

2017 Survey of Undergraduates: Research Skills and Library Instruction

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Executive Summary

The majority of undergraduate students who responded to the Library's 2017 Survey of Undergraduates acknowledged the need to further develop their research skills, echoing perceptions expressed by graduate student instructors in the Library's previous survey. While neither undergraduates nor their graduate student instructors look to the Library to provide this instruction, responses to this survey demonstrate that participation in Library instruction correlates with stronger perceived research skills, as well higher perceptions of usefulness of the Library and its services.

About this Report

The 2017 Survey of Undergraduates posed questions intended to help develop a broad understanding of the needs, priorities, and experiences of students on this campus. This report discusses respondents' perceptions of developing specific research skills, and explores respondents' understanding of the role of the Library's instruction program in supporting their learning activities at the University.

The majority of questions discussed in this report utilized one of several five-point or seven-point scales. Responses on these scales have been clustered for analysis based on the clustering practices used by Ithaca S+R; clustering is indicated below each chart or in footnotes. Many questions followed a similar structure or were presented as a series of questions under the same heading; these questions have been similarly grouped in this report.

The cross-tabulations presented in this report use a combination of demographic data obtained from the Registrar (for example, declared major or GPA) and the Identity and Privileges Office (for example, year in the College), inferred from the Registrar's data (for example, Collegiate Division), and provided by respondents (for example, participation in or receipt of Library instruction).

Finally, where appropriate, comparisons have been drawn to responses and findings from the Library's 2015 Survey of Graduate and Professional School Students.¹ For purposes of this analysis, 'professional school students' include those from the Chicago Booth School of Business, Graham School of Continuing Liberal and Professional Studies, Harris School of Public Policy, the Law School, and the School of Social Service Administration".

About the Survey

The invitation to participate in the 2017 Survey of Undergraduates was distributed by email to all enrolled undergraduates on February 7, 2017.² Students were given until March 3, 2017 to complete the survey. Of the 5,689 students invited to complete the survey, 1,513 clicked the survey link, 1,343 started the survey, and 1,100 completed the survey, yielding a 19% response rate. While response rates by demographic groupings are generally representative of campus populations, women are overrepresented, and international students are underrepresented.

Importance and Perception of Research Skills

Survey responses confirm the perception that undergraduates are not often assigned original research; in fact, the most frequently assigned types of work are problem sets (64% assigned regularly) and responses to assigned readings (57%). Given the types of work commonly assigned, it seems most crucial that these students be able to locate and evaluate academic sources of information, write according to academic or discipline-specific standards, and use information ethically. As undergraduates move into the later years of the College, or into majors that require theses, skills that support the production of original research should grow in importance. In fact, although less than 40% of fourth year respondents report being assigned research papers, the majority of undergraduate respondents indicate that it is important to them to acquire nearly all research skills mentioned in this survey. However, they

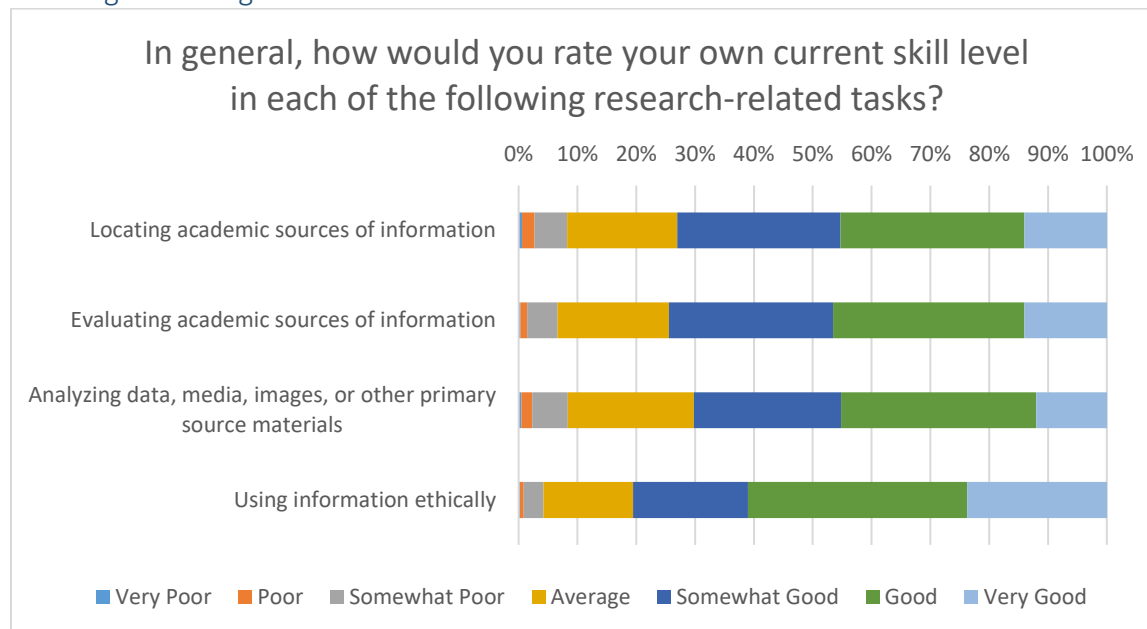
¹ <https://www.lib.uchicago.edu/about/thelibrary/surveys/2015-survey-graduate-and-professional-school-students/>

² The eligible population for the survey was identified by Shoshannah Cohen in the Office of the Registrar based on two criteria: participants must be enrolled in classes during the Winter Quarter 2017, and must be over the age of 18 by the close of the survey's data collection. A small number of potential participants was excluded prior to the survey's distribution due to the elective suppression of their directory information under FERPA.

rate their current level of skill for most research-related tasks as falling between 'somewhat poor and 'somewhat good'.³

