



From Service Role to Partnership: Faculty Voices on Collaboration with Librarians

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abstract: Librarians at two research universities surveyed faculty practices and views about collaboration with librarians to gain insight into likely partners and strategies for information literacy (IL) instruction. Quantitative data on methods of collaboration revealed that the most often-practiced method of working together was having a librarian deliver an instruction session, followed by jointly developing an online course guide. Statistical differences by disciplinary area and years teaching were examined; experienced faculty reported a greater range of collaboration methods. Thematic analysis of open-ended responses on motives for collaboration, a factor less frequently studied, found that the top reason was to improve student IL skills, followed by to benefit from librarian expertise.

Introduction

Collaboration between librarians and faculty is essential to incorporating information literacy (IL) into the higher education curriculum. The topic of faculty-librarian collaboration is overwhelmingly popular in the library literature.

In 2018 alone, over 240 articles addressed this subject.¹ In the literature on faculty-librarian teamwork, many voices emphasize the importance of this partnership as a vital link to integrate IL into the curriculum.² Many studies offer disciplinary-focused collaborations as an effective method to achieve this integration.³ In 2008, Stephanie Sterling Brasley reviewed the literature, offering specific

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examples of successful faculty-librarian partnerships using categories defined by Susan Carol Curzon.⁴ At the heart of effective collaboration are shared values, good communication, complementary expertise, and enthusiastic partners.⁵ Numerous articles each year report on the efforts of librarians to work with faculty to establish and deliver effective instructional experiences that will develop students' IL skills.

The librarian's voice prevails on this topic, which appears almost exclusively in library science literature, reflecting the importance of the topic to librarians, a perception not necessarily shared by faculty.⁶ As Ada Ducas and Nicole Michaud-Oystryk, Claire McGuiness, Sue Phelps and Nicole Campbell, and Tayo Nagasawa, among others, noted in their literature reviews, few articles on collaboration address the nature of working together itself. Instead, they report on specific examples of faculty-librarian collaboration in the form of case studies.⁷ As Atif Yousef observed, few researchers have gathered data about collaboration from the faculty perspective.⁸ Among those who have solicited faculty attitudes are J. Edmund Maynard, Anita Cannon, Joy Thomas, Gloria Leckie and Anne Fullerton, and Rhonda Gonzales.⁹ These are discussed in the literature review.

This study attempts to help fill that gap by adding more recent data (especially since the adoption of the Framework for Information Literacy for Higher Education, hereafter the Framework) and by bringing faculty voices from two large universities to the scholarly conversation about faculty-librarian teamwork. The authors combined variables that had been addressed separately in other studies to examine the relationships between collaboration and faculty attitudes toward IL, faculty's academic disciplines, and their years of teaching experience. This multi-institutional study collected data on methods of collaboration and solicited open-ended comments on what motivates or hinders the faculty-librarian partnership to capture faculty attitudes in their own words. The authors hope that data gleaned from the study could help set instructional priorities and develop strategies for collaboration.

The research study had four main objectives:

1. To determine faculty's methods of collaboration with librarians;
2. To investigate whether such variables as attitude toward the value of IL, disciplinary area, or years of teaching show differences regarding collaboration;
3. To determine what motivates faculty to collaborate with librarians and what they like or do not like about such teamwork; and
4. To investigate why faculty may not have collaborated with a librarian.

Literature Review

Beginning with Maynard in 1990, followed by Cannon in 1994 and then others, research studies began to solicit input from faculty as well as shared data and insights on faculty practices and attitudes toward IL, research instruction, and engagement with librarians.¹⁰ These foundational studies provided a model for the current study. In these investigations, the researchers directly queried teaching faculty, and the studies offered data comparison points on similar topics: faculty attitudes toward IL or library instruction, reporting of engagement with librarians, faculty's instructional practices, and motivations or barriers to collaboration.

These core studies, as well as more recent investigations of faculty attitudes, employed similar methodologies. Most used a survey or questionnaire with multiple-choice options or a range of set responses. Some surveys were based in whole or part on the 1994, 20-item questionnaire by Anita Cannon at York University in Toronto.¹¹ Response rates ranged from a high of 56 percent¹² to a low of 14 percent,¹³ and the number of responses from 44¹⁴ to 734.¹⁵ Two studies also incorporated interviews to solicit a more complete picture but did not report these findings in any detail.¹⁶ Paul Hrycaj and Michael Russo at Louisiana State University in Baton Rouge suggested that perhaps small focus groups with faculty, instead of surveys with formulated responses, would offer a more reliable understanding of the faculty viewpoint.¹⁷ Only one study, by Kate Manuel, Susan Beck, and Molly Molloy at New Mexico State University in Las Cruces in 2005, reported on interviews with 21 faculty members who were “heavy users” of library instruction with a thorough thematic analysis.¹⁸

The purpose behind the investigations described here was similar: to solicit faculty attitudes and practices in relation to library services, particularly IL, to understand the willingness of faculty to collaborate with librarians. Many studies gathered faculty input on the importance of or need for IL.¹⁹ They reported the level of faculty participation in IL, along with data on faculty preferences and practices related to IL (designated as methods of collaboration in this study), with options ranging from in-class instruction by a librarian to online instructional aids, such as tutorials.²⁰ In the course of describing methods of collaboration, faculty often revealed that they teach IL themselves²¹ or that they expect students to learn these skills on their own or in another class.²²

When faculty were asked why they did not request instruction, among the most common responses were that they had no time, that they were unaware of the service, or that there was “no need” for it.²³ While many studies identify the barriers to collaboration, the research by Manuel, Beck, and Molloy focused on why faculty work with librarians. Among the top reasons faculty reported for which they use librarian instruction were students’

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lack of research skills, to combat the Internet, and the need for IL for student success in college. That study also asked why faculty had a librarian teach IL, which speaks directly to the current study’s research question on why faculty are motivated to collaborate.²⁴

Several research studies reported on faculty attitudes or practices by discipline²⁵ or by years of teaching.²⁶ However, the only study that offered a detailed statistical analysis of the relationship between collaboration and such characteristics as faculty rank and years of teaching was that by Atif Yousef, who analyzed faculty attitudes toward partnering with librarians at Zarka Private University in Zarka, Jordan. Survey results from 114 humanities and science faculty included responses on the topics of collection development, user services, and information literacy. Yousef discovered that more experienced faculty collaborate more.²⁷



The current investigation builds on the groundwork of these researchers in several ways. It updates data that have been previously investigated by comparing multiple variables, such as the importance of IL, methods of collaboration, and disciplinary areas. It also examines the previously unanalyzed variables of the number of years teaching at the postsecondary level and the research designation assigned by the Carnegie Classification of Institutions of Higher Education to the two universities participating in the study. In addition, this study uses qualitative analysis of open-ended responses about motivations for collaboration as well as rationales for not doing so. The inclusion of open-ended responses to the *why* or *why not* collaborate questions distinguishes this study from most previous investigations, which often offered faculty a choice of set responses. It also serves to expand on a 2012 investigation by two authors of the current study with a third colleague at Western Michigan University in Kalamazoo,²⁸ as well as expanding the faculty subject pool to a second institution to solicit a wider range of responses.

