

Volume 8, General Issue (2020)

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Schleicher, C. A., Barnes, C. A., & Joslin R. A. (2020). OER Initiatives at Liberal Arts Colleges: Building Support at Three Small, Private Institutions. *Journal of Librarianship and Scholarly Communication*, 8(General Issue), eP2301. https://doi.org/10.7710/2162-3309.2301

This article underwent semi-anonymous peer review in accordance with JLSC's peer review policy.



ISSN 2162-3309 10.7710/2162-3309.2301

PRACTICE

OER Initiatives at Liberal Arts Colleges: Building Support at Three Small, Private Institutions

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INTRODUCTION Liberal arts colleges (LAC) are arguably ideal environments for the use of open educational resources (OER) given their shared emphasis on innovative pedagogy and individualized learning. However, library-led OER initiatives at LAC have just started to make progress. LAC librarians have very few models or sources of advice to which they can turn when planning OER initiatives suitable to their particular institutional context. **DESCRIPTION OF PROGRAMS** In this article, librarians describe their experience promoting and supporting OER usage at three small, private LAC, each at a different stage in developing formal programs to assist faculty interested in adopting and creating OER. The authors discuss strategies employed, obstacles encountered, and lessons learned, providing practical advice for achieving OER success in the LAC environment. **NEXT STEPS** The authors believe practical advice for the LAC context will benefit librarians at various stages of OER program implementation.

Received: 01/11/2019 Accepted: 01/26/2020

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INTRODUCTION

In many ways, small, private liberal arts colleges (LAC) seem to be ideal environments for the adoption and creation of open educational resources (OER). With their small class sizes and commitment to providing students a highly customized, high-impact educational experience, there is good reason to believe that LAC can be particularly fertile environments for the development of OER and the innovative pedagogical practices afforded by using openly licensed course materials, from textbooks to test banks. Yet, despite these shared characteristics, LAC have generally lagged behind their larger peers, especially public research universities and community colleges, in the realm of OER.

There are many reasons for this, including issues of scale, institutional organization, and the profile of the student body. In some ways, the highly customized character of many LAC courses makes it harder for their faculty to switch to open materials, like the introductory textbooks from OpenStax and other companies that are now being adopted across North America. As Jonathan Miller (2018) has observed, a major impediment to OER at LAC is likely the fact that "many courses at liberal arts colleges are, in the best sense of the word, idiosyncratic, and do not make use of traditional, standardized textbooks" (p. 400).

This trend has started to change in recent years, and a growing number of LAC are launching OER initiatives like their larger, public counterparts. Why this is now happening is also a complex issue, but changing economic and demographic realities on the part of the institutions and their student populations are certainly a major driver. Facing much stiffer competition for the most talented students, LAC are under ever increasing pressure to justify their high tuition rates and eliminate obstacles to student success. Like their peers attending other types of institutions, the skyrocketing cost of course materials is leading more LAC students to drop courses, change majors, or take courses without acquiring all (or any) of the required books. Faculty and staff are spending ever more time employing creative ways to save their students money on course materials, but used books, library reserves, and fair use policies can only help so much.

At those LAC that are starting to support OER or have been doing so for several years, the library has usually taken the lead in raising campus awareness concerning the pedagogical and financial benefits of using openly licensed course materials. To develop OER initiatives that are sustainable and successful, LAC librarians need examples of how their colleagues have managed to start and expand them. This article describes specific strategies employed at three small, private LAC, each at a different stage of implementation.

Fundamental to each LAC success story are the decisions by library leaders to invest in these innovative efforts and the people working to establish them. This collaborative article is itself evidence of the importance of funding professional development opportunities in the realm of scholarly communication and open education (OE). It is fundamentally an argument for spending part of the library's limited human and financial resources on increasing employee familiarity and facility with OER in order to determine the best ways to advocate and support their use in the classroom.

LITERATURE REVIEW

Much of the scholarly literature on OER in North American higher education has been published by faculty members and focused on faculty perceptions, impacts on student learning outcomes, and whether openly licensed resources can and should replace traditional commercial textbooks. Hilton (2016) synthesizes "published research performed in higher education settings that utilized OER" by examining sixteen articles that study "either (1) the influence of OER on student learning outcomes in higher education settings or (2) the perceptions of college students and instructors of OER" (pp. 573–4). Hilton finds enough evidence of the efficacy of OER when compared with "traditional textbooks" to conclude that "researchers and educators may need to more carefully examine the rationale for requiring students to purchase commercial textbooks when high-quality, free and openly-licensed textbooks are available" (pp. 588–89). While much of the OER research published since 2016 has continued to focus on these topics and perspectives (Hilton, 2017; Ikahihifo, Spring, Rosecrans & Watson, 2017; Brandle, 2018; Colvard, Watson, & Park, 2018; Delgado, Delgado, & Hilton, 2019), in the last 5-to-10 years there has also been a noticeable increase in publications by academic librarians about their OER support and leadership.

