Perspectives on Student Research Skills in K-12 and Academic Communities

Imagine Easy Solutions, EasyBib.com
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About This Study

In 2012, EasyBib conducted a questionnaire with librarian users to survey different aspects of the information literacy landscape. Through a series of multiple choice questions, librarians provided their insights on their:

- Information literacy instruction program
- Students' understanding of website credibility, information synthesis and access
- Current stance on plagiarism in their institution

This data was compiled and organized into an infographic, *Trends in Information Literacy*, which is available for free on the EasyBib blog at http://content.easybib.com/.

In May 2014, EasyBib conducted a similar survey with a larger audience in order to compare the statistics with the original 2012 data. The purpose of this second survey is to determine how information literacy trends (i.e., student understanding, library instruction, etc.) have shifted over the past two years. A second survey was concurrently placed on EasyBib.com to survey student perceptions of these same information literacy skills.

Our initial findings were released in a spring 2014 report, *Trends in Information Literacy: A Comparative View*. It can be downloaded at http://info.easybib.com/trends-in-information-literacy-comparative-view.

This report provides some more in-depth analysis of the data and focuses more on differences and trends across types of libraries.

Data Collection

Data was collected using two survey tools: Google Forms (for librarians) and Qualaroo (for students).

The Google Forms survey was sent to EasyBib's mailing list of primarily high school and academic librarians, and was promoted via social media. The survey consisted of eight multiple-choice questions. A total of 1,182 usable responses were collected over four days in May 2014.
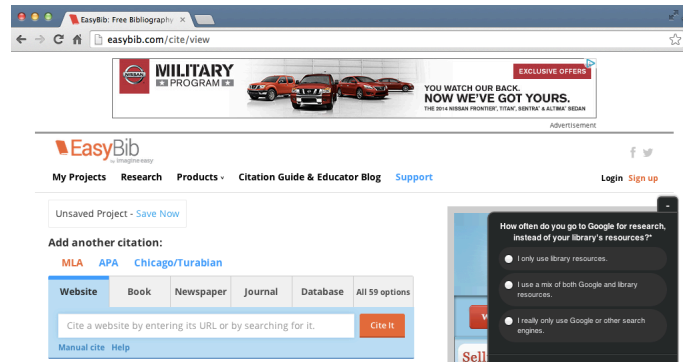

Figure 1: Example of pop-up survey on EasyBib.com.

To reach our student population, a pop-up survey was placed on EasyBib.com via Qualaroo from May 19 to 21, 2014, consisting of four multiple-choice questions (see Figure 1). A total of 10,471 responses were collected. Only four questions were asked to students in order to limit the interruption from creating citations.

Both surveys were completely voluntary and no identifiable information, including geographic location, were collected during this study, with the exception of one broad demographic question on each survey (the type of library and type of school attended).

Demographics

The surveys were open to librarians and students across the globe. Librarians did not have to subscribe to EasyBib to participate. In the interest of protecting privacy, no location data was collected. However, the survey included a question regarding which type of library in which the respondent works.

What Type of Library Do You Work In?

- Elementary School
- Middle School
- High School
- District-wide
- 2-year college
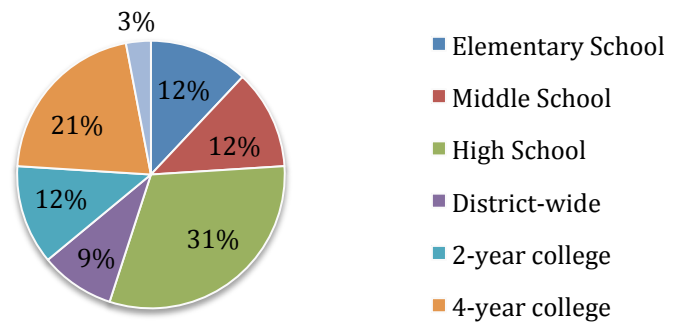- 4-year college

3%, 12%, 12%, 21%, 12%, 9%, 31%

Figure 2: Responses to "Which type of library do you work in?"

The majority of respondents came from high schools and four-year institutions. Middle and elementary schools each represented 12% of respondents, as did two-year colleges. "Other / N/A" respondents included public librarians and writing consultants, and constituted 2% of total responses. We were pleasantly surprised to see that so many elementary librarians (129) responded to the survey.

Academia vs. K-12 Education

In our email survey, we asked respondents, "*Which best describes the information literacy instruction at your institution?*" and pooled the data into two groups: K-12 respondents and higher education respondents.

