,790</td>
</tr>
<tr>
<td>Easier to find</td>
<td>2.52</td>
<td>1,818</td>
</tr>
<tr>
<td>Available when library is closed</td>
<td>2.70</td>
<td>1,765</td>
</tr>
<tr>
<td>Available to my students for free</td>
<td>2.86</td>
<td>1,786</td>
</tr>
<tr>
<td>Integrated with other online sources</td>
<td>2.92</td>
<td>1,776</td>
</tr>
<tr>
<td>No digital rights management</td>
<td>3.43</td>
<td>1,674</td>
</tr>
<tr>
<td>Available on my mobile device</td>
<td>3.93</td>
<td>1,750</td>
</tr>
</tbody>
</table>

Rating average on a scale of 1-7 (1 being highest, 7 lowest)
Response count: 1,846 instructors
Accessibility and mobility is important to researchers and students, as evidenced in this study. They use their home/personal computer to access online/electronic books 2/3 of the time. Only 22% of researchers and students still prefer print most—with 94% of respondents indicating that the last place they go to find research material are printed books and journals in the library.

It is interesting to note that when those instructors, researchers, and students who say they prefer both print and electronic books equally were asked which source for research material they most value, only 17% prefer printed books and journals in the library, while 43% prefer eBooks and eJournals from the library, and 82% prefer online sources overall, including resources outside the library. Also, 67% of these same respondents say they recommend online/electronic books to their library.

“Publisher-provided book content gives me a better grasp of the subject by providing knowledge right from the basics to the more advanced topics.”
Niharika Singh, Graduate Student

“Publisher-provided book content offers detailed information that I can use to prepare my lecture notes with more reliable data.”
Dr. Melike Bor, Associate Professor, Ege University

“Publisher-provided book content play[s] a very important and relevant role—Shapes and help refines my research directions.”
Graduate Student, Aberystwyth University

79% of researchers and students prefer online/electronic books

What is your preference for online/electronic books vs. print books?

- Prefer electronic most (53%, 2,137)
- Prefer both electronic and print equally (26%, 1,033)
- Prefer print most (22%, 879)

Response percent/count - totals may not equal 100% due to rounding.
Response count: 4,049 researchers/students

Which device do researchers and students use most to access online/electronic books for research-related purposes?

- Home/Personal Computer (64%, 4,475)
- Library Computer (28%, 1,911)
- Tablet (4%, 251)
- Smart Phone (4%, 251)
- eReader (2%, 111)

Response percent/count - totals may not equal 100% due to rounding.
Response count: 6,948 researchers/students
eTextbooks in the university library: The user-defined benefits of access for all instructors and students via the library

If eTextbooks were available via the library, only 7% of instructors say they would still assign a printed text.

Three-fourths of students/researchers say they are required to get textbooks and recommended reading assigned by their instructors. The main reason students do not end up getting the required/recommended reading for their course is that it is not available online. The majority of students would prefer to access required and recommended reading free, via the library.

The majority of students would prefer to access required and recommended reading free, via the library.
Content integration: Equal need for eBooks and eJournals

Electronic books and journals are both considered highly valuable in the research and learning process. Instructors use and value eJournals and eBooks almost equally. When considered along with the fact that instructors value “ease of integration with other online sources” as a reason to prefer eBooks to printed books, the study results indicate that they favor an integrated approach for the electronic sources they choose to provide to students. Better platforms help instructors prepare for classes in less time and present fewer obstacles to students and researchers.

“Publisher-provided book content gives me the chance to get more information from fewer sources.”
Stefano Ciliberto, Graduate Student, Universita degli Studi di Napoli Federico II

“[eBooks help me most] to read more on the topic to teach and also on related topics.”
Charles Emmanuel Annoh, Central University College, Ghana

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Printed books in the library: 25% (464)
Electronic journals in the library: 22% (387)
Electronic books in the library: 20% (365)
Online databases outside the library (ex. PubMed): 16% (301)
Free web sources (ex. Google, Wikipedia): 13% (236)
Printed journals in the library: 3% (56)
Other: 2% (27)

Response percent/count - totals may not equal 100% due to rounding.
Response count: 1,846 instructors
Cross-disciplinary research: Multi-disciplinary content required

As evidenced in the study, the value of eBooks to facilitate the teaching and learning-centered research workflow and outcomes is commonly assessed by academic users with these criteria:

- Quality of authorship
- More frequent updates than print
- Discoverability and accessibility online

A total of 87% of students and researchers state that they cross disciplines more than six times per year and more than 61% of instructors say they “always” or “often” teach in cross-disciplinary areas.

87% of academic researchers perform cross-disciplinary research outside of their primary subject area

How often do you perform research in new or related “secondary” cross-disciplinary areas?

