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Reference Services F

Desperately Seeking Funding: Library guides to student funding

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Desperately Seeking Funding: Library guides to student funding

Abstract

Purpose: This study examines online research guides as a measure of academic library support for students seeking educational funding opportunities.

Design/methodology/approach: The library websites of 38 members of a regional academic library consortium were examined for guides that address funding for educational purposes. Guide content was manually reviewed. Information regarding institutional characteristics was gathered from the Carnegie Classification of Institutions of Higher Education.

Findings: Despite relatively few reports of educational funding support in the library literature, online guides exist at 42% of studied institutions. However, few guides are comprehensive and many lack features that promote discoverability. Instructional content — guidance, advice, or information beyond resource descriptions — and in-person funding support rarely appear in the studied guides, presenting opportunities for academic libraries to contribute to student retention and success.

Practical implications: This paper provides information on and examples of online guides to educational funding useful to academic libraries looking to support students facing affordability concerns.

Originality/value: This paper contributes to the literature on non-disciplinary uses of online research guides and is the first to survey academic library guides on educational funding opportunities.

Introduction

The higher education community has struggled to respond to a crisis of affordability (Broton and Goldrick-Rab, 2016). As a result, many students must secure scholarships, grants, or other aid to cover tuition bills and living expenses. Libraries, which exist at the crossroads of academic affairs and student services (Nichols Hess et al., 2015), are well-positioned to support students in need of such educational funding opportunities. Seeking funding requires the research and information literacy skills in which librarians specialize and librarians' customer service ethic primes them to successfully convey information on funding options (Joe, 2016).

Academic libraries frequently contribute to efforts to mitigate the impact of rising education costs, most notably by promoting alternatives to textbook purchasing and providing resources aimed at improving students' financial literacy (Reiter and Ford, 2019; Todorinova and Wilkinson, 2019).

However, initiatives directed at helping students obtain funds are less readily apparent in the library literature than those that attempt to systemically reduce costs or improve financial understanding. The authors became engaged in funding-related projects at their own institution in response to an invitation from a student support unit, which led to an awareness of similar efforts at other academic libraries. With this study, they endeavor to fill the apparent gap in documenting library funding initiatives.

Although funding support may take a variety of forms, such as the development of programming related to scholarship-seeking or the provision of funding-specific consultation services, this preliminary evaluation of library funding support focuses on online research guides. Online guides utilize existing library infrastructure and represent an approachable entry point for providing funding information. By identifying and examining funding guides hosted by academic libraries across a regional consortium, this study both offers direction for librarians building these resources and creates an initial map of the funding support landscape. More specifically, it investigates 1) the prevalence of library guides to

educational funding opportunities, 2) the size and type of institutions at which library funding guides exist, and 3) the content of library funding guides.

Literature Review

This literature review provides an overview of affordability challenges in higher education before describing how academic libraries have participated in affordability-related efforts. It briefly outlines library initiatives to reduce course material costs and improve financial literacy, and then focuses on services that support users seeking scholarships, grants, and other sources of educational funding. Finally, it examines literature relating to online research guides, summarizing how previous studies have sampled guides and analyzed guide content.

The Affordability Crisis

Recent decades have brought the issue of higher education affordability into focus, as a postsecondary degree has never been more expensive (Kirshstein, 2012; Ma et al., n.d.; U.S. Department of Education, n.d.). Increases in education costs have significantly outstripped increases in income (Kirshstein, 2012; Peters et al., 2019) and increases to government-provided financial aid (Welbeck et al., 2014), leaving many students unable to afford college (Mitchell et al., 2019).