The SPARC-ACRL Forum on Emerging Issues in Scholarly Communications at the 2009 ALA Mid-Winter Conference was a pivotal event in the history of academic library support for OER efforts. As Nicole Allen, Steven Bell, and Marilyn Billings (2014) explain, each of them traces their involvement back to that January meeting in Denver. Since 2011, scholarly articles on OER have been published by and about librarians working at North Carolina State University (Raschke & Shanks, 2011), Temple University (Bell, 2012 & 2017), the University of Massachusetts–Amherst (Billings, Hutton, Schafer, Schweik, & Sheridan, 2012), the City University of New York (Okamoto, 2013), the University of California–Los Angeles (Farb & Grappone, 2014), California State University–San Marcos (Mitchell & Chu, 2014), the State University of New York–Geneseo (Pitcher, 2014), the University of Minnesota (Jensen & West, 2015; Ferguson, 2017), Pierce College (Jensen & West, 2015; West, 2017), Virginia Tech (Walz, 2015 & 2017), Utah State University (Davis, Cochran, Fagerheim, & Thoms, 2016), Cleveland State University (Goodsett, Loomis,

& Miles, 2016), the University of California–San Diego (Hess, Nann, & Riddle, 2016), Germanna Community College (Pierce, 2016), Arizona State University (Doan, 2017), Pennsylvania State University (Salem, 2017), the University of Kansas, and Grand Valley State University (Ferguson, 2017). None of these 18 schools, however, is a small, private LAC similar to the authors' institutions.

Open: The Philosophy and Practices that are Revolutionizing Education and Science (Jhangiani & Biswas-Diener, 2017) contains two chapters by academic librarians, one from a large, public research university (Walz) and one from a community college (West). In their prefatory comment to West's "Librarians in the Pursuit of Open Practices," the editors, both faculty members, state that "Any serious book on open would be incomplete without the inclusion of the librarian point of view" (p. 139). Even though the editors affirm that "libraries have long been repositories of learning that are strongly aligned with the open philosophy" (p. 139), this editorial statement marks an emerging recognition of the role that academic librarians have and continue to play in the OER movement. In 2018, librarians working at Vanderbilt University, Boise State University, and the University of Connecticut co-edited a collection of essays entitled OER: A Field Guide for Academic Librarians (Wesolek, Lashley, & Langley, 2018). Published in November, the volume contains two articles by librarians about OER initiatives at several private LAC: Rollins College in Florida (Miller) and the three small, private schools in the Carolinas that are members of the informal group called the Duke Endowment Libraries: Davidson College, Furman University, and Johnson C. Smith University (Hare, Wright, Allen, Clinkscales, & Reed). Both chapters detail the steps and strategies used to raise campus awareness and establish formal library support for faculty adoption and development of OER.

This article will add to the literature by comparing efforts at three different LAC, each at a different stage of the process. By juxtaposing the start of an OER awareness campaign at Franklin & Marshall College, the transition at Gettysburg College from outreach efforts concerning the development of an open access (OA) institutional repository (IR) to those focusing on OER, and successful collaborative OER efforts at Macalester College, the authors illustrate how LAC librarians can take their OER initiatives to the next level.

DESCRIPTION OF PROGRAMS

Franklin & Marshall College and Shadek-Fackenthal Library

Background. If there is an existing culture of "open" on campus, OER librarians may more easily gain faculty support for OER. Prior to 2015, however, administrators at Franklin & Marshall College (F&M) had not yet formally supported any open initiatives. While F&M

was an early IR adopter, the college library marketed the repository as a way for faculty to store and share their scholarship, rather than a way to promote information access. Without a marketing strategy or administrative engagement, faculty interest in the IR waned between 2007 and 2015.

Despite lacking a culture of OA support, F&M's college librarian and provost were instrumental in establishing support for OER initiatives after 2015. At the provost's previous institution, a large research university in the Northeast, he was tasked with quantifying student education material costs. He brought this experience to F&M, where, at the same time, the college librarian was refreshing the college library's strategic plan, "Advancing the Future of Scholarship." To the strategic plan, the college library added the goal of supporting "initiatives that reduce barriers to access to quality information," and included the need to encourage and support faculty adoption of OER, to advocate for OA publishing, and to inform the campus community about scholarly communication issues (p. 5–6).

By aligning institutional priorities with openness, and after hiring a scholarly communications librarian responsible for OER development starting in 2017, a grassroots OER initiative flourished. This case study will describe the aforementioned grassroots approach to growing an OER initiative, focusing specifically on how campus stakeholder involvement can grow an OER program in its infancy.

Developing and Implementing. The scholarly communications librarian ensured, as a first step, she kept library colleagues engaged in OER work from the beginning. Organized by the F&M science librarian, Librarian House Calls presented the first formal opportunity to work collaboratively to introduce OER on campus. Two months into every semester, the science librarian announces dates and potential discussion topics to faculty; he ensured OER and Open Access Week were on the fall 2017 agenda. Librarians walked around departmental office areas in pairs to meet faculty in their own spaces and have informal conversations about library events and services. Librarian colleagues shared the new OER library guide and the scholarly communications librarian's contact information. After each librarian pair completed their House Call shifts, all of the librarians worked collaboratively on notes, allowing the scholarly communications librarian to identify several faculty for further outreach. Faculty contacted after House Calls were those interested in textbook replacements and new pedagogical opportunities that might be realized by engaging with OER.

Librarian House Calls also invited a follow-up meeting with a faculty member in the psychology department who was impressed with the Noba Collection of OER because she recognized the authors as experts in their field. She indicated she felt ethically obligated to

seek out low-cost textbook alternatives for her students, and thought quality OER could be a solution. OER awareness spread between psychology faculty members, and the college library hosted the department for a 2-hour breakfast OER workshop in the spring semester. Because of F&M's size and culture of collaboration within departments, this trickle-down, "word-of-mouth" effect was common and rapid.

