The Impact of Library Support on Education Faculty Research Productivity: An Exploratory Study

CHRISTOPHER V. HOLLISTER AND ROBERT SCHROEDER

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Christopher V. Hollister and Robert Schroeder
The Impact of Library Support on Education Faculty Research Productivity: An Exploratory Study

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The authors surveyed college and university faculty members in the field of professional education to gauge their perceptions pertaining to the impact of library services on their research. The purpose was to illuminate faculty perceptions in a postsecondary education environment that emphasizes research productivity and requires libraries to provide ever more compelling evidence of their institutional value. Survey results showed that faculty members continue to rely on traditional discovery and collections-based library services, but that additional support for grant activity, data management, intellectual property management, and bibliometric analysis is needed. Implications for transforming library research support are discussed, and areas for further study are proposed.

KEYWORDS faculty research, library support, research partnerships

INTRODUCTION

The need for academic libraries to demonstrate their institutional value is given in the current postsecondary education environment; some in the library field would qualify this need as an existential imperative. The question, then, is how to effectively prove that value. The influential report The Value of Academic Libraries provided a foundation for demonstrating value in terms of published evidence, suggestions for next steps, and forming a relative research agenda (Oakleaf 2010). The report also included...
contextual discussion of trends in the academy that cannot be overemphasized: namely, the financial pressures that result in rigid, data-driven budgetary decision making. As noted by Lynch, Murray-Rust, and Parker (2007), university administrators are unlikely to prioritize the static or diminishing budgets of libraries without clear evidence of their connections to enrollment and measurable student learning outcomes. Also discussed in Oakleaf’s report is the exigent concern among administrators pertaining to the emergent culture of renewed institutional goals that emphasize research productivity. For the purpose of demonstrating value, this is a particular concern to which libraries would do well to align themselves.

From the institutional perspective, it can be argued that research productivity is principally an economic issue. Greater productivity characteristically equates to successful external funding; it also weighs significantly in terms of educational rankings, which, in turn, have an impact on student enrollment and faculty recruitment. Research productivity can also be viewed in part to be an economic issue for individual faculty because it correlates directly with professional advancement and job security. Furthermore, many faculty members have intrinsic and aesthetic motivations for conducting research. Together, all these systemic and personal motivators are the basis for what the authors of this article propose: Establishing the role of the library as an essential partner in the research enterprise is a compelling demonstration of institutional value.

On the surface, what the authors propose is not new. Others have effectively argued for a dramatic realignment of library services and, more specifically, the targeted recasting of subject and liaison librarians’ roles (Kirchner 2009; Goetsch 2008; Pinfield 2001). Some investigators have developed structures, such as publication and grant analyses, for linking collection-based library activity to faculty output (Monroe-Gulick, Currie, and Weller 2014; Poll and Payne 2006). Still, these arguments and structures are mainly confined to the silos of library discourse. The purpose of this exploratory study was to illuminate the perceptions of faculty concerning the impact of library support on their research productivity. The working hypothesis was a simple one: Faculty perceptions are powerful, independent indicators of how relevant library services are to an institution’s research enterprise; these indicators can and should be used to improve professional practice, build productive partnerships, and exhibit institutional value. Accordingly, the authors investigated what constitutes research productivity among faculty in different types of institutions, the varying levels of importance attributed to categories of research productivity, and the perceived impact of library support.

LITERATURE REVIEW

Evolution of Library Services

Traditional library support for faculty research has been based primarily on collection development and discovery services (Aukland 2012; Oakleaf 2010;
Reviewing past discussions in the literature, Grover and Hale (1988) were among the early scholars to emphasize the need for librarians to move beyond traditional levels of service, and to assume more proactive roles in faculty research. The authors contended that faculty researchers are often reliant upon networks of colleagues whom they perceive to have valuable disciplinary knowledge, and that librarians should endeavor to be part of those networks by understanding and anticipating the researchers’ patterns. Forecasting the changes to come, the authors reasoned that “the proliferation of information associated with the information age may require a more assertive level of service” (9).