Student adaptations to affordability challenges can impact educational success. Many students do not have a plan for making tuition payments beyond the current semester, struggle to cover rent, and sometimes exhaust their funds altogether multiple times in a single academic year (Klepfer et al., 2019). At best, these financial concerns may be distracting; at worst, they may prove debilitating (Kafka, 2019). Financial and food insecurity are often linked to enrollment disruptions (Cooper, 2010; Hege et al., 2020; Klepfer et al., 2018; Philips et al., 2018). Students may risk not buying required course materials or delay enrollment in high-credit courses needed for degree completion (Florida Virtual Campus, 2019). As one

student success administrator expressed, "most students drop out not for academic reasons, but because of life challenges" (Mintz, n.d., para. 5). Moreover, students of color, transgender students, student parents, and students from the foster care system tend to experience the most severe effects of non-affordability, compromising populations already more likely to encounter barriers to educational success (Eichelberger et al., 2017; Furfaro, 2020; Trawver et al., 2020).

Higher education responded to the affordability crisis by developing new services that support students' financial needs. For example, some colleges and universities began offering food pantries, assistance securing housing, transportation, or childcare, short-term interest-free loans, and free tax preparation services that encourage timely applications for financial aid (Broton and Goldrick-Rab, 2016; Sullivan et al., 2018). Some created integrated service hubs that provide a single on-campus service point for resources related to financial and other basic needs (Sullivan et al., 2018). Others hired individuals with social work training in order to better assist low-income students (Broton and Goldrick-Rab, 2016).

Colleges and universities also recognized the importance of students' financial education

(Eichelberger et al., 2017; Shaulskiy et al., 2015). In 2019, the U.S. Financial Literacy and Education

Commission issued a report on best practices for financial literacy at higher education institutions,

recommending that schools engage students in financial literacy and education through mandatory

financial literacy courses, trained peer educators, and integration of financial literacy into core curricula

(U.S. Financial Literacy and Education Commission, 2019). Schools responded by weaving financial

literacy skills into student orientations, study abroad programs, internship requirements, and credit
bearing courses (Kafka, 2019).

Academic Libraries and Affordability

Libraries often play a role in efforts to tackle affordability in the higher education environment. They are frequently key drivers of campus initiatives to reduce or mitigate the impact of increasing course material costs (Todorinova and Wilkinson, 2019). These efforts include course reserve systems and electronic textbook purchasing programs that allow students to access learning materials without buying or renting them (Comeaux et al., 2019; Salem, 2017; Todorinova and Wilkinson, 2019). Academic libraries also produce resources that encourage and support faculty in discovering and adopting library-owned or openly licensed materials as course texts (Comeaux et al., 2019; Okamoto, 2013; Salem, 2017; Todorinova and Wilkinson, 2019). Finally, libraries provide guidance to faculty authoring open education resources and even create their own open materials (Okamoto, 2013; Todorinova and Wilkinson, 2019).

Academic libraries have also developed significant initiatives in financial literacy. In 2013-2014, financial literacy became a presidential focus of the Association of College and Research Libraries (ACRL) (Dawes, 2013). The organization encouraged libraries to address the need for financial literacy education resulting from increased tuition costs and growing student debt (Dawes, 2013). Independently and with the support of campus partners, libraries subsequently curated and promoted collections of financial literacy resources, developed financial literacy programming, hosted peer-to-peer financial consulting programs, and integrated financial literacy concepts into instruction sessions (Reiter and Ford, 2019).

However, there has been less discussion of academic library efforts to help users identify and obtain funding to cover the costs of their educational endeavors. The literature that does exist on this topic focuses primarily on library support for research funding at the faculty and graduate student levels rather than support for students seeking money to cover tuition and living costs. Means (2000), for example, described the creation of a 'Research Funding Service' at the University of Washington's Health Sciences Library that offered consultations, workshops, and online resources for faculty seeking research

funding. Forbes, Schlesselman-Tarango, and Keeran (2017) detailed the development of a workshop series for graduate students seeking research funding, noting that today's graduate students do not consistently benefit from faculty-led grant projects and may need to secure funding in order to complete the research required by their degree programs (2017).