Along with Librarian House Calls, Open Access Week and events leading up to it were integral to recruiting OER allies and reaching the broader campus community. Before these presentations, the scholarly communications librarian collected data to inform faculty and administrators about the current textbook landscape. Library colleagues shared a study that the Committee on Information Resources and Services (CIRS) conducted earlier that year highlighting F&M student perceptions of textbooks. The small survey mirrored national trends from the Florida Virtual Campus survey of 22,000 college students (Florida Student Textbook Survey, 2016). According to the F&M survey, 81% of student respondents delayed purchasing their books for a class, 66% did not have the materials when needed, and 25% indicated they had dropped a course because the books were too expensive. CIRS also conducted a faculty OER survey that highlighted the top reason faculty were not using OER: "Did not know about." These results were used in presentations to remind faculty and administrators that national textbook affordability trends impact our students on a local level. The survey data also reminded librarians that faculty may not be aware of the open textbook landscape or OER as a concept.

Working with the Interlibrary Loan (ILL) Office, ILL data generated a second important F&M statistic, which the Scholarly Communication Librarian presented to the Provost's Council. ILL is a small operation, yet it is able to fill 99% of requests from faculty, professional staff, and students. Of the 1% of unfilled requests, student textbook orders represented the highest overall reason for ILL cancellations. Faculty and administrators often praise ILL for its efficiency in delivering materials, so willingly leveraging ILL's good reputation to highlight where it has failed students was impactful.

A few weeks before the Open Access Week event, the scholarly communications librarian presented information about the affordability and pedagogical opportunities of OER at a meeting of the provost's council and one of college department chairs, with similar presentations given to smaller faculty groups throughout the semester. Sharing national trends with administrators and faculty did not garner the same interest as presenting trends observable among F&M's own courses and students. While some faculty questioned the Bureau of Labor and Statistics' (2016) graph showcasing the upward trend in textbook costs, for example, no questions arose regarding the CIRS survey design and outcomes despite the small sample size. After these presentations, the scholarly communication librarian lever-

aged information about general faculty interest, awareness, and misconceptions, of which there were several. Since these presentations, chairs have discussed OER with their faculty in department meetings.

To engage the largest segment of the campus, the student body, the college library hosted several events open to the entire community but specifically targeted to students. The first event was a showing of "The Internet's Own Boy: The Story of Aaron Swartz." The film presents current challenges related to information access, copyright and intellectual property, and civil liberties on the Web. The director of the faculty center suggested faculty speakers whose research interests align with the movie's themes. A faculty member in computer science and another in business, organizations, and society (BOS) agreed to participate by speaking about the nuances of the scholarly communication landscape as it relates to openness and information access. One speaker required his 20 students to attend the movie screening, but 30 more students attended out of personal interest. Social media posts and film event posters helped generate this promising turnout, but the smaller community of the LAC also facilitated conversation and continued engagement with the professors and students through follow-up events.

Leading up to Open Education Week, the scholarly communications librarian recruited the digital initiatives librarian to co-moderate a panel discussion with the chief information of-ficer and faculty from the departments of biology and earth and environment. This Access to Information Panel widened the OE lens to touch on general issues surrounding access. Panelists discussed net neutrality's impact, endangered government data, accessible research, and the benefits of OER adoption. The most successful approach to recruiting attendees was to draw on past partnerships by emailing the previous film event's panelists. Both professors from computer science and BOS encouraged students to attend, and one panelist asked students to write reflections about what they learned as part of a course assignment. The event was so popular it had to be moved into a larger lecture hall. The college library received congratulatory emails and requests for more events in the future dedicated to these issues.

Finally, the college library worked closely with the administration to permeate the campus with open initiatives. At a meeting of the faculty, the provost introduced the college librarian and the scholarly communications librarian, who were invited to promote the new Open Access Publishing Fund. The provost described OA as a social justice issue at heart. For many in the room, this may have been the first time hearing a campus administrator publicly support the open movement. The scholarly communications librarian wrote the OA fund guidelines as an attempt to establish a retroactive OA foundation that might support OER efforts in the future. At a minimum, this kind of administrative financial support set a new precedent on campus, and the library saw that, at best, this program could pos-

sibly lead to administrative funding for future faculty OER development. Administrators are clearly influential voices on campus, yet the college library had heard repeatedly from faculty during prior outreach efforts that they would need time and money from the institution to create OER. Faculty all have different needs and unique pressures, so administrative priorities and financial support can help establish buy-in.

Key Takeaways. Support from college administrators and nuanced faculty understanding of OA are important to the success of early, library-led OER advocacy. The college library will leverage the faculty's interest in the OA fund to find OER allies, help faculty understand access and open licensing in broader contexts, and seek to create a fund in the future to support OER creation.

When embarking on a new library initiative, buy-in and support from library peers is also vital. To invite further engagement, it is helpful to present OER terminology and trends during internal meetings to help arm peers with the ability to speak knowledgeably about these topics among their constituencies.

