Wake Forest University Faculty Survey:
Analytical Memo

February 2, 2017

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Overview

The following memo provides an analytical narrative of the results of the Ithaka S+R Local Faculty Survey, which was administered at Wake Forest University. The survey instrument covers many scholarly research and teaching-related topics, in part overlapping with the 2015 Ithaka S+R U.S. Faculty Survey[1] and other previous iterations of the Ithaka S+R U.S. Faculty Survey.[2]

During Fall 2016, 689 Wake Forest University faculty members received an email invitation to participate in a survey about their research and teaching habits, and participants were able to enter a drawing for one of three Kindle Fire e-readers. Three email reminders were sent before the close of the survey.

In total, 261 respondents clicked the survey link (about 38% of those who received the email invitation), with 243 of those starting the survey (about 35%) and 167 of those respondents completing the survey, for an overall response rate of about 24%. Due to the survey flow and skip patterns, not all Wake Forest University respondents received every question in the survey.

In this analysis, we report findings by various demographic stratifications including rank and discipline.

Due to the size of a number of the rank and discipline subgroups, Wake Forest University and Ithaka S+R chose to group these respondents for analysis in the following ways:

Rank[3]

> ➢ Assistant Professor (25, 15.53%)
>
> ➢ Associate Professor (42, 26.09%)
>
> ➢ Professor (53, 32.92%)

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[1] Wolff, Christine, Alisa B. Rod, and Roger C. Schonfeld. "Ithaka S+R US Faculty Survey 2015." *Ithaka S+R*. Last Modified 4 April 2016. http://sr.ithaka.org?p=277685.

[2] Schonfeld, Roger and Ross Housewright. "US Faculty Survey 2012." Ithaka S+R. Last Modified 8 April 2013. http://sr.ithaka.org?p=22502.

[3] Respondents from ranks not outlined here were excluded from these stratifications.

Discipline[4]

➢ Humanities (including Art, Classical Languages, East Asian Languages, English, German and Russian, History, Music , Philosophy, Religion, Romance Languages, Theatre and Dance, and Women's, Gender, and Sexuality Studies) (62, 39.49%)

➢ Social Sciences (including Anthropology, Communication, Education, Military Science, Politics and International Affairs, Psychology, and Sociology) (24, 15.29%)

➢ Science (including Biology, Chemistry, Computer Science, Physics, and Mathematics) (29, 18.47%)

In addition, Wake Forest University requested that comparisons of findings be drawn against responses from the Duke University Faculty Survey[5] as well as the 2015 U.S. Faculty Survey.[6] Comparisons have been included for each module of questions covered in this memo, except for the "Library Space Planning" module, as this series of questions was not fielded nationally nor at Duke University.

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[4] Respondents from departments not outlined here were excluded from these stratifications.

[5] The Duke University Faculty Survey was administered in Fall 2015. Invitations were sent to 989 faculty members and 260 completed the survey, for an overall response rate of about 26%.

[6] The 2015 U.S. Faculty Survey was administered in Fall 2015. Responses included in this report from the 2015 U.S. Faculty Survey are for respondents from R2: Doctoral Universities only. Invitations were sent to 23,707 faculty members within this subgroup and 1,622 completed the survey, for an overall response rate of about 7%.

Key insights

In order to understand and effectively support the needs of faculty members, Wake Forest University asked Ithaka S+R to focus this analytical memo on faculty members' needs as both researchers and teachers and on the unique needs of faculty members from differing disciplines and ranks. The results from the survey revealed the following strategically relevant high-level findings:

» Wake Forest University faculty members are about as comfortable with the transition from print to electronic resources as their peers at Duke University and other R2 Doctoral Universities. Scientists tend to be most comfortable with this transition, whereas humanists still exhibit an affinity for print versions of scholarly journals and monographs. In planning for future collection development, it will be important for the university library to recognize the unique preferences and needs of faculty members from specific disciplines.

» To access resources that are not immediately available through the university library, Wake Forest University faculty members, similar to their peers at Duke University and other R2 Doctoral Universities, are most likely to use interlibrary loan / document delivery or search for a freely available version of the resource online. However, an especially large share of humanists reported being likely to purchase the resource themselves from the publisher or a vendor when the resource was not immediately available through the university library. It may be worth exploring further what is driving this behavior from humanists and whether the university library can promote alternative courses of action.

» Wake Forest University faculty members often differ substantially by discipline and by rank in their digital research and data preservation and management practices. To most effectively support these activities, the library will likely need to differentiate and tailor its service offerings accordingly.

» While respondents from differing disciplines and ranks varied in their reported dependence on the library and in the importance that they assigned to many of the roles of the library, there was a uniformly high level of importance assigned to the role of the library in paying for needed resources across disciplines and ranks.

» Faculty members in the sciences and those in higher ranks were less likely to agree that Wake Forest University offers excellent training and support to help

them adopt new pedagogies or instructional approaches that take advantage of the opportunities offered by digital technology and that the university recognizes or rewards the integration of theses pedagogies or approaches. If the adoption of these approaches and pedagogies across disciplines and ranks is of importance to the university, these barriers will need to be addressed.
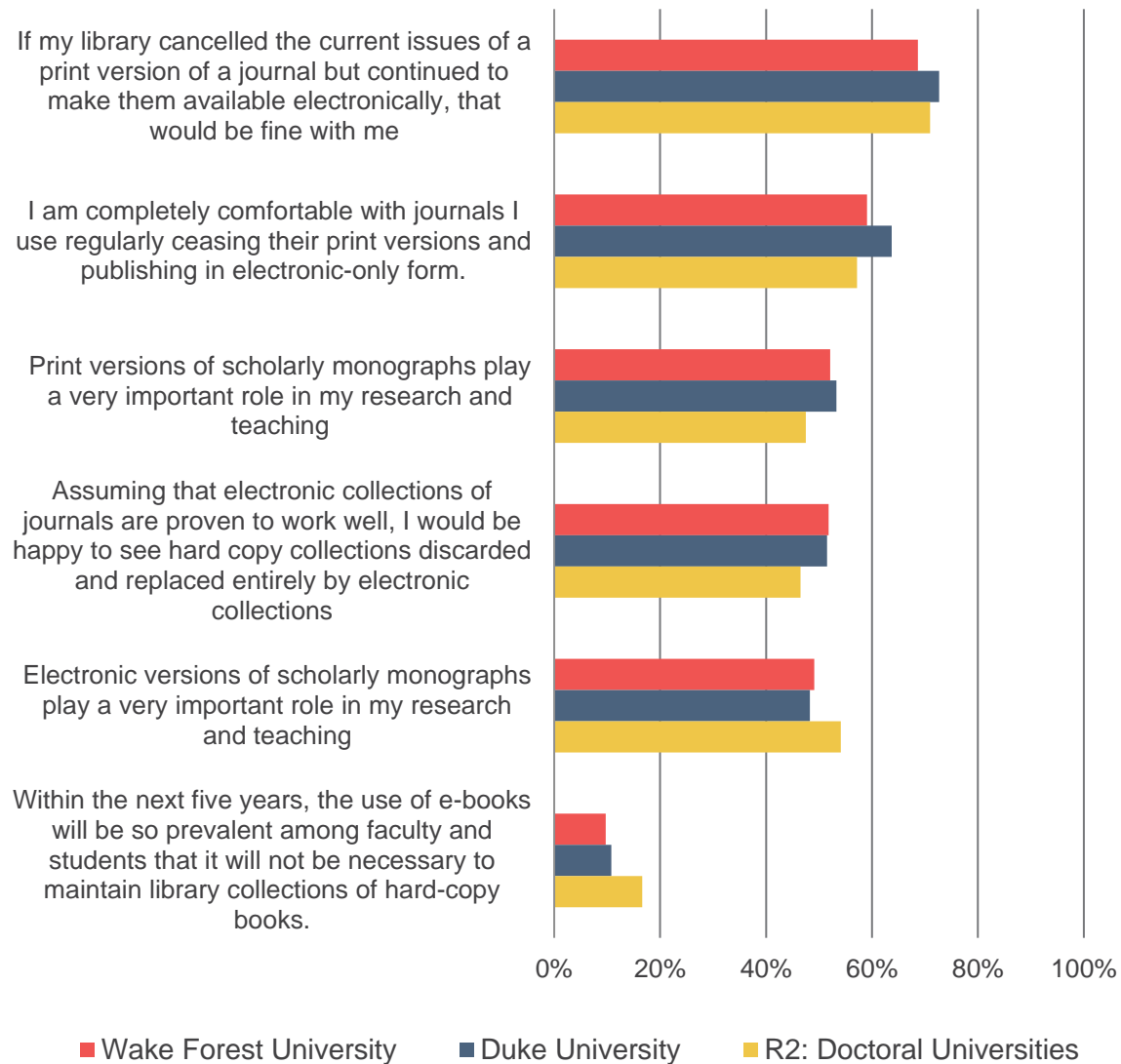
» Wake Forest University faculty members reported relatively lower levels of satisfaction with the availability of printers, work spaces, space to spread out reading materials or personal belongings, and seating within the library building. If these aspects of the library building are critical for supporting the work of these faculty members, the university library may want to explore what kinds of improvements would be most impactful.

Access to collections

A series of questions in the Wake Forest University Faculty Survey focused on practices and preferences around accessing scholarly journals and monographs in both digital and print formats and gaining access to these materials within and outside of the library.

Faculty members at Wake Forest University reported similar attitudes towards the print-to-electronic transition for journals and monographs as did their peers at Duke University and other R2 Doctoral Universities (see Figure 1). Only a small share of respondents strongly agreed that within the next five years, the use of e-books will be so prevalent that it won't be necessary to maintain hard-copy collections. However, approximately two-thirds of respondents would be comfortable with their library cancelling its current issues of a print journal as long as the issues were made available electronically. Approximately half of respondents strongly agreed that both print and electronic versions of scholarly monographs play a very important role in their teaching and research.

Figure 1: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view – a 10 equals "Extremely well" and a 1 equals "Not at all well." *Percent of respondents by institution who strongly agreed with each statement.*


In examining these attitudes more deeply by respondents' disciplinary affiliation, we see some notable differences (see Figure 2). In particular, Wake Forest University faculty members in science fields tend to be more comfortable with the print-to-electronic transition, although they do not report that electronic scholarly monographs play a more important role in their research and teaching than their peers in the humanities and social sciences. Humanists generally report being less comfortable with this print-to-

electronic transition and much more strongly agree that print versions of monographs play an important role in their research and teaching as compared to their peers.

Figure 2: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view – a 10 equals "Extremely well" and a 1 equals "Not at all well." *Percent of Wake Forest University respondents by discipline who strongly agreed with each statement.*
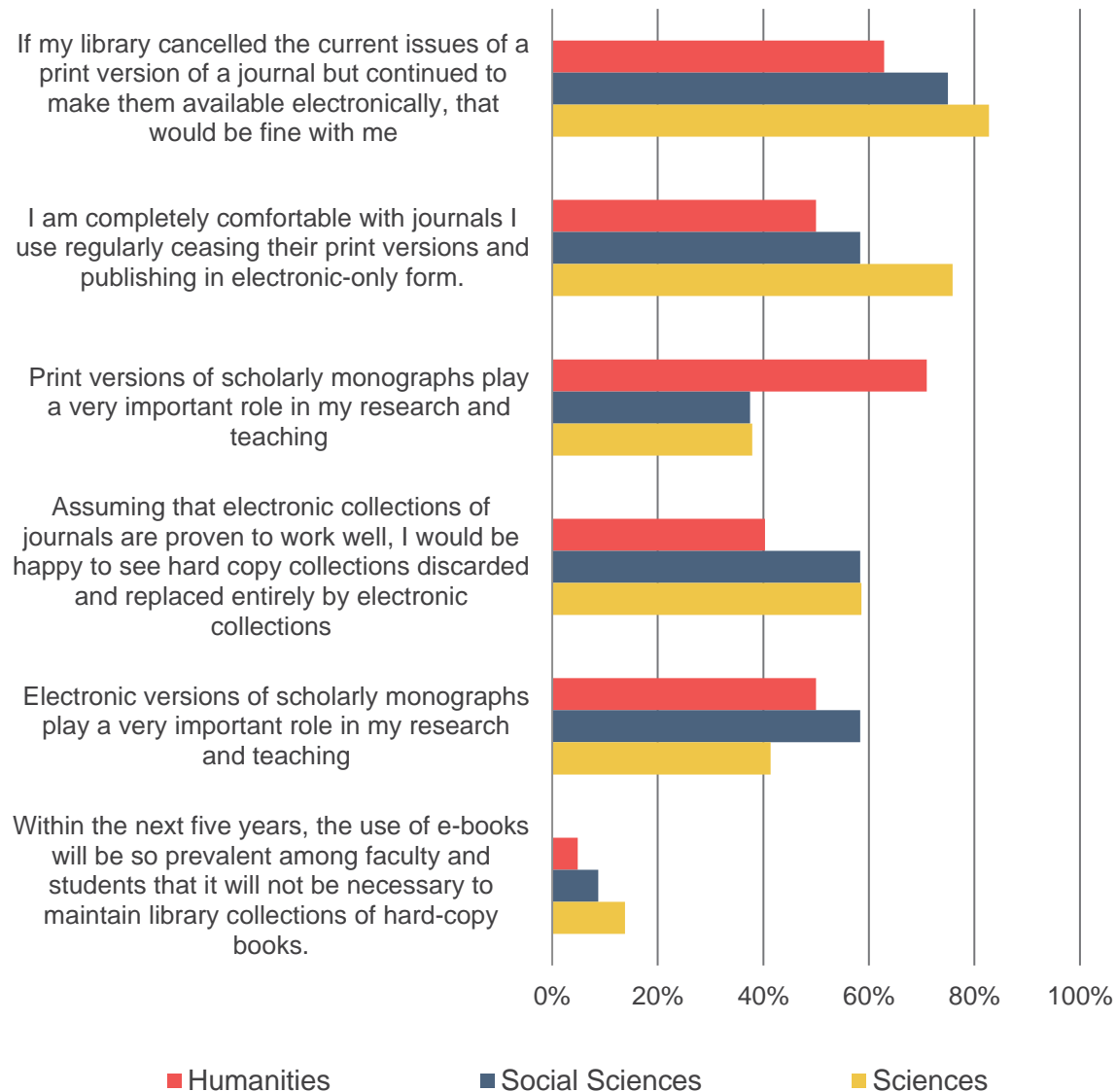

Faculty members from Wake Forest University, Duke University, and other R2 Doctoral Universities all highly value collections and subscriptions provided by their university library; approximately nine in ten respondents indicated that this was a highly important source for journal articles and scholarly monographs used for research and teaching (see

Figure 3). Respondents from Wake Forest University and other R2 Doctoral Universities rated alternative sources, including materials that are freely available online, person collections, collections of other institutions, and an academic department's collections, as more highly important than did those from Duke University.

Across disciplines, we see that Wake Forest University faculty members uniformly highly value library collections and materials that are freely available online (see Figure 4). Respondents in the humanities rated collections of other institutions as more highly valuable than did those in the social sciences and sciences, while scientists assigned their academic departments' collections a higher level of importance as compared to those in the humanities and social sciences.

Compared to respondents from other ranks, Assistant Professors especially highly rated the collections of other institutions; approximately 62% of respondents rated this source as highly important as compared to 38% of Associate Professors and 30% of Professors.