Since the publication of Grover and Hale’s paper, academic libraries have undertaken major shifts to facilitate the transition to a digital research environment. This has had the effect of making the library and its services “virtually invisible to many faculty” (Corrall, Kennan, and Afzal 2013, 637), who now perceive the library’s role as less relevant to researchers and “more geared to supporting teaching and learning” (Bent, Gannon-Leary, and Webb 2007, 82). As evidence of this, Schonfeld and Housewright (2010) surveyed faculty at several postsecondary institutions concerning their attitudes toward the transition to a digital research environment. Their findings suggest that the availability of today’s online collections and tools is making academic libraries increasingly “disintermediated from the discovery process, risking irrelevance in one of its core functional areas” (2). Law’s (2010) assertions concerning the perceived role of librarians are more blunt: “Librarians are much less clearly partners in the academic enterprise and much more a provider of services in an increasingly hierarchical relationship characterized by the division of university staff into ‘academic’ and the very pejorative ‘non-academic’” (192).

Notwithstanding these characterizations, Case (2008) maintained that the digital research environment solidifies the academic library an essential partner in the creation of new knowledge by virtue of its expertise in access, preservation, online systems development, and digitization. Case argued that this expertise “provides librarians with the opportunity to engage directly with faculty in the research, teaching, and professional activities in a way qualitatively different from and rarely possible before” (142). Building on this, Monroe-Gulick, O’Brien, and White (2013) stressed that “The idea of being a ‘partner’ in research rather than a ‘supporter’ of research is an area of librarianship that needs further exploration and emphasis” (384). Still, there is a lack of published research on library support for faculty researchers; the current literature is mainly focused on support services at individual libraries or on the future aligning of libraries with researchers (Corrall, Kennan, and Afzal 2013; Wiklund and Voog 2013).

It is also noteworthy that transformations in the system of scholarly communication favor the library as an active agent in ways that are pertinent to the present discussion. Moving beyond traditional collections-based support, the library partnership in faculty research includes leadership in the area of
open access, expertise in alternative citation metrics, and experimentation in new publishing enterprises. As argued by Budd (2012), the library is an integral part of the new scholarly communication environment in which faculty researchers must operate.

Economic Pressures

During the last two decades, academic libraries have embraced models of demonstrating their value that are mainly focused on the student learning; considerable energies have been devoted to the areas of information literacy (Saunders 2011) and embedded librarianship (Carlson and Kneale 2011). During the same time, many colleges and universities renewed their institutional goals, emphasizing the increased importance of research productivity (Budd 2006). This shift has been driven by changes in government policy in relation to the funding of research institutions and to an emergent culture of assessment and accountability in higher education (Geuna and Matrin 2003; Drummond and Wartho 2009). Accordingly, the professional discourse has recently begun to address issues of library support for faculty research productivity in the context of many industrialized countries (Raju and Schoombee 2013). The perceived pressures of globalization have caused the governments of many countries to use their university research systems to drive strategic economic growth. As a result, research productivity analytics are playing a large role in the funding of national universities (Corrall, Kennan, and Afzal 2013; O’Brien 2010). In the United Kingdom, for instance, the Research Excellence Framework (formerly the Research Assessment Exercise) is used to allocate government funding for research. Similarly, the Australian government used the Research Quality Framework (RQF) and the Excellence Research for Australia (ERA) as instruments to determine funding (Butler 2007; Drummond and Wartho 2009). In response, librarians in the United Kingdom and Australia have moved quickly to support their faculty and universities with robust bibliometric programs and other analytics initiatives. Fortunately, this shortsighted view of funding university research has not gone uncontested (Boulton and Lucas 2008); still, it is the reality faced by many of today’s academics.

Research Productivity

In its most basic form, research productivity is “the ratio of production output to what is required to produce it” (Dickeson 2013, 76). However, as Dickeson explains, “What passes for research outputs at many institutions, notwithstanding their missions, is sometimes scant and occasionally laughable” (78). For this reason, the Oakleaf (2010) report, based on a review of the literature, provides a clearer picture of what constitutes standard
research productivity: books, book chapters, journal articles, grant funding, conference presentations, juried exhibits, professional awards, patents, and consultancy work. Furthermore, Kroll and Forsman (2010), based on faculty interviews at several universities, make clear what library tools and services faculty value, and, in particular, where they experience unmet needs for their research. To this point, the authors of the present study were able to show that library support for faculty should be expanded beyond the parameters of current information literacy models, which are mainly designed to address student learning (see Table 1). As shown in Table 1, the authors used the Association of College and Research Libraries’ (ACRL) ubiquitous Information Literacy Competency Standards for Higher Education (2000) and Kuhlthau’s highly cited Information Search Process (2004) to show the need for new areas of faculty research support.