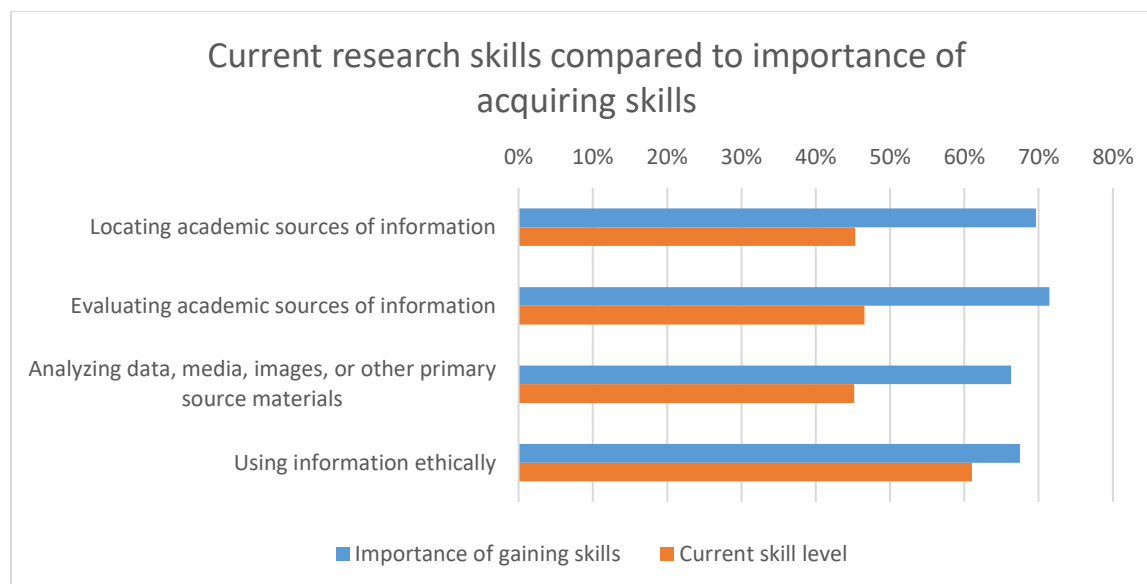
The priorities of undergraduates and graduate students are very similar when it comes to obtaining research skills. This is true when graduate students are considered in the aggregate; when professional school students are excluded, the gap between the populations widens, but the broad pattern of priorities remains roughly the same.

Locating and Using Academic Sources of Information



n=1042-1044.

³ Graduate students did not answer this or any other question that addressed their current level of skill in these areas, so it is not possible to compare perceived skills across populations.



% of respondents who indicated that gaining each skill was important or very important, compared to % of respondents who indicated that current skill levels were good or very good.

The majority of undergraduate respondents rated their abilities to locate and evaluate academic sources of information as ‘somewhat good’ or ‘good’, and more rated their abilities as ‘very good’ than did any degree of ‘poor’. Increasing confidence in these skills positively correlates with time at the University, and skill levels were perceived to be higher among respondents in majors requiring a thesis, or who reported having received library instruction. Respondents with declared majors were consistently more confident in their skills than those who had not declared a major. It is encouraging that the small number of respondents who rated their ability to locate academic materials as ‘poor’ were slightly more likely to find it useful that the Library provides support in this area.⁴

Third and Fourth Years were most likely to start their research with academic databases, though use of search engines as a starting point is prominent in all years. In fact, despite the high levels of confidence in search skills expressed, a plurality of undergraduate respondents (43%) reported starting their most recent research project by using a general search engine such as Google. Substantially fewer undergraduates used research databases than did graduate students.⁵ Students in Biological Sciences Collegiate Division (BSCD) majors were most likely to start their research with academic search tool, followed by the Humanities majors. More specifically, the majors most likely to begin with a research database were (in order) Psychology, Biological Sciences, English Literature, and Comparative Human Development. Economics majors were most likely to start their research with a search engine.

Respondents were generally confident in their abilities to analyze primary source materials, including data, though the phrasing of this question may have resulted in the varied answers by Division. Respondents from the BSCD and Physical Sciences Collegiate Division (PSCD) expressed a lower degree of confidence than did those from the Humanities and the Social Sciences Collegiate Division (SSCD).

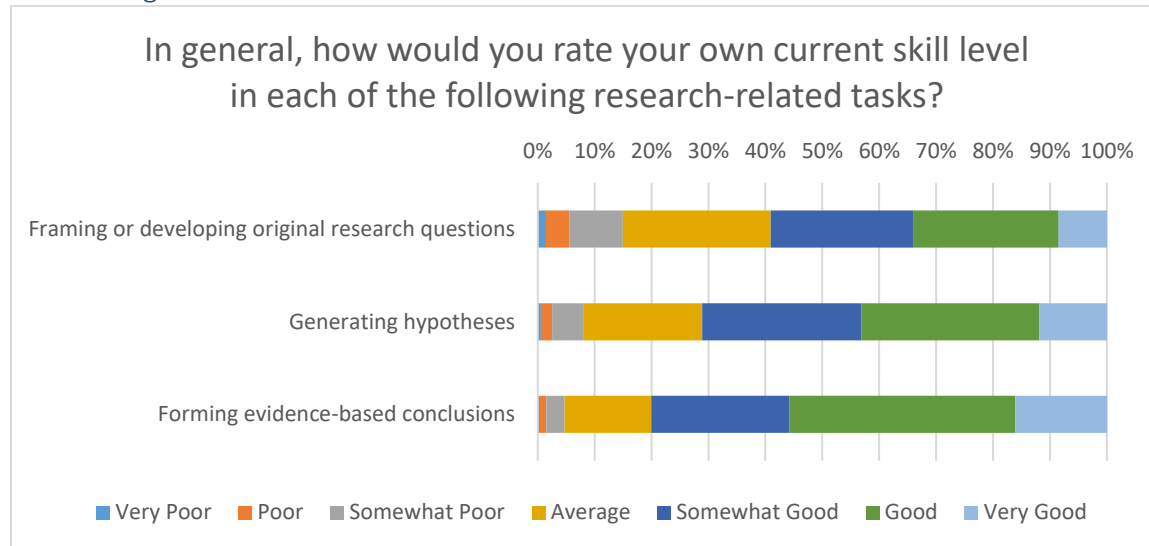
61% of respondents rated their ability to use information ethically as good or very good. While nearly 80% of respondents from all Collegiate Divisions rated their skills in this area as at least somewhat good, respondents from the sciences, along with respondents who had not yet declared a major, were most