Figure 3: When you think about the journal articles and scholarly monographs that you routinely use - for research as well as for teaching - how important are each of the following sources? *Percent of respondents by institution who rated each as highly important.*
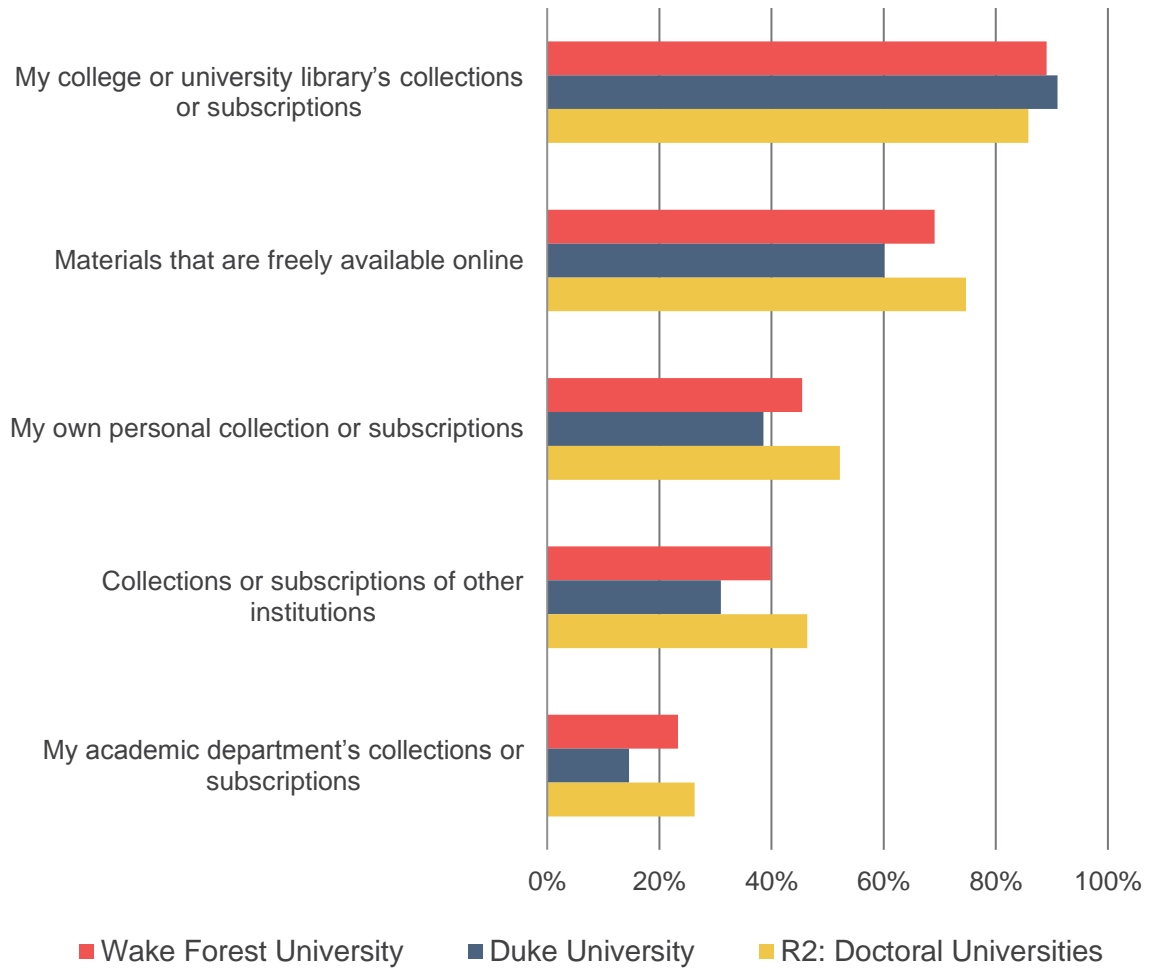
Figure 4: When you think about the journal articles and scholarly monographs that you routinely use - for research as well as for teaching - how important are each of the following sources? *Percent of Wake Forest University respondents by discipline who rated each as highly important.*
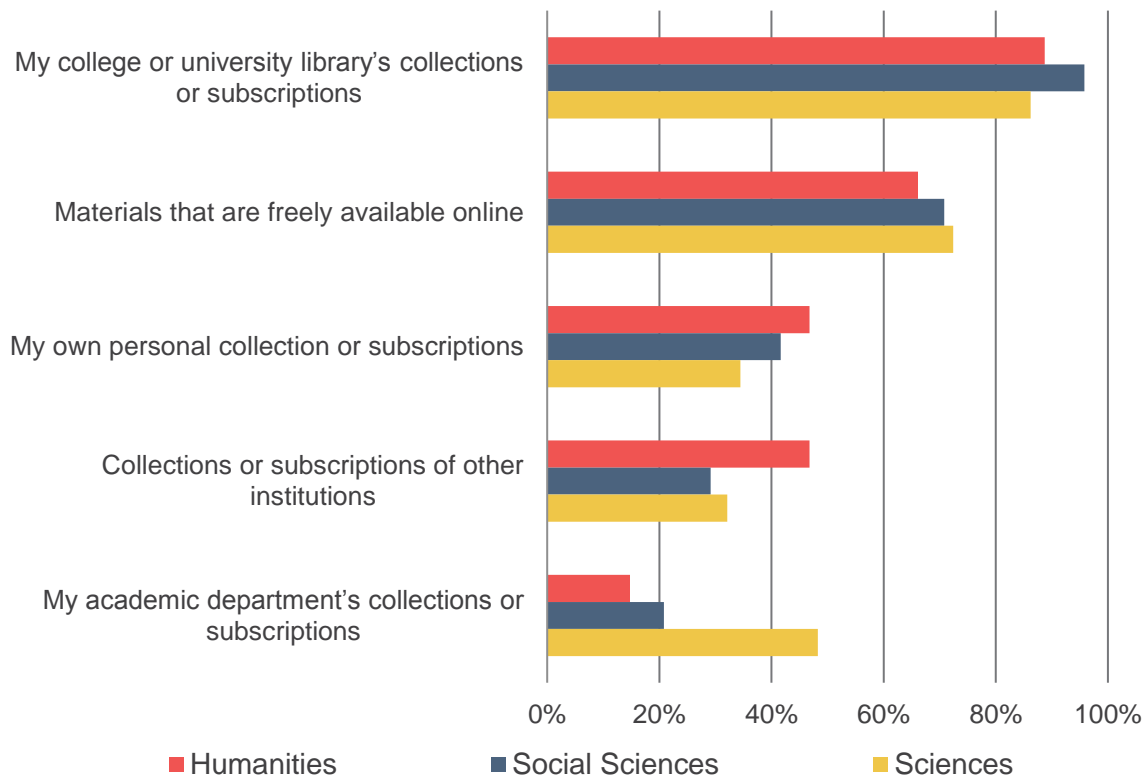

Respondents were also asked how often they use various methods to seek access to resources that they do not have immediate access to through their college or university library's collections. Wake Forest University faculty members, like those at Duke University and other R2 institutions, were most likely to use interlibrary loan or document delivery services or search for a freely available version online (see Figure 5). Respondents at Wake Forest University were more likely to ask a friend at another institution for the material than were those at Duke University, and less likely to contact the author directly.

Respondents in the humanities reported being much more likely to purchase the material themselves from the publisher or vendor as compared to those in the social sciences and sciences, while those in the social sciences were less likely than their peers to ask a friend at another institution (see Figure 6).

Figure 5: When you want a scholarly monograph or journal article that you do not have immediate access to through your college or university library's physical or digital collections, how often do you use each of the following methods to seek access to that material? *Percent of respondents by institution who selected "often" or "occasionally."*
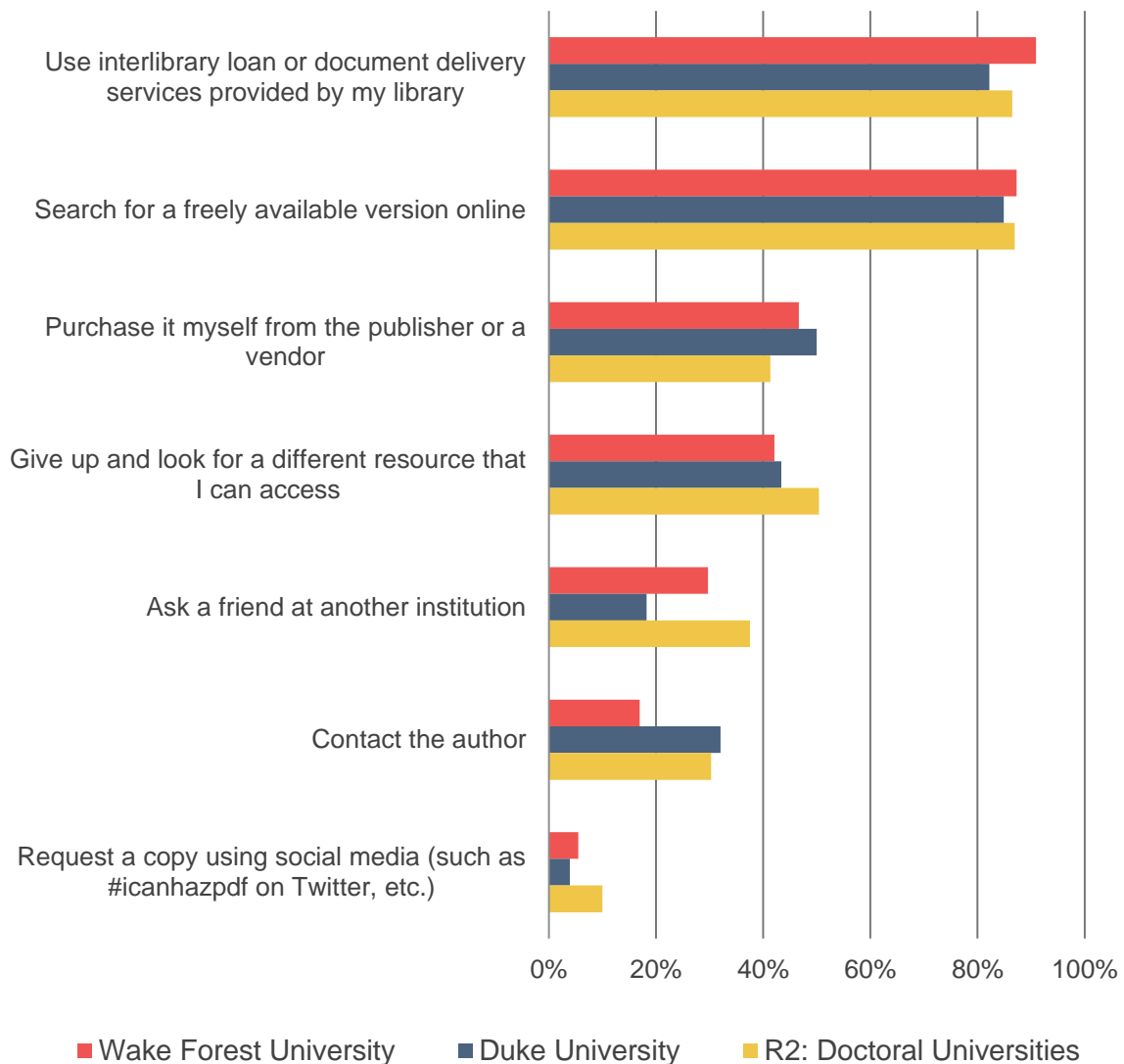
Figure 6: When you want a scholarly monograph or journal article that you do not have immediate access to through your college or university library's physical or digital collections, how often do you use each of the following methods to seek access to that material? *Percent of Wake Forest University respondents by discipline who selected "often" or "occasionally."*
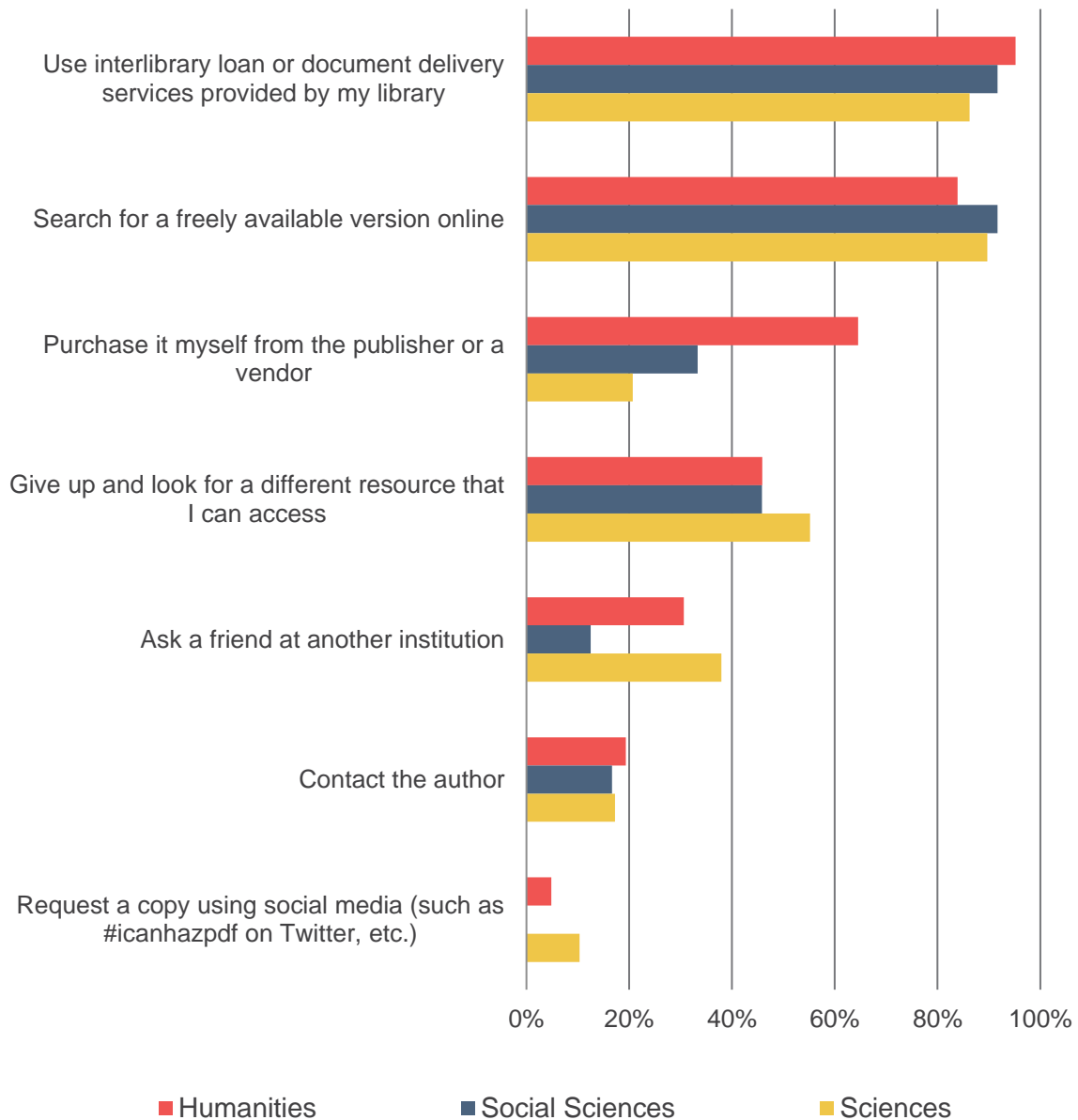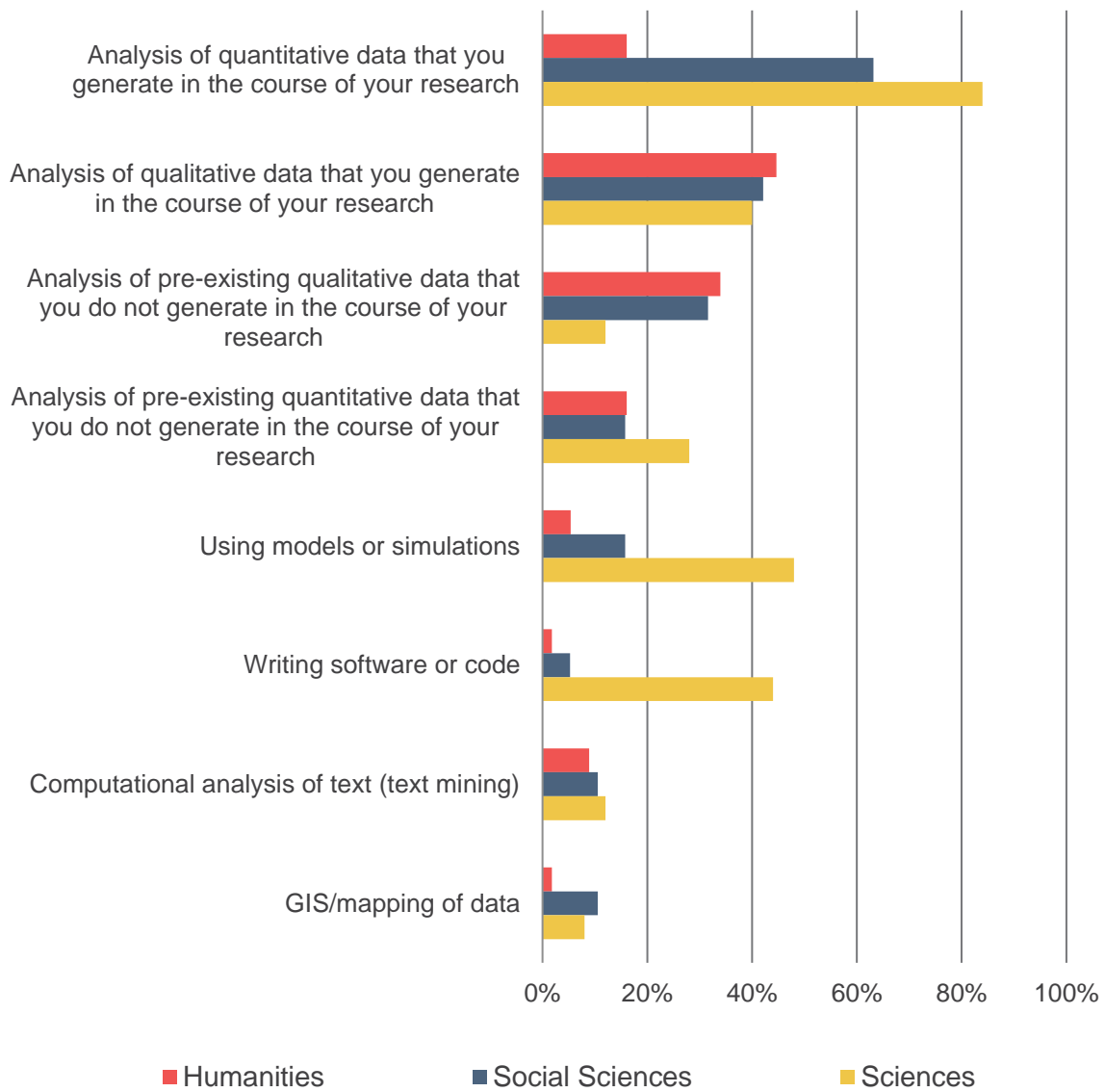
Research practices