As argued by Bourg, Coleman, and Erway (2009), librarians must be knowledgeable about new modes of publication and online research; faculty frustrations with facets of these modes will open up new roles for traditional instruction and liaison librarians. These changes will create opportunities for librarians who are willing to retool and reorganize their services to accommodate areas such as scholarly publishing and data preservation. Accordingly, Wiklund and Voog (2013) created a model for their investigation of faculty productivity that moved to incorporate new facets of research. Their four-part model included the following elements of faculty research: starting a research group; collecting materials; processing, analyzing, and writing; and communicating results and making data accessible. At the same time, Raju

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**TABLE 1** Alignment of Faculty Research Process Models to Information Literacy Standards

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Information need (1) Initiation</td>
<td>Start research group</td>
<td>Prepare</td>
<td></td>
</tr>
<tr>
<td>Access information (2) Selection</td>
<td>Collect material</td>
<td>Gather</td>
<td></td>
</tr>
<tr>
<td>Evaluate information (3) Exploration</td>
<td>Formulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethics and information (5) Collection</td>
<td>Search closure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses of information (4) Process/analyze/write</td>
<td></td>
<td>Create</td>
<td></td>
</tr>
<tr>
<td>Ethics and information (5) Communicate results &amp; make data accessible</td>
<td></td>
<td>Share</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preserve</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Measure (impact)</td>
<td></td>
</tr>
</tbody>
</table>

*ACRL Information Literacy Standard numbers noted in parentheses.
and Schoombee (2013) independently developed a slightly more robust Research Life Cycle model, which included measurement and impact—an area that uniquely aligns with faculty needs.

Faculty Perceptions

Despite the advantages of today’s online discovery tools, Kroll and Forsman (2010) showed that faculty researchers struggle with modern research processes such as grant activity, data management, intellectual property management, and bibliometric analysis; as shown by Corrall, Kennan, and Afzal (2013), these are among the core emerging trends in library support for research. However, as Kroll and Forsman (2010) wrote, “Researchers do not realize what expertise librarians have to offer their users, are uninformed about services offered, and have little idea what the library might do in the future” (18). This is confirmed by Brown and Tucker (2013), who found that faculty members rate library support as an important element in their research productivity, but only in “functions related to buying or providing access to resources” (283).

The Present Study

The present study is merited by virtue of the nexus of factors presented in this literature review. Stated in general terms, those factors are as follows:

- The increased pressures on faculty to produce research, and their need of relevant support.
- The increased pressures on the academic library to provide relevant support, and the opportunity to demonstrate institutional value by doing so.
- The apparent disconnect between faculty and the library.
- The benefits that both parties can derive from a strategic research partnership.

The authors of this article contend that an exploration of faculty perceptions in this area represents a gap in the professional literature: specifically, faculty perceptions of what constitutes research productivity, the varying levels of importance attributed research productivity, and the relative impact of library support.

METHOD

The authors created a 10-question survey instrument, based on the Raju and Schoombee (2013) Research Life Cycle model, to collect the perceptions of education faculty pertaining to their use and potential use of library
support for their research productivity (see the appendix). As noted, this model uniquely aligns with the needs of faculty researchers; relevant components were used to inform the development of survey questions. The first part of the survey consisted of demographic questions about the respondents’ professional appointments and status, the Carnegie Classifications\(^1\) of their respective institutions, and the extent to which research productivity was part of their professional work. The second part of the survey included questions about the specific kinds of scholarly products valued at respondents’ institutions, the relative levels of library support received for that production, and the levels of support that respondents believe the library might afford them in the future. As this was an exploratory survey, and not a large study from which the authors desired to generalize, a convenience sample of education faculty members was deemed to be adequate. The authors sent a query to the ACRL Education and Behavior Sciences Section (EBSS) listserv in July of 2014 requesting subscribers—primarily education librarians—to distribute the survey to the education faculty at their institutions; nine librarians agreed to participate. A broad range of Carnegie Classification types of colleges and universities was represented in the study sample, though all of the institutions were located in the United States. The survey was open from July 28 to August 29, 2014. Sixty education faculty members responded, which again was deemed to be sufficient for this exploratory investigation.