The K-12 responses come from elementary school, middle school, high school, and district-wide librarians. The most popular type of instruction among both groups is a **one-shot session.**

What we found:
- Roughly **12% of K-12 librarians reported having no information literacy instruction at all,** while all academic librarians reported that they had some form of information literacy instruction.

- About a **quarter of librarians (23%) in higher education offer full-length courses** of information literacy instruction; **no K-12 librarians** did.

- Academic institutions appear to have information literacy instruction fully integrated into their library's functions, as none of them reported having instruction in development, compared to 9% of K-12 librarians.
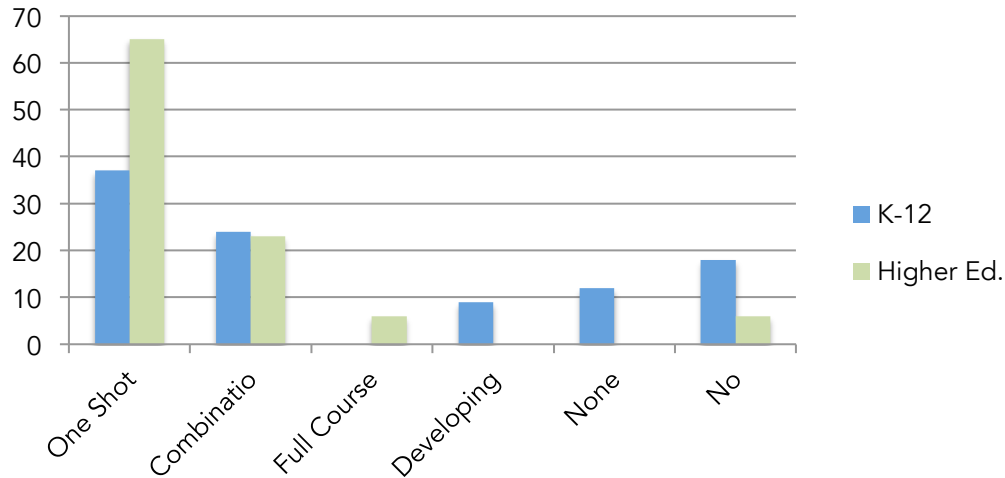
How Are You Teaching Information Literacy?

Figure 3: K-12 vs. Academic Information Literacy Instruction

Honing In on High School Perspectives

With the majority of respondents (31%) coming from high school librarians, we wanted to see how they incorporate information literacy instruction into their schools' curriculum.
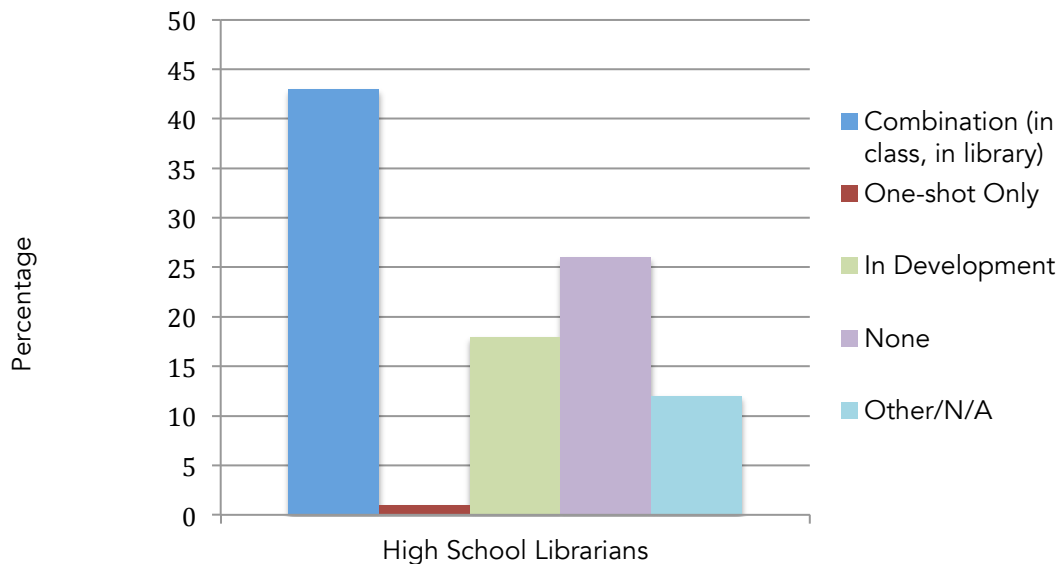
What Is Your Most Common Form of Instruction?