Wake Forest University faculty members were queried on their role as researchers, including questions on digital research activities, data preservation and management, perceptions of open access publishing, and usage of the Wake Forest University repository. These questions were only displayed to respondents who conduct research; approximately 83% of Wake Forest University respondents indicated that performing academic research was among their professional responsibilities.

Respondents from Wake Forest University rated all digital research activities and methodologies as less highly important than respondents at Duke University and other R2 institutions. However, large shares of subsets of Wake Forest University respondents rated many of these activities and methodologies as highly important (see Figures 7 and 8). Greater shares of scientists rated the analysis of quantitative data generated in the course of research, the use of models or simulations, and the writing of software or code as highly important compared to their peers in other disciplines, and Assistant Professors frequently rated many of these activities as more highly important than their peers.

Figure 7: How important to your research is each of the following digital research activities and methodologies today? *Percent of Wake Forest University respondents by discipline who rated each as highly important.*

Analysis of quantitative data that you generate in the course of your research

Analysis of qualitative data that you generate in the course of your research

Analysis of pre-existing qualitative data that you do not generate in the course of your research

Analysis of pre-existing quantitative data that you do not generate in the course of your research

Using models or simulations

Writing software or code

Computational analysis of text (text mining)

GIS/mapping of data

0%   20%   40%   60%   80%   100%

■ Humanities   ■ Social Sciences   ■ Sciences

Figure 8: How important to your research is each of the following digital research activities and methodologies today? *Percent of Wake Forest University respondents by rank who rated each as highly important.*
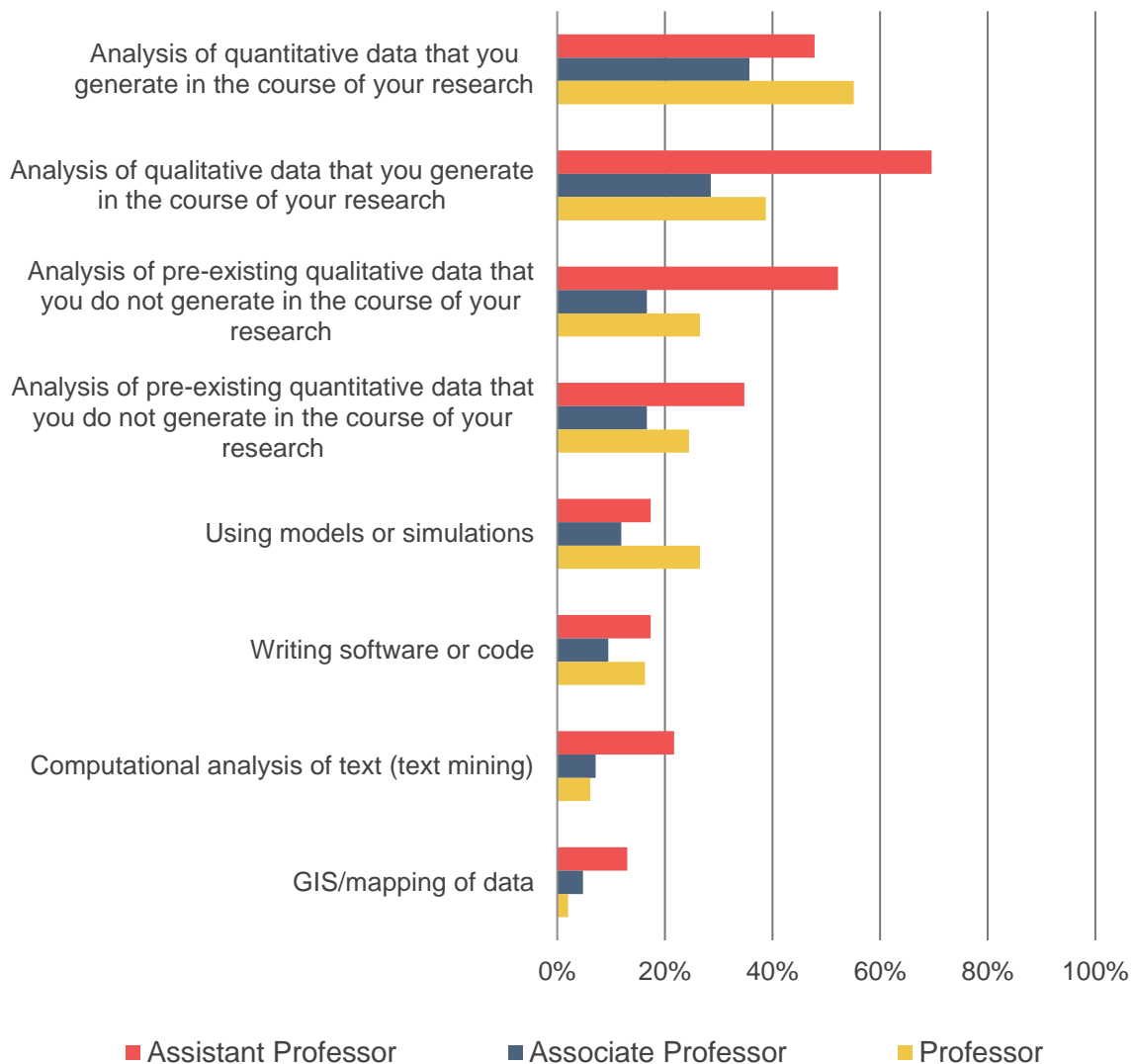

We then asked faculty members about their level of interest in integrating these digital research activities as well as potential barriers to this integration. Wake Forest University humanists and Assistant Professors demonstrated more interest in this integration than did their peers in other disciplines in ranks; they more strongly agreed that they are very interested in integrating digital research activities and methodologies more deeply into their work (37% vs. 16-26% and 45% vs. 22-31%, respectively).

Social scientists at Wake Forest University reported notably lower levels of agreement that tenure and promotion decisions or other research assessment exercises would not

recognize their work in integrating these activities, and that the time it would take to integrate these activities would not be worth it; that is, these respondents did not consider these factors to be as much of a barrier for their adoption of these digital research activities as did their peers (see Figure 9). A smaller share of scientists, relative to respondents from other disciplines, indicated that they do not have the sufficient technical skills to more deeply integrate these activities.

In examining responses by rank, we see that Professors do not view having a lack of time as as much of a barrier as do respondents from other ranks; a smaller share of these respondents strongly agreed that they are unable to devote enough time to integrate these activities effectively (see Figure 10). These respondents were also less likely to agree that they were unsure of how these activities and methodologies could support their research goals. Assistant and Associate Professors identified both of these barriers as more substantial in preventing them from more deeply integrating these activities and methodologies, and a larger share of Associate Professors in particular indicated that they do not have the sufficient skills to integrate these activities efficiently.

Figure 9: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view, where a 10 equals "Extremely well" and a 1 equals "Not at all well." *Percent of Wake Forest University respondents by discipline who strongly agreed with each statement.*
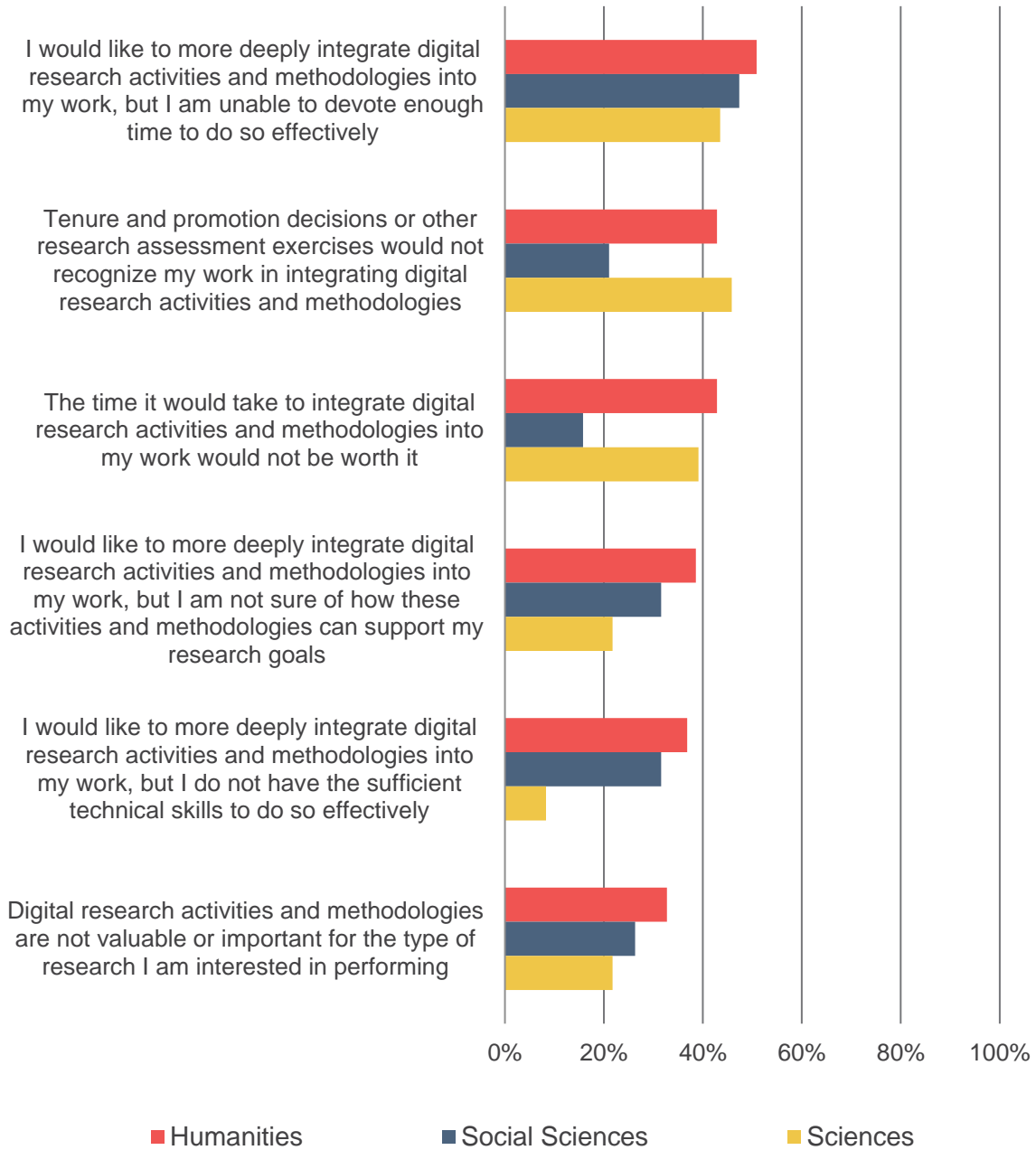
Figure 10: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view, where a 10 equals "Extremely well" and a 1 equals "Not at all well." *Percent of Wake Forest University respondents by rank who strongly agreed with each statement.*
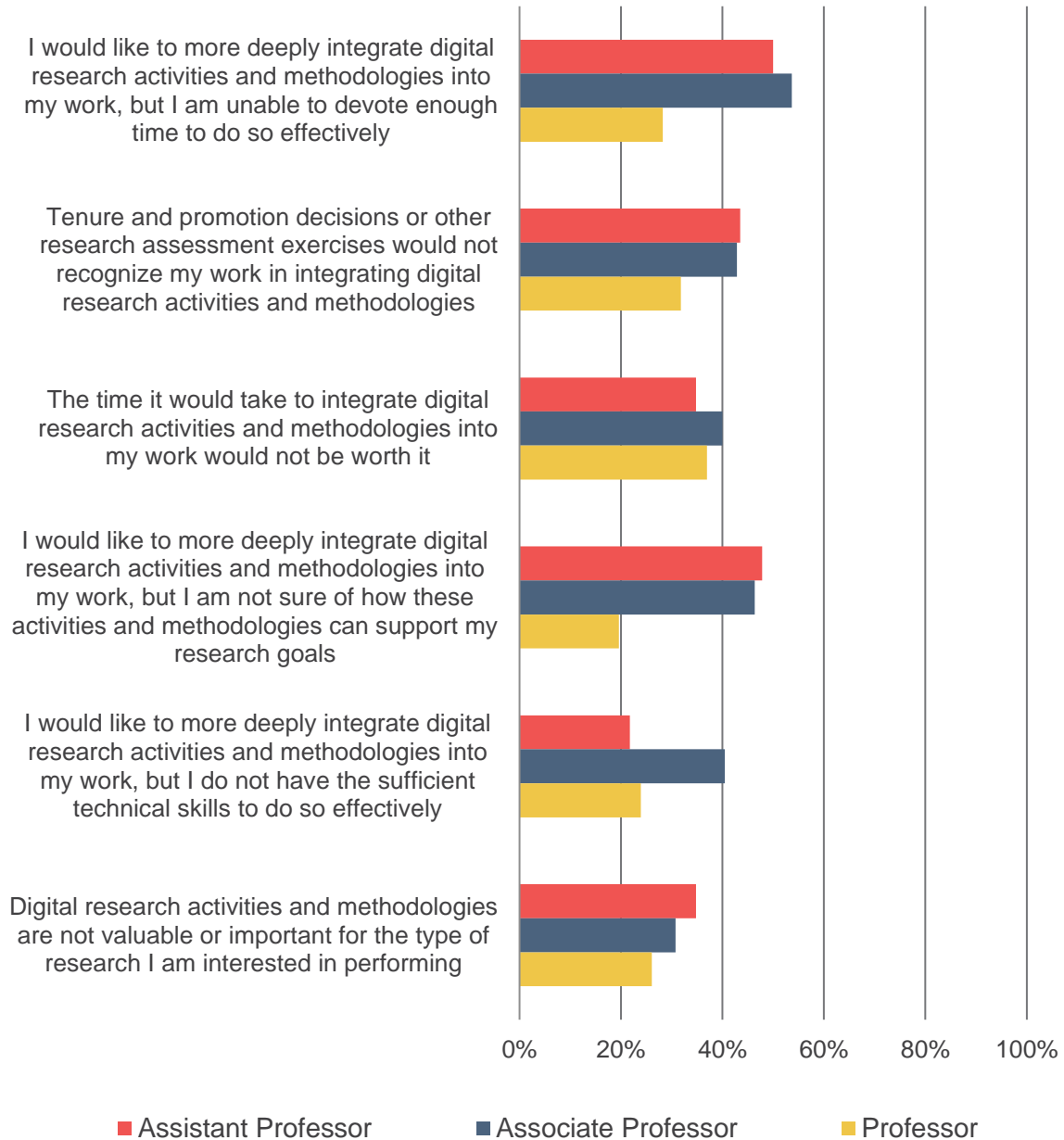