Limitation

Presumably a high percentage of the participants in this study were professionally acquainted with the librarians who volunteered to distribute the survey instrument. Although participants were instructed that the survey results would be stripped of all individually and institutionally identifiable data, it was possible for their responses to be biased. Given the positive exchange that characteristically qualifies the librarian and college instructor relationship, it was likely that biased responses would reflect favorably on the distributors of the survey. Conversely, the potential for this bias may also have had the reverse effect of making responses that were critical of library support more noteworthy.

RESULTS

The first four questions of the survey were demographic in nature. For Question 1, respondents were asked to identify the Carnegie Classification of their college or university. Of the 60 respondents, three-quarters

\(^1\) Information concerning Carnegie Classifications is available at http://carnegie classifications.iu.edu.
were from various doctoral/research universities or higher; of these
45, 20 were from doctoral/research universities, 15 were from high-activity
research universities, and 10 were from very-high-activity research univer-
sities. The remaining one-quarter (15) were from master's colleges and
universities.
Questions 2 and 3 were asked to ensure that survey participants met
the criteria for inclusion in this study. Question 2 asked respondents whether
they were affiliated with a postsecondary department or school of education.
Fifty-nine of the 60 respondents indicated that they were; the one unaffiliated
respondent was disqualified. Question 3 asked respondents whether research
productivity (i.e., scholarship) was part of their professional work. Fifty-two
of the 59 affiliated respondents answered affirmatively; the remaining seven
respondents were disqualified. The 52 remaining participants continued with
the rest of the survey.
Question 4 asked participants to identify their professional appointments
or positions. Forty-nine participants answered this question. Almost half (22)
were tenured faculty; one-third were tenure-track faculty (16); five were
adjunct faculty; and four were fixed-term or temporary faculty. Two partici-
pants identified themselves as “other,” of whom one was an associate dean.
Cross tabulations of Questions 3 and 4 showed that research productivity is
either required or expected professional activity for 36 of the 38 tenured or
tenure-track survey participants.
Question 5 asked participants to indicate the level of importance that
is attributed to research productivity at their respective institutions. Forty-
ine participants answered this question. The majority (31) answered that
research productivity was required; nine answered that it was expected; six
answered that it was encouraged; and three answered that it was based on
personal prerogative. Cross tabulations of Questions 4 and 5 produced no
surprises. Ninety-five percent (36) of the 38 tenured or tenure-track faculty
had requirements or expectations of research productivity, whereas 63 per-
cent (7) of the 11 remaining faculty in temporary, adjunct, or other positions
were merely encouraged to produce scholarship or took it upon themselves
to do it.
Question 6 asked the participants to rank various research products in
terms of the institutional value placed on them for job security and profes-
sional advancement (see Table 2). Respondents ranked each type of product
on a scale of 1, the lowest, to 5, the highest. Unsurprisingly, the average rank-
ing showed that refereed journal articles, books, and book chapters continue
to be among the most highly valued research products in the academy. The
authors had expected that grant activity would rank as an important area
of productivity, but they did not anticipate a second-place ranking; this re-
sult seemed particularly noteworthy. Finally, and perhaps not surprisingly,
it seems clear that nonrefereed publication and consultancy work are not
considered valuable production.
Table 2: Faculty Ranking of Research Products

<table>
<thead>
<tr>
<th>Productivity products ranking</th>
<th>Average value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refereed journal articles</td>
<td>4.87</td>
</tr>
<tr>
<td>Grants (applications or funding)</td>
<td>4.00</td>
</tr>
<tr>
<td>Books</td>
<td>3.80</td>
</tr>
<tr>
<td>Book chapters</td>
<td>3.53</td>
</tr>
<tr>
<td>Professional awards</td>
<td>3.07</td>
</tr>
<tr>
<td>Conference presentations</td>
<td>3.04</td>
</tr>
<tr>
<td>Patents</td>
<td>2.63</td>
</tr>
<tr>
<td>Juried exhibits</td>
<td>2.61</td>
</tr>
<tr>
<td>Nonrefereed articles (journals, trade publication, weblog, or newspaper)</td>
<td>2.24</td>
</tr>
<tr>
<td>Consultancy or advisory work</td>
<td>1.94</td>
</tr>
</tbody>
</table>

Question 7 asked participants which areas of their research have benefited from library support (see Table 3). These areas were predefined by the authors as indicative of the current range of library support given to college and university instructors, and they were presented in a list from which respondents could select.