Reports of research funding initiatives suggest that these services are uncommon in academic libraries. In order to investigate how academic libraries support researcher needs, Andrade and Kollen (2012) examined the services offered by nineteen libraries at large, research-focused universities. They discovered that only four of these libraries offered some form of research grant-related support, such as workshops, consultations, or email alerts regarding funding opportunities. Means (2000) similarly noted that although many academic libraries subscribe to research funding databases, few provide accompanying funding services. Wu, Cai, Jin, and Dong (2018) focused on potential opportunities for academic libraries to support the identification of research funding sources rather than existing programs. Downing (2010) proposed that libraries consider collaborating with campus partners to provide research funding support but observed that grant specialists are rare in academic libraries.

Library initiatives aimed specifically at students seeking money to cover their tuition and living costs appear to be even less common. The reports that do exist, however, suggest these programs yield significant benefits. Angell and Price (2019) mentioned an undergraduate funding initiative involving an online guide and related instruction for both students and staff advisors as a channel through which one library supported the holistic student experience. Joe (2016) discussed the creation of a "Quick Guide" to financial aid. An internal document that reference librarians could consult when approached by students, the guide ensured that library staff could provide timely and accurate answers to common financial aid questions. Roggenkamp (2014) described how a one-shot session to support a class assigned to locate and apply for scholarships evolved into ongoing course instruction, workshops open

to the campus community, development of an online guide, and a collection of print materials. Students who benefitted from these resources, many of whom had not previously considered applying for scholarships, subsequently related that they were able to remain enrolled and avoid loan debt by earning scholarship funding (Roggenkamp, 2014).

Online Research Guides

Online research guides are ubiquitous in academic libraries (Almeida and Tidal, 2017; Jackson and Stacy-Bates, 2016; Linares and Johnson, 2016). Although most often used in a disciplinary context to orient users to a field's key resources, guides to non-discipline-specific topics, such as citation searching, three-dimensional printing, and research metrics, have become increasingly common (Dagenais Brown, 2014; Horton, 2017; Suiter and Moulaison, 2015).

Numerous studies have examined the design features and usability of guides (Almeida and Tidal, 2017; Hintz et al., 2010; Sinkinson et al., 2012; Sonsteby and DeJonghe, 2013), while others have reviewed the content of thematically similar guides (Furay, 2018; Reese and McCain, 2017; Suiter and Moulaison, 2015). Studies that analyzed guide content employed a variety of approaches. Some studies attempted to be as comprehensive as possible in examining what resources guides include (van Dyk, 2015; Osorio, 2014). Others devised survey instruments aimed at capturing whether a guide addressed particular categories or questions of interest (Furay, 2018; Insua, 2018; Pendell and Armstrong, 2014; Suiter and Moulaison, 2015).

Sampling techniques in guide analyses are similarly diverse. Studies exclusively focused on guide content often first search the LibGuides content management platform for relevant guides and then select a random or other sample from the search results (van Dyk, 2015; Osorio, 2014). Studies interested in both assessing the prevalence of guides on a specific topic and reviewing guide content

often define their sample in relation to an existing association or consortium of academic libraries. For example, the Association of Research Libraries and the Association of American Universities have been used as samples in studies centered on topics relevant to research-intensive institutions (Pendell and Armstrong, 2014; Suiter and Moulaison, 2015). Regional library consortia and associations have served as samples for studies of guides and other features of library websites when organizational characteristics were relevant to the topic of study (Reese and McCain, 2017) and when analyses required a cross-section of institution types and sizes (Evelhoch, 2016).

Methods

The sample for this study is comprised of online guides hosted by members of the Orbis Cascade Alliance, a consortium of academic libraries in the Pacific Northwest region of the United States that facilitates collective purchasing, coordinates resource sharing, and administers a shared library management system and discovery interface ("Overview of the Alliance", n.d.). Alliance membership is limited to degree-granting institutions located in Idaho, Oregon, or Washington that are accredited by the Northwest Commission on Colleges and Universities ("Overview of the Alliance", n.d.). As of March 2020, the consortium had 38 members ("Members", n.d.). The authors' own institution, Seattle University, is a member of the consortium. Alliance members represent a diverse range of institution sizes and types, including both public and private nonprofit institutions granting associate through doctoral degrees ("Members", n.d.). Moreover, the location of the Orbis Cascade Alliance within the Pacific Northwest allowed the authors to focus this preliminary study on a region where affordability challenges are particularly acute, with many students in Washington and Oregon experiencing housing and food insecurity (Furfaro, 2020; The Hope Center for College, Community, and Justice, 2020).