Though presenting to large audiences helped spread the word about new OER library services, more intimate one-on-one conversations created the furthest reach in this first year. The LAC campus made this easy. During Open Access Week, a presentation was given to a smaller group of about four faculty and two librarians interested in OER. The workshop content was similar to previous presentations, but those did not generate any individual follow-up besides passing interest. After this small workshop, however, all faculty attendees expressed interest in more workshops and emailed to meet and talk about OER and publishing their work OA in the future.

Gettysburg College and Musselman Library

Background. Efforts by academic librarians to promote and support the use of OER frequently grow out of ongoing work to educate their campuses on OA issues (Mitchell & Chu, 2014). This has been the case at Gettysburg College, where Musselman Library is shifting its focus from mainstreaming an OA IR to fostering the use of open and affordable educational resources. Named after an iconic campus architectural feature, The Cupola: Scholarship at Gettysburg College went live in the spring of 2012 and was overseen by a working group comprised of librarians and professional staff. The Cupola provided the library with an effective vehicle for promoting the benefits of expanding access to college scholarship and educating the campus on the philosophy underlying the open movement. As of the end of 2018, The Cupola contained more than 7,500 works by faculty, students, and staff, and has been fully integrated within the scholarly workflow of the college.

This success has been the result of forward thinking on the part of the dean of the library, who saw the value in establishing a digital repository of college scholarship, and the head of research & instruction, who led a robust and creative outreach campaign that involved all of the library's academic liaisons. Their efforts were so successful, and the IR became so popular, that the decision was made to create the position of scholarly communications assistant to handle the mediated deposit workflow, communications with campus authors, and the checking of copyright permissions, among other related responsibilities. The head of research & instruction then became the director of scholarly communications and the department of scholarly communications (ScholComm) was born. In 2016, the dean and the director recognized the need for more dedicated support for OER and hired Musselman Library's first scholarly communications librarian the following year.

Developing and Implementing. The first steps taken by the scholarly communications librarian involved getting to know the campus climate surrounding OE, studying the outreach already undertaken, and assessing how it had been received in terms of OER in use and the presence of allies among the faculty, staff, and administrators. Approximately ten members of the faculty had already assigned OER and, in two instances, created their own. To increase affordability and access to required texts, some faculty had begun assigning readings available in the public domain or owned by the library. Several more had expressed interest in adopting open and affordable course materials, often while attending one of the events on OA and OER.

While these events were usually scheduled to coincide with Open Access Week, others were held at different times of the academic year, such as a half-day workshop on OER in May of 2017. They were largely well attended, with 47 members of the faculty attending at least one, a figure representing approximately 15% of the college's 234 full-time and 80 part-time faculty members. The speed and scope of this success were partially the result of the college's small size, which facilitates collaboration and the sharing of ideas across the organization, as well as the trusted position occupied by Musselman Library within it.

While the faculty response to prior OER outreach was encouraging, the question became how to integrate OE within college life, as had been done with *The Cupola*, and how to formalize support for the adoption and creation of OER. A multi-pronged effort ensued involving diversifying messaging to appeal to different audiences, reaching out to constituencies beyond the faculty, creating strategic partnerships with stakeholders outside of the library, leveraging the college's commitment to innovative pedagogy, and implementing a program that would give faculty the knowledge and resources they need to embed the evaluation, adoption, and creation of OER within the regular teaching and learning workflow. Focusing OER outreach on faculty is understandable given that they determine which

course materials to use, but there are compelling reasons for raising awareness among students as well. Twitter offered one proven method of creating this shared awareness. For several years, disgruntled students have been sharing their shock at the amounts they spend each semester on course materials by posting pictures on social media of their bookstore receipts accompanied by the hashtag #TextbookBroke. Following the lead of Florida State University and others, the library created a #TextbookBroke wall for Open Access Week and asked students to represent their course material costs using Post-its. The "wall" was a 4-foot by 3-foot poster displayed on the main floor of the library. By the end of the week the poster was covered with Post-its and offered students an eye-catching and interactive visualization of the problem. While the data gathered was only anecdotal, it did demonstrate that Gettysburg students were suffering from skyrocketing textbook costs in ways consistent with the rest of the country. Next to the poster, and representing part of the solution, was a display of OpenStax textbooks either currently assigned or under consideration by Gettysburg faculty. The director and scholarly communications librarian were also interviewed by reporters from the student newspaper for an article about the textbook crisis and for a podcast that aired the week prior to OA Week.

Having targeted students for OA Week, the library then decided to focus on faculty for Open Education Week. Up to that point, there was no means by which Gettysburg faculty could share information about OER use with their peers. To fill this need, a new library guide was created called Open Education @ Gettysburg College. It featured OER resources and testimonials from faculty who had assigned OER in their courses. Rather than offer information on the financial benefits to students, a line of argument which faculty often find unconvincing for various reasons, the guide was filled with resources detailing the pedagogical benefits that the use of openly-licensed resources could provide. To obtain the testimonials, faculty known to have employed OER were contacted and asked three questions: What were your major motivations for switching to or adding an open textbook to your course? How has the open textbook improved your course? What advice would you give to a professor who is considering switching to or adding an open textbook?

The scholarly communications librarian created the library's guide to OE on campus in conjunction with his participation in the Open Education Leadership Program. While still studying the library's past outreach, the director supported his application to the Open Education Leadership Program, a two-semester program OER fellowship program run by the Scholarly Publishing and Academic Resources Coalition (SPARC), and designed to train librarians how best to advocate for OER. As the only LAC librarian among the four-teen-person cohort, the scholarly communications librarian focused his work on establishing the best means of supporting OER at a small, private, undergraduate institution. His capstone project involved designing a pilot OER grant program suited to Gettysburg Col-

lege's progress to date, and a practical guide that would help others do the same for their own institutional setting.