We then ask respondents about their data preservation and management practices and the usefulness of various resources within and outside of the university for supporting these practices. Compared to respondents at Duke University and other R2 institutions, Wake Forest University faculty members more strongly agreed that they find it difficult

to organize or manage their data, media, or images (22% and 21% vs. 33%, respectively). By discipline, we see that larger shares of Wake Forest University respondents in the social sciences, followed by the sciences, find the organization and management of these data to be difficult, and are less likely to manage or organize these data on a cloud storage service (see Figure 11).

By rank, we see that while Assistant Professors are more likely to organize these data using a cloud storage service, they also more frequently report that it is difficult to organize and manage these data as well as preserve these data for the long-term (see Figure 12).

Figure 11: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view. *Percent of Wake Forest University respondents by discipline who strongly agreed with each statement.*


Legend: ■ Humanities   ■ Social Sciences   ■ Sciences
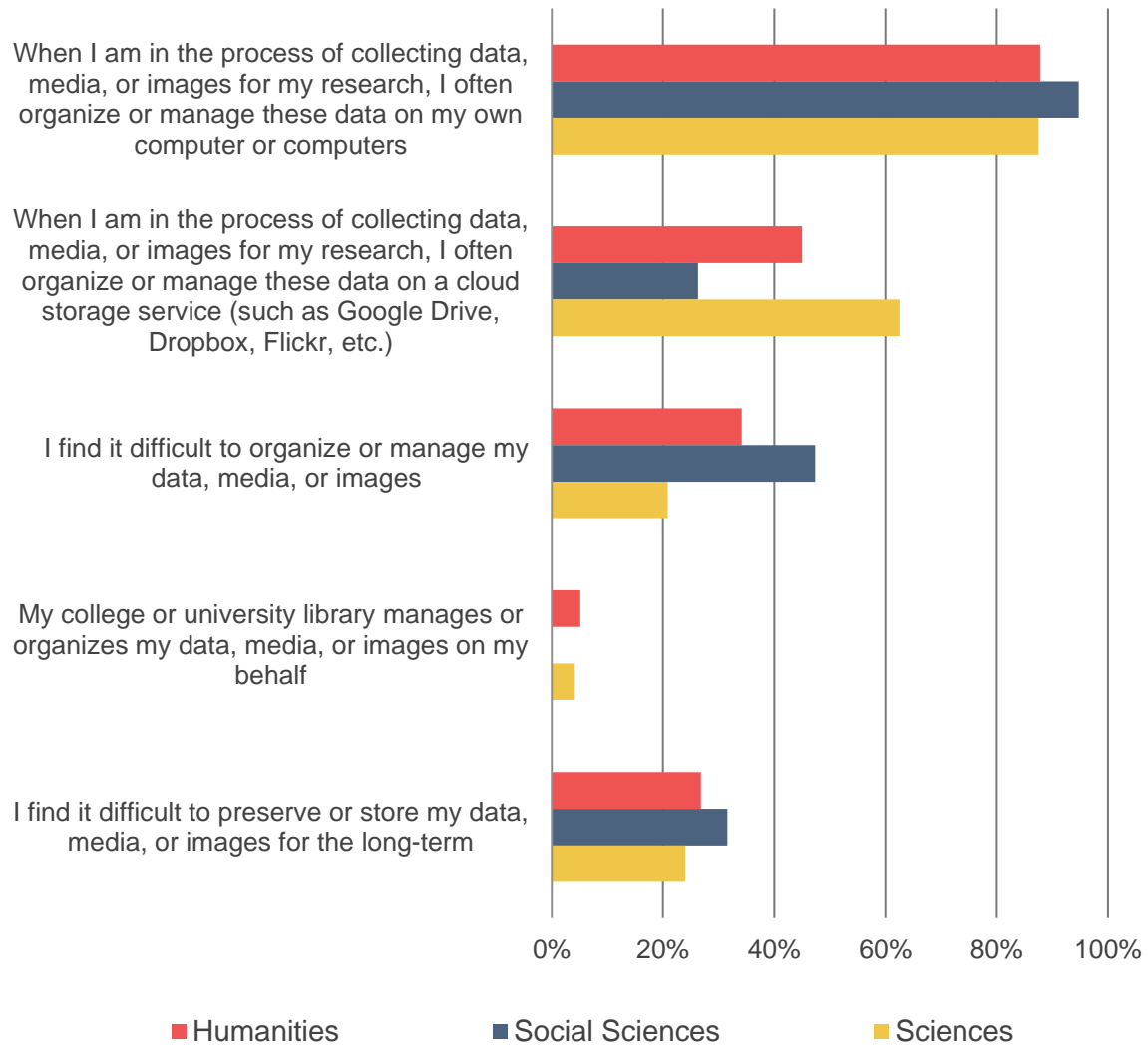
Figure 12: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view. *Percent of Wake Forest University respondents by rank who strongly agreed with each statement.*
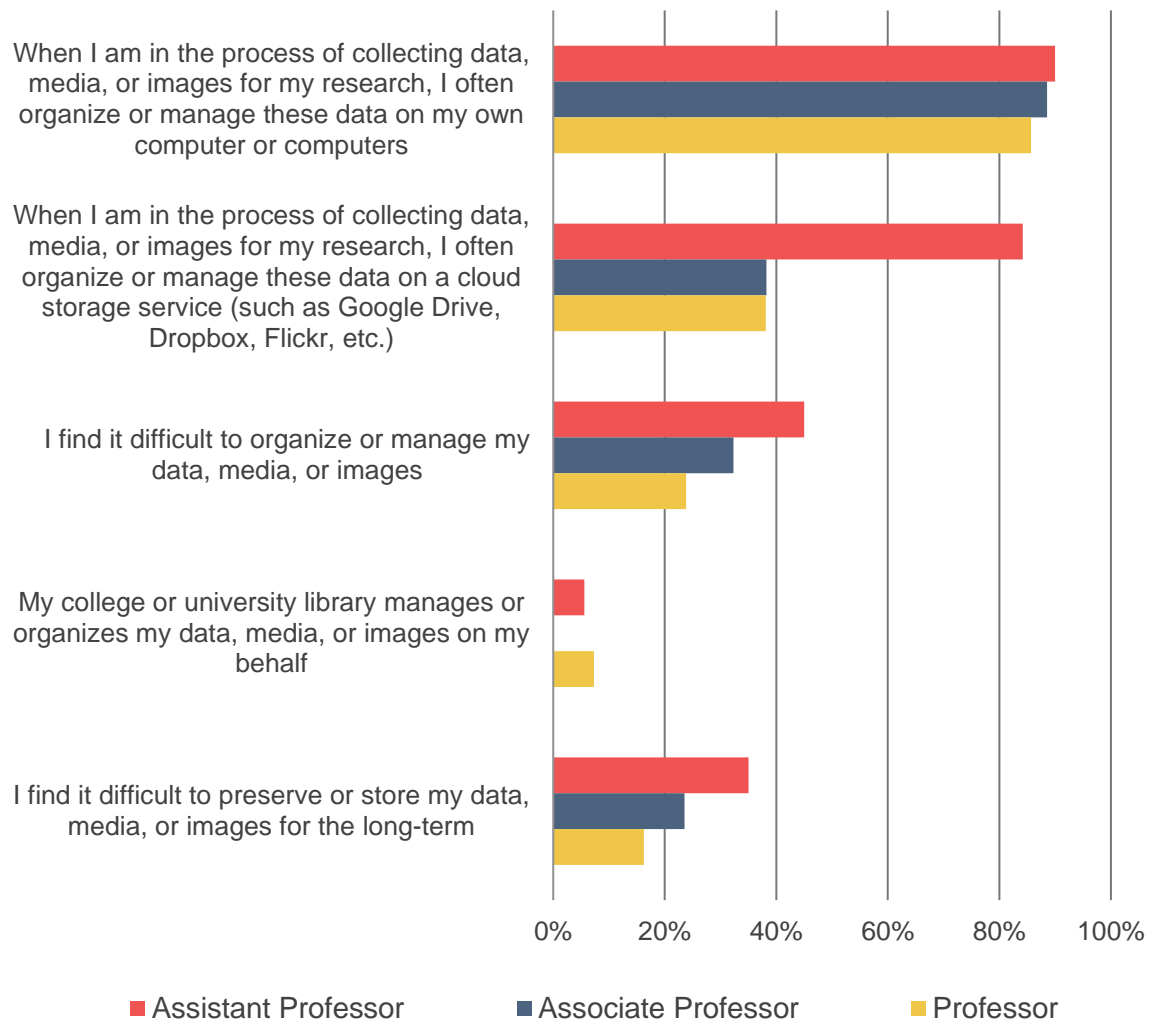
Wake Forest University respondents in the sciences often differ from their peers in the value that they assign to various sources of support for managing or preserving these research data, media, and images; these respondents especially more highly value freely available software, their university IT department, and a disciplinary or departmental repository at the university (see Figure 13). We have observed less variation by rank, although Assistant Professors assigned higher value to freely available software compared to their peers (68% vs. 48%, respectively) and to an AV or media support department at the university (44% vs. 23-26%, respectively).

Figure 13: Please use the scale below to rate from 10 to 1 how valuable you would find each of the following possible sources of support for managing or preserving research data, media, or images or how valuable you do find each of the following sources of support for managing or preserving research data, media, or images. *Percent of Wake Forest University respondents by discipline who rated each source of support as highly valuable.*
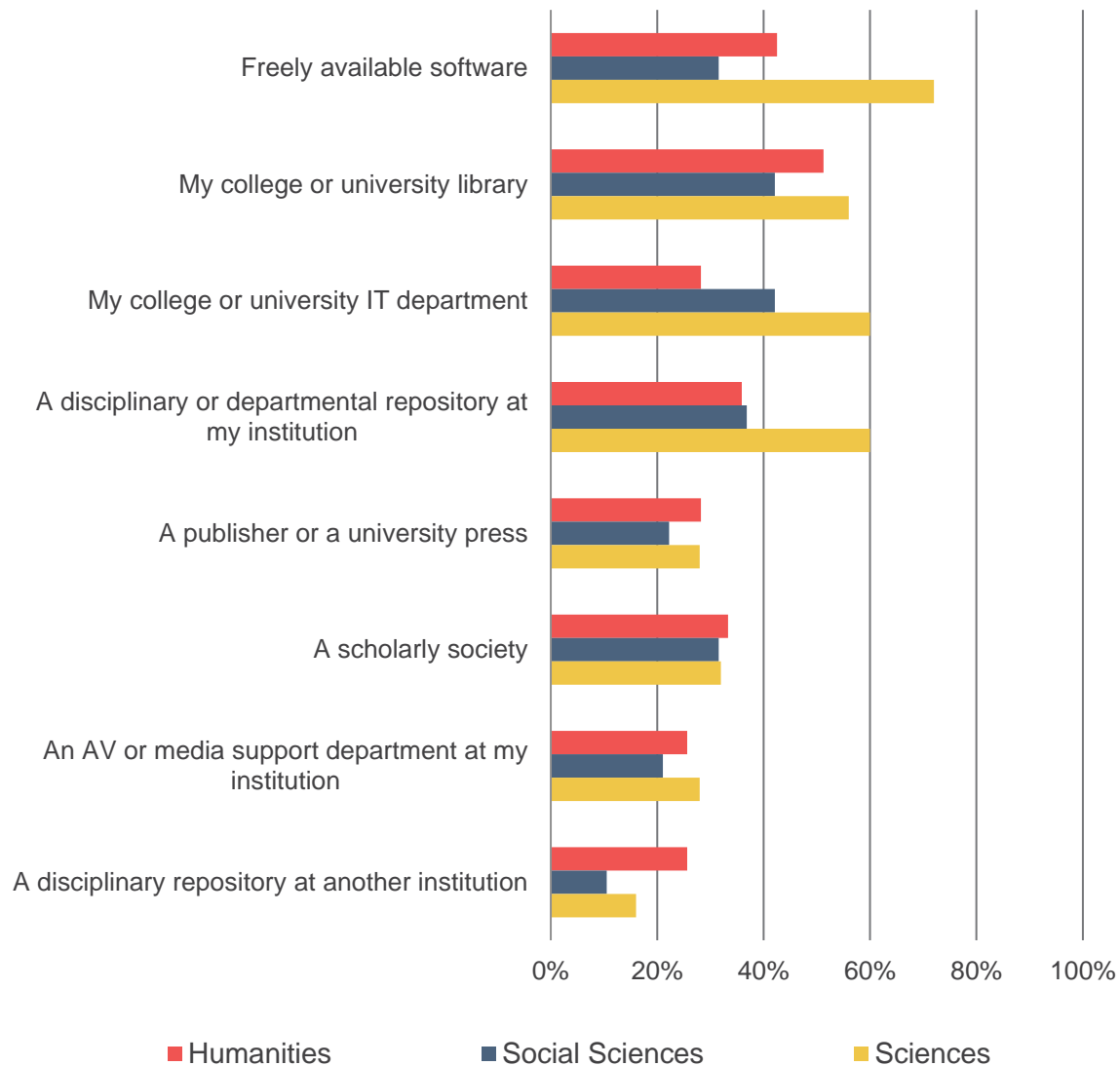

Approximately half of respondents at Wake Forest University, Duke University, and other R2 institutions strongly agreed that they "would be happy to see the traditional subscription-based publication model replaced entirely by an open access publication system in which all scholarly research outputs would be freely available to the public." By discipline, Wake Forest University humanists were less likely to agree compared to social

scientists and scientists (45% vs. 58% and 56%, respectively), and Assistant Professors were more likely to agree as compared to Associate Professors and Professors (68% vs. 33% and 49%, respectively).