Methodology

The authors of this investigation queried the faculty at two large, research-oriented public institutions, Wayne State University in Detroit, Michigan, and Western Michigan University in Kalamazoo. This survey consisted of two parts. The first section questioned teaching faculty regarding the value they place on information literacy and solicited their feedback on the wording and concepts of the Framework.²⁹ The second portion of the instrument asked the faculty about their relationship with librarians—how they have worked in partnership with a librarian, what motivated them to do so, what they liked about the collaboration, and why they have not taken advantage of working with a librarian. This study reports on the findings from the second half of the survey, dealing directly with the connections between librarians and the professoriate.

After examining numerous definitions of librarian-teacher collaboration, Patricia Montiel-Overall posited her own for teacher and librarian partnership for the twenty-first century: "Collaboration is a trusting, working relationship between two or more equal participants involved in shared thinking, shared planning, and shared creation of innovative integrated instruction."³⁰ The authors embraced the ideals of equality and sharing embodied in this definition. However, the current study explored a wider spectrum of engagement with library instruction, including traditional in-class instruction by a librarian, as well as indirect collaboration methods, such as faculty referring students to a specific librarian or teaching IL concepts to students themselves.

The authors, librarians at Wayne State and Western Michigan, used Qualtrics to administer an anonymous, Institutional Review Board-approved 10-question survey. The survey consisted of three demographic questions, two 5-point Likert questions on the value of information literacy and the frames, a free-response question on alternative wording for the concepts in the Framework, a checklist of collaboration methods including the option of not collaborating, two open responses on motivations for and barriers against collaboration, and an open comments box. The survey was distributed through e-mail in the spring semester of 2016. E-mails went to 1,720 faculty at Wayne State and 897 at Western Michigan. No distinctions were made between full-time and part-time faculty, and no incentives were offered for returning the survey. The response

rate from Wayne State was 9 percent with 158 usable surveys, and Western Michigan also had a 9 percent response rate with 79 usable surveys, totaling 237 usable responses.

The number of responses allowed the authors to establish statistical significance using institution, area of discipline, and years of teaching as the independent variables. The authors performed a chi-square test to determine if there was a difference between expected and observed frequencies in nominal categories. Any relationships that were significant at an alpha value of 0.05 were then run with a phi or Cramer's V test to determine the coefficient on the strength of the association. All statistical analysis was performed using SPSS.

The responses to the two open-ended questions regarding motivation for collaboration and reasons for not doing so were coded manually for themes, then counted for frequency. Blank or N/A responses to these questions were eliminated from the analysis. In addition to frequency counts, relative frequency was calculated by dividing individual theme frequency counts by total theme mentions to determine the comparative importance of the reasons for both collaborating and not collaborating; this value was expressed as a percentage of the total theme responses. The qualitative findings reported in this analysis represent the views and values of this group of faculty at the time of the survey and may not reflect patterns at other institutions.

Results

Summary of Demographic Findings

Faculty in the study were asked to self-identify their discipline, which the authors categorized into five disciplinary areas: education, fine arts (including communication), humanities, social sciences, and STEM (science, technology, engineering, and mathematics). The response rates were as follows: social sciences (31 percent), STEM (27 percent), education (16 percent), fine arts (14 percent), and humanities (13 percent). Eight percent of the respondents reported less than 2 years of teaching; 13 percent had 2 to 5 years of experience; 21 percent had 6 to 10 years; 24 percent had 11 to 20 years; and 35 percent had over 20 years of teaching experience. The authors grouped faculty with 10 years of experience or less into three categories to capture potential attitude shifts during the early stages of becoming oriented to and established in the profession.

Do Faculty Collaborate?

The authors were interested in which segments of the faculty chose not to collaborate to hypothesize reasons and solutions for increased library involvement. Overall, 27 percent of faculty reported that they do not partner with librarians. STEM reported no joint efforts at a 33 percent rate, followed by fine arts (30 percent), social sciences (27 percent), humanities (23 percent), and education (13 percent).

Less experienced faculty reported no collaboration at higher levels than did more experienced faculty. Faculty with less than 2

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Table 1.
Statistical analysis of methods of collaboration by disciplinary area, years teaching, and institution

No collaboration	Librarian teaching in a course session	Faculty teach themselves	Online course guide	Referral to a specific librarian	Collaborative assignment	Online video tutorials	Librarian in CMS	Collaborative learning outcomes
Disciplinary area (df* = 4)	$\chi^2 = 5.401$	$\chi^2 = 13.329^{++}$	$\chi^2 = 6.754$	$\chi^2 = 16.261^{++\S}$	$\chi^2 = 2.008$	$\chi^2 = 6.663$	$\chi^2 = 11.703^{++}$	$\chi^2 = 2.374$
Years teaching (df = 4)	$\chi^2 = 11.370^{++}$	$\chi^2 = 10.531^{++}$	$\chi^2 = 6.964$	$\chi^2 = 3.757^{++}$	$\chi^2 = 4.770$	$\chi^2 = 7.627$	$\chi^2 = 1.764$	$\chi^2 = 3.303$
Institution (df = 1)	$\chi^2 = 9.729^{++}$	$\chi^2 = 9.534^{++}$	$\chi^2 = 2.744$	$\chi^2 = 0.047$	$\chi^2 = 0.054$	$\chi^2 = 4.346^{++}$	$\chi^2 = 3.685$	$\chi^2 = 0.020$

*df or degree of freedom is the number of values in the study that are free to vary.

++Significance at an alpha of 0.05.

#Weak association of variables with coefficient below 0.25.

\$Moderate association of variables with coefficient between 0.25 and 0.75.

years of experience reported no collaboration at 42 percent, followed by 2 to 5 years (43 percent), 6 to 10 years (31 percent), 11 to 20 years (16 percent), and 21 or more years (22 percent). There was a significant difference in this category, as shown in Table 1 ($p = .023$).

At Wayne State University, 33 percent of faculty reported no collaboration, while at Western Michigan University, 14 percent reported none. There is a significant difference in this category ($p = .002$). Table 2 shows that Western Michigan University has greater rates of partnership at nearly every level of years of teaching. The relative value placed on research and teaching at the two institutions may be a factor. Wayne State University is in the highest Carnegie Classification with a designation of R1 Doctoral University—Very High Research Activity, whereas Western Michigan University has an R2 Doctoral University—High Research Activity classification.