To prepare for its implementation and ensure its viability, ScholComm has been cultivating collaborative relationships with campus stakeholders to lay the groundwork for launching a pilot version. The scholarly communications librarian met with representatives from the campus bookstore, for example, and solicited their feedback on an infographic that reminds faculty of their options for selecting affordable course materials, including OER. The director and librarian also met with the provost and deans of the academic divisions to garner support for a "textbook listening tour" similar to the one run by librarians at Temple University. Other meetings were scheduled with Admissions, Financial Aid, and the Office of Multicultural Engagement so as to understand how our efforts in support of Open Education intersect with their support of the student body.

Key Takeaways. Since the members of the Gettysburg College faculty are making strides adopting OER for introductory courses, especially in the natural and social sciences, the real need for further support appeared to be more advanced courses and those not employing a traditional textbook. Whether opting to adapt the work of others or create new resources, faculty creators of OER would benefit from the support of librarians familiar with the platforms, technologies, and preservation options available to them. And that support would be even more effective and sustainable if library employees had the assistance of colleagues in other parts of the college, like educational technology departments and learning and teaching centers. If that support can be offered as part of a program including funding and departmental support, there is a higher likelihood that faculty would be successful in their efforts to create OER that could be reused in future classes and adapted by their colleagues. This was the logic behind the faculty OER grant program designed by the scholarly communications librarian, the details of which can be found in "Piloting Faculty OER Grant Programs—A Practical Guide for Librarians, available in the Cupola.

The support for OER being developed by ScholComm is built upon the success of *The Cupola* and its employees' ability to work as a team. Deciding to create new positions, alter existing responsibilities, and support the professional development of staff working on OER-related issues is a crucial component in developing library support for OER at small, private LAC. Since LAC librarians and professional staff already wear multiple hats, creating institutional capacity for the support of OER on campus requires that library leaders invest time and money in human as well as technological resources. Without the willingness of library leaders to divert dollars and employee time to education, infrastructure, and collaboration with teaching faculty, library support cannot be expected to flourish or be sustainable. While there need not be a single position or department with the responsibil-



ity for developing OER support, Macalester College being a case in point, librarians and professional staff must themselves be supported in their work on this relatively new service offered by the library. Furthermore, the library is most likely to succeed when OER support is a team effort and collaborative relationships are established with individuals working in other departments on campus.

Macalester College and the DeWitt Wallace Library

Background. Macalester College and the DeWitt Wallace Library have a long history of supporting OA and open publishing. For many years, the library has been a member of organizations devoted to OA including SPARC, Knowledge Unlatched, and Hathitrust, encouraged faculty to publish in OA journals by providing funding for publishing fees, and promoted an IR that now includes more than 5,400 published papers, journals, and monographs with more than 2.4 million downloads. It is this culture of supporting OA, in combination with this college's focus on active learning and student engagement, that has made it fertile ground for OER development and provided a firm foundation upon which to build OER support programs.

In 2015, the library started a campaign to highlight the rising costs of college textbooks and to discuss the impact this was having on higher education. The library held forums and other events in cooperation with stakeholder groups and was surprised by the initial student and faculty reaction. In a campus forum co-sponsored with the Macalester College Student Government (MCSG), students indicated that while high textbook costs are a problem at many higher educational institutions, it was not a significant problem at Macalester because of the support resources made available on campus. Faculty made similar comments, explaining that when they discussed this issue with their classes, the students did not seem overly concerned. Students reported spending \$300-\$500 out of pocket per academic year on textbooks rather than the estimated amounts reported in the College Board (2017) national survey for students attending private four-year liberal arts colleges. Macalester's financial aid office makes extra funding available to students who have a demonstrated need and who require assistance in paying textbook costs. Students at Macalester are also eligible to apply for a campus Textbook Advance Program designed to facilitate timely access to textbooks for their courses. This program allows students to use their campus student ID card at the bookstore to get their textbooks, having the balance placed on their student account and thus delaying payment by spreading it over the course of the semester. In addition, the library co-sponsors with MCSG a highly successful textbook reserve program. With this initiative, the Academic Affairs Committee of the student government allocates up to \$10,000 annually to purchase textbooks that can be checked out from the library course reserve program. This targets the most expensive textbooks used on campus to ensure that all students have access to their course materials at the start of the semester, and it is a heavily used program. During spring and fall 2017 semesters, students checked out these textbooks more than 11,300 times.

While the problem of rising textbook costs did not significantly resonate with the campus community, messaging about the ability to customize and adapt open textbooks did receive a strong response. Many of the students in the initial OER forum events voiced concern about faculty requiring textbooks for their classes and then only asking students to read a few select chapters from each, or requiring students to purchase texts that were then used only as a reference resource. At the same time, the library heard that faculty liked the idea of being able to customize a textbook for their course by focusing on the content they would be covering during the semester. They liked the ability to experiment with new publishing models, to more easily update or alter the textbook as needed, and to incorporate alternative types of content, such as interactive exercises and multimedia, to better engage with their students. The library decided to shift its OER messaging away from the cost of textbooks and to refocus on the customization and flexibility possible with openly licensed resources.