Figure 4: Type of Instruction by High School Librarians

Collaborative instruction, where librarians teach either one-shot sessions or meet with students multiple times throughout the course of a research project, is the most

popular form of instruction at the high school level. Only one respondent did *solely* one-shot sessions throughout the school year.

It is gratifying to see that high school librarians, who wear many different hats and often do not have immediate colleagues like paraprofessionals on whom they can rely, are able to incorporate teaching research skills both on their own and with other teachers in the school community.

On the other hand, the damaging result of impossibly busy schedules due to classroom curriculum, tight budgets, or administrators perhaps not viewing information literacy as a genuine need is reflected in the second most popular response: over one quarter (26%) had no instruction *at all* of research skills.

Website Evaluation in K-12 Education

Our student survey earlier this year reported that the majority (58.7%) prefer to use the Open Web in place of databases, books, and other subscription resources. With such a large number using search engines (and not vetted library resources), we looked to see how the website evaluation skills vary across types of schools, if at all.

How Would You Rate Your Students' Website Evaluation Skills?

Figure 5: Website Evaluation Skills in K-12 School
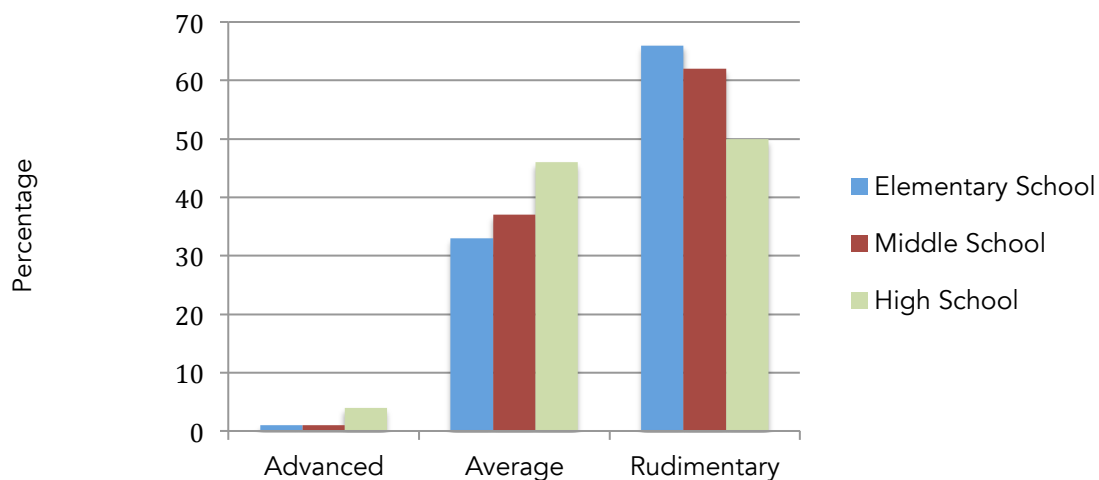
While the numbers vary, each group reported that most students have a rudimentary understanding of evaluating websites for accuracy, and the fewest have an advanced

skill set. Research shows that students are referencing less-than-desirable sources in their secondary and higher education research papers, so these results are not surprising.[1]

Statistics worth noting:

- Elementary and middle school librarians said that over 60% of their students have a rudimentary understanding of website evaluation. That is understandable—young students are new to online information and are less likely to identify bias or other factors at an earlier age.

- At the high school level, librarians felt that their students were more likely to have an average or advanced understanding of critically evaluating websites. That said, about half said their students have only a basic knowledge of website evaluation. This is not ideal, but certainly aligns with research demonstrating the discrepancy students face with their research skills and expectations of college professors.[2]

Website Evaluation in Higher Education

The same question, when posed to academic librarians, did not yield as consistent of results. Those working in two- and four-year higher education institutions said that the majority of their students have an average understanding of website evaluation—as opposed to a rudimentary level, as reported by K-12 librarians. What's more, fewer academic librarians said that their students have an advanced ability to evaluate websites (1.5%) compared to 4% in high school.

This is a curious find. If high school librarians report that most of their students have rudimentary website evaluation skills, one would imagine that the trend would be the same in higher education.

How Would You Rate Your Students'
Website Evaluation Skills? (K12 + Academic)

[1] *A Comparison of Internet Sources for Secondary and Higher Education Students,* report, 2011, accessed October 23, 2012.