⁴ UR4-1 ‘poor’ x RL5 ‘useful’: 61%. ‘Average’: 56%. ‘Good’: 58%.

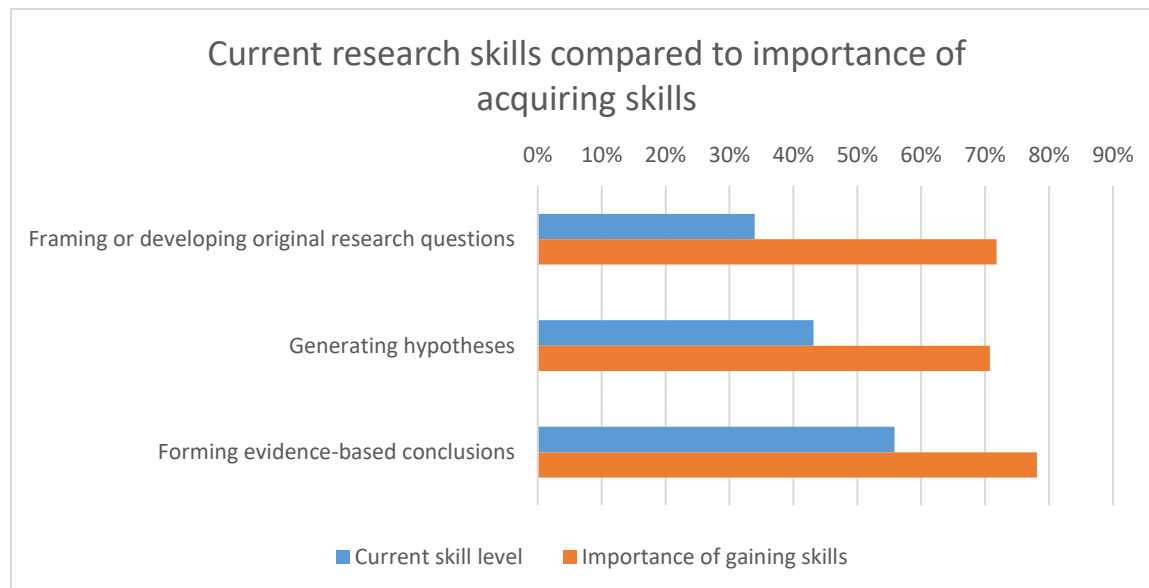
⁵ 25% undergraduate respondents; 38% graduate respondents

likely to express any degree of concern about their skills. However, the very small number of respondents who rated their abilities in this area as 'poor' were also more likely to value the Library's support in this area.⁶

Conducting Research



n=1041-1043.



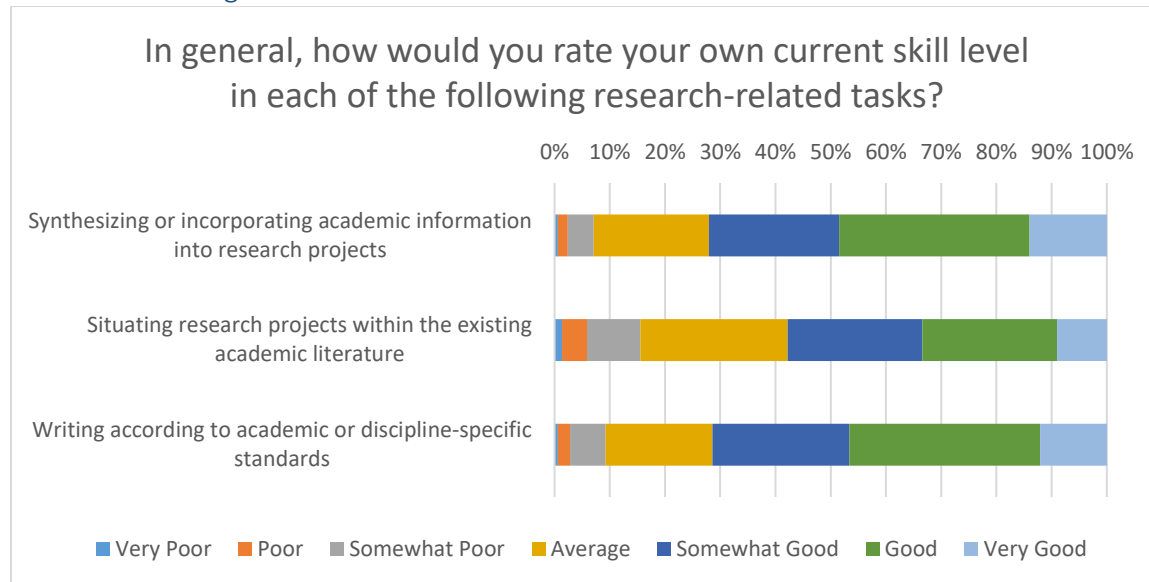
% of respondents who indicated that gaining each skill was important or very important, compared to % of respondents who indicated that current skill levels were good or very good.