Developing and Implementing. The library brought interested faculty together to start building momentum. In Spring 2016, the library scheduled a full-day, hands-on workshop for faculty that would address many of the obstacles to OER adoption that national surveys frequently highlight. Members from all academic divisions were represented. The library discovered, in addition to the major obstacles that frequently get reported, there were more practical concerns that were preventing faculty from moving forward. Faculty were confident about their ability to develop the disciplinary content around their topic areas, but were hesitant moving forward with adoption or authoring because of their uncertainty concerning their skills in the area of textbook production. This included issues related to layout and design, accessibility, and video/audio editing, among other areas.

The library sought grant funding to enable library staff to partner with a faculty member and work side-by-side to develop and implement an OER project. The goal of this effort was to learn what issues came up, create documentation and support resources as needed, identify tools that would be helpful, and put in place local campus resources that could support future faculty OER creation efforts. This grant also led to the development of a campus OER toolkit that faculty can use as they begin an OER project.

Macalester's OER toolkit not only links to the many helpful resources that have been developed by other campuses and organizations which are proponents of OER, but also includes specific tools and resources available on campus. The library encouraged faculty starting an OER project to connect with local people and resources so that they could receive the personalized attention and support for which small LACs are known. Included among these

local resources is a group of student library employees extensively trained to provide faculty with help editing multimedia files and using many specialized software tools. There are also staff on campus to assist with layout and design and to help address accessibility issues. The library hosts installations of WordPress and PressBooks, and provides support for tools such as the interactive educational resource H5P. During Fall 2017, the library established a popular stipend program that provides kick-off funding of up to \$1200 for OER projects. Once the support infrastructure was in place, the library could move forward with full implementation of an OER authoring program.

Faculty also noted the lack of textbooks which adequately covered interdisciplinary topics. As previously described, interdisciplinary courses and seminars, often co-taught by faculty from different disciplines, are common at small, private LAC. Whether it be a course on the ethics of technology taught by a computer science professor and a colleague from the philosophy department, or a biologist partnering with an educational studies professor to lead a course exploring outdoor education as an opportunity to promote social justice and environmental sustainability, this collaboration on course topics has led to conversations between the faculty and the library around starting open textbook projects. Some Macalester courses are similar to those offered in graduate programs at other institutions. This led to open textbook authoring projects being implemented by faculty interested in developing a sophisticated course resource that would be appropriate for undergraduates.

A faculty member in the mathematics, statistics and computer science (MSCS) department came to the library with such a project. She had been teaching a course on Bayesian statistics for several years, and had been frustrated by her inability to find what she considered an appropriate undergraduate textbook on the subject. Instead, she had relied on her own notes, slide decks, and exercises to teach the course. She was particularly interested in incorporating interactive statistical exercises right into the body of the textbook, allowing students to test their comprehension as they worked through the material. She is constructing her OER textbook using the R Studio "bookdown" platform. This textbook will be fully customizable and incorporate the required computer code for applying Bayesian methodology. It is expected to be ready for use in her classroom in Fall 2018. It will be shared and published on GitHub and in the library's IR under a Creative Commons license.

Key Takeaways. Lessons learned from this implementation process centered on understanding and aligning faculty perceptions, interests, and needs to their teaching materials within the LAC context. While some Macalester faculty have adopted existing open textbooks—mostly in introductory courses—most faculty are interested in authoring textbooks for upper-level courses where they felt adequate undergraduate-level course materials were not available.

Macalester's campus emphasizes social justice issues, social change and real world experiences, and librarians capitalized on this to update and contextualize texts alongside faculty. The motivation behind an introductory-level German language and culture project entitled "Grenzenlos Deutsch" was one faculty member's desire to create a language curriculum that better reflected the changes—social, political, and cultural— that are impacting the German language. This project includes embedding multimedia video and audio content as well as interactive exercises to better engage the students and create a more active learning experience. This project is supported by an NEH grant, which ten faculty from different campuses across the country used to meet for a month-long authoring and open content creation event.

NEXT STEPS

On Advocacy

While no OER benefits should be forgotten when engaging with the campus community, libraries must recognize that some institutions, and some audiences within the institution, may prioritize particular OE benefits over others. Strategies for outreach and promotion should be adapted to the specific institutional environment, mission statements, and individuals. One must spend time determining what arguments and talking points resonate at the institution related to OER (e.g., equity, cost reduction, flexibility). As outlined in F&M's case study, local statistics can be more impactful than national ones, and student cost savings can be much less persuasive for faculty than their ability to customize OER to perfectly suit the needs of their courses. College administrators may envision how OER efforts might fit within the college's strategic planning in ways often unknown to librarians. Having their support can make an enormous difference on faculty perceptions of OER, and make advocacy work more successful. Support from such school leaders can help OER advocates get more outreach opportunities in front of faculty and chairs meetings, but some of the most successful outreach occurs informally in one-one-one or small group settings. A combination of events that are big and small, formal and informal, and each tailored to the particular audience is likely to have the best results.