The library website of each institution was examined for guides that address funding for educational opportunities. The authors navigated to the guide section of each library's website and used the search

interface to determine if any of the library's guides included the terms "funding," "scholarships," "financial aid," or "grants." Guides addressing educational funding as part of a discipline-specific guide (e.g., biology, art history, psychology) were excluded from analysis on the grounds that they are neither aimed at nor easily discoverable by the general campus population. However, other guides not focusing exclusively on funding for educational opportunities were included for further analysis if the guide appeared to target a discipline-neutral audience. Information regarding the guide creator, as well as any tags or subjects used to label each guide, was recorded when available.

In order to investigate the size and type of institutions at which library funding guides exist, each sampled institution's primary classification, student population size, and control structure (i.e. public vs. private) was obtained from the Carnegie Classification of Institutions of Higher Education (Indiana University Center for Postsecondary Research, n.d.).

In order to investigate the content of library funding guides, the authors developed a series of questions to answer through manual review of each guide. Following Pendell and Armstrong (2014), the authors refined the review questions and established inter-reviewer agreement by first reviewing a small number of library funding guides outside the sample used in this study ("Arrupe College: Financial Aid - Scholarships", n.d.; "FIC Research Guides/Bibliographies: Scholarships & Financial Aid", n.d.; "Grants & Scholarships", n.d.). The guides used for this purpose are hosted by institutions within the Association of Jesuit Colleges and Universities and were known to the authors through their own institution's membership in that organization.

For every guide identified within the sample, the authors inspected guide content to answer the following questions:

- Focus: Does the guide focus exclusively on funding for educational opportunities or does it address funding for educational opportunities alongside other topics?
- Audience: Does the guide contain elements of specific interest to 1) undergraduate students, 2)
 graduate students, or 3) faculty?
- Breadth: Does the guide contain information or resources relating to 1) scholarships,
 fellowships, or grants; 2) financial aid or student loans; 3) research funding or other funding
 directed toward scholarly projects; 4) funded internships or experiences; 5) emergency funding;
 6) other funding topics?
- **Instructional Content**: Does the guide offer funding-related guidance, advice, or information beyond a listing or description of relevant resources?
- Funding Search Tools: Does the guide include funding databases or directories that combine funding opportunities from multiple sources?
- Subscription Search Tools: Does the guide include funding databases or directories to which access is provided by institutional subscription?
- Book Resources: Does the guide include references to print or electronic book resources?
- Region-Specific Resources: Does the guide include funding sources or information resources
 particular to the region in which the institution is located (e.g., state-administered funding, local
 scholarships)?
- Institution-Specific Funding Sources: Does the guide include funding sources specific to the institution (e.g., institution-only grants or scholarship programs)?
- In-Person Library Support: Does the guide indicate that in-person funding support is available within the library (e.g., individual consultations, workshops, presentations)?
- Financial Aid Office: Does the guide link to the institution's financial aid office?

 Other Campus Funding Services: Does the guide link to other campus services that provide funding support?

All data was collected in February and March 2020.

Results

Guide Prevalence

Seventeen guides addressing funding for educational opportunities were identified at the sampled institutions, with one institution, the University of Washington, maintaining two distinct funding-related guides. As such, sixteen of the thirty-eight institutions (42%) maintained some form of funding guide.