At least 60% of undergraduate respondents perceive their ability to frame or develop original research questions, generate hypotheses, and form evidence-based conclusions as falling between 'somewhat good' and 'very good'. Respondents from the sciences expressed the most confidence in their abilities to form evidence-based conclusions, while respondents from the Humanities and the SSCD expressed more confidence in their abilities to generate hypotheses. Respondents were relatively less confident in their

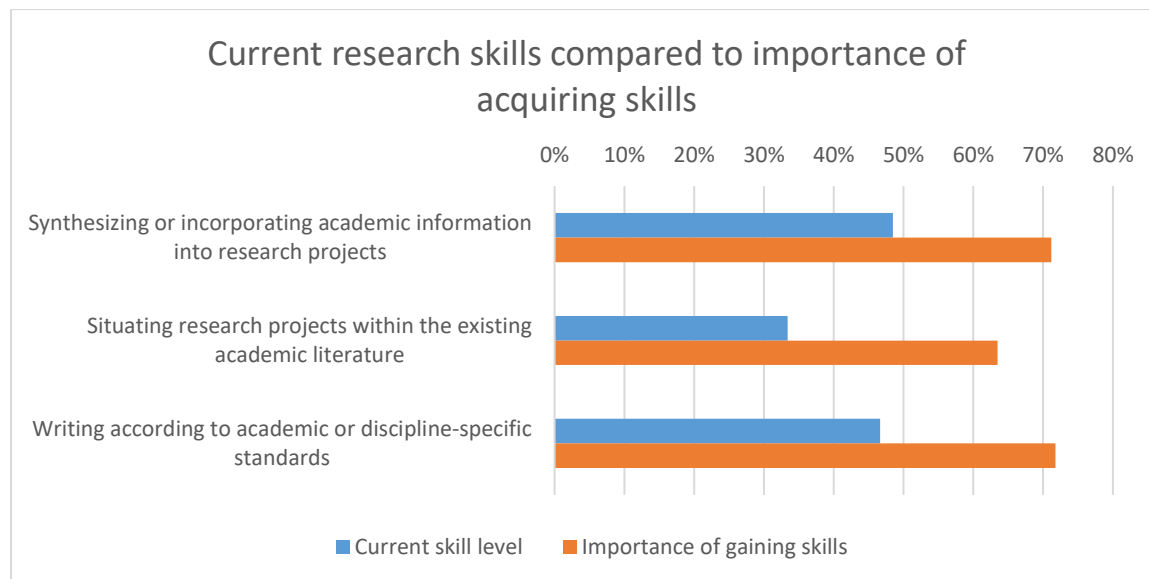
⁶ UR4-5 'poor' x RL7 'useful': 56%. 'Average': 40%. 'Good': 39%.

abilities to frame or develop original research questions, particularly those from the PSCD, and those who had not yet declared a major.

Academic Writing



n=1042-1044.



% of respondents who indicated that gaining each skill was important or very important, compared to % of respondents who indicated that current skill levels were good or very good.

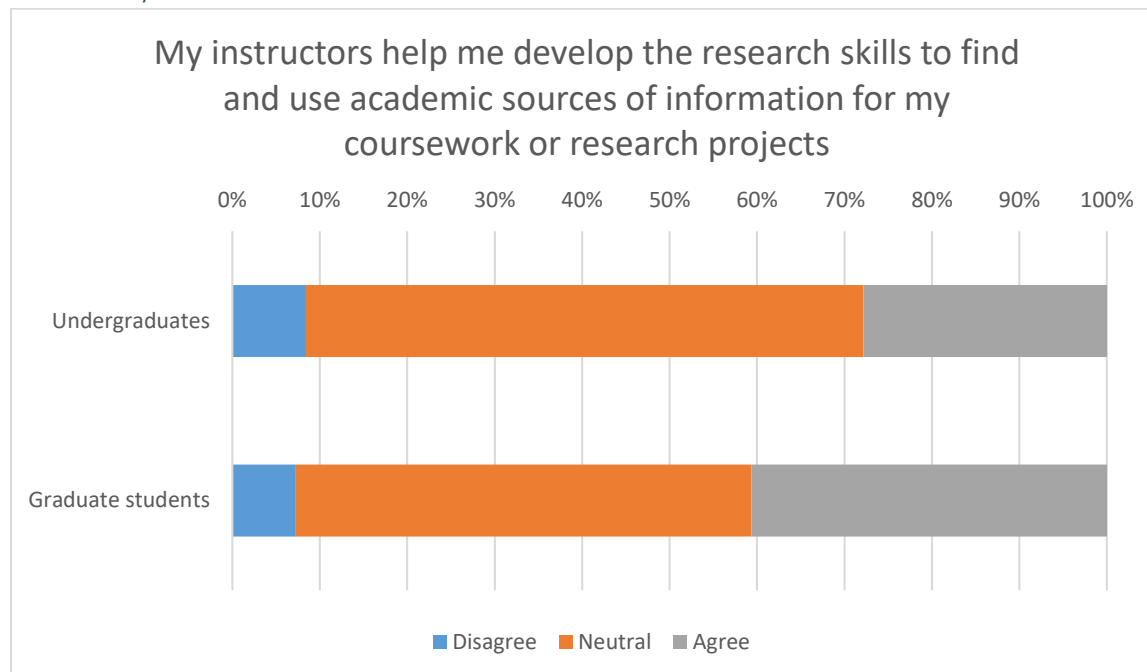
When considering skills that specifically pertain to academic writing, respondents expressed the most confidence in their abilities to synthesize or incorporate academic information into research projects, and the least confidence in their abilities to situate research projects within the existing literature. Respondents who had not yet declared a major were least confident in their abilities to synthesize academic information into research projects or situate research projects within the existing literature, though they were somewhat more confident in their abilities to write according to academic standards.