[2] Alison J. Head, "College Students Eager to Learn but Need Help Negotiating Information Overload," *The Seattle Times*, June 03, 2011, accessed October 22, 2012.
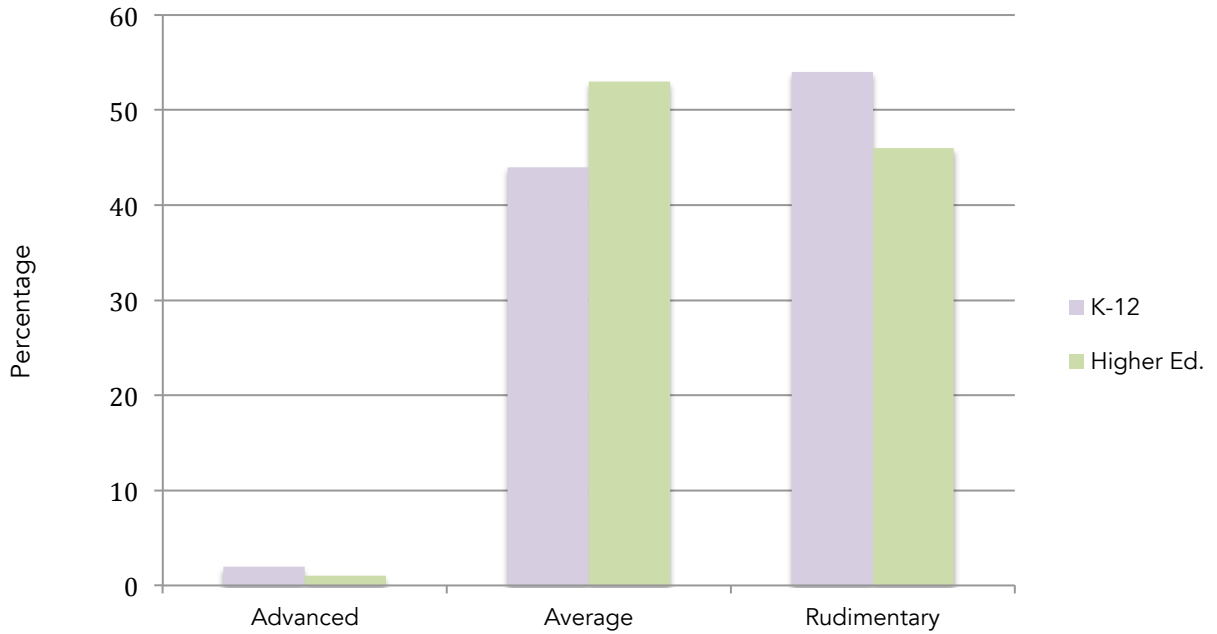
Figure 6: Perceptions of Website Evaluation Skills Between Secondary & Higher Ed.

We also saw inverted responses from two- and four-year college librarians when they assessed whether their students had an average or advanced understanding of evaluation.

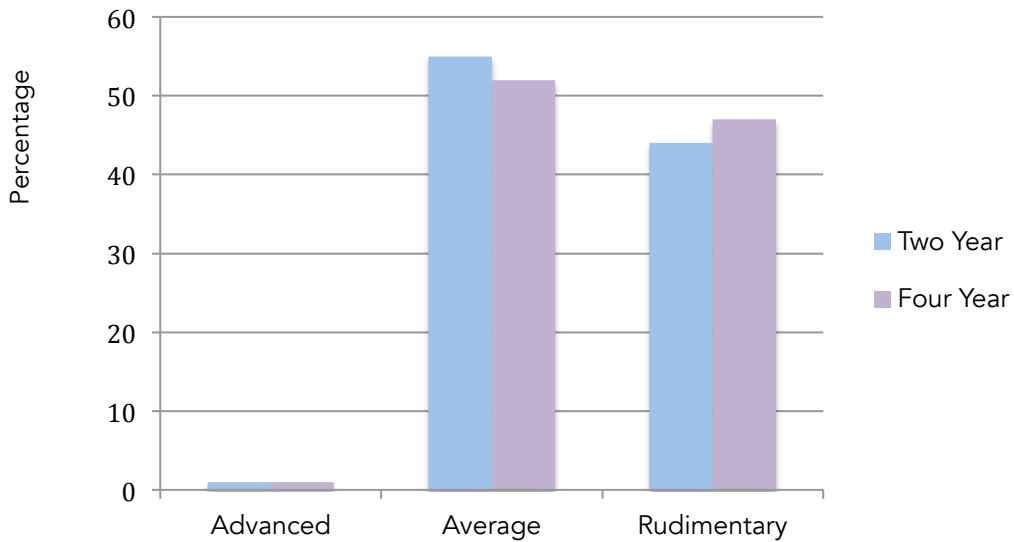## How Would You Rate Your Students' Website Evaluation Skills? (Academic Only)

Figure 7: Academic Librarians' Views on Student Website Evaluation Skills

Regardless of how one interprets the data, one thing is clear: students do not have an advanced understanding of how to critically evaluate websites. Given their lack of knowledge in this area, it is important that we learn how frequently *librarians* saw students using the Open Web for research.