Table 2.

Participation in faculty-librarian collaboration by institution and years teaching

Years teaching	Wayne State University (R1 Carnegie Classification)		Western Michigan University (R2 Carnegie Classification)	
	Collaboration	No collaboration	Collaboration	No collaboration
Less than 2 (n = 19)	8 (57%)	6 (43%)	3 (60%)	2 (40%)
2 to 5 (n = 30)	14 (58%)	10 (42%)	3 (50%)	3 (50%)
6 to 10 (n = 49)	19 (61%)	12 (39%)	15 (83%)	3 (17%)
11 to 20 (n = 57)	28 (78%)	8 (22%)	20 (95%)	1 (5%)
21 or more (n = 82)	37 (70%)	16 (30%)	27 (93%)	2 (7%)
Total (N = 237)	106 (67%)	52 (33%)	68 (86%)	11 (14%)

The authors expected to find a relationship between faculty members' ranking of the importance of IL and their level of collaboration, but no connection appeared. Likewise, there was no significant difference between institutions on how they viewed the importance of IL when ranked on a 5-point Likert scale. Wayne State's mean ranking of the importance of IL was 4.82, only slightly higher than Western Michigan's at 4.80. No relationship was found between the ranking of the importance of IL and the years of experience teaching or disciplinary area. The absence of relationships is because faculty ranked IL highly across all demographic segments of the study. Faculty participants widely accepted the connection between student success and the ability to find and evaluate information.



Methods of Collaboration

Beyond participation in collaboration, the authors also surveyed faculty on the methods of collaboration they engage in with the library. As shown in Table 3, the most common form

... the most common form of collaboration was having a librarian teach in a course session, with 41 percent participation, followed by having an online course guide, at 24 percent taking part, and making a referral to a specific librarian, at 19 percent participation.

of collaboration was having a librarian teach in a course session, with 41 percent participation, followed by having an online course guide, at 24 percent taking part, and making a referral to a specific librarian, at 19 percent participation. The least common forms

of collaboration were having a librarian presence in the course management system (CMS) at 12 percent and having collaborative learning outcomes at 7 percent.

Table 3 shows two significant differences in methods of collaboration by institution. Western Michigan reported higher participation than Wayne State in having a librarian in the classroom, with Western Michigan at 54 percent and Wayne State at 34 percent ($p = .002$), and in creating a joint assignment, with Western Michigan at 24 percent and Wayne State at 13 percent ($p = .037$). As previously stated, institutional variations may explain why Western Michigan University had higher participation in some instances.

When exploring methods of collaboration by disciplinary area, education and humanities showed comparably high engagement, while fine arts and STEM showed comparably low participation in most methods, as

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shown in Table 4. Statistically significant differences by disciplinary area were present for having a librarian teach a class session ($p = .010$); collaborative learning outcomes ($p = .044$); online tutorial videos ($p = .020$); and online course guides ($p = .003$).

As displayed in Table 5, faculty with less than two years of teaching experience had low participation rates in all methods of collaboration except making a referral to a specific librarian and teaching information literacy themselves. Faculty with less than two years of experience and those with two to five years of experience reported similar rates of taking part in online course guides, referral to a

specific librarian, and online video tutorials. All faculty with less than 21 years of experience had similarly low participation rates in collaborative learning outcomes. Faculty with less than two years of experience and faculty with 21 or more years of experience reported teaching IL themselves at higher rates than faculty with intermediate levels of experience. The authors found a significant difference regarding two methods of collaboration: having librarians teach a course session ($p = .032$) and collaborative learning



Table 3.
Methods of collaboration by institution

Institution	Librarian teaching in a course session*†	Faculty teach IL themselves	Online course guide	Referral to a specific librarian	Collaborative assignment*†	Online video tutorials	Librarian in CMS	Collaborative learning outcomes
Wayne State University								
(R1 Carnegie Classification) (n = 158)	53 (34%)	47 (30%)	38 (24%)	30 (19%)	21 (13%)	19 (12%)	19 (12%)	9 (6%)
Western Michigan University								
(R2 Carnegie Classification) (n = 79)	43 (54%)	32 (41%)	18 (23%)	16 (20%)	19 (24%)	17 (22%)	10 (13%)	7 (9%)
Total (N = 237)	96 (41%)	79 (33%)	56 (24%)	46 (19%)	40 (17%)	36 (15%)	29 (12%)	16 (7%)

*Significance at an alpha of 0.05.

†Weak association of variables with coefficient below 0.25.



Table 4.
Methods of collaboration by disciplinary area

Disciplinary area	Librarian teaching in a course session*†	Faculty teach IL themselves	Online course guide‡	Referral to a specific librarian	Collaborative assignment	Online video tutorials*†	Librarian in CMS	Collaborative learning outcomes*†
Education (n = 38)	21 (55%)	12 (32%)	10 (26%)	9 (24%)	11 (29%)	12 (32%)	7 (18%)	6 (16%)
Fine arts (n = 33)	9 (27%)	17 (52%)	7 (21%)	7 (21%)	5 (15%)	3 (9%)	3 (9%)	1 (3%)
Humanities (n = 30)	16 (53%)	10 (33%)	14 (47%)	5 (17%)	6 (20%)	5 (17%)	3 (10%)	4 (13%)
Social sciences (n = 73)	33 (45%)	24 (33%)	19 (26%)	26 (22%)	12 (16%)	6 (8%)	10 (14%)	3 (4%)
STEM (n = 63)	17 (27%)	16 (25%)	6 (10%)	9 (14%)	6 (10%)	10 (16%)	6 (10%)	2 (3%)
Total (N = 237)	96 (41%)	79 (33%)	56 (24%)	46 (19%)	40 (17%)	36 (15%)	29 (12%)	16 (7%)

*Significance at an alpha of 0.05.
†Weak association of variables with coefficient below 0.25.
‡Moderate association of variables with coefficient between 0.25 and 0.75.



Table 5.
Methods of collaboration by years of experience teaching

Years teaching	Librarian teaching in a course*†	Faculty teach IL themselves	Online course guide	Referral to a specific librarian	Collaborative assignment	Online video tutorials	Librarian in CMS	Collaborative learning outcomes*†
Less than 2 (n = 19)	3 (16%)	10 (53%)	3 (16%)	5 (26%)	0 (0%)	2 (11%)	0 (0%)	1 (5%)
2 to 5 (n = 30)	8 (27%)	9 (30%)	5 (17%)	8 (27%)	5 (17%)	3 (10%)	5 (17%)	0 (0%)
6 to 10 (n = 49)	19 (39%)	12 (24%)	10 (20%)	10 (20%)	5 (10%)	8 (16%)	6 (12%)	1 (2%)
11 to 20 (n = 57)	29 (51%)	16 (28%)	18 (32%)	13 (23%)	12 (21%)	11 (19%)	7 (12%)	3 (5%)
21 or more (n = 82)	37 (45%)	32 (39%)	20 (24%)	10 (12%)	18 (22%)	12 (15%)	11 (13%)	11 (13%)
Total (N = 237)	96 (41%)	79 (33%)	56 (24%)	46 (19%)	40 (17%)	36 (15%)	29 (12%)	16 (7%)

*Significance at an alpha of 0.05.