Fortunately, perceptions of skills in these areas consistently rise over time; for example, 64% of respondents in their fourth year at the University perceive themselves to be good or very good at synthesizing or incorporating academic information into research projects, as compared to only 36% of first years. Despite this, less than half of fourth years were confident in their abilities to situate research within the literature (47% good-very good).

Responsibility for developing research skills

Survey responses indicate that nearly all students could improve their research skills. Respondents' self-assessments mirror the perceptions of graduate student respondents with teaching responsibilities, only 13% of whom disagreed with the assertion that their students had poor research skills. However, both recent student surveys demonstrated that it is not clear who should have primary responsibility for supporting the development of these skills. Undergraduate respondents generally perceive the development of research skills to be the responsibility of faculty members rather than librarians, while graduate students with teaching responsibilities indicated that responsibility for developing research skills should fall first to the student,⁷ then their instructor,⁸ and then the Library.⁹

The faculty



n = 1081 (undergraduates); 1336 (graduate students). **Disagree:** Strongly Disagree, Disagree. **Neutral:** Somewhat Disagree, Neither Agree nor Disagree, Somewhat Agree. **Agree:** Agree, Strongly Agree.

Undergraduates were slightly less likely than graduate students in the coursework phase to perceive the faculty's role in helping them to develop research skills. However, undergraduates' feelings regarding

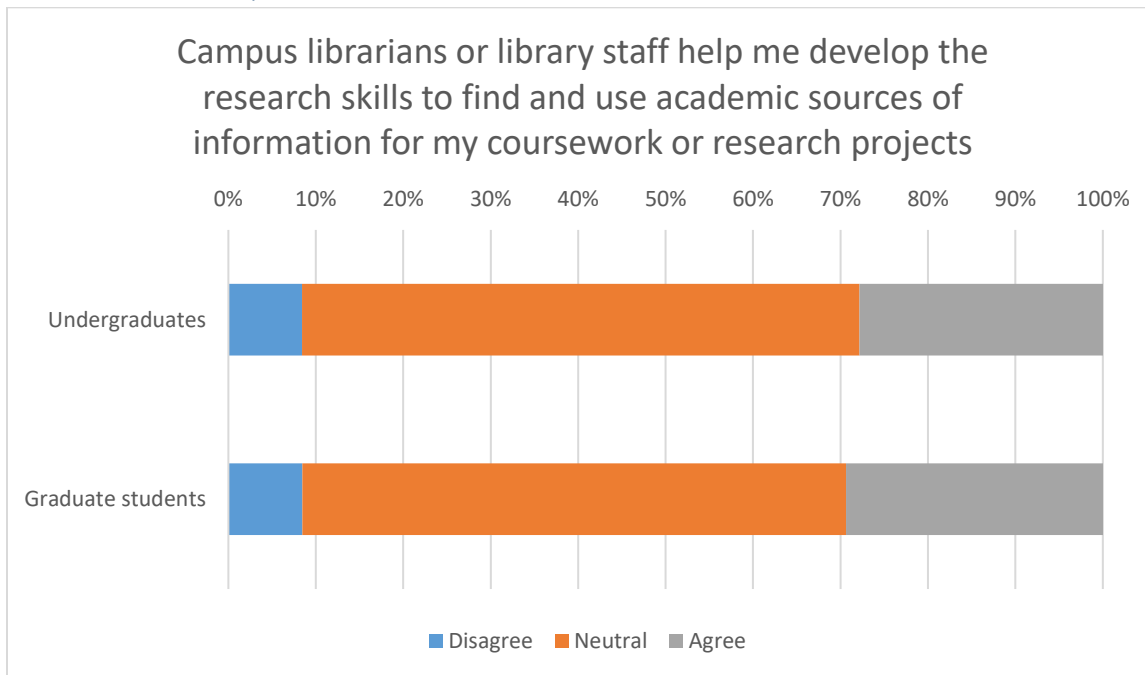
⁷ 48% of respondents who taught agreed or strongly agreed with the statement "It is principally my students' own responsibility to develop their research skills."

⁸ 24% of respondents who taught agreed or strongly agreed with the statement "It is principally my responsibility to develop the research skills of my students."

⁹ 11% of respondents who taught agreed or strongly agreed with the statement "It is principally my academic library's responsibility to develop their research skills."

the role of faculty grow more positive as they advance through their degrees, with 34% of respondents in their fourth year agreeing that their instructors helped them develop the skills needed to find and use academic sources of information for their work. Respondents from the SSCD were most likely to recognize the role of the faculty in supporting the development of research skills (37% agree-strongly agree), as were respondents from majors that require a BA thesis (37% agree-strongly agree), while respondents from the PSCD were most likely to disagree (11% disagree-strongly disagree).