Wake Forest University faculty members who indicated that their research publications or products were available online for free were then asked about where it was made available. Humanists and scientists more frequently made their research available online for free as compared to social scientists, and were least likely to host their research in the university's repository as compared to in an open access disciplinary repository and elsewhere online (see Figure 14). Assistant Professors were less likely than their peers in other ranks to make their research available freely online (see Figure 15).

Figure 14: Is your scholarly research hosted online at your institution's repository (WakeSpace), an open access disciplinary repository (such as PubMed, SSRN, etc.), or is your scholarly research freely available elsewhere (such as your personal webpage)? *Count of Wake Forest University respondents by discipline who indicated that their research was available in each of the hosting sources.[7]*

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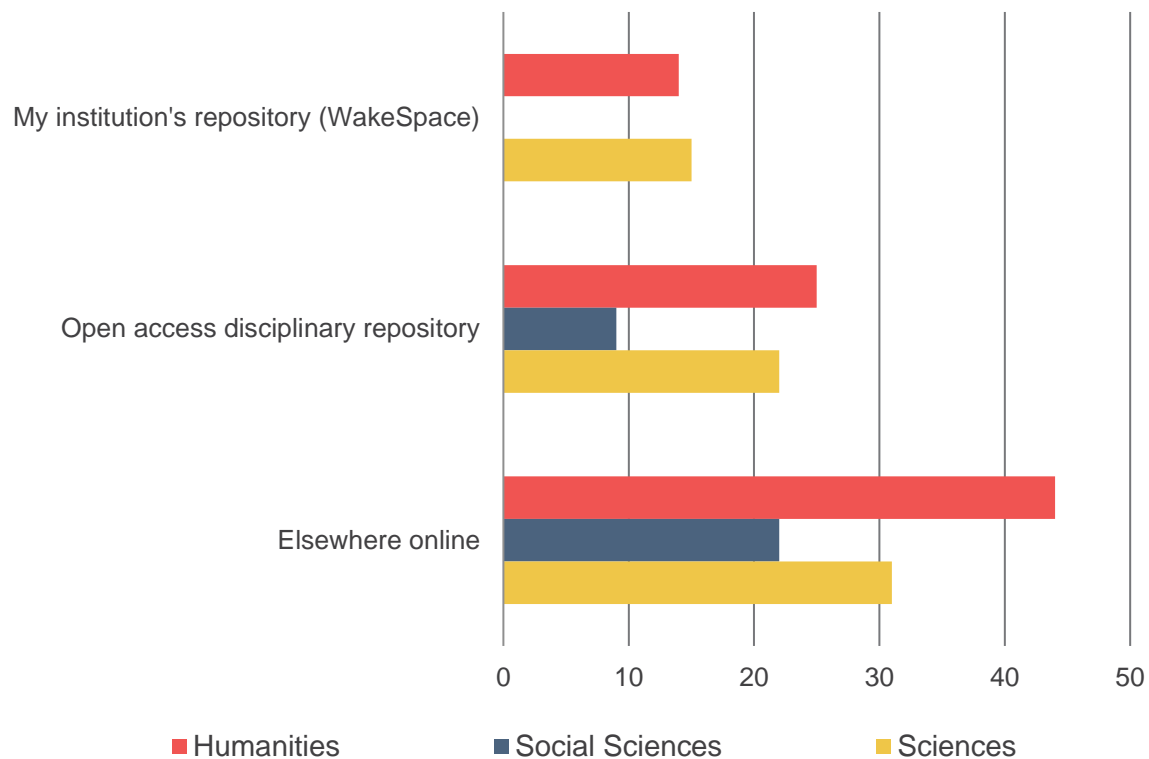
[7] If respondents previously indicated that their research was freely available online, they were asked in this question where their research was hosted. They were asked about a variety of research types (including peer-reviewed journal articles or

Figure 15: Is your scholarly research hosted online at your institution's repository (WakeSpace), an open access disciplinary repository (such as PubMed, SSRN, etc.), or is your scholarly research freely available elsewhere (such as your personal webpage)? *Count of Wake Forest University respondents by rank who indicated that their research was available in each of the hosting sources.*
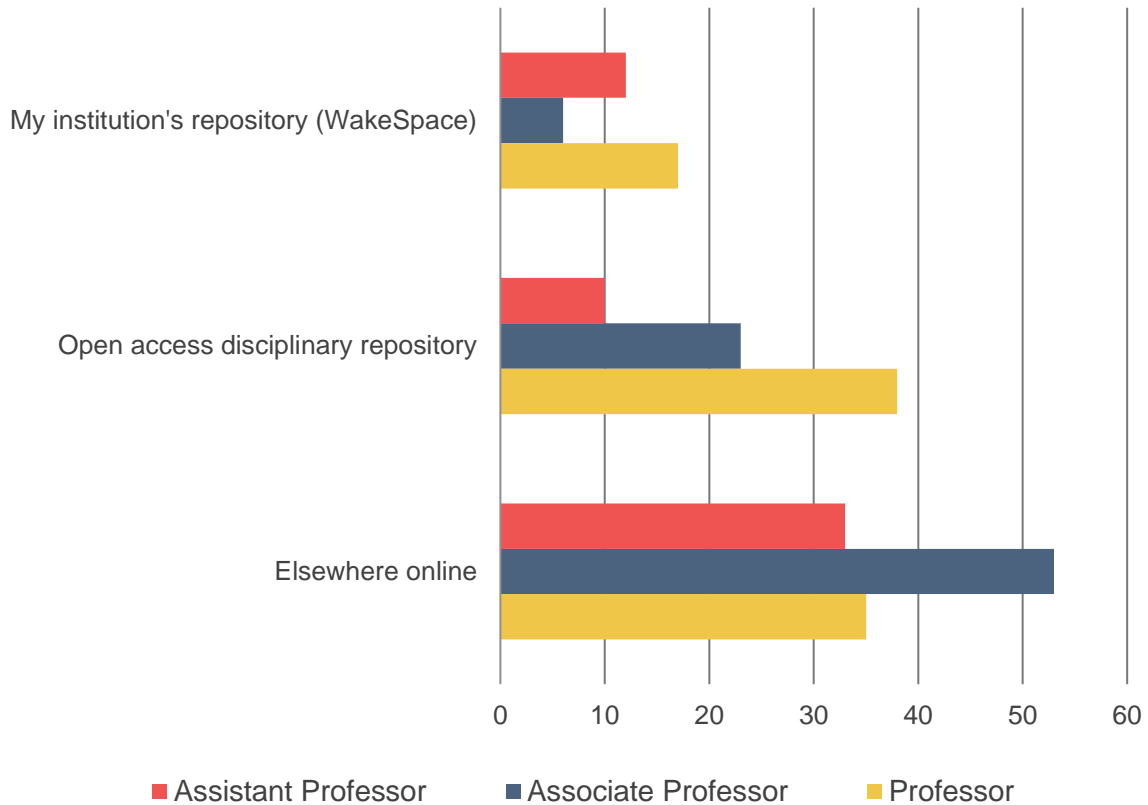
conference proceedings, pre-prints of peer-reviewed journal articles, working papers or draft manuscripts, data, images, media, or other primary source materials, books or scholarly monographs, software or code, blog or microblog posts, and responses or comments to online versions of articles, blog posts, discussion forums, or social media conversations) and Figures 14 and 15 contain aggregated responses across these research types.

Role of the library

Wake Forest University faculty members were also asked about their dependence on the library and perceptions of the importance of the various functions of the library.

Approximately six in ten Wake Forest University respondents indicated that they were highly dependent on the library, which also aligned with findings at Duke University; approximately 44% of respondents at other R2 institutions reported being highly dependent.

Wake Forest University scientists reported being relatively less dependent on the library as compared to their peers in the social sciences and humanities (41% vs. 63% and 68%, respectively), while Assistant Professors indicated an especially high level of dependence compared to Associate Professors and Professors (71% vs. 59% and 60%, respectively).

We also asked respondents to rate the importance of a number of the functions of their university library. The levels of importance that Wake Forest University faculty members assigned these functions generally followed the same pattern as did those at Duke University and other R2 institutions, although Wake Forest University faculty members assigned a relatively higher level of importance to a number of these roles (see Figure 16).

By discipline, we see that Wake Forest University faculty members in the humanities generally value the various functions of the library more than their peers, although there was agreement across disciplines in the high level of importance assigned to the role of the library in paying for needed resources (see Figure 17). Assistant Professors also often tend to value these functions more highly than their peers (see Figure 18).

Figure 16: How important is it to you that your college or university library provides each of the functions below or serves in the capacity listed below? *Percent of respondents by institution who indicated that each function was highly important.*
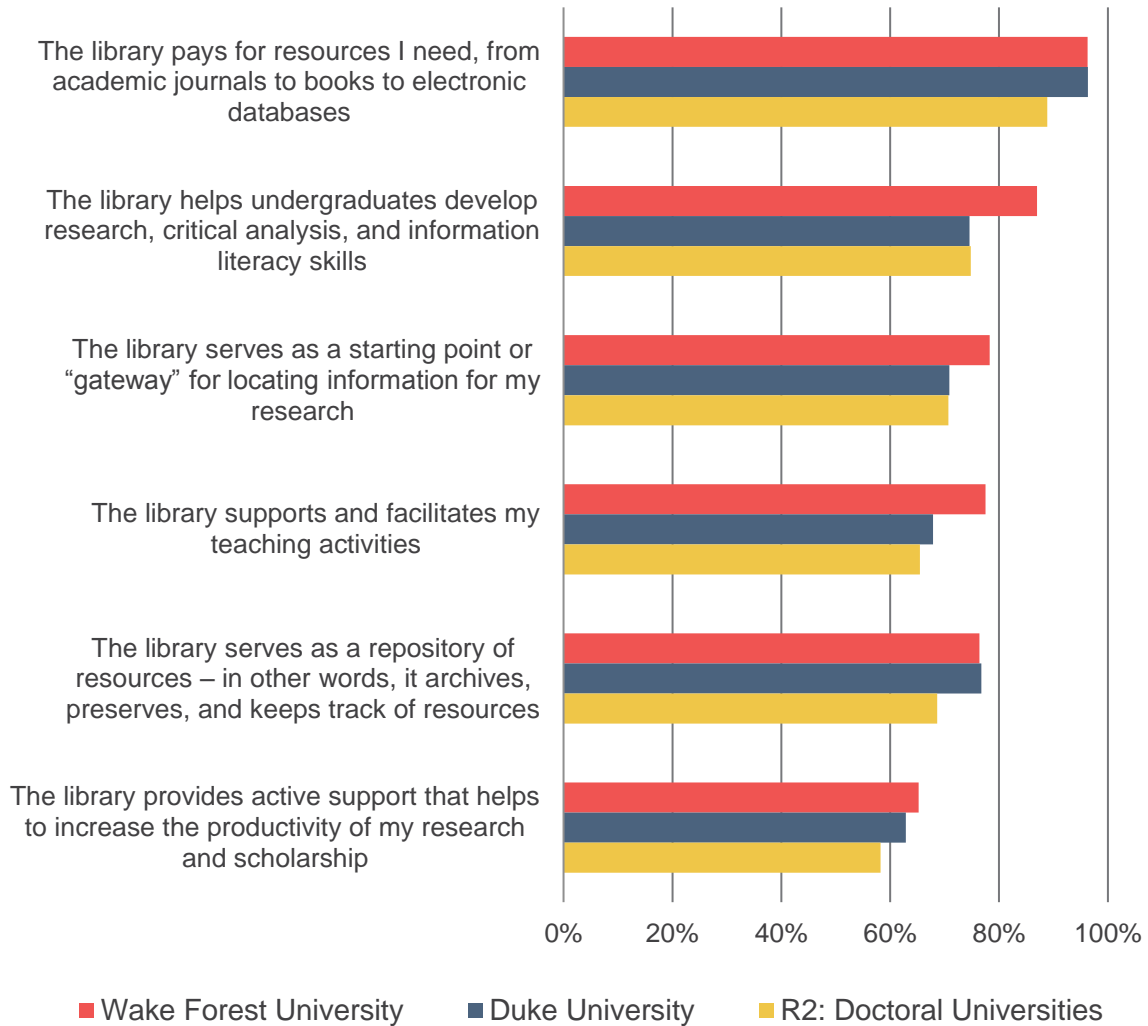
Figure 17: How important is it to you that your college or university library provides each of the functions below or serves in the capacity listed below? *Percent of Wake Forest University respondents by discipline who indicated that each function was highly important.*
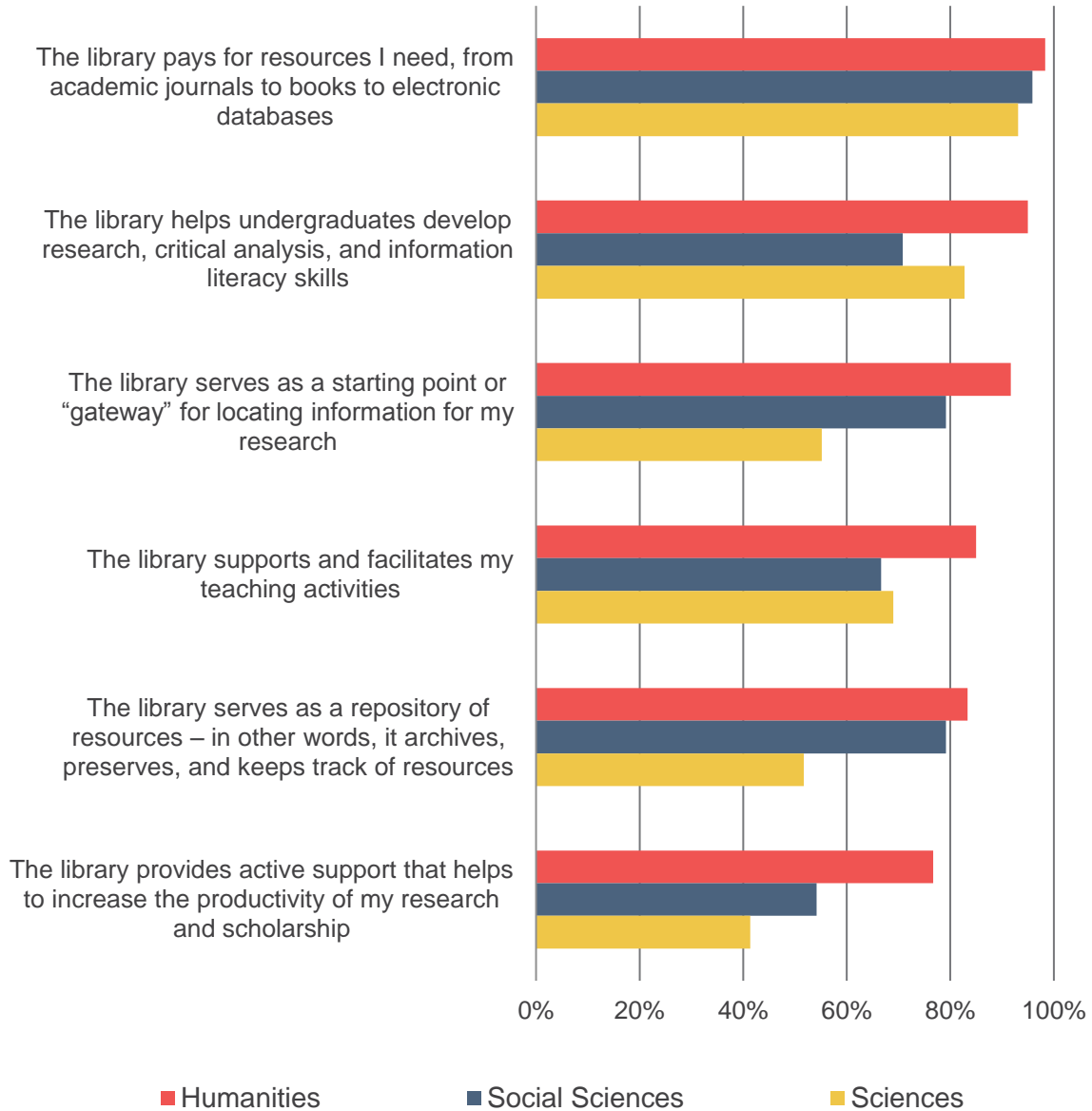
Figure 18: How important is it to you that your college or university library provides each of the functions below or serves in the capacity listed below? *Percent of Wake Forest University respondents by rank who indicated that each function was highly important.*
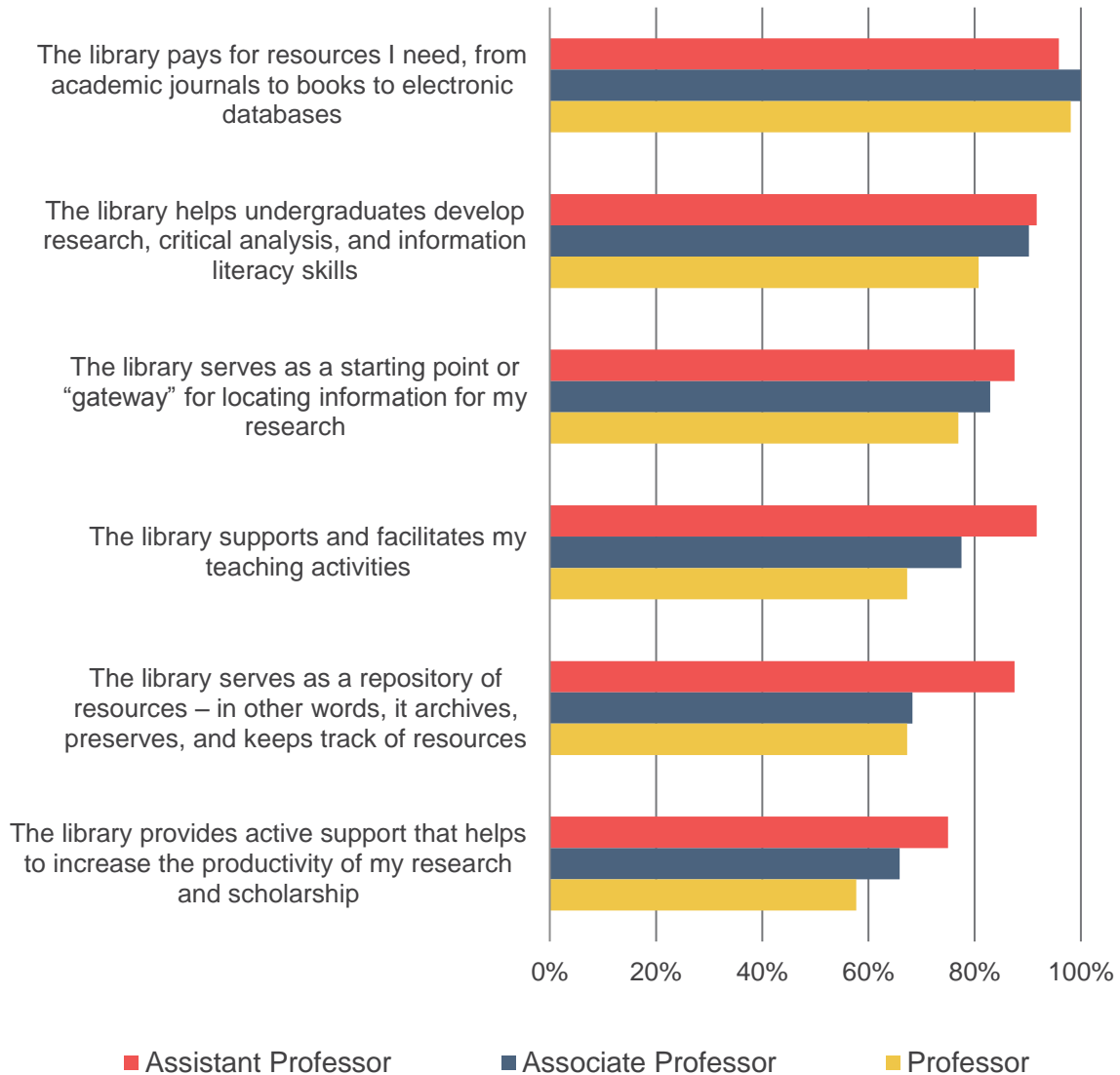
Instruction