- Regularly (at least once a week) 48%
- Occasionally (at least once a month) 39%
- Almost never (less than 6 times per year) 13%

Response percent/count - totals may not equal 100% due to rounding.
Response count: 6,004 researchers/students

61% of instructors say they “always” or “often” teach in cross-disciplinary areas

How often do you teach in new or related “secondary” cross-disciplinary fields, as opposed to in your primary field of research?

- Always (every semester) 261
- Often (3-4 semesters/year) 862
- Sometimes (1-2 semesters/year) 14%

Response percent/count - totals may not equal 100% due to rounding.
Response count: 1,846 instructors
The evolving user experience: Academic users rank the most valuable platform attributes

77% of researchers and students, and 66% of instructors rank Elsevier’s ScienceDirect as the number one preferred science, technology, and medicine publisher platform.

Why #1?

- “Ease of navigation, search, accessibility”
- “Reliability and quality of content”
- “Highest quality of authorship”
- “I can find trusted foundation knowledge easily”
- “Diverse topics covered”
- “When I wrote my monograph, I found in Elsevier the most important papers that I needed”
- “Most international acclaimed resources only available through ScienceDirect”
- “Wide range of subjects in ScienceDirect, and faster publication of recent works”
- “The books by Elsevier have high quality content perfectly suited for the topic”

77% of students/researchers and 66% of instructors in this study rank Elsevier’s ScienceDirect as the #1 preferred STM publisher platform.

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Response percent/count - totals may not equal 100% due to rounding.

Response count: 3,472 researchers/students

Response count: 1,158 instructors
Patron demand for quality: The top motivator behind user recommendation to the university library for institutional purchase

The top motivator for both instructors and students/researchers to recommend eBooks to their library is the need for high quality content. The most prominent motivators to recommend beyond quality content are online convenience, mobility, and a multi-disciplinary range of content. This points to the emerging need for both quality content and platform.

Students/Researchers say quality content is #1

<table>
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<tr>
<th>Motivator</th>
<th>Percent</th>
<th>Count</th>
</tr>
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<tbody>
<tr>
<td>Need high quality content to enhance my research outcomes</td>
<td>55%</td>
<td>1,872</td>
</tr>
<tr>
<td>Want online convenience to search and save</td>
<td>24%</td>
<td>825</td>
</tr>
<tr>
<td>Need mobility (because I prefer reading anywhere, anytime)</td>
<td>14%</td>
<td>470</td>
</tr>
<tr>
<td>Need cross-disciplinary content outside my primary area of research</td>
<td>6%</td>
<td>214</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>46</td>
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Response percent/count - totals may not equal 100% due to rounding. Response count: 3,427 researchers/students

Instructors say quality content is #1

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<thead>
<tr>
<th>Motivator</th>
<th>Percent</th>
<th>Count</th>
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<tbody>
<tr>
<td>Need high quality content to enhance my teaching or research</td>
<td>66%</td>
<td>712</td>
</tr>
<tr>
<td>Want online convenience to search and save</td>
<td>18%</td>
<td>196</td>
</tr>
<tr>
<td>Need mobility (because I prefer reading anywhere, anytime)</td>
<td>10%</td>
<td>108</td>
</tr>
<tr>
<td>Need cross-disciplinary content outside my primary area of teaching</td>
<td>5%</td>
<td>56</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>13</td>
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</tbody>
</table>

Response percent/count - totals may not equal 100% due to rounding. Response count: 1,085 instructors
Key Conclusions

The academic world continues to evolve as new technologies and increasing demands on academic researchers and their libraries emerge. The migration from print to electronic delivery of content, and new ways to access that content are both central aspects of this evolution. Yet, to succeed in academia, one constant remains— instructors and students need quality content to facilitate quality teaching and learning outcomes.

While instructors, researchers, and students need quality content, they also want the convenience associated with electronic delivery on easy-to-use platforms. In the midst of migration it seems that the demand for online content is moving at a faster pace than the process of migration from print to electronic delivery of content in today’s libraries. Only 22% of instructors, researchers, and students surveyed say that they actually prefer print over electronic at this time, and user comments in the study clarify their demand to access more electronic content than is currently available to them in the library.

- Instructors, researchers, and students need high quality content to facilitate high quality teaching and learning outcomes.

- eBooks maintain content-driven value to instructors, students and researchers, who need trusted foundational “quality content” to enhance their research workflow and facilitate quality outcomes.

- Teachers, students and researchers have a cross-disciplinary workflow that requires multi-disciplinary content.

- There is a preference for platforms that provide users with specific attributes—quality content, integrated sources such as eBooks and eJournals, mobility, and convenience—because they help instructors prepare for classes in less time and present fewer obstacles to students and researchers.

- eTextbooks available via the university library can provide the benefits of free, easy instructor and student access to required and recommended course content.

- Better platforms help instructors prepare for classes in less time and present fewer obstacles to students and researchers

- The top reason academics say they recommend content to their library for institutional purchase is the need for high quality content to enhance their research/teaching outcomes.
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