Librarians or Library staff



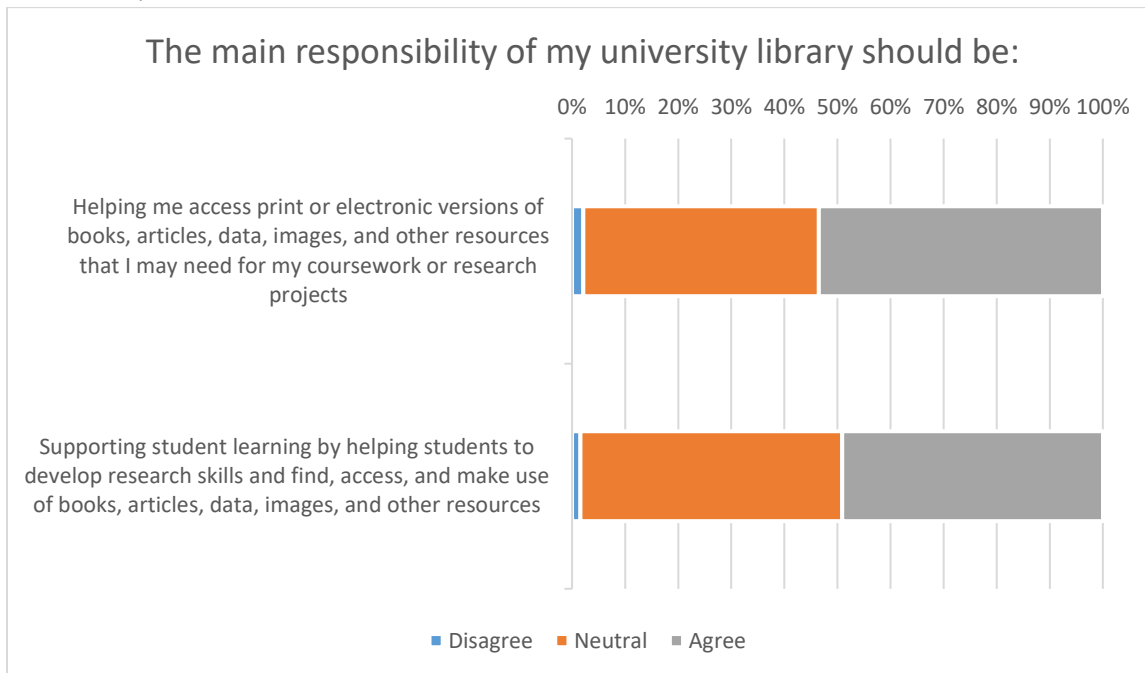
n = 1079 (undergraduates); 2243 (graduate students). **Disagree:** Strongly Disagree, Disagree. **Neutral:** Somewhat Disagree, Neither Agree nor Disagree, Somewhat Agree. **Agree:** Agree, Strongly Agree.

Both undergraduates and graduate students expressed a strong neutral opinion about the role of librarians in developing research skills, with the largest portion of both populations selecting “Neither Agree nor Disagree”.¹⁰ Respondents from the SSCD were most likely to both agree (26% agree-strongly agree) and disagree (11% disagree-strongly disagree) with this statement.¹¹ Agreement with this statement positively correlates with time at the University; 31% of respondents in their fourth years agree, up from 17% in the first year. Strongest agreement came from respondents in majors that require a BA thesis (35%).

¹⁰ Undergraduates: 48% neither agree nor disagree. Graduate students: 41% neither agree nor disagree.

¹¹ Respondents from the New Collegiate Division were most likely to agree with this statement (53% agree-strongly agree),

The Library



*n=1087-88 (undergraduates); 2244-2248 (graduate students). **Disagree:** Strongly Disagree, Disagree. **Neutral:** Somewhat Disagree, Neither Agree nor Disagree, Somewhat Agree. **Agree:** Agree, Somewhat Agree.*

Elsewhere in this survey, respondents were asked to express their agreement with two statements regarding the “main” role of the Library. Respondents expressed slightly stronger agreement with the Library’s role in accessing collections (53% agree-strongly agree) than supporting student learning (49%).¹² However, 80% of respondents at least somewhat agreed with the primacy of both roles.

By contrast, graduate students were more likely to express agreement with the Library’s role in providing access to materials (62% agree-strongly agree), and were slightly less enthusiastic about the Library’s role in supporting student learning (47%). This is not surprising given the lack of emphasis graduate student instructors placed on the role of the Library in supporting the development of research skills.

With one exception, undergraduate respondents with declared majors more strongly agreed with the Library’s role in providing access to materials, particularly those respondents from the Humanities and the BSCD.¹³ A slightly smaller majority of respondents from the SSCD (54% agree-strongly agree) agreed with the Library’s role supporting student learning, as did half of respondents who had not yet declared a major. Respondents with majors that require BA theses expressed stronger agreement with the

¹² These statements were presented serially rather than as mutually exclusive choices, which explains why these responses add up to more than 100%.

¹³ Humanities: Providing access to materials: 65% agree-strongly agree. Supporting student learning: 44% agree-strongly agree. BSCD: Providing access to materials: 61% agree-strongly agree. Supporting student learning: 44% agree-strongly agree.

Library's role supporting student learning than did most other groups of respondents (57% agree-strongly agree), but still preferred the former role (62%).

The Library's instruction program

The mixed feelings and perceptions of the Library's role in supporting student learning expressed in these surveys can be partially explained by the low rate of participation in Library instruction. In fact, only 38% of undergraduate respondents indicated having received or participated in Library instruction, which is actually a little lower than the rate of participation reported by graduate students in 2015 (41%). Respondents from the Humanities (47%) and the SSCD (47%) were most likely to have received instruction, while respondents who had not yet declared a major were most likely to indicate not receiving instruction (61%).¹⁴