†Weak association of variables with coefficient below 0.25.



outcomes ($p = .041$). The three categories of faculty with the most years of experience reported having a librarian teach a session in their class at greater levels than did the two categories of faculty with the fewest years of teaching. For collaborative learning outcomes, faculty with the most years of experience reported more joint efforts than all other groups at 13 percent; the next closest was 5 percent.

What Motivates Faculty to Collaborate?

Two research interests of this study were determining faculty motivation for collaborating with a librarian and discovering what faculty like and do not like regarding such teamwork. The survey asked respondents who had worked with a librarian to “explain what motivated you to do so.” A second part of this open-response question asked what they liked or did not like about the experience. Most comments addressed the first part of the question—the motivating factor that led faculty to collaborate. There were too few like or did not like replies to analyze, which might have occurred because the question asked for two responses and the second part may have been overlooked. Only three respondents mentioned disappointment with the collaboration, and their comments were not analyzed due to this small response.

For this question, 100 responses were usable; because responses frequently expressed multiple themes, 165 theme mentions were coded and counted. Ten themes were identified and analyzed. Social sciences faculty were the most represented group in the responses (56), followed by education (37), humanities (34), STEM (27), and fine arts (11). Faculty with 21 or more years of teaching experience were most heavily represented (63 responses), followed in descending order of experience by the other groups: 11 to 20 years (41), 6 to 10 years (30), 2 to 5 years (23), and less than 2 years (8). These results mirrored the demographics of the study as a whole.

Table 6 lists the themes coded (with definitions) accompanied by frequency counts and percentages listed in descending order of times mentioned ($n = 165$). The three most often mentioned themes were skill development (49 mentions, 30 percent), librarian expertise (39 mentions, 24 percent), and access to resources (19 mentions, 12 percent).

Concern for developing students’ searching skills and helping them learn how to access credible resources were priorities with faculty, and faculty viewed librarians as hav-

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ing the knowledge important for helping students develop IL. One education faculty member phrased this theme as: “The librarian is an expert in the area, and I can do the things that I ask my students to do, but she is better prepared to TEACH them how to do those things.”

The second-tier themes by frequency included collaboration value (12 mentions, 7 percent), student-librarian connection (12 mentions, 7 percent), helpful for students

Table 6.
Thematic frequency in faculty comments on motivation for collaboration (n = 165)

Theme	Frequency	Explanation
Skill development	49 (30%)	Reflected faculty member's desire to have students gain research skills, or faculty member remarked on the lack of research skills in students.
Librarian expertise	39 (24%)	Mentioned the librarian's better knowledge of resources and searching skills.
Access to resources	19 (12%)	Indicated that motivation included helping students learn about appropriate, credible, and /or discipline-specific library and other resources.
Collaboration value	12 (7%)	Expressed the value of the collaboration as a motivating factor.
Student-librarian connection	12 (7%)	Stated the value of facilitating a personal connection between students and librarians.
Helpful for students	9 (5%)	Reflected faculty member's concern that the experience would help students (faculty member reflection on how the experience would positively influence student's affect, such as increasing confidence, reducing anxiety, etc.)
Established collaboration	9 (5%)	Stated that the collaboration was already established in the course prior to the respondent's appointment as an instructor.
Librarian outreach	8 (5%)	Mentioned librarian efforts to make faculty members aware of the service.
Another perspective	5 (3%)	Expressed the value of having students hear a different voice related to the value of information literacy skills.
Recommended by colleague	3 (2%)	Stated that a colleague recommended collaborating with a librarian or arranging for instruction.



(9 mentions, 5 percent), established collaboration (9 mentions, 5 percent), and librarian outreach (8 mentions, 5 percent). Faculty reported that they found value in the act of collaboration, viewing it as a true partnership. One humanities faculty member expressed it this way: "The collaboration has evolved over time from a service role to a partnership moving from simply providing one-time instruction in searching skills to embedding them into ongoing discussion of the nature and dynamics of information especially digital resources and databases." Two other motivation themes mentioned more than once were obtaining another perspective (five responses, 3 percent) and recommended by a colleague (three responses, 2 percent). Faculty appreciated the librarian voice for providing "another perspective," as expressed by a humanities faculty member: "I also think it's valuable for them [students] to hear from more than one person—it reinforces the concepts we're trying to get across."

Why Faculty Have Not Collaborated

The counterpart to the previous question asked those who did not collaborate to expand on why not, inquiring, "If you have not taken advantage of working with a librarian, please tell us why" as an open-response question. This question drew 81 usable responses, and 88 theme mentions were counted. Eight themes were coded and counted.

Table 7 lists the themes coded (with definitions) accompanied by frequency counts and percentages listed in descending order of times mentioned ($n = 88$). The top two themes, no need and unaware of service, were identified in 26 responses (30 percent of the total) and 19 responses (22 percent), respectively. Responses that were coded "no need" included explanations by faculty that their course was technical in nature or that information resources were not relevant to the course content. Responses coded as unaware of service stated that faculty were not familiar with how librarians could support faculty teaching, especially related to IL. For example, a faculty member in the social sciences commented: "Not aware of services, did not realize librarians could help."

The next tier of responses was represented by the themes lack of time and teach it myself, at 12 mentions (14 percent) and 10 mentions (11 percent), respectively. The final tier of responses consisted of referral to a librarian (6 mentions, 7 percent), students learn skills elsewhere (6 mentions, 7 percent), perceived availability of librarians (5 mentions, 6 percent), and uses online instructional materials (4 mentions, 5 percent).

One response, uncoded, from a humanities faculty member declared that librarians were not "credible, publishing scholars." Although this comment was discouraging, it was not a widely expressed perception of the faculty who responded to this survey. Another response worth noting came from a STEM faculty member who commented: "I think there is a feeling amongst scientists that we can find information as least as fast and as completely as a librarian; maybe this is not true?"

Because of the interest of this study in the association between collaboration and such variables as disciplinary area and years of teaching (as reflected in the study's quantitative analysis), counts of motivation themes by disciplinary area were recorded. However, the frequency mentions, ranging from a high of 18 to a low of zero, were so low for many themes that comparisons among disciplinary groups would have little meaning.