Use of Open Web in Research Assignments

Librarians across both levels of learning had very similar responses to the frequency with which their students are using the Open Web in assignments requiring online research.

How Often Do Students Use the Open Web
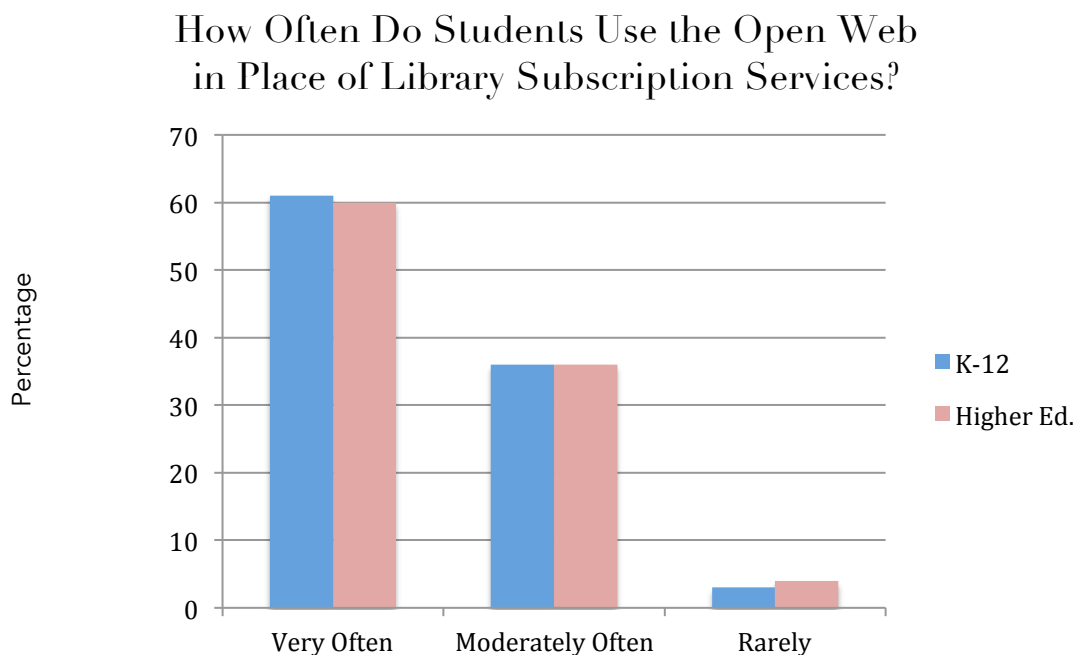in Place of Library Subscription Services?

Figure 8: Frequency of Students Using Open Web in Research

Our initial report revealed that students and librarians have similar experiences on this topic.[3] With other questions, responses from the two groups were varied, but the general research preferences of students received consistent responses from students, K-12 librarians, and academic librarians.

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[3] Imagine Easy Solutions, *Trends in Information Literacy: A Comparative View,* report, May 2014, p. 7, accessed October 27, 2014, http://info.easybib.com/trends-in-information-literacy-comparative-view.

Conclusion

As an educator, taking a close look at how librarians approach research instruction and analyzing the information literacy skills of students can help guide future decisions. From the results of this survey, for example, it is evident that students' website evaluation skills need to be improved. One-shot sessions, the most popular form of information literacy instruction, may not be enough to improve students' website evaluation skills. With today's technology, librarians have the ability to flip instruction, by creating video tutorials and offering them online. Some schools may be benefit to require students to participate in an information literacy course, whether in-person or online, to improve these skills if resources are available.

Enhancing the use of the library's subscription databases depends on both student and faculty awareness of these sites as well as the ability to easily access them. Placing links on the library's webpage, creating video tutorials, and providing professional development or announcements on new services to faculty members is key. Librarians are well positioned to work with administrators and supervisors to determine the best course of action regarding other forms of information literacy instruction to meet the needs of the school community.

About Us

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Imagine Easy Solutions is a small company with big ideas. *EasyBib*, its first product, is an information literacy platform providing research, note taking and citation tools. *ResearchReady*, its newest product, helps students learn fundamental, effective and ethical 21st century research and critical thinking skills. Imagine Easy Solutions was founded in 2001 and is headquartered in New York City.