Institutional Characteristics

Student populations at the sixteen institutions with funding guides range from 2,701 students to 46,166 students, with a mean of 14,598 students and a median of 8,779 students. Populations at the twenty-two institutions without funding guides range from 409 students to 26,693 students with a mean of 5,826 students and a median of 3,838 students. A t-test, an inferential statistic used to examine whether there is a significant difference between the means of two groups, suggests that this gap between the larger mean student population of institutions with funding guides (14,598) and the smaller mean student population of institutions without funding guides (5,826) represents a statistically significant difference, t(19.823) = 2.4984, p = 0.02.

Figure 1. Student populations of sampled institutions

Institutions maintaining funding guides represent eight distinct Carnegie classifications, from associate-degree-granting colleges to doctoral universities with very high research activity. Institutions without funding guides represent eleven Carnegie classifications, also ranging from associate-degree-

granting colleges to doctoral universities with very high research activity. Half (eight) of institutions with guides fall within doctoral classifications, but only 14% (three) of institutions without guides bear doctoral classifications.

Figure 2. Carnegie classifications of sampled institutions

Three quarters (12) of institutions with guides are public, while the remaining one quarter (4) are private not-for-profit institutions. Among institutions without guides, ten (45%) are public and twelve (55%) are private not-for-profit.

Guide Features and Content

Four (23%) of the funding guides do not include the name of any individual associated with the guide and two (12%) list "Library Staff" as guide authors. The individuals associated with the remaining eleven (65%) guides occupy a broad range of library roles, including reference, instruction, engagement, outreach, social sciences, education, and scholarly communication positions.

All seventeen guides utilize the LibGuides platform, which allows for tags and subject labels to be associated with individual guides. Tag selection varies widely among the six guides (35%) that include tags. Tags with a clear relationship to funding include "financial aid," "grants," "loans," "scholarships," "student aid," and "financial literacy." Subjects associated with the seven guides (41%) that opt to include them also vary widely. However, none of the indicated subjects bear a clear relationship to educational funding topics.

Eight of the guides (47%) focus exclusively on funding for educational opportunities. The remaining nine (53%) include funding for educational opportunities within broader topics: four address educational

funding alongside personal financial literacy, four place it with 'College 101'-style study and life skills, and one nests funding within the library's general reference guide.

Six of the guides (35%) appear to specifically target undergraduate students, four (23%) target both undergraduate and graduate students, and one targets undergraduate students as well as faculty members. Only two guides (12%) do not contain content of specific interest to undergraduates, with one focusing exclusively on graduate students and another on graduate students and faculty members. The remaining four guides (23%) contain content aimed at the campus community more broadly, including items of interest to undergraduate students, graduate students, and faculty.

Figure 3. Guide audience types

The guides address a variety of funding-related topics. Information on scholarships, fellowships, or grants is the most popular subject, covered by thirteen of the seventeen (76%) guides. Financial aid and student loan information follow closely behind, covered by twelve of the seventeen (71%) guides. Six guides (35%) deal with funding for research or other scholarly projects, and three (18%) address funded internships or other sponsored opportunities. Only one guide (7%) contains information on emergency funding resources.

Figure 4. Frequency of guide funding topics

Eleven guides (65%) link to funding search tools in the form of databases or directories made freely available online. Six of the free funding search resources listed appear in two or more of the sampled guides.

Table I. Funding search tools appearing in two or more guides

Five guides (29%) include one or more databases for which the institution pays a subscription or licensing fee. Only three such databases were observed: GrantForward, Grant Station, and the Foundation Directory (and the associated Foundation Grants to Individuals).

Nine guides (53%) promote institution-specific sources of funding support, such as scholarships or awards open only to students attending that school, while seven (41%) guides include region-specific funding resources, such as local or state scholarship programs. Eleven guides (65%) incorporate print or electronic books from the library's collection into their resource suggestions.

Only five guides (29%) offer instructional content (funding-related guidance, advice, or explanatory information) in addition to linked resources, with the remaining twelve (71%) limited to lists and descriptions of resources. Instructional content includes text, videos, and downloadable handouts on funding types, scholarship scams, application tips, responsible borrowing, and the loan repayment process. One guide includes instructions for a first-year experience course assignment that asks students to identify relevant scholarships using guide resources.