Wake Forest University faculty members were queried on their role as instructors, including questions on perceptions of student research skills, responsibility for developing these research skills, digitally-focused techniques utilized in undergraduate courses, opportunities for integrating new pedagogies and instructional approaches, and reliance on various sources of support for integrating these new pedagogies and approaches. This set of questions was only displayed to respondents who teach; approximately 94% of Wake Forest University respondents indicated that teaching either undergraduate or postgraduate courses was among their professional responsibilities.

Approximately 45% of respondents from Wake Forest University strongly agreed that their undergraduate students have poor research skills compared to approximately 41% from Duke University and 59% from other R2 institutions (see Figure 19). Approximately seven in ten respondents from all three groups strongly agreed that improving these research skills is an important goal for the courses they teach. Larger shares of faculty members from Wake Forest University, as compared to Duke University and other R2 institutions, strongly agreed that librarians contribute to their students' learning by helping them to find, access, and use primary and secondary sources in their coursework and by helping them to develop their research skills.

Earlier in the survey, we saw that 87% of respondents see the function of the library in helping undergraduates develop research, critical analysis, and information literacy skills as highly important; here we see that approximately two-thirds of Wake Forest University respondents strongly agreed that librarians at their university contribute significantly to their students' learning by helping them to develop their research skills. The former survey question focused on the role of the library more generally, including library staff, collections, technologies, space, etc., whereas this question focuses specifically on the contributions of *librarians* to students' development of research skills. Across both of these questions, we see that Wake Forest University humanists especially recognize and value this contribution of the library, and in this question we also see that humanists most strongly agree that their students have poor research skills (see Figure 20).

Figure 19: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view. *Percent of respondents by institution who strongly agreed with each statement.*

■ Wake Forest University ■ Duke University ■ R2: Doctoral Universities
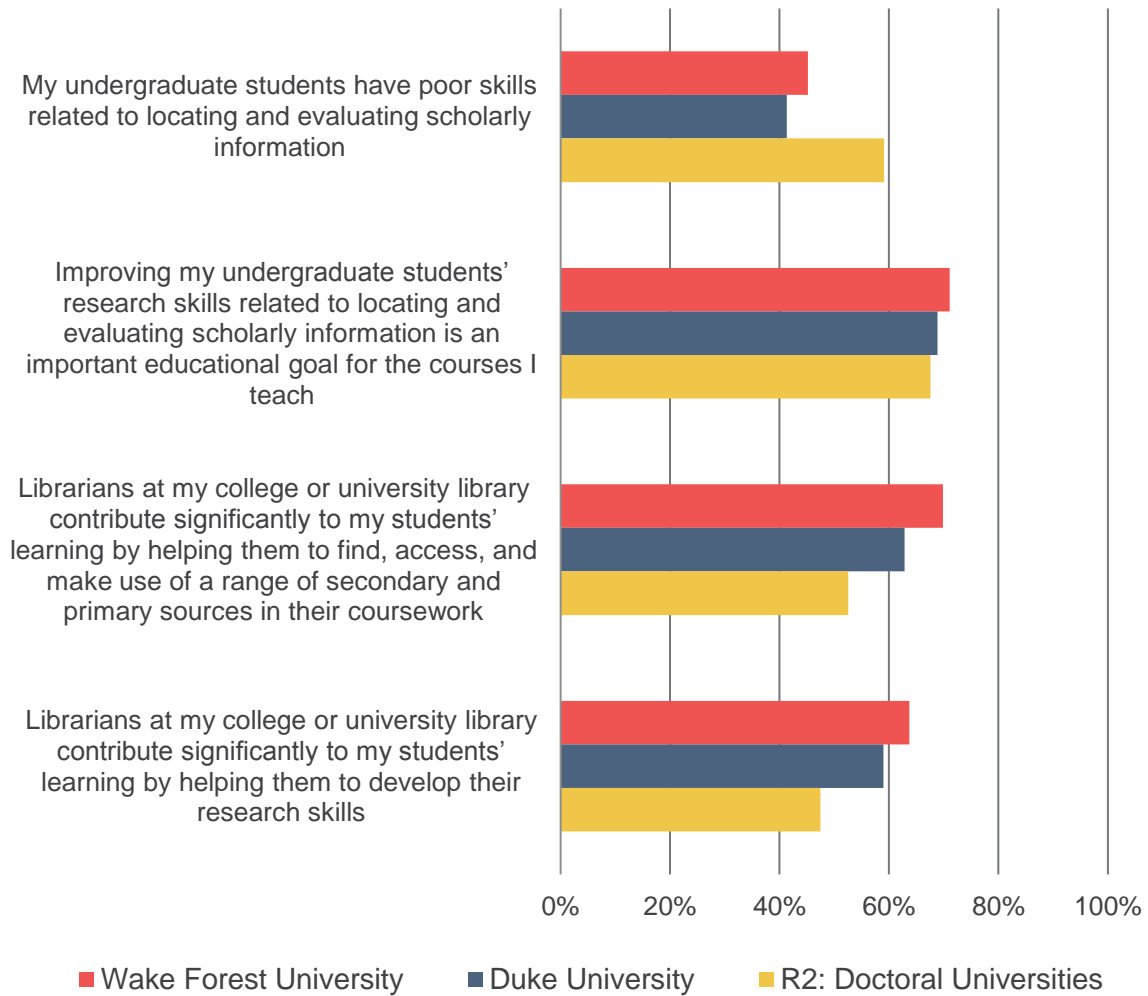
Figure 20: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view. *Percent of Wake Forest University respondents by discipline who strongly agreed with each statement.*
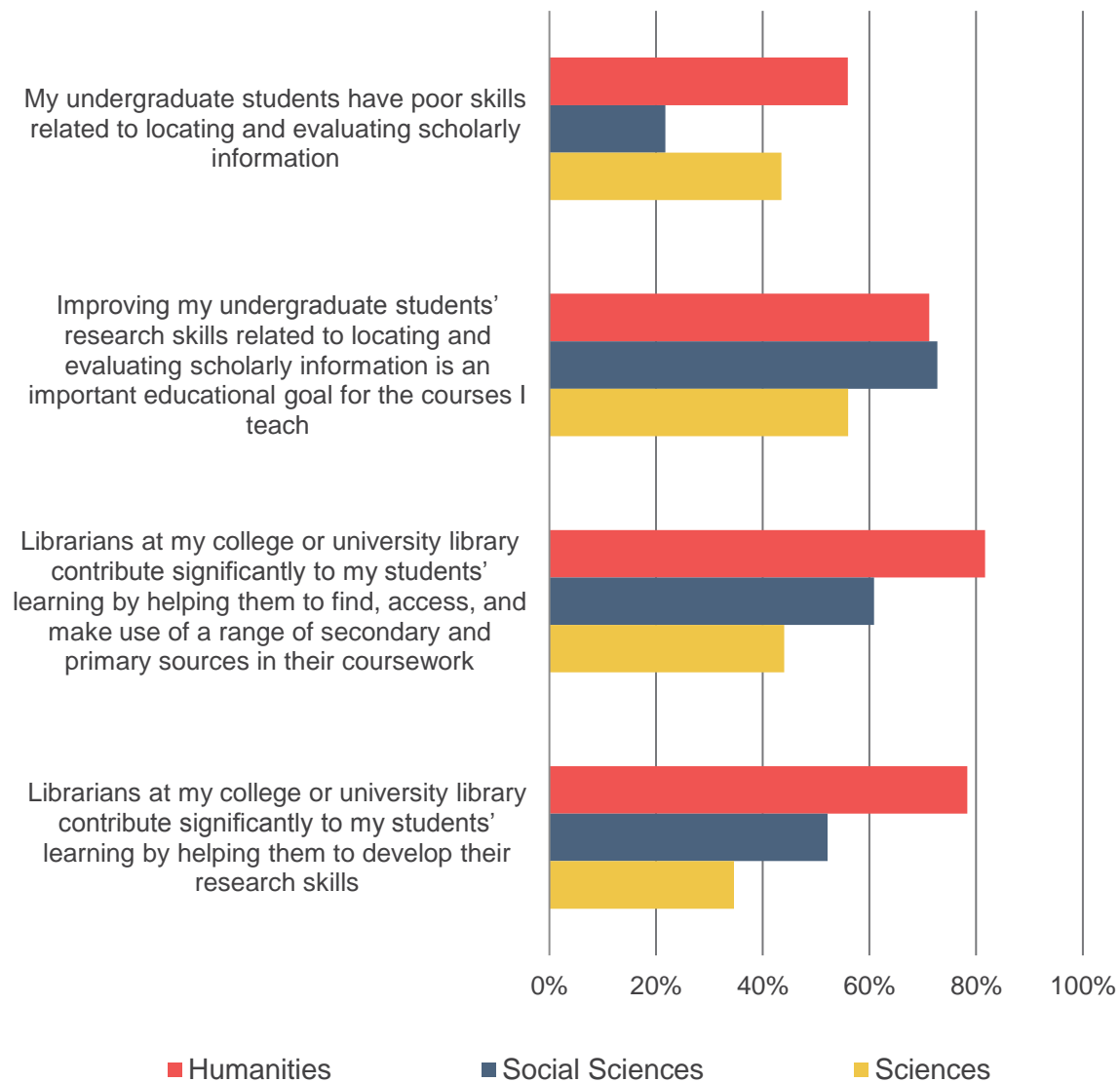

Respondents were then asked about how frequently they utilize various digitally-focused techniques when teaching lower and upper division students, and we see that Wake Forest University faculty members reported most frequently utilizing videos in the classroom, instead or as one component of a lecture or discussion (see Figure 21).

Respondents were notably more likely to use a number of these techniques in lower division courses, including using publisher-provided instructional modules, using

automated online tools to evaluate problem sets and offer feedback, and assigning students to share reading responses on a course discussion board or blog. Within these lower division courses, Wake Forest University faculty members in science fields were more likely than their peers to use publisher-provided instructional modules and use automated online tools, but were substantially less likely to show videos in the classroom. Assistant Professors reported more frequently utilizing most of these techniques, as compared to peers in other ranks, and were especially likely to assign students to create audiovisual or digital media projects and supplement in-person class time with additional audio or video modules.