On a Culture of Open

As all three institutions note, an existing culture of open can create an organic pathway for OER advocacy focused on equity and transparency. With the benefit of an existing awareness of open, built upon outreach on topics like the benefits of depositing in an OA IR, of publishing OA, or understanding author rights, OER can be a natural next step forward and an excellent complement to other open topics. And yet, with or without a history of

openness on campus, OER advocacy can often be effective as a component of a larger open campaign educating the campus on a range of issues related to access and copyright. The key is to determine where the culture of open is strongest and build on that, be it among the student body, among a department or group of faculty members, or the school's senior officers. Each may support OER for a different reason, but bringing them together can result in a multipronged plan more likely to succeed because of buy-in from stakeholders throughout the institution.

On Support Structures

Finally, OER advocacy work is more effective with properly trained and well-supported librarians equipped to take the lead on OER and educate library colleagues to assist in advocacy efforts. An OER outreach campaign is more likely to be successful as a team effort, especially at an institution without a well-established culture of open or faculty champions on whom the OER point person can rely. From creating shared documentation to educating colleagues on how to explain the nuances of Creative Commons licensing, team advocacy brings greater opportunity to reach more faculty.

One major concern for libraries that have one person focused on OER initiatives is the potential for this knowledge and skill set to be lost if the position becomes vacant. The more collaboration that happens, including sharing public documentation of decisions, workflows, and materials, the more sustainable an OER initiative will be.

In order to thrive, the librarians tasked with developing OER awareness and support need forward-thinking library leaders who will recognize the value in reallocating time and energy towards OER advocacy and professional development. Librarians in this lead role may need technical skills or support like web layout and design, video and audio editing, and other content production skills to assist faculty in developing OER projects. Grant applications need to be written and surveys need to be created, administered, and promoted. These skills are especially important for librarians at LAC for at least two reasons. First, most small, private LAC do not employ a developer in the library and the would-be OER librarian often must rely on themselves and what they can learn from peers through professional development opportunities. Second, given the idiosyncratic nature of many LAC courses, there is likely to be a much higher interest among faculty in creating new OER rather than adopting or adapting existing ones. This will put an even greater technological (and time) burden on the librarian leading OER support. For many librarians, OER advocacy and support work will lead them into unchartered professional waters. It is therefore vital that these individuals can rely on their supervisors and colleagues as they explore this relatively new field within academic librarianship.

ACKNOWLEDGEMENT

The authors would like to thank Terry Fishel, who supported this work after Ron Joslin's untimely passing in 2019. To understand Ron's impact in the OER world and his colleagues' appreciation for him, please refer to In Fond Memory: Ron Joslin.

REFERENCES

Allen, N., Bell, S., & Billings, M. (2014). Spreading the word, building a community: Vision for a national librarian oer movement. *Against the Grain*, 26(5). https://doi.org/10.7771/2380-176X.6842

Bell, S. (2012). Coming in the back door: Leveraging open textbooks to promote scholarly communications on campus. *Journal of Librarianship and Scholarly Communication*, *I*(1), eP1040. https://doi.org/10.7710/2162-3309.1040

Bell, S. (2017). What about the bookstore? Textbook affordability programs and the academic library-bookstore relationship. *College & Research Libraries News*, 78(7). https://doi.org/10.5860/crln.78.7.375

Billings, M. S., Hutton, S. C., Schafer, J., Schweik, C. M., & Sheridan, M. (2012). Open educational resources as learning materials: Prospects and strategies for university libraries. *Research Library Issues*, (280). https://doi.org/10.29242/rli.280.2

Brandle, S. M. (2018). Opening up to OERs: Electronic original sourcebook versus traditional textbook in the introduction to American government course. *Journal of Political Science Education*, *14*(4), 535–554. https://doi.org/10.1080/15512169.2017.1420482

Colvard, N., Watson, C. E., & Park, H. (2018). The impact of open educational resources on various student success metrics. *International Journal of Teaching and Learning in Higher Education*, *30*(2). Retrieved from https://files.eric.ed.gov/fulltext/EJ1184998.pdf

Davis, E., Cochran, D., Fagerheim, B., & Thoms, B. (2016). Enhancing teaching and learning: Libraries and open educational resources in the classroom. *Public Services Quarterly*, 12(1), 22–35. https://doi.org/10.1080/15228959.2015.1108893

Delgado, H., Delgado, M. S., & Hilton III, J. (2019). On the efficacy of open educational resources: Parametric and nonparametric analyses of a university calculus class. *International Review of Research in Open and Distributed Learning*, 20(1). https://doi.org/10.19173/irrodl.v20i1.3892

Doan, T. (2017). Why not OERs? portal: Libraries and the Academy, 17(4). https://doi.org/10.1353/pla .2017.0039

Farb, S., & Grappone, T. (2014). The UCLA libraries affordable course materials initiative. *Against the Grain*, 26(5). https://doi.org/10.7771/2380-176X.6848

Ferguson, C. L. (2017). Open educational resources and institutional repositories. *Serials Review*, 43(1), 34–38. https://doi.org/10.1080/00987913.2016.1274219

Florida Virtual Campus (2016). 2016 Florida Student Textbook Survey. Retrieved from https://florida.theorangegrove.org/og/items/3a65c507-2510-42d7-814c-ffdefd394b6c/1/

Goodsett, M., Loomis, B., & Miles, M. (2016). Leading campus OER initiatives through library–faculty collaboration. College & Undergraduate Libraries, 23(3), 335–342. https://doi.org/10.1080/10691316 .2016.1206328