Only two guides (12%) indicate that in-person funding support is offered at the library. These two guides are hosted by the same institution, the University of Washington, which offers a library-based 'Graduate Funding Information Service' that provides one-on-one consultations as well as funding presentations and workshops. However, eleven guides (65%) include links to their institution's financial aid office, with seven (41%) also linking to other campus funding services, such as fellowships offices or research funding offices.

Discussion

More than forty percent of surveyed institutions maintain some form of an online guide to educational funding, suggesting an emerging trend among academic libraries despite the relatively few

reports of funding support in the library literature. This trend appears strongest at large, public universities with a research focus. Sampled institutions with funding guides have larger mean student populations, are more often publicly controlled, and are more often classified as doctoral universities than those without guides.

Although undoubtedly a direct consequence of the affordability issues experienced by students, libraries' growing interest in student engagement and success may also be contributing to the popularity of funding guides. The academic library, historically focused on curricular and research needs, has come under increasing pressure to further institutional goals around student persistence (ACRL Research Planning and Review Committee, 2014; Mezick, 2007; Soria et al., 2013). Several guides in this study are maintained by librarians in positions dedicated to outreach, engagement, or the student experience, roles designed to make campus contributions beyond traditional subject specialist support (Angell, 2018). Now that "recruitment and retention has become everyone's responsibility" (Joe, 2016, p. 199), educational funding support may emerge as a natural fit for academic libraries looking to play a demonstrable role in broader administrative outcomes.

Despite the existence of guides at a significant minority of the institutions examined, it is unclear how many students find and use them. Future studies may offer detailed data on student usage of guides, particularly as libraries utilizing the LibGuides platform often make view counts of their guides publicly available. However, the inconsistent titling and labeling of guides raises concern that discoverability may be limited. The name and descriptive labels of a guide are particularly important accessibility features because online library guides are often already difficult for students to locate (Reese and McCain, 2017). Less than half of the guides studied bear tags or subject labels. None of the subject labels have an obvious relationship to funding, and only four of the six tagged guides utilize relevant terms such as "funding," "scholarships," "grants," "loans," or "financial aid."

Guide titles were often similarly unhelpful in highlighting funding content, primarily because approximately half of the guides were not focused exclusively on funding topics. Four of these guides include funding information within guides on financial literacy, and their titles, such as "Financial Fitness" and "Personal Finance," at least hint at the possibility of providing information on obtaining educational funding. However, the titles of broader guides, such as "Reference Web Sites," "College Success," and "New Student Care Package," do little to suggest the availability of funding information. Combining funding with other topics creates additional discovery pathways for students, but without clear indicators of content, it may also obscure guides from users looking expressly for funding information and most in need of it.

Many funding guides within the sample are far from comprehensive, which may be an additional consequence of the fact that funding is often housed within a broader guide rather than in a guide of its own. Only three of the seventeen guides cover three or more funding topics. Five guides are limited entirely to the single topic of financial aid and student loans. This lack of breadth in funding guides is misaligned with the literature on meeting students' financial needs, which suggests that providing a 'hub' or 'one-stop-shop' for affordability concerns is a promising strategy (Sullivan et al., 2018). Some students have directly expressed their frustration with the lack of a single campus location for discovering funding opportunities and suggested that a library could act as a centralized resource (Forbes et al., 2017). These students proposed that their library's online funding guide, which was limited to research funding, be broadened to include scholarships and travel grants (Forbes et al., 2017). They identified the library as a central campus service point, considering it an ideal host for collaborative support services on account of its cross-disciplinary nature (Forbes et al., 2017).