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Figure 21: Whether you do it yourself or you are supported by a college or university service in doing so, how often do you utilize each of the following techniques in your lower/upper division undergraduate courses - often, occasionally, rarely, or never? *Percent of Wake Forest University respondents who reported utilizing each technique "often" or "occasionally."*
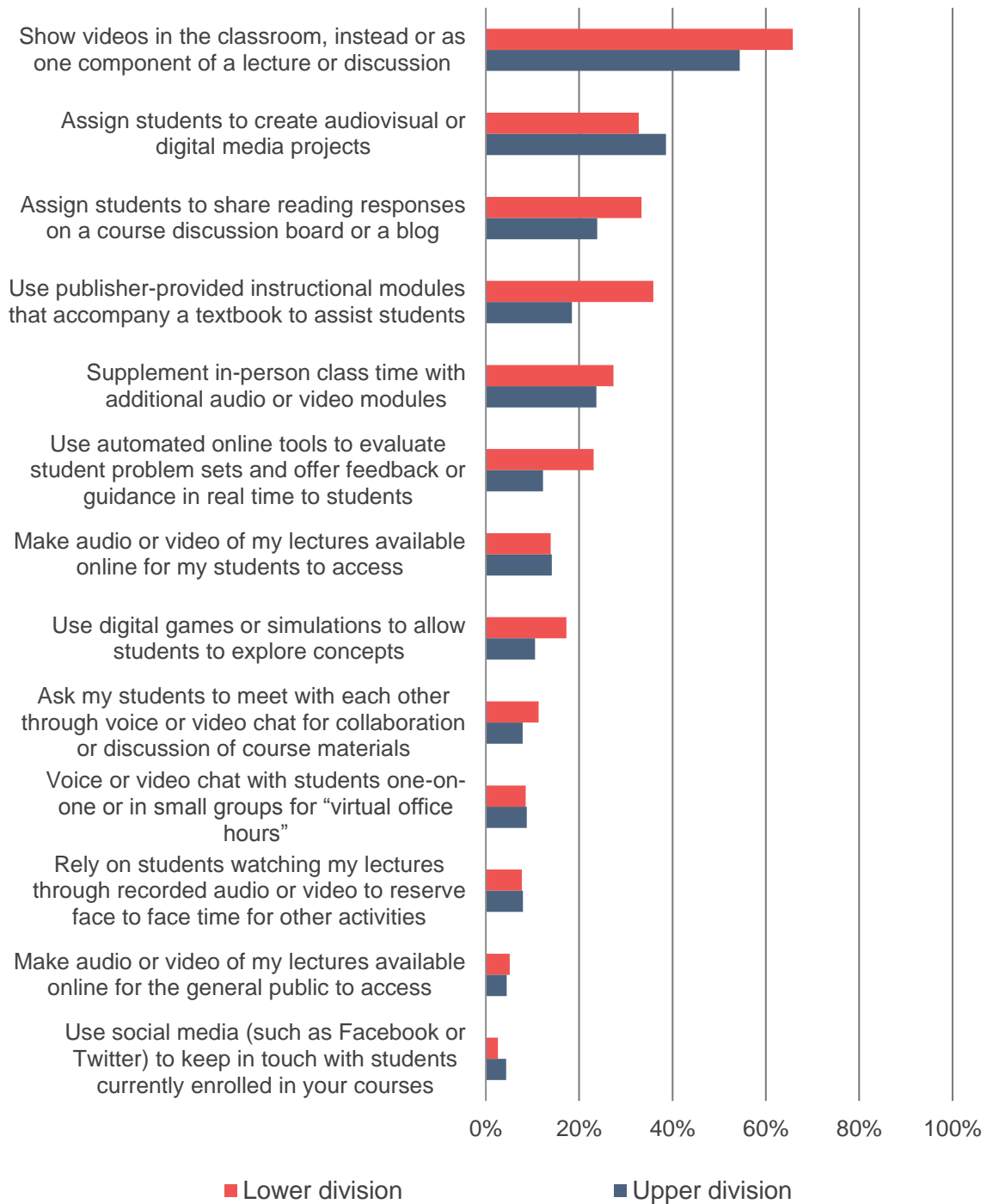
Approximately six in ten Wake Forest University faculty member respondents strongly agreed that they would like to adopt new pedagogies and instructional approaches that take advantage of the opportunities offered by digital technology, and nearly the same share strongly agreed that Wake Forest University offers excellent training and support for the adoption of these pedagogies and approaches (see Figure 22). Approximately four in ten respondents strongly agreed that Wake Forest University recognizes or rewards faculty members for integrating these pedagogies and approaches.

Across disciplines we see comparable levels of interest in adopting these pedagogies and approaches (see Figure 23). However, faculty members in the sciences were notably less likely to agree that the university provides excellent training and support and that the university recognizes and rewards faculty members. By rank, we see that Assistant Professors and Associate Professors, as compared with Professors, are generally more interested in adopting these pedagogies and approaches, believe more strongly that the university offers excellent training and support, and agree that the university recognizes and rewards faculty members (see Figure 24).

Figure 22: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view. *Percent of respondents by institution who strongly agreed with each statement.*

■ Wake Forest University   ■ Duke University   ■ R2: Doctoral Universities
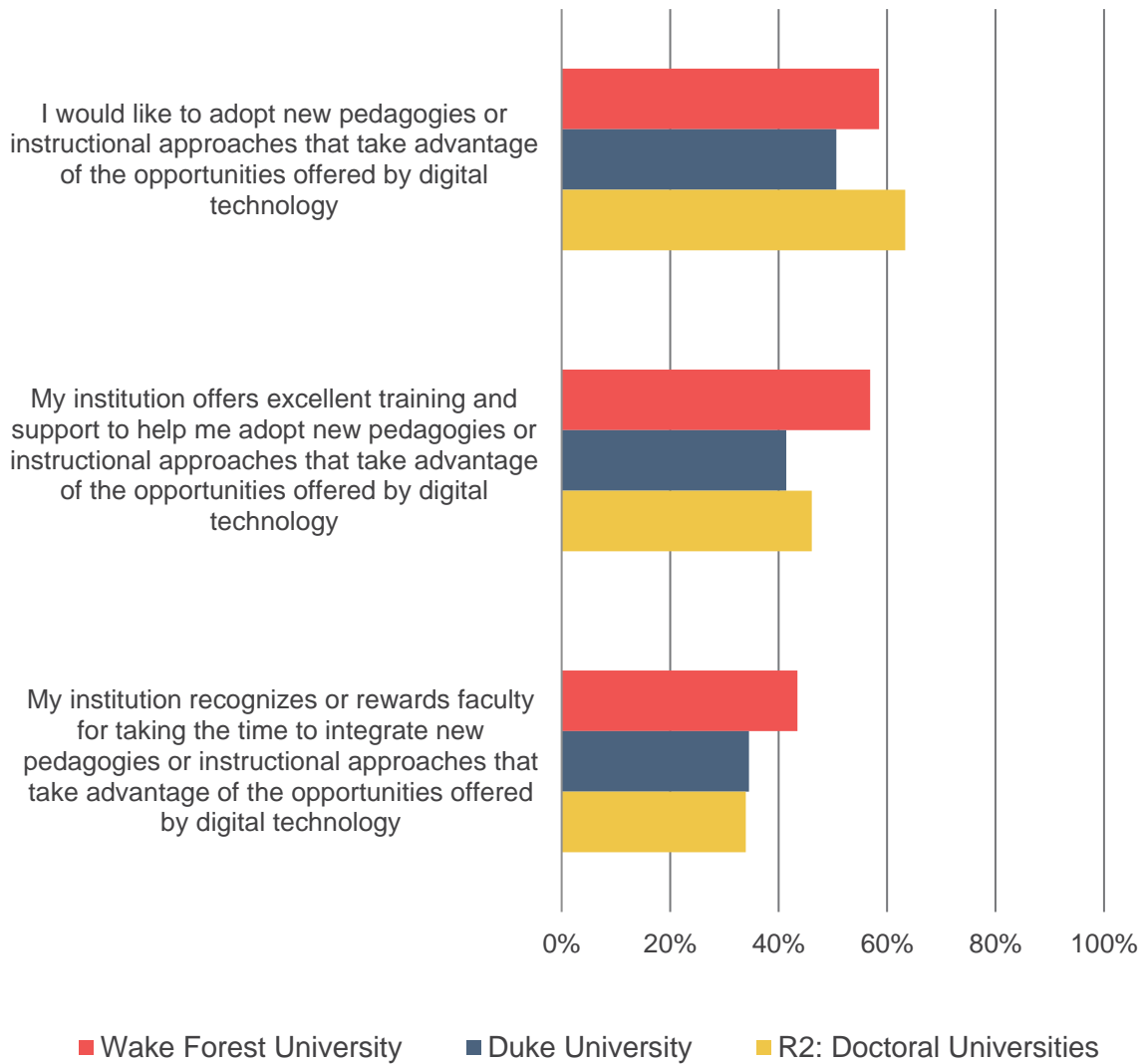
Figure 23: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view. *Percent of Wake Forest University respondents by discipline who strongly agreed with each statement.*

Legend: ■ Humanities ■ Social Sciences ■ Sciences
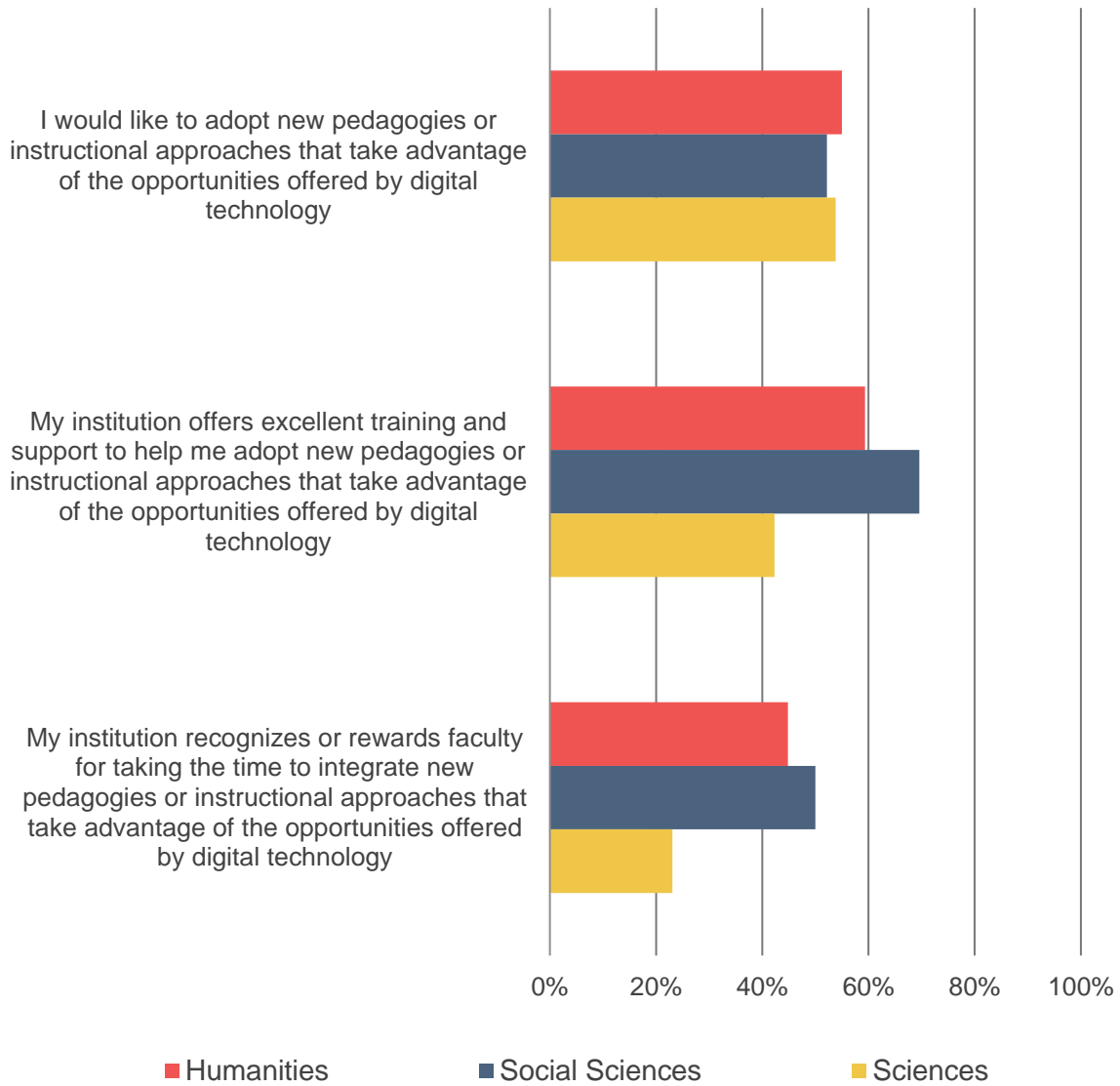
Figure 24: Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view. *Percent of Wake Forest University respondents by rank who strongly agreed with each statement.*
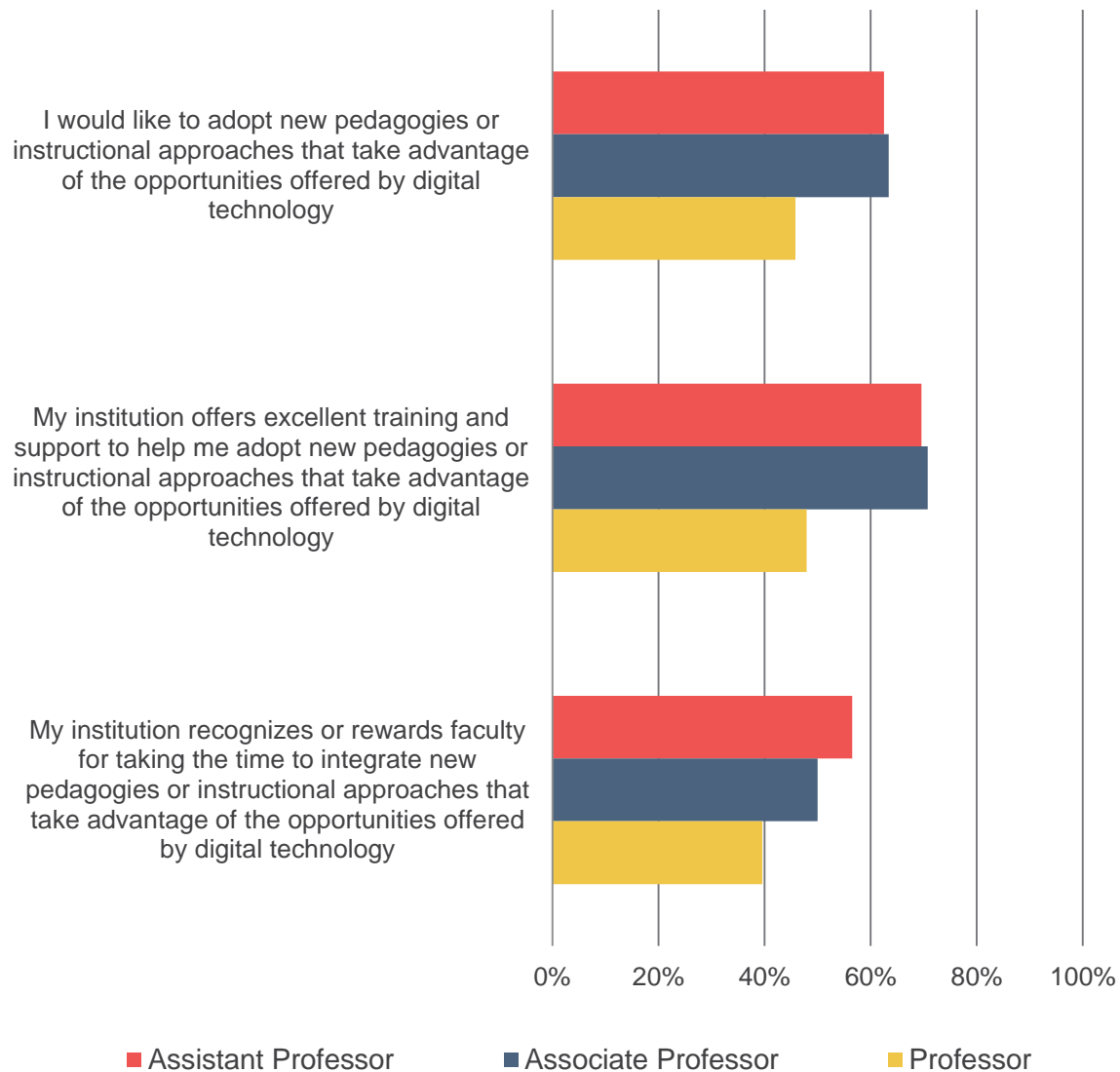
In integrating these new pedagogies and approaches, faculty members at Wake Forest University reported being most reliant on their own ideas, on scholars in their personal network, and on scholars at academic conferences. Respondents in the humanities reported a notably higher level of reliance on their university library as compared to their peers in other disciplines (see Figure 25). While there was little variation for dependence on the university library by rank, Assistant Professors did report being more reliant than their peers on a number of sources, including scholars in their personal network,

conference programs and newsletters, and blogs and other online resources (see Figure 26).