Question 7 was posed in the past tense because the authors wished to learn which areas were already viewed by the education faculty as

Table 3: Areas in Which Research Productivity Has Benefited From Library Support

<table>
<thead>
<tr>
<th>Areas of research productivity</th>
<th>Yes</th>
<th>No</th>
<th>Do not know</th>
<th>Not relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information access and retrieval (i.e., library collections and subscriptions)</td>
<td>47</td>
<td>1</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Management of literature citations (e.g., EndNote, Zotero, RefWorks)</td>
<td>23</td>
<td>18</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Management of intellectual property, copyright, publications, or postprints</td>
<td>18</td>
<td>18</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Grant-related activity</td>
<td>18</td>
<td>24</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Promotion and tenure support</td>
<td>18</td>
<td>20</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Increased professional visibility/professional standing in the field</td>
<td>18</td>
<td>22</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Selection of traditional or alternative publishing venues</td>
<td>15</td>
<td>23</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Storage, management, or analysis of research data (i.e., large document or data sets)</td>
<td>11</td>
<td>27</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
TABLE 4 Areas in Which Research Productivity Could Benefit From Library Support

<table>
<thead>
<tr>
<th>Areas of research productivity</th>
<th>Yes</th>
<th>No</th>
<th>Do not know</th>
<th>Not relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information access and retrieval (i.e., library collections and subscriptions)</td>
<td>47</td>
<td>1</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Grant-related activity</td>
<td>38</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Management of literature citations (e.g., EndNote, Zotero, RefWorks)</td>
<td>37</td>
<td>8</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Selection of traditional or alternative publishing venues</td>
<td>35</td>
<td>9</td>
<td>4</td>
<td>—</td>
</tr>
<tr>
<td>Management of intellectual property, copyright, publications, or postprints</td>
<td>32</td>
<td>14</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Storage, management, or analysis of research data (i.e., large document or data sets)</td>
<td>32</td>
<td>12</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Increased professional visibility/professional standing in the field</td>
<td>31</td>
<td>8</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Promotion and tenure support</td>
<td>29</td>
<td>6</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

being currently supported by the library. Almost all (47 of 48) respondents to this question indicated that “information access and retrieval” was an area of library support from which they benefited. The remaining areas all garnered less than 50 percent affirmative answers; less than one-third of the respondents confirmed receiving library support in the areas of “selection of traditional or alternative publishing venues” or “storage, management, or analysis of research data.”

Question 8 asked participants which areas of their research productivity might benefit from library support (see Table 4). The same predefined areas were presented in a list from which respondents could select, but this was posed as a future-oriented question. The purpose was to generate data to compare with the results of Question 7, potentially showing the strengths and weaknesses of library support from the faculty perspective.

Again, almost all (47 of 48) respondents indicated that “information access and retrieval” was potentially the most fruitful area for future library support, but in the responses for this question no other areas of support garnered less than 60 percent (29) affirmative answers. This is in stark contrast to the answers given for Question 7, in which no areas other than “information access and retrieval” rose above 50 percent affirmative. Interestingly, the average ranking for “Do not know” responses for each area was slightly higher
in Question 8 than for Question 7 (3.3 vs. 2.8), and the average ranking of “not relevant” responses fell dramatically from 4.1 to 1.6.

Question 9 asked participants whether there was a specific librarian assigned to serve faculty and students in their department or school of education. There was a total of 48 responses: 90 percent (43) answered affirmatively, and 10 percent (5) indicated that they did not know.

Question 10 was open-ended; it asked whether respondents knew of additional areas of library support that could potentially improve faculty research productivity. There were 17 responses to this question: Four participants described how effective their current library liaison was, and two noted that increased access to more library databases was needed. There were also some surprising and innovative ideas put forth. Two respondents suggested that their doctoral students could use more access to librarians, and one commented that a K–12 district partner benefited from securing an affiliate account with which to access the library databases. One respondent mentioned that he or she would welcome opportunities to publish or present jointly with a librarian, and another presented the idea of collaborating with librarians to develop LibGuides2 on areas of faculty research interests.

DISCUSSION

Results from this investigation align well with the Krull and Forsman (2010) findings on the information needs and desires of college and university researchers; participants in the present study indicated that their research activities continue to benefit from access to library collections and discovery tools. However, they also specified numerous areas in which their productivity could benefit from greater library support: for instance, grant-related activity, bibliographic management, selection of traditional and alternative publishing venues, intellectual property management, and data management. It is noteworthy that Dickeson's (2013) work on faculty research does not include grant-related activity as a quality measure; participants in the present study indicated that this is a highly valued area of research productivity at their respective institutions.