The absence of emergency resources from all but one guide was notable given that growing food insecurity and homelessness among students has been well documented in the popular media (Jones,

2019; Spencer, 2020). This omission is especially glaring within a sample drawn from the Pacific Northwest, where rates of overall homelessness and unsheltered homelessness are particularly high (Frohlich, 2019). For example, although none of the community college library funding guides studied address emergency resources, in Washington, "nearly 1 in 5 [community college students] said they were homeless and had to sleep outside, in a car or at a shelter. Furthermore, more than 40% went hungry or couldn't afford to buy nutritious food" (Furfaro, 2020, para. 2). More than half of Oregon's community college students similarly reported housing insecurity, with more than 40% experiencing food insecurity (The Hope Center for College, Community, and Justice, 2020).

Subscription funding databases are few and far between, with most guides combining free electronic resources with materials from the institution's book collections. Paid resources that are included by the studied guides — GrantForward, Grant Station, and the Foundation Directory — all focus heavily on research or organizational funding rather than scholarships or other aid aimed at education costs ("Foundation Directory Online", n.d.; "GrantForward Search Engine", n.d.; "GrantStation", n.d.). That said, student-focused funding databases offering institutional subscriptions are relatively new to the market — ScholarshipUniverse, which claims to be the first such database to vet and curate scholarship opportunities, was only introduced in 2018 after adaptation from an internal product developed at the University of Arizona (Schaffhauser, 2018; "ScholarshipUniverse", n.d.).

Only a handful of guides (29%) include instructional content, defined here as content offering funding-related guidance, advice, or information beyond a listing or description of relevant resources. As such, most guides are simple pathfinders to resources with accompanying descriptions. Although undoubtedly useful, libraries should consider whether guides of this type are fully meeting student needs around the complex topic of educational funding. Students are more likely to seek out library research guides when they are investigating a topic new to them or have become confused by attempts

to use other resources (Insua, 2018; Ouellette, 2011). Including some form of instruction within guides makes them more accessible to users unfamiliar with educational funding options who may need to know not only what search tools are available, but also how to approach the search process, evaluate potential opportunities, and make decisions about resources they are offered.

Moreover, the inclusion of instructional content, whether librarian-created or from librarian-vetted sources, may go some way towards addressing the worry librarians have reported when offering services that could directly impact students' finances (Joe, 2016; Reiter and Ford, 2019). Tips on recognizing and avoiding scholarship scams, for instance, or institution-approved information on what students can expect from the loan repayment process may help to ensure that students absorb information from linked resources with the relevant context in mind and prepare them to evaluate funding information they obtain through other means appropriately.

Finally, although libraries have reported successful funding-related programming and instruction (Roggenkamp, 2014) and students have asked libraries to provide programming related to the funding application process (Forbes et al., 2017), only one library appears to have moved beyond online guide support to provide additional funding services. The University of Washington's two funding guides direct users to a library-based service that offers consultations and workshops. However, even that service is limited specifically to graduate students rather than open to the entire campus population ("Graduate Funding Information Service", n.d.). As many guides refer students to their institution's financial aid office or other funding-related offices, this may be the result of a deliberate decision not to duplicate efforts being made elsewhere on campus. Future research investigating the relationship between a library's funding guide and the online information and in-person services proffered by a financial aid or other office may provide insight into how funding support is distributed across a single institution and pinpoint service or programming gaps that academic libraries can fill. Nevertheless, given the library's

position at the crossroads of academic affairs and student services, (Nichols Hess et al., 2015), the expansion of funding support beyond online guides presents promising opportunities for building collaboration with campus partners and channeling library expertise to benefit students struggling with higher education affordability.

Conclusion

This study reveals that despite low visibility in library literature, support for students seeking educational funding opportunities is provided by many academic libraries in the form of research guides. Online guides are relatively easy to create and thus present a valuable opportunity to utilize traditional library expertise to further institutional goals around student success in an environment rife with affordability concerns. However, careful consideration of guide features can enhance the ability of these tools to contribute meaningfully to students' funding efforts. Given that online guides are often difficult to locate, guide titles, tags, and labels may be key to students finding and using them to identify the funding opportunities they need. Designing a guide as a comprehensive hub for both funding resources and funding information in the form of instructional content may help to demystify a complex topic that directly impacts students' ability to participate in higher education. Future research focused on how students use funding guides and the funding-related support that would be most valuable to them will provide additional recommendations for guide best practices. It may also reveal new channels through which academic libraries can support students struggling to afford their education.