Hare, S., Wright, A., Allen, C., Clinkscales, G.E., & Reed, J. (2018). Interinstitutional collaborations to forge intracampus connections: A case study from the duke endowment libraries. In A. Wesolek, J. Lashley, & A. Langley (Eds.), *OER: A Field Guide for Academic Librarians* (pp. 309-330). Forest Grove, OR: Pacific University Press. https://doi.org/10.7710/9781945398797

Harwell, J. (2015). Being earnest with collections: Investing in open access at a small academic library. *Against the Grain*, 27(6). https://doi.org/10.7771/2380-176X.7254

Hess, I., Nann, A.J., & Riddle, K. E. (2016). Navigating OER: The library's role in bringing OER to campus. *Serials Librarian*, 70(1–4), 128–134. https://doi.org/10.1080/0361526X.2016.1153326

Hilton, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Educational Technology Research and Development*, 64(4), 573–590. https://doi.org/10.1007/s11423-016-9434-9

Hilton, J. (2017). (Ed.) Special issue: Outcomes of openness: Empirical reports on the implementation of OER. *International Review of Research in Open and Distributed Learning*, 18(4). Retrieved from http://www.irrodl.org/index.php/irrodl/issue/view/85

Ikahihifo, T. K., Spring, K. J., Rosecrans, J., & Watson, J. (2017). Assessing the savings from open educational resources on student academic goals. *International Review of Research in Open and Distributed Learning*, 18(7). Retrieved from https://doi.org/10.19173/irrodl.v18i7.2754

Jensen, K., & West, Q. (2015). Open educational resources and the higher education environment: A leadership opportunity for libraries. *College & Research Libraries News*, 76(4), 215–218. https://doi.org/10.5860/crln.76.4.9298

Jhangiani, R., & Biswas-Diener, R. (Eds.). (2017). Open: The Philosophy and Practices that are Revolutionizing Education and Science. London: Ubiquity Press. https://doi.org/10.5334/bbc

Jung, E., Bauer, C., & Heaps, A. (2017). Higher education faculty perceptions of open textbook adoption. *The International Review of Research in Open and Distributed Learning*, 18(4). https://doi.org/10.19173/irrodl.v18i4.3120

Lovett, M., Meyer, O., & Thille, C. (2008). JIME—The open learning initiative: Measuring the effectiveness of the OLI statistics course in accelerating student learning. *Journal of Interactive Media in Education*, 2008(1). https://doi.org/10.5334/2008-14

Miller, J. (2018). Bringing OER to the liberal arts: An innovative grant program. In A. Wesolek, J. Lashley, & A. Langley (Eds.), *OER: A Field Guide for Academic Librarians* (pp. 399–414). Forest Grove, OR: Pacific University Press. https://doi.org/10.7710/9781945398797

Mitchell, Carmen, & Chu, Melanie. (2014). Open Education Resources: The New Paradigm in Academic Libraries. *Journal of Library Innovation*, 5(1). Retrieved from http://hdl.handle.net/10211.3/128180

Okamoto, K. (2013). Making higher education more affordable, one course reading at a time: Academic libraries as key advocates for open access textbooks and educational resources. *Public Services Quarterly*, *9*(4). https://doi.org/10.1080/15228959.2013.842397

Ovadia, S. (2019). Addressing the technical challenges of open educational resources. *Portal: Libraries and the Academy*, 19(1). https://doi.org/10.1353/pla.2019.0005

Pierce, M. (2016). Looking at OER with a critical eye: Strengthening OER initiatives by focusing on student learning. *Community & Junior College Libraries*, 22, 11–17. https://doi.org/10.1080/02763915. 2016.1205391

Pitcher, K. (2014). Library publishing of open textbooks: The Open SUNY Textbooks Program. *Against the Grain*, 26(5). https://doi.org/10.7771/2380-176X.6844

Raschke, G., & Shanks, S. (2011). Water on a hot skillet: Textbooks, open educational resources, and the role of the library. In S. Polanka (Ed.), *The No Shelf Required Guide to E-Book Purchasing* (pp. 52–57). Chicago, IL: ALA TechSource. Retrieved from https://journals.ala.org/index.php/ltr/article/view/4419/5129

Salem Jr., J. A. (2017). Open pathways to student success: Academic library partnerships for open educational resource and affordable course content creation and adoption. *The Journal of Academic Librarianship*, 43(1), 34–38. https://doi.org/10.1016/j.acalib.2016.10.003

Walz, A. (2015). Open and editable: Exploring library engagement in open educational resource adoption, adaption and authoring. *Virginia Libraries*, 61(1). https://doi.org/10.21061/valib.v61i1.1326

Walz, A. (2017). A library viewpoint: Exploring open educational practices. In: Jhangiani, RS & Biswas-Diener, R. (Eds.), *Open: The Philosophy and Practices that are Revolutionizing Education and Science*, (pp. 147–162). https://doi.org/10.5334/bbc.l

Wesolek, A., Lashley, J., & Langley, A. (Eds.). (2018). *OER: A Field Guide for Academic Librarians*. Forest Grove, OR: Pacific University Press. https://doi.org/10.7710/9781945398797

West, Q. (2017). Librarians in the Pursuit of Open Practices. In: Jhangiani, RS & Biswas-Diener, R (Eds.), *Open: The Philosophy and Practices that are Revolutionizing Education and Science* (pp. 139–146). https://doi.org/10.5334/bbc.k