A few general observations about the data may prove useful for librarians wishing to converse with faculty about collaboration. Skill development was the most frequently



Table 7.
Thematic frequency in faculty comments on barriers to collaboration (n = 88)

Theme	Frequency	Explanation
No need	26 (29%)	The course does not require library research, or the instructor perceives no need for IL instruction.
Unaware of service	19 (22%)	Faculty member was not familiar with instructional services or the possibilities of collaboration.
Lack of time	12 (14%)	Indicated that there was no room in course content or that faculty member lacked time to pursue collaboration.
Teach it myself	10 (11%)	Stated that the faculty member teaches IL, some because they have training, others because they consider themselves better prepared to teach research skills to their students.
Referral to librarian	6 (7%)	The faculty member sends students to consult with a librarian in lieu of having an instructional collaboration.
Students learn skills elsewhere	6 (7%)	Indicated that the faculty member believes that other courses or instructors teach students IL skills or they already possess these skills.
Perceived availability of librarians	5 (6%)	Faculty indicated they did not believe librarians were available at times or locations needed (such as satellite locations).
Uses online instructional materials	4 (5%)	Reported using online videos, LibGuides, or other instructional materials.



mentioned theme and the most often-stated theme in every disciplinary group except education, where librarian expertise was the most-referenced idea. Librarian expertise was also a motivating factor for humanities faculty and equaled skill development as the top motivation for collaborating. Access to resources was the third most frequently voiced motive for working with librarians in all disciplinary areas.

Discussion

This study began with the objective to elicit faculty voices on their practices and attitudes toward collaboration with the library. The investigation found that faculty do collaborate and that they employ a range of methods; they are motivated to collaborate with librarians and will offer rationales if they do not do so. Analyses by disciplinary area and by years of teaching provided additional insights into faculty practices and preferences. In addition to expanding the range of faculty voices in the scholarly conversation around collaboration, the findings of this study can pinpoint opportunities and offer strategies as librarians continue to explore ways to approach faculty about IL collaboration.

Faculty value library collaboration at high levels, especially direct contact with a librarian in a class session. Only 27 percent of faculty reported they do not collaborate with librarians, while 73 percent indicated that they work with librarians in some fashion

Faculty value library collaboration at high levels, especially direct contact with a librarian in a class session.

to help students develop information literacy skills. This rate of involvement is relatively high compared to a study in 2003, when 79 percent of faculty reported no interaction with librarians.³¹ Of course, collaboration can take various forms. The most

frequent collaboration is librarian-led IL instruction. Forty-one percent of faculty in the current study reported use of librarian-taught IL sessions, a rate similar to other studies that found 44 percent³² and 37 percent involvement,³³ but higher than the 20 percent reported by Ducas and Michaud-Oystryk.³⁴ Research at Western Michigan University by Patricia Fravel Vander Meer, Maria Perez-Stable, and Dianna Sachs in 2012 found comparable results, with 42 percent of the faculty reporting use of a librarian-led IL session.³⁵ Despite librarians' best efforts to provide IL instruction, the needle has scarcely moved since the mid-1990s.

The authors analyzed reported methods of collaboration and examined differences across a variety of disciplines and levels of experience. Of faculty who reported no collaboration, STEM was the highest disciplinary area at 33 percent, followed by fine arts (30 percent), social sciences (27 percent), humanities (23 percent), and education (13 percent). This study's findings of low participation in STEM and high participation in the humanities and social sciences concur with disciplinary trends found in other studies.³⁶ Education is notable in its high level of collaboration, which matches Thomas's findings.³⁷ There were rapid shifts in the categories of librarian teaching in a course session (from 16 percent in the first two years to 39 percent in years 6 through 10) and faculty teach IL themselves (from 53 percent in the first two years to 24 percent in years 6 through 10) during the time that new faculty orient to the profession.

Similarly, Yousef discovered that faculty with more than 10 years of teaching ranked collaboration at a higher level compared to faculty with less experience.³⁸ Gonzales found that faculty with 10 years or less of teaching considered library research less important to their field than did their more seasoned peers.³⁹ Collaboration may depend on the relationship that teaching faculty and subject librarians have developed over time, particularly if it has been a long-standing alliance. Melissa Moore posits that seeking out “library champions” is one of the best ways for librarians to establish long-term relationships with faculty.⁴⁰

While articles on faculty-librarian collaboration often discuss barriers to partnerships (particularly from the librarian viewpoint), the current study addresses a factor that has received little attention in the literature: faculty motivation for collaborating. When the authors analyzed faculty’s open-ended responses, the three most frequently recurring themes that motivated faculty to work with librarians were skill development, librarian expertise, and access to resources. These results dovetail with those of a smaller study by Manuel, Beck, and Molloy, who interviewed 21 faculty members targeted for their high use of library instruction services. Their research reported that the most frequent themes which emerged in answer to the question “Why have a librarian teach IL?” were regard for librarian expertise (a major theme in this study), the opportunity to update their own skills, and the librarian’s role as a corroborating voice,⁴¹ which were minor themes in the current analysis.

Insights from additional articles, mostly from the librarian perspective rather than from the faculty viewpoint, reiterate the importance of the skill development theme, the most frequently reported reason for collaboration in the present study. Faculty are often moved to work with librarians to develop or increase their students’ research skills⁴² or to offer IL to improve student performance.⁴³ Because IL goals often resonate with faculty pedagogical aims,⁴⁴ unearthing these shared values can serve as a strong foundation for collaboration.⁴⁵

The second most frequently occurring motivational theme was librarian expertise. One faculty member from humanities with 21 or more years of teaching experience expressed the theme in this way: “I recognized my understanding of modern information systems was badly out of date, and I knew that my students’ was mostly nonexistent. The librarian’s continual engagement with the class was essential to its overall success. And it was a success.” The incidence of librarian expertise as a theme supports the findings of Manuel, Beck, and Molloy, who extracted the

the three most frequently recurring themes that motivated faculty to work with librarians were skill development, librarian expertise, and access to resources.

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same idea from their faculty interviews.⁴⁶ Anecdotally, librarians who have cultivated relationships with faculty over time often find those faculty open to more avenues of collaboration and more respectful of their knowledge. The association of substantial collaboration with more experienced faculty might suggest that those who have developed partnerships with librarians have learned what librarians can contribute and have gained an appreciation for this expertise.

The theme of regard for librarian expertise may appear at odds, however, with observations in some articles that reported faculty do not understand or respect the knowledge and skills that librarians bring and that librarians are perceived not as equals (instructors) but as service providers in the eyes of faculty.⁴⁷ Several observations by librarians in a 2018 survey of United States and Canadian academic libraries stated that faculty frequently or very frequently “acted surprised” at the librarians’ “scholastic or academic achievement.”⁴⁸ Given the findings of the present study, the authors might interpret these reactions as those of faculty who lacked true collaborative partnerships with librarians.