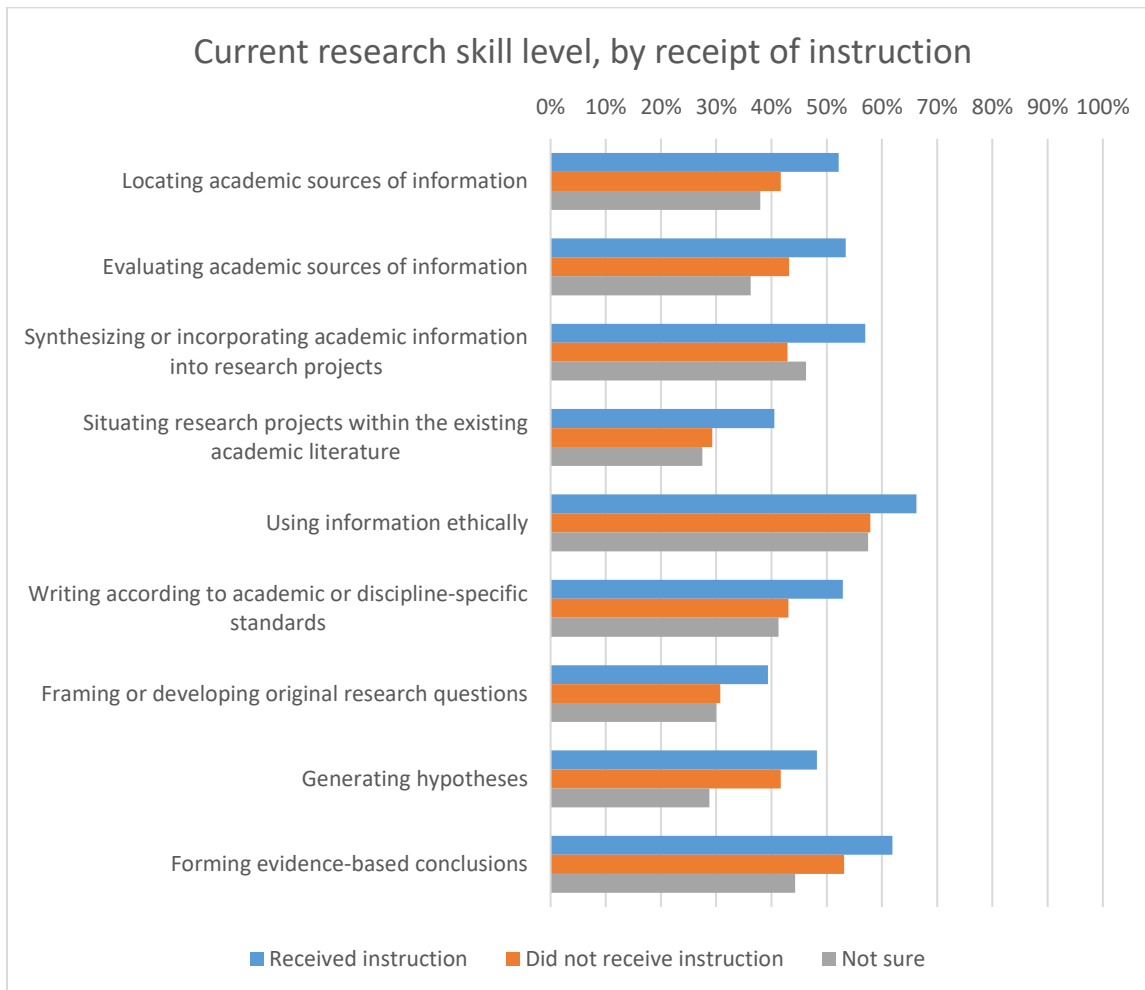
Time at the University seems to positively correlate with participation in instruction, with nearly half of respondents in the fourth year having received instruction (49%), up from about one-third of respondents in the first and second years (33%). While respondents in the fourth year will have had more opportunities to receive instruction in their time at the University, they are also more likely to have received targeted instruction in preparation for writing a BA or Honors Thesis. In fact, 63% of respondents in majors that require these theses report having received instruction.

Respondents to the current and previous surveys expressed mixed perceptions of the Library's role in supporting the development of student research skills, and indicated a relatively low rate of participation in Library-focused instruction. These contextual statements make for an even more striking contrast in responses between respondents who received instruction and those who did not.

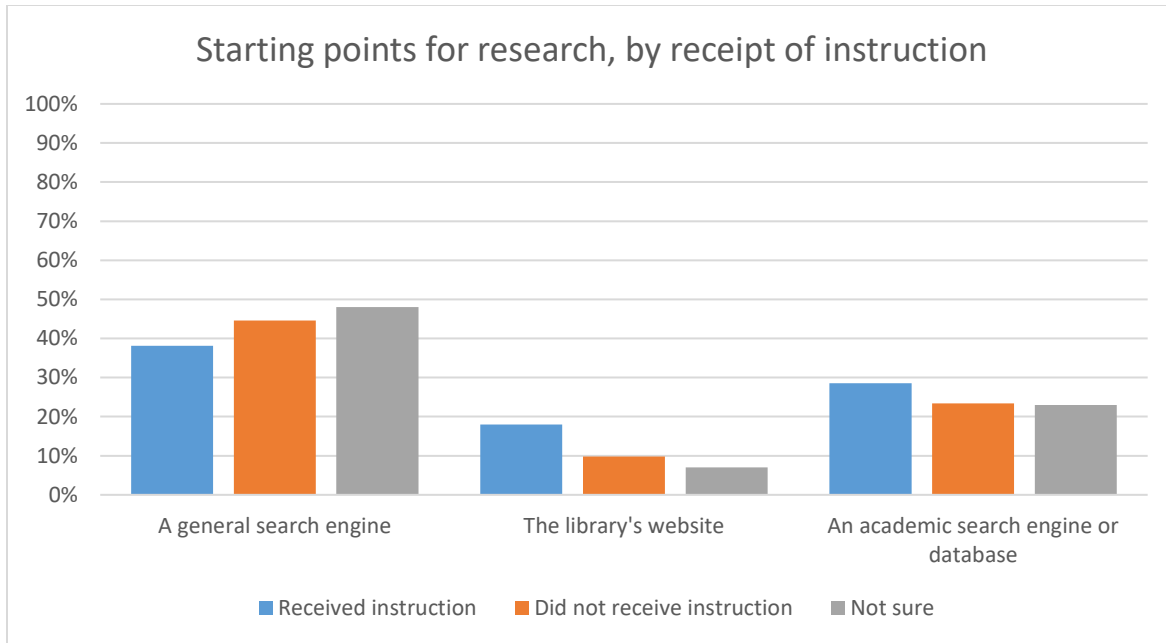
¹⁴ 70% of respondents from the New Collegiate Division received instruction, but this group makes up only 1% of survey respondents.