Implications of the findings in this study relate to those from Corrall, Kennan, and Afzal's (2013) work; their exploration of emerging trends in library support for research showed the need for “education and training to meet the needs arising from new roles for librarians and different relationships with researchers” (640). Specifically, Corrall, Kennan, and

2 Information concerning Springshare’s LibGuides is available at http://springshare.com/libguides.
Afzal found evidence of knowledge and skills gaps among librarians pertaining to research data management, institutional and governmental research environments, and research methods and processes. These gaps correlate well with the areas in which library support can improve faculty productivity, as expressed by participants in this study. Accordingly, “LIS schools need to be flexible enough to design their curricula to ensure that they are training librarians for contemporary library and information practices” (Raju and Schoombee 2013, 36). For practitioners, there needs to be concerted institutional investments in professional development activities (White 2014). The key, however, is relevant professional development. As noted by Corrall, Kennan, and Afzal (2013), library education and training needs to “extend beyond the focus on technological competencies and domain/disciplinary knowledge that pervades existing literature on the subject” (667).

Unsurprisingly, there is a strong correlation between tenured or tenure-track participants in this study and the high expectations they experience for producing research. The intrinsic motivators of job security and professional advancement easily explain much of this. However, as shown by Budd (2006), there is also a measurable reverse correlation between decreased research productivity and the trend in higher education toward greater numbers of nontenured faculty. This runs counter to emergent culture of renewed institutional goals that emphasize research productivity. Campus administrators, who rely heavily on metrics for decision making, are likely to recognize this, redouble their efforts to increase their numbers of tenure-track faculty, and provide relevant support. As revealed by Budd (2006), institutional support for libraries equates with greater faculty productivity. Academic libraries may do well to anticipate this shift and to plan accordingly.

As libraries advance with new and expanded services for faculty, the promotion and marketing of those services must also change. Traditional, informal means of reaching faculty and large-scale outreach campaigns will continue, but new services afford new and more focused entrées into the research lives of faculty. Survey instruments, for instance, serve to provide relevant data for librarians, but they can also be used to promote services to disciplinary faculty. Library researchers used this approach to promote new services among engineering faculty at Loughborough University (Marshall and Reid 2008). Faculty data can then be leveraged to develop targeted instructional workshops. University of Minnesota librarians, for instance, developed a “Creating a Data Management Plan for Your Grant Application Workshop” to support their institution’s e-science initiative (Johnson, Butler, and Johnston 2012, 764). In another approach, librarians at Wayne State University collaborated with their Division of Research and their Office of Technology Transfer to provide workshops and individual research assistance to faculty as they apply for grants or move to license and mar-
Library Support Impact on Education Faculty Research

ket intellectual property (Healy 2010). As noted by Stern, Rojas, and Namei (2010), the synergy created by aligning library workshops with institutional missions generates greater overall impact.

The present investigation and its results are bolstered in several ways by Creaser and Spezi's (2014) exploration of the imputed value and impact of academic libraries on faculty. Their work, which was based on librarian input, showed that current library measures for demonstrating value are focused mainly on student-centered information literacy activities. Creaser and Spezi revealed that library value cannot be determined based on user metrics alone, and they confirmed the lack of published literature on research partnerships between faculty and librarians. They also reinforced the notion that for this area of study library researchers continue to rely on the perceptions of librarians instead of faculty; and notwithstanding all these factors, they indicated a reimagining of library support for faculty research may be needed. The authors of the present study suggest that these lines of inquiry merit further investigation.

This exploratory study focused solely on education faculty; the suite of library support services they desire is tied to the nature of research that is conducted in their field. Whether those forms of library support overlap with other disciplines is a matter for additional research. Librarians who serve in STEM disciplines, for instance, have found grant support, data curation, and research impact services to be more highly valued by their faculty (Karasma-nis and Murphy 2014; Vaughn et al. 2013). The digital humanities constitute an emerging, multidisciplinary field, and Jeonghyun (2013) cautiously posits that the data curation and sharing needs of faculty in the arts and humanities are growing as well. There is a need for larger scale surveys of faculty in multiple disciplines at all types of postsecondary institutions to factor the actual impact of library services on their research productivity; this will allow for the generalizable findings that are necessary to guide the evolution of library services and the development of productive research partnerships.