The faculty view of librarians not as equals but as service providers is also discussed as a barrier to collaboration in the literature, but it did not appear as a rationale for not collaborating in the current study. No need and unaware of service were the top themes found in this study as barriers to collaboration—reasons that also emerged in the literature review. The response that IL was “not needed” or “inappropriate” for the course was echoed in many studies.⁴⁹ Similarly, faculty reported being “unaware” of the IL instruction service in several of these core studies.⁵⁰ The fourth most frequently mentioned barrier that came up in the qualitative results, teach it myself, was also consistent with the quantitative findings of this study, where 33 percent of faculty reported that they teach IL themselves. This result also corresponds to responses described in numerous core studies.⁵¹ Many librarians may face these reasons for not collaborating as they struggle to demonstrate and quantify the value of the library and its resources and services in the academic enterprise, beyond collections and access.

Recommendations

In addition to cultivating the willing audiences presented by education, humanities, and social sciences faculty, librarians might take direction from the themes unearthed

... shared pedagogical goals around improving student skills and performance and institutional assessment initiatives might serve as common ground for talking with faculty about collaboration.

in this study’s qualitative responses regarding why faculty are motivated to collaborate. Skill development, librarian expertise, and access to resources might serve as “audience appeals” to enhance marketing and outreach efforts. Similarly, shared pedagogical goals around improving student skills and performance and institutional assessment initiatives might serve as common ground for talking with faculty about collaboration. Promoting and marketing instruction with testimonials by more seasoned faculty who use library services might inspire

those who do not, particularly the newest faculty, who showed the least partnership activity in this study.

The commonly voiced reasons for not collaborating, often mentioned by faculty in this and other studies, suggest that more outreach and marketing are warranted to catch the attention of unaware faculty and to open a dialog with faculty who reported no need for IL instruction. That said, it is important to determine each course's goals and perhaps review a class syllabus, often accomplished through curriculum mapping, before assuming there is a need. To counteract the lack of time argument, librarians might offer more alternatives to in-class instruction. They could consider developing instructional interventions such as stand-alone tutorials, specialized online course guides, redesigned modules or assignments, and grading rubrics that align with the practice of faculty teaching IL themselves.

For those faculty who teach information literacy themselves, librarians might put a more positive spin on this finding by acknowledging that faculty who recognize the importance of IL and teach that importance are allies. In fact, librarians can encourage faculty to teach IL themselves in classrooms by setting up teach-the-teacher initiatives. Several faculty in the survey commented that attending librarian sessions keeps them up to date, so faculty may schedule IL sessions with a librarian and then teach it themselves in later semesters.

Areas for Future Study

The least common types of collaboration reported were faculty and librarians working jointly on learning outcomes and a librarian embedded in a course management system (CMS). These findings dovetail with the previously mentioned study by two of the current authors and a third colleague at Western Michigan University, which also found that the least popular method of collaboration was the librarian embedded in the CMS.⁵² Perhaps faculty view these less-used methods as more invasive, or librarians might broach them less often. In addition, some faculty may not use the CMS as a course resource beyond posting the syllabus and grades. This activity on the part of faculty often goes unrecorded in library reports or statistics; conscious efforts could be made to keep a better record of librarian presence in a CMS. Possibly, librarians could pursue future study of these less frequently reported collaboration practices.

One gap in the study was that the authors could not distinguish feedback from part-time and full-time instructors. Only 16 percent of faculty with less than two years of teaching experience brought a librarian in to do an instruction session for their class—the most traditional and popular method of collaboration. Did they lack awareness of library or IL services? Part-time or graduate student instructors are not always as well informed about library instructional services as their full-time counterparts. Yousef found that faculty with master's degrees ranked collaboration higher than those with doctorates.⁵³ This indicates that the instructors librarians find hardest to reach—part-time instructors and teaching assistants—may also be those that highly value our services. This service gap certainly invites future study.

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The phenomenon of faculty teaching information literacy themselves also merits additional exploration. It was the second most selected response in the list of methods

...the instructors librarians find hardest to reach—part-time instructors and teaching assistants—may also be those that highly value our services.

of collaboration and one of the most frequently mentioned themes of why faculty do not collaborate with librarians. The nature of what is taught needs to be investigated. Do faculty teach based on their own research methods, what they have learned from previous library instruction in their classes, what they acquired from teach-the-teacher library instruction programs, or from some

other expertise? How in-depth is the instruction, and does it meet the information literacy needs of the students? Faculty teaching information literacy themselves is an emerging reality in library instruction and might advance information literacy on a large scale.

Conclusion

Faculty attitudes and preferences regarding collaboration with librarians in the arena of information literacy are multifaceted. Demographic variables, such as disciplinary area and number of years teaching, and motivations for collaborating (skill development, librarian expertise, access to resources, and the like) or for not collaborating (no need, unaware of service, lack of time, and similar reasons) need to be considered carefully when crafting instructional priorities and creating strategies for teamwork. This nuanced approach, as opposed to a one-size-fits-all method, will likely increase the chances of an academic library successfully connecting and collaborating with faculty through its instruction program.

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Notes

1. Based on searching Library & Information Science Source, using the following search string: faculty AND (librarian OR library) AND (collaboration OR perspective OR voices OR interview OR survey), limited to 2017 publication date and to Source Types: Journals and Academic Journals.