Library instruction and student research skills

Respondents who received Library instruction consistently gave a higher rating to their current research skills than those who did not receive instruction. In particular, respondents who received instruction were more likely to rate as 'good' their skills in synthesizing or incorporating academic information into research projects (57% good-very good, compared to 43% of those who did not receive instruction), locating academic sources of information (52%, compared to 42%), and situating research projects within the existing literature (41%, compared to 29%).



% of respondents who indicated that their level of skill was good or very good



% of respondents selecting each option

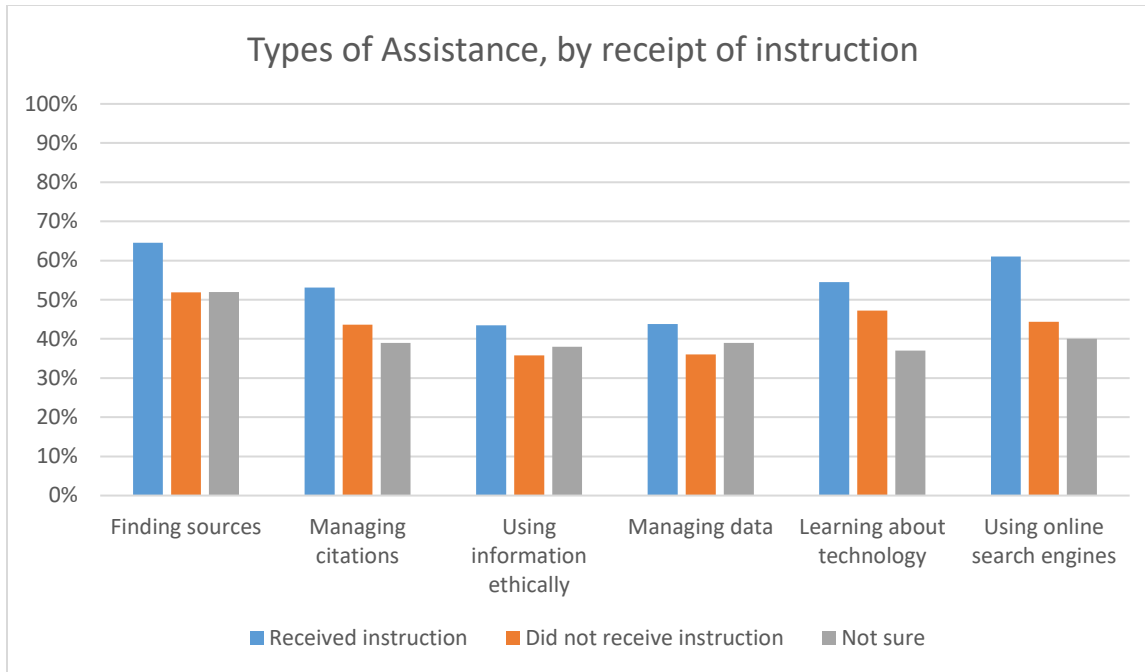
Respondents who received instruction were less likely to start their research from a general search engine than respondents who did not receive instruction; they were also more likely to start their research from an academic search engine or from the Library's website.¹⁵

Library instruction and perceptions of the Library

Respondents who received instruction were more likely to agree that *both* faculty and campus librarians support the development of their research skills. In particular, those who received instruction were 40% more likely to agree that campus librarians support the development of research skills than were those who did not receive instruction.

Respondents who received instruction were also more likely to agree with the usefulness of a range of services provided by the Library, particularly providing support in learning and using online search engines or databases (61% very-extremely useful, compared to 50% of all respondents) and providing assistance finding sources for coursework or research projects (65% very-extremely useful, compared to 57% of all respondents). The only type of assistance that showed no correlation between receipt of instruction and perceived usefulness was assistance using information ethically, an area where respondents generally felt competent already.

¹⁵ It is interesting to note that respondents in majors that require a thesis were more likely to report starting at the Library's website than were respondents who received instruction, despite only 63% of the former having participated in instruction.



% of respondents who perceived each type of assistance to be **Very Useful** or **Extremely Useful**

Conclusion

The majority of undergraduate students who responded to this survey acknowledged the need to further develop their research skills, echoing perceptions expressed by graduate student instructors in the Library’s previous survey. While undergraduate respondents generally feel that the responsibility for developing these skills lies with their instructors, graduate student instructors disagree, indicating that students themselves should be responsible.

Neither undergraduates nor their graduate student instructors perceive the development of student research skills to be the responsibility of the Library. However, when students have participated in Library instruction, they are more likely to perceive their research skills as stronger, and are more likely to start with Library sources (rather than a general search engine) when conducting research. They are also more likely to perceive value in the various roles of the Library, and to appreciate the usefulness of services provided by the Library.

In its 2016-2019 Strategic Directions,¹⁶ the Library described a goal wherein “Library instructional programs and tools are tightly integrated into the curriculum and research processes, enabling students and faculty to use and evaluate information critically, ethically, and effectively.” Participation in Library instruction seems to correlate with both improved research skills and stronger value placed on the Library and its services. As a result, increasing the range and reach of the Library’s instruction program could serve the best interests of both students *and* the Library.

¹⁶ https://www.lib.uchicago.edu/documents/564/Strategic_Directions_2016-2019_final.pdf