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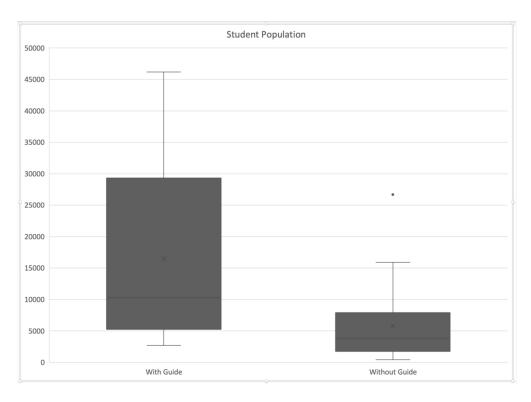


Figure 1. Student populations of sampled institutions $592x429mm (72 \times 72 DPI)$

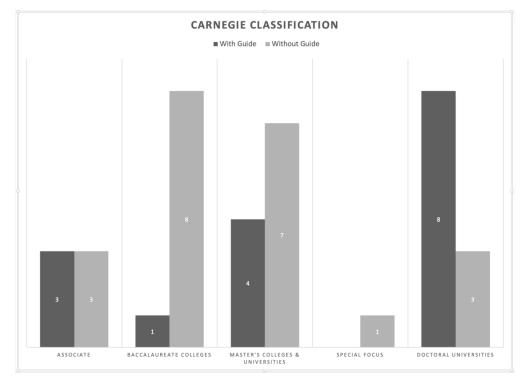
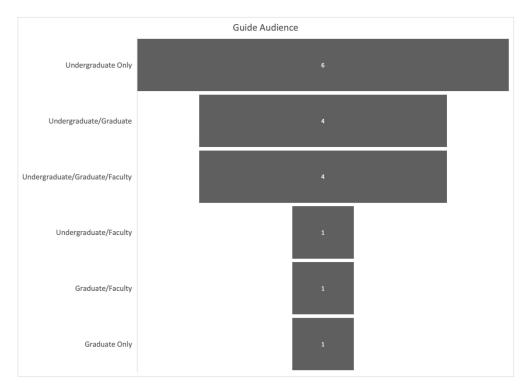


Figure 2. Carnegie classifications of sampled institutions

591x429mm (72 x 72 DPI)



 $\ \, \text{Figure 3. Guide audience types} \\$

587x426mm (72 x 72 DPI)

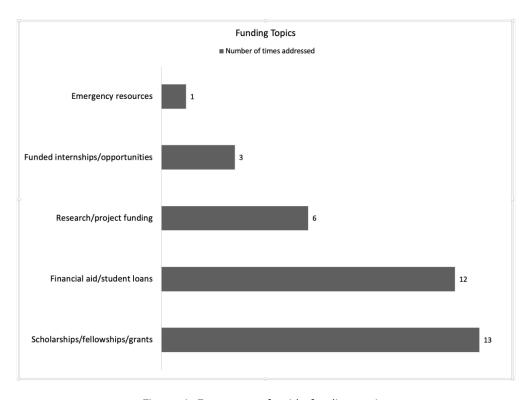


Figure 4. Frequency of guide funding topics 592x429mm (72 x 72 DPI)

Scholarship Database or Search Engine	Guide Occurrences
CareerOne Stop	5
Fast Web	5
Grants.gov	4
College Board's Scholarship Search	2
Duke Research Funding	2
UW Office of Merit Scholarships, Fellowships & Awards	2

Table I. Funding search tools appearing in two or more guides 420x125mm~(72~x~72~DPI)