2. See, for example, Joyce Lindstrom and Diana D. Shonrock, "Faculty-Librarian Collaboration to Achieve Integration of Information Literacy," *Reference & User Services Quarterly* 46, 1 (2006): 18–23, doi:10.5860/rusq.46n1.18; Joan K. Lippincott, "Developing Collaborative Relationships: Librarians, Students, and Faculty Creating Learning Communities," *College & Research Libraries News* 63, 3 (2002): 190–92.
3. Dick Raspa and Dane Ward, "Listening for Collaboration: Faculty and Librarians Working Together," chap. 1 in *The Collaborative Imperative: Librarians and Faculty Working Together in the Information Universe*, ed. Dick Raspa and Dane Ward (Chicago: Association of College and Research Libraries, 2000), 1–18.
4. Stephanie Sterling Brasley, "Effective Librarian and Discipline Faculty Collaboration Models for Integrating Information Literacy into the Fabric of an Academic Institution," *New Directions for Teaching and Learning* 2008, 114 (2008): 77–86, doi:10.1002/tl.318.
5. Ruth Ivey, "Information Literacy: How Do Librarians and Academics Work in Partnership to Deliver Effective Learning Programs?" *Australian Academic & Research Libraries* 34, 2 (2003): 100–113, doi:10.1080/00048623.2003.10755225.
6. Lars Christiansen, Mindy Stomblor, and Lyn Thaxton, "A Report on Librarian-Faculty Relations from a Sociological Perspective," *Journal of Academic Librarianship* 30, 2 (2004): 116–21, doi:10.1016/j.acalib.2004.01.003.
7. Ada M. Ducas and Nicole Michaud-Oystriky, "Toward a New Enterprise: Capitalizing on the Faculty/Librarian Partnership," *College & Research Libraries* 64, 1 (2003): 55–74, doi:10.1016/j.acalib.2004.01.003; Claire McGuinness, "What Faculty Think—Exploring the Barriers to Information Literacy Development in Undergraduate Education," *Journal of Academic Librarianship* 32, 6 (2006): 573–82, doi:10.1016/j.acalib.2006.06.002; Sue F. Phelps and Nicole Campbell, "Commitment and Trust in Librarian-Faculty Relationships: A Systematic Review of the Literature," *Journal of Academic Librarianship* 38, 1 (2012): 13–19, doi:10.1016/j.acalib.2011.11.003; Tayo Nagasawa, "A Model of Collaboration Building between Teaching Faculty and Librarians at Earlham College: Viewed from Educational Development and Relationship Marketing," in Serap Kurbanoglu, Joumana Boustany, Sonja Špiranec, Esther Grassian, Diane Mizrahi, and Lorie Roy, eds., *Information Literacy in the Workplace, Communications in Computer and Information Science* (Cham, Switz.: Springer, 2017), 654–64, doi:10.1007/978-3-319-74334-9_67.
8. Atif Yousef, "Faculty Attitudes toward Collaboration with Librarians," *Library Philosophy and Practice*, 2010: 1–14, <http://digitalcommons.unl.edu/libphilprac/512>.
9. J. Edmund Maynard, "A Case Study of Faculty Attitudes toward Library Instruction: The Citadel Experience," *Reference Services Review* 18, 2 (1990): 67–76, doi:10.1108/eb049095; Anita Cannon, "Faculty Survey on Library Research Instruction," *RQ* 33, 4 (1994): 524–41, <https://www.stor-org/stable/20862531>; Joy Thomas, "Faculty Attitudes and Habits Concerning Library Instruction: How Much Has Changed since 1982?" *Research Strategies* 12, 4 (1994): 209–23; Gloria J. Leckie and Anne Fullerton, "Information Literacy in Science and Engineering Undergraduate Education: Faculty Attitudes and Pedagogical Practices," *College & Research Libraries* 60, 1 (1999): 9–29, doi:10.5860/crl.60.1.9; Rhonda Gonzales, "Opinions and Experiences of University Faculty Regarding Library Research Instruction: Results of a Web-Based Survey at the University of Southern Colorado," *Research Strategies* 18, 3 (2001): 191–201, doi:10.1016/S0734-3310(02)00090-3.
10. Ibid.
11. Cannon, "Faculty Survey on Library Research Instruction"; Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 11; Gonzales, "Opinions and Experiences of University Faculty Regarding Library Research Instruction," 193; Paul Hrycaj and Michael Russo, "Reflections on Surveys of Faculty Attitudes toward Collaboration with Librarians," *Journal of Academic Librarianship* 33, 6 (2007): 692–96, doi:10.1016/j.acalib.2007.09.008; Patricia Fravel Vander Meer, Maria A. Perez-Stable, and Dianna E. Sachs, "Framing a Strategy: Exploring Faculty Attitudes toward Library Instruction and Technology Preferences to Enhance Information Literacy," *Reference & User Services Quarterly* 52, 2 (2012): 109–22, doi:10.5860/rusq.52n2.109.



12. Maynard, "A Case Study of Faculty Attitudes toward Library Instruction," 69–70.
13. Hrycaj and Russo, "Reflections on Surveys of Faculty Attitudes toward Collaboration with Librarians," 692; Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 112.
14. Gonzales, "Opinions and Experiences of University Faculty Regarding Library Research Instruction," 193.
15. Ducas and Michaud-Oysttryk, "Toward a New Enterprise," 58.
16. Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 13; Yousef, "Faculty Attitudes toward Collaboration with Librarians," 7.
17. Hrycaj and Russo, "Reflections on Surveys of Faculty Attitudes toward Collaboration with Librarians," 695.
18. Kate Manuel, Susan E. Beck, and Molly Molloy, "An Ethnographic Study of Attitudes Influencing Faculty Collaboration in Library Instruction," *Reference Librarian* 43, 89–90 (2005): 139–61, doi:10.1300/J120v43n89_10.
19. Maynard, "A Case Study of Faculty Attitudes toward Library Instruction," 71; Cannon, "Faculty Survey on Library Research Instruction," 526–29; Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 13–14; Hrycaj and Russo, "Reflections on Surveys of Faculty Attitudes toward Collaboration with Librarians," 693; Vander Meer, Perez-Stable and Sachs, "Framing a Strategy," 112.
20. Maynard, "A Case Study of Faculty Attitudes toward Library Instruction," 69–70; Cannon, "Faculty Survey on Library Research Instruction," 531; Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 20–21; Gonzales, "Opinions and Experiences of University Faculty Regarding Library Research Instruction," 198; Ducas and Michaud-Oysttryk, "Toward a New Enterprise," 58; Hrycaj and Russo, "Reflections on Surveys of Faculty Attitudes toward Collaboration with Librarians," 693; Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 113.
21. Gonzales, "Opinions and Experiences of University Faculty Regarding Library Research Instruction," 198; Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 17; Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 113.
22. Thomas, "Faculty Attitudes and Habits Concerning Library Instruction," 217; Ducas and Michaud-Oysttryk, "Toward a New Enterprise," 58; Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 113.
23. Maynard, "A Case Study of Faculty Attitudes toward Library Instruction," 70–72; Cannon, "Faculty Survey on Library Research Instruction," 531; Thomas, "Faculty Attitudes and Habits Concerning Library Instruction," 217; Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 22; Ducas and Michaud-Oysttryk, "Toward a New Enterprise," 58–59; Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 113.
24. Manuel, Beck, and Molloy, "An Ethnographic Study of Attitudes Influencing Faculty Collaboration in Library Instruction," 144–49.
25. Maynard, "A Case Study of Faculty Attitudes toward Library Instruction," 70–72; Cannon, "Faculty Survey on Library Research Instruction," 527–36; Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 12–25; Thomas, "Faculty Attitudes and Habits Concerning Library Instruction," 214–18; Ducas and Michaud-Oysttryk, "Toward a New Enterprise," 58–64; Yousef, "Faculty Attitudes toward Collaboration with Librarians," 9.
26. Thomas, "Faculty Attitudes and Habits Concerning Library Instruction," 214–18; Gonzales, "Opinions and Experiences of University Faculty Regarding Library Research Instruction," 196; Yousef, "Faculty Attitudes toward Collaboration with Librarians," 10–12.
27. Yousef, "Faculty Attitudes toward Collaboration with Librarians," 1–14.
28. Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 109–22.
29. The results of the portion of the survey dealing with the Framework and its language appeared in LuMarie F. Guth, Judith M. Arnold, Veronica E. Bielat, Maria A. Perez-