Figure 25: Please use the scale below to rate from 10 to 1 how much you rely on each of the following possible sources of instructional support when introducing new pedagogies or approaches that take advantage of the opportunities offered by digital technology, where 10 equals "A great deal" and 1 equals "Not at all." *Percent of Wake Forest University respondents by discipline who strongly rely on each of the following sources of support.*
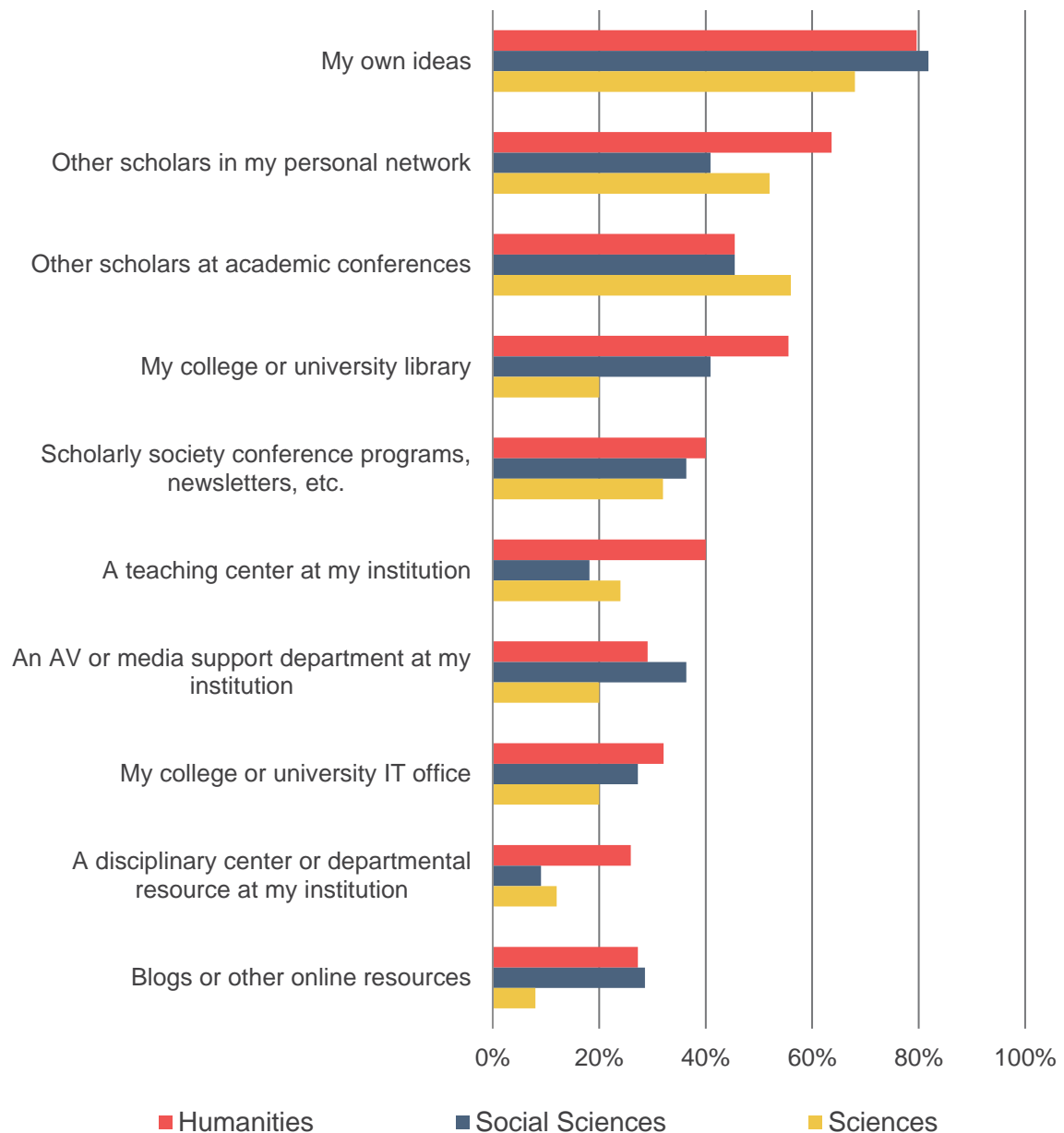
Figure 26: Please use the scale below to rate from 10 to 1 how much you rely on each of the following possible sources of instructional support when introducing new pedagogies or approaches that take advantage of the opportunities offered by digital technology, where 10 equals "A great deal" and 1 equals "Not at all." *Percent of Wake Forest University respondents by discipline who strongly rely on each of the following sources of support.*
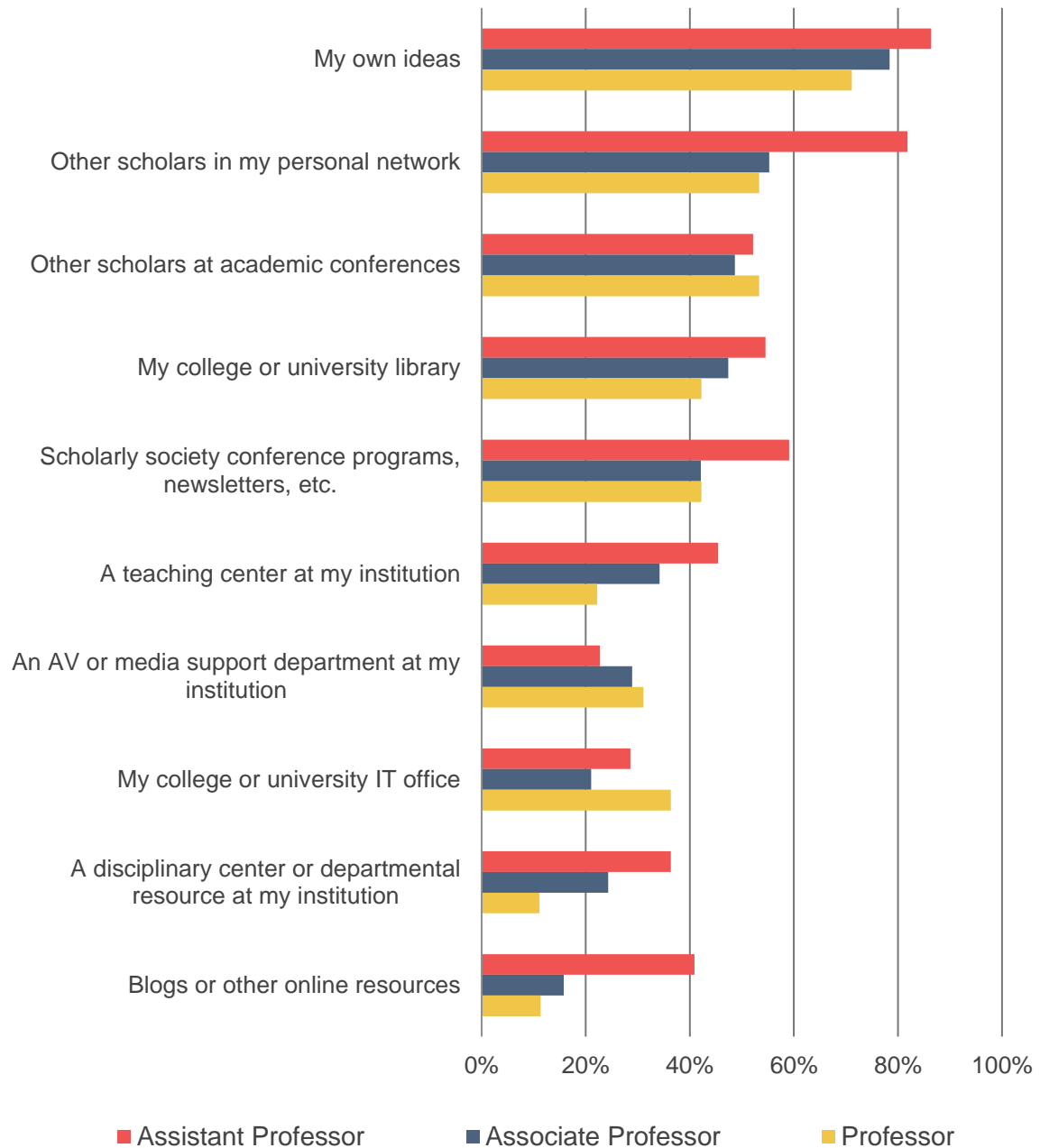
Library space planning

The final series of questions in the Wake Forest University Faculty Survey focused on how library spaces for research, study, and collaboration are perceived and used.

Ninety-nine percent of Wake Forest University respondents report having been in a library building on campus at some point, and 97% of respondents reported visiting the Z. Smith Reynolds Library most often. Approximately two-thirds of respondents reported having visited a library building in the last week, and a quarter reported having visited in the last month.

The aspects of the library building that Wake Forest faculty members reported being most satisfied with include the location of the building, the availability of librarians or library staff, the connection or access to the internet, and the general level of safety (see Figure 27). Respondents were less satisfied with the availability of printers, work spaces, space to spread out reading materials or personal belongings, and seating.

Figure 27: Overall, how satisfied or dissatisfied are you with each of the following aspects of the campus library building that you visit most often? *Percent of Wake Forest University respondents who selected "satisfied" or "extremely satisfied."*

Finally, we asked respondents about their motivations in and level of familiarity with library spaces. Respondents in the humanities, as well as those in lower ranks, tended to report feeling more motivated to do research or teaching-related activities when they are in a campus library building (see Figures 28 and 29). Social scientists, often followed by scientists, generally reported lower levels of knowing where to ask for help when they have questions about using technological tools, finding information or resources for research, and finding information for teaching. By rank, we observed fairly even levels of familiarity with knowing where to ask for help with questions about research and teaching, although respondents in lower ranks tended to report lower levels of familiarity with knowing where to ask for help with questions related to technological tools.

Figure 28: Please read the following statements and tell us whether you strongly agree with the statement, agree, somewhat agree, neither agree nor disagree, somewhat disagree, disagree, or strongly disagree. *Percent of Wake Forest University respondents by discipline who selected "satisfied" or "extremely satisfied."*
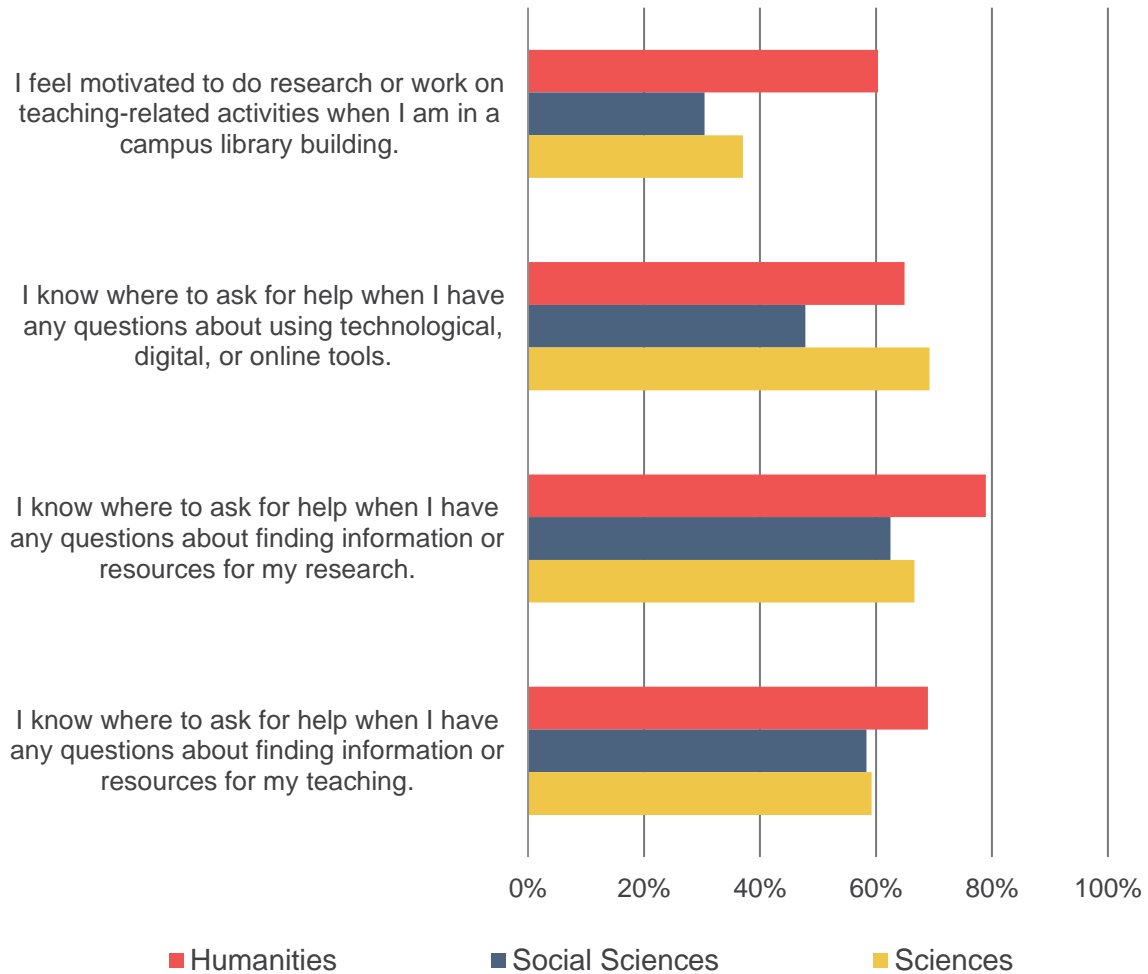
Figure 29: Please read the following statements and tell us whether you strongly agree with the statement, agree, somewhat agree, neither agree nor disagree, somewhat disagree, disagree, or strongly disagree. *Percent of Wake Forest University respondents by rank who selected "satisfied" or "extremely satisfied."*

■ Assistant Professor ■ Associate Professor ■ Professor