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Leveraging Library Expertise in Support of Institutional Goals: A Case Study of an OER Initiative at Lehman College

Stacy Katz
CUNY Lehman College

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Educational Resources Initiative

Stacy Katz
Lehman College, Bronx, New York, USA

Abstract

Incentivizing faculty adoption of Open Educational Resources (OER) as a method for reducing

textbook costs to increase access and affordability of higher education has been an area of

development in academic libraries. This manuscript describes the experience at Lehman College,

CUNY, the only four-year public college in the Bronx, NY. The OER initiative involves the

creation of a new program, which includes assisting faculty with adopting and adapting OER, as

well as training and discussion around issues pertinent to OER, such as finding and evaluating

OER. The case study explains local conditions and provide an overview of the financial

implications for textbook costs that OER alleviates as well as the pedagogical benefits. The

repositioning of the Library through this initiative is also discussed.

Introduction

        Increasing college completion rates and educational attainment has been attributed to

providing societal benefits in the public interest, ranging from greater civic engagement to

greater health and happiness, as well as economic benefits such as greater employment prospects

and higher incomes (Commission on the Future of Undergraduate Education, 2017; Ma, Pender,

& Welch, 2016). However, those individuals who start but do not complete college do not

experience these gains from the degree. Therefore, increasing college completion has an effect on reducing unemployment, increasing wages, and expanding the economy.

The U.S. Department of Education published a study showing that in the first decade of this century 2.4 million qualified low- and moderate-income students did not finish college because of cost (Advisory Committee on Student Financial Assistance, 2006). The cost of college is largely comprised of tuition and fees, room and board, books and supplies, personal expenses, and transportation. Faculty is not typically positioned to change tuition and fees, nor room and board, nor personal expenses, nor transportation. However, faculty selects assigned course materials. As the American Association of University Professors (AAUP) Statement on the Freedom to Teach states, faculty have the right to select the materials for their courses (2018). Though that decision can be made by a curriculum committee, a section leader, or individual faculty members, the choice resides in the academic, rather than administrative, part of the institution.

Given that this decision resides with faculty, researchers have examined the factors faculty use to select textbooks. Seaman and Seaman (2017) surveyed faculty members on the elements in course material selection, such as the comprehensiveness of content, cost, ease of finding materials, format availability (print or digital), if supplemental materials are included, recommendations from other faculty, if the text is adaptable or editable, and if it works with their institution's Learning Management System. Within these considerations, faculty rated comprehensiveness of content and cost to the student as the most important factors. However, only 22% of faculty surveyed reported that they are "Very satisfied" with the cost of their

selected textbook. While textbooks and supplies are not the highest cost in attending college, they do impact students' abilities to succeed in college (Ernst, 2017).

Several large scale studies have documented that the cost of textbooks prevents students from achieving their degree. In the Florida Virtual Campus Student Textbook and Course Materials Survey, 66.6% of students surveyed did not purchase the required textbook, even though most knew it would lead to a poor course grade. In the same survey, students report that textbook costs can also affect time to graduation, as they reported taking fewer courses, not registering for a course, dropping a course, or withdrawing from a course due to textbook costs (2016). These costs are detrimental to student success and particularly problematic for students in traditionally underserved groups.

The term "Open Educational Resources" was coined in the 2002 UNESCO Forum on the Impact of Open Courseware for Higher Education in Developing Countries. The report provides the vision and method for OER, "open access to the resource, with provision for adaptation" and that these resources be "enabled by information/communication technologies" for a "diverse community of users" to "provide an educational, non-commercial resource" (2002, p. 24). This definition has adapted over time to the commonly used definition from the William and Flora Hewlett Foundation (frequent funders of OER initiatives) to "teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others" (Hewlett Foundation, 2018). Essentially, any learning object in the public domain or has a Creative Commons license can be an OER. The UNESCO definition provides purpose to the endeavor of OER. They are also enabled by technology, but not necessarily digital objects. OER are distinguished by their

intellectual property license, rather than their format. Digital objects can be freely available or commercial, but are not considered OER without the ability to freely use and repurpose. These permissions are referred to as the "5 Rs" - retain, revise, reuse, remix, and redistribute (Open Content, n.d.).