- Stable, and Patricia Fravel Vander Meer, "Faculty Voices on the Framework: Implications for Instruction and Dialogue," *portal: Libraries and the Academy* 18, 4 (2018): 693–718, doi:10.1353/pla.2018.0041.
30. Patricia Montiel-Overall, "A Theoretical Understanding of Teacher and Librarian Collaboration (TLC)," *School Libraries Worldwide* 11, 2 (2005): 32.
31. Ducas and Michaud-Oysttryk, "Toward a New Enterprise," 58.
32. See Cannon, "Faculty Survey on Library Research Instruction," 531, and Thomas, "Faculty Attitudes and Habits Concerning Library Instruction," 215.
33. Gonzales, "Opinions and Experiences of University Faculty Regarding Library Research Instruction," 198.
34. Ducas and Michaud-Oysttryk, "Toward a New Enterprise," 58.
35. Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 113.
36. See Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 20; Ducas and Michaud-Oysttryk, "Toward a New Enterprise," 58–59; and Cannon, "Faculty Survey on Library Research Instruction," 527.
37. Thomas, "Faculty Attitudes and Habits Concerning Library Instruction," 215.
38. Yousef, "Faculty Attitudes toward Collaboration with Librarians," 10.
39. Gonzales, "Opinions and Experiences of University Faculty Regarding Library Research Instruction," 194–95.
40. Melissa Moore, "Reeling 'Em In: How to Draw Teaching Faculty into Collaborative Relationships," in *Libraries within Their Institutions: Creative Collaborations*, ed. Rita Pellen and William Miller (New York: Routledge, 2005), 77–83.
41. Manuel, Beck, and Molloy, "An Ethnographic Study of Attitudes Influencing Faculty Collaboration in Library Instruction," 147–49.
42. Examples of such discussions include Anne Jumonville, "The Role of Faculty Autonomy in a Course-Integrated Information Literacy Program," *Reference Services Review* 42, 4 (2014): 536–51, doi:10.1108/RSR-07-2014-0020; Laurie McNamara Morrison, "Faculty Motivations: An Exploratory Study of Motivational Factors of Faculty to Assist with Students' Research Skills Development," *Partnership: The Canadian Journal of Library and Information Practice and Research* 2, 2 (2007): 1–20; Laura Robinson Hanlan, Rebecca A. Ziino, and Allen H. Hoffman, "Assessing Student Information Literacy Skills and the Effectiveness of an Evolving Faculty-Librarian Collaboration in a First Year Design Course," in 2013 IEEE [Institute of Electrical and Electronics Engineers] *Frontiers in Education Conference (FIE)*, October 23–26, 2013, 1444–46, doi:10.1109/FIE.2013.6685070; Eric Resnis, Katie Gibson, Arianne Hartsell-Gundy, and Masha Misco, "Information Literacy Assessment: A Case Study at Miami University," *New Library World* 111, 7–8 (2010): 287–301, doi:10.1108/03074801011059920.
43. See Jumonville, "The Role of Faculty Autonomy in a Course-Integrated Information Literacy Program," 536–51; Char M. Booth, M. Sara Lowe, Natalie Tagge, and Sean M. Stone, "Degrees of Impact: Analyzing the Effects of Progressive Librarian Course Collaborations on Student Performance," *College & Research Libraries* 76, 5 (2015): 623–51, doi:10.5860/crl.76.5.623; Hanlan, Ziino, and Hoffman, "Assessing Student Information Literacy Skills and the Effectiveness of an Evolving Faculty-Librarian Collaboration in a First Year Design Course," 1444–46.
44. Laurie McNamara Morrison, "Faculty Motivations."
45. Jumonville, "The Role of Faculty Autonomy in a Course-Integrated Information Literacy Program," 542; Booth, Lowe, Tagge, and Stone, "Degrees of Impact," 623–51; Elizabeth Pickard, "From Barrier to Bridge: Partnering with Teaching Faculty to Facilitate a Multi-Term Information Literacy Research Project," *Collaborative Librarianship* 9, 3 (2017): 175–82, <https://digitalcommons.du.edu/collaborativelibrarianship/vol9/iss3/5>.
46. Manuel, Beck, and Molloy, "An Ethnographic Study of Attitudes Influencing Faculty Collaboration in Library Instruction," 147–49.
47. Harriet Igbo and Nwabuisi Imo, "Collaborative Teaching as a Strategy for Imparting Information Literacy in Students: Faculty—Librarian Perceptions," *Library Philosophy*



- and Practice, 2017, <https://digitalcommons.unl.edu/libphilprac/1548>; Julie Arendt and Megan Lotts, "What Liaisons Say about Themselves and What Faculty Say about Their Liaisons, a U.S. Survey," *portal: Libraries and the Academy* 12, 2 (2012): 155–77, doi:10.1353/pla.2012.0015.
48. Ahmed Alwan, Joy Doan, and Eric Garcia, "Microaggressions as a Barrier to Effective Collaboration between Teaching Faculty and Academic Librarians: An Analysis of the Results of a U.S. and Canadian Survey," *International Journal of Information, Diversity, & Inclusion* 2, 3 (2018): 44, publish.lib.umd.edu/IJIDI/.
 49. Maynard, "A Case Study of Faculty Attitudes toward Library Instruction," 70; Cannon, "Faculty Survey on Library Research Instruction," 531; Thomas, "Faculty Attitudes and Habits Concerning Library Instruction," 217; Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 22; Ducas and Michaud-Oystryk, "Toward a New Enterprise," 59; Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 113.
 50. Cannon, "Faculty Survey on Library Research Instruction," 531; Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 22; Ducas and Michaud-Oystryk, "Toward a New Enterprise," 59; Gonzales, "Opinions and Experiences of University Faculty Regarding Library Research Instruction," 198; Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 113.
 51. Cannon, "Faculty Survey on Library Research Instruction," 531; Thomas, "Faculty Attitudes and Habits Concerning Library Instruction," 217; Leckie and Fullerton, "Information Literacy in Science and Engineering Undergraduate Education," 22; Gonzales, "Opinions and Experiences of University Faculty Regarding Library Research Instruction," 198; Ducas and Michaud-Oystryk, "Toward a New Enterprise," 59; Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 113.
 52. Vander Meer, Perez-Stable, and Sachs, "Framing a Strategy," 113.
 53. Yousef, "Faculty Attitudes toward Collaboration with Librarians," 9.

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