CONCLUSION

The amplified culture of accountability in higher education requires academic libraries to provide more compelling evidence of their institutional value. Recent shifts in the academy that focus on research productivity provide libraries an opportunity to demonstrate that value as essential partners in their institutional research enterprises. As explained by Case (2008), “Partnering with faculty in the act of creating knowledge in the digital age is not only a tremendous opportunity for libraries, but ultimately an obligation. We owe it to the faculty to share our expertise to help make the products they create more valuable. We owe it to ourselves to build our expertise and secure the library’s future as a significant partner in research and scholarship” (153).
Brown and Tucker (2013) conducted a pivotal study on library readiness or resistance to expanding library support for faculty research; the authors found that “although a high percentage of faculty rate the library as important or very important to research productivity, perceived importance of specific support functions drops markedly, except for functions related to buying or providing access to resources” (283). The education faculty participants in the present investigation indicated specific ways in which library support can improve their research productivity, particularly in the areas of grant-related activity, bibliographic management, selection of traditional and alternative publishing venues, intellectual property management, and data management. These faculty perceptions, coupled with institutional demands for increased research productivity, should be the driving forces for changes in library education and training, and in the current models of providing library support for research.

ACKNOWLEDGMENTS

The authors thank the librarians who volunteered to distribute the survey instrument used to collect data for this study.

REFERENCES


Q1 Which of the following Carnegie Classifications best describes the post-secondary institution to which you are currently appointed? [If you are unsure, look up your institution at the Carnegie Classification Lookup.]
- Master's S: Master's Colleges and Universities (smaller programs) (1)
- Master's L: Master's Colleges and Universities (larger programs) (2)
- DRU: Doctoral/Research Universities (4)
- RU/H: Research Universities (high research activity) (5)
- RU/VH: Research Universities (very high research activity) (6)

Q2 Are you affiliated with a postsecondary department or school of education?
- Yes (1)
- No (2)

If No Is Selected, Then Skip To Thank you for taking this survey!

Q3 Is research productivity (i.e., scholarship) part of your professional work in any way?
- Yes (1)
- No (2)

If No Is Selected, Then Skip To Thank you for taking this survey!

Q4 Which of the following best describes your current position in your department or school of education?
- Faculty (tenured) (1)
- Faculty (tenure track) (2)
- Clinical or research appointment (3)
- Fixed term, temporary, or visiting faculty/lecturer (4)
- Adjunct faculty/lecturer (5)
- Other (please specify) (6) ____________________

Q5 Which of the following best qualifies the importance of research productivity in terms of your professional work?
- It is required. (1)
- It is expected. (2)
- It is encouraged. (3)
- It is based on personal prerogative. (4)

Q6 What weight does your institution place on each of the following in terms of professional appointments, promotions, and tenure? (Please rank each item on a scale of 1 to 5, with 1 being the lowest ranking and 5 being the highest.)
Q7 In terms of your own research productivity, HAVE ANY of the following elements required or benefited from library support (i.e., information-related sources or services)?

<table>
<thead>
<tr>
<th></th>
<th>Yes (1)</th>
<th>No (2)</th>
<th>Do not know (3)</th>
<th>Not relevant (4)</th>
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<tr>
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<td>(i.e., library collections and</td>
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<tr>
<td>subscriptions) (1)</td>
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<td>(e.g., EndNote, Zotero, RefWorks)</td>
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<td>(copyright, publications, or post-prints (3)</td>
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<tr>
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<tr>
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<tr>
<td>Promotion and tenure support (7)</td>
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<td>Increased professional visibility/professional standing in the field (8)</td>
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</table>
Q8 In terms of your own research productivity, CAN ANY of the following elements potentially require or benefit from library support (i.e., information-related sources or services)?

<table>
<thead>
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<th>Element</th>
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<th>Do not know (3)</th>
<th>Not relevant (4)</th>
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</thead>
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<td>Selection of traditional or alternative publishing venues (4)</td>
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<tr>
<td>Increased professional visibility/professional standing in the field (8)</td>
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</tbody>
</table>

Q9 Is there a specific librarian assigned to serve faculty and students in your department or school of education?

- ○ Yes (1)
- ○ No (2)
- ○ Do not know (3)

Q10 Are there any additional elements of your own research productivity that have benefited or could potentially benefit from library support? If so, please describe.

Thank you for taking this survey!