Researchers at the University of Georgia completed a study of 21,822 students enrolled in eight different courses over 13 semesters, and found that OER adoption improved grades and reduced the failure and withdrawal rates of all students. This study was particularly groundbreaking, as the researchers disaggregated the data. In their research, they found that OER "improve course grades at greater rates and decrease DFW (grades of D or F, or withdrawal) rates at greater rates for Pell recipient students, part-time students, and populations historically underserved by higher education" (Colvard, Watson, & Park, 2018, p. 262).

Background

Lehman College is a senior college within the City University of New York (CUNY) and the only public senior college in the Bronx, New York. Despite being sandwiched between two of the most economically prosperous counties in New York State, specifically Manhattan and Westchester, the Bronx remains the second poorest county in the state and ranks near the bottom five percent of counties in the United States for economic mobility for children in poor families. The Bronx also lags in educational attainment in the state, with only 27.7 percent of residents ages 25 to 64 with at least an associate's degree. As the college with the fourth highest mobility rate in the United States, Lehman College launches students from the bottom 40 percent economically to the top 40 percent (Chetty, et. al., 2017). The President of Lehman College

issued a challenge to the college called "90x30" to reach ninety thousand degrees and certificates by the year 2030 (Lehman College, n.d.), roughly double the number of degrees the college is on track to grant by 2030. While the Library's general activities, such as collection development and information literacy, support students in achievement of their degree, the Library reflected that an OER initiative could leverage librarian skills to reduce textbook cost for students.

Within the CUNY system, several colleges had already developed Zero Textbook Cost (ZTC) course initiatives. Beginning in 2014, several CUNY libraries utilized funds typically allocated for reserve textbooks to incentivize the redesign of courses using ZTC materials. In particular, Borough of Manhattan Community College (BMCC) and New York City College of Technology (City Tech) were among the first within CUNY to begin to explore how libraries could go beyond offering copies of reserve textbooks and help offset the cost of textbooks for students. ZTC courses use materials that are OER as well as freely available copyrighted websites, and library resources that are free to students.

The Leonard Lief Library first discussed the idea of an OER/ZTC initiative in Fall 2016 when the Interim Provost asked departments within Academic Affairs, including the Library, to propose non-recurring strategic initiatives that will benefit the College and demonstrate our commitment to continuous improvement. Library faculty discussed several possible projects and proposed an OER/ZTC initiative as well as an innovative video series interviewing faculty researchers. The OER/ZTC was allocated three thousand dollars for three faculty members to redesign their courses to be zero cost. The three participating faculty members would each receive one thousand dollars and training to redesign their course with open, as well as free resources. The initiative grew as Governor Cuomo announced that the City University of New

York (CUNY) and State University of New York (SUNY) systems would each receive four million dollars for OER (Straumsheim, April 4, 2017). This money was distributed through the CUNY Office of Library Services and a formula was included to fund faculty incentives, professional development, and hiring of library adjuncts to either work on OER initiatives or relieve full-time Library faculty from typical duties in order to devote time to the initiative. The funding for professional developments and hiring adjuncts for relieving OER librarians from their typical duties has been key in creating supports for the initiative. At Lehman College, this funding enabled eleven faculty to redesign their courses with OER/ZTC materials and adjuncts and other faculty to adopt the syllabi and resources developed by their colleagues.

Initiative structure and training

In structuring the initiative, the Library formed a working group comprised of five library faculty. The working group developed a call for proposals based on a model from the New York City College of Technology (City Tech) in which stipends are awarded to faculty for curating a resource of openly licensed materials and other cost-free educational materials. The emphasis of the initiative is to assist faculty in curating a zero cost resource to meet the educational needs of the students.

The working group selected the faculty participants from the applications received from the call for proposals. The proposal form queried regarding the number of sections, number of students, the current textbook and cost, supplemental resources used in the course, faculty rationale for redesigning the course with OER, any preliminary thoughts on developing OER, as

well as what types of training and support they might need. Faculty were selected based on the cost savings to students, as well as their interest and vision for OER/ZTC in their classes.

Faculty motivation varied in the applications. Many faculty felt that the cost of textbooks is too high for students and noted that their students do not purchase the textbook. However, cost was not the only motivator. One faculty member in African American Studies described a compelling justification in their desire to bring African American studies into new digital media. A faculty member teaching Art History felt that they could not justify asking students to purchase expensive textbooks for a course that students took as a non-major requirement, especially when much of the information is available online. Other faculty reported that they were looking for a way to reinvigorate their teaching.

To participate in the initiative, faculty must show that their department chair supports the redesign of the course with OER/ZTC materials. During the first year, the three faculty participants were assigned a librarian from the working group to assist in searching for materials. The Library working group developed asynchronous online training remixed from existing OER training materials from Affordable Learning Georgia, OpenSUNY, Open Washington, and LaGuardia Community College. The training was developed using Blackboard. While not an open platform, Blackboard is the Learning Management System at the college and is familiar to most faculty. The training topics include an introduction to OER, Creative Commons licenses and public domain, searching OER repositories, evaluating OER, selecting and modifying OER, accessibility standards, and attribution for Creative Commons-licensed resources. A Research Guide was developed for faculty who were participating in the initiative as well as for greater awareness of OER at the college. The Research Guide includes brief overviews of the same

topics in the course, as well as links to OER by discipline arranged by school within Lehman College. At least one OER per department is included to show the range of OER available, though the number of OER available is constantly growing. The Open Resources Librarian follows up with faculty to ensure they find materials that meet their course needs. Additionally, as new OER are published, faculty with OER interests receive emails about new resources that would specifically be of interest for their classes.

Table 1. Open Educational Resources: Students and Savings.

Semester	Total Students	Total Savings ($)
Fall 2017	841	52,417.49
Winter 2018	48	6,015.87
Spring 2018	1144	90,894.97
Total	1042	149,328.33

Table 2. Number of faculty and courses by discipline.

Discipline	Faculty	Courses
African and African American Studies	2	3
Art	1	2
Earth, Environmental, and Geospatial Science	1	2
Economics and Business	1	1
Education	2	2
English	1	2
Languages and Literature	1	1
Nutrition	1	1
Sociology	2	2
Total	12	16

Some of these topic areas align with librarian expertise, particularly searching repositories, evaluation of resources, and Creative Commons licenses and copyright. Librarians working in the digital space also have developed proficiency around best practices in accessibility. Librarians are not typically asked about instructional design, outside of information literacy sessions, in courses. Questions regarding curriculum committees, printing of materials, and learning design provide new opportunities for librarians to engage with faculty on student learning.

Initiative impact

Student savings

The impact of the initiative can be measured at multiple levels, including student savings and pedagogical impact. Savings from OER compound across sections and semesters and quickly add up to more than the expenditure from state or grant funding. The savings from the first cohort of three faculty was $15,000 in the first year of implementation. The savings by year vary depending on if the class is running in a particular semester and if the faculty using OER is assigned to teach that class. The calculation is also artificial, in that it assumes that students will purchase a new textbook. The Library tracked actual textbook prices in the year that the faculty adopted OER. The number of students is initially estimated by the potential seats for the course and then revisited for actual enrollment. Student savings were calculated based upon faculty

reporting the cost of their previous textbook and then multiplying that figure by the number of students enrolled in the course.

Tracking student savings with OER is complex because of the variables involved of actual students enrolled and the variability in textbook prices based on the vendor. While research shows that students are not purchasing new textbook when they have to obtain a commercial textbook, OER is considered equivalent to a new textbook. Various calculations have been used by other organizations and systems. For example, SPARC approximates savings at $100 per student for OER adoption. OpenStax utilizes U.S. Department of Education's National Center for Education Statistics figure $555.60 on required course materials and then divides that number by seven courses. University of Missouri calculates savings by taking the average of the five price points (new, used, new rental, used rental, and ebook) of each individual title. The University weights the average by the number of units previously sold of each. The calculation for savings is a snapshot that varies based on the courses being offered and which faculty teach the course.

Pedagogical benefits of OER

The savings from OER exist and are significant, regardless of how they are calculated. In the CUNY Cross-Campus Zero Textbook Cost student survey, one Lehman student responded about the benefits of a ZTC course:

> Less stressful financially because I had 2 books from my other classes that were almost 200 dollars each, also it was less overwhelming getting the materials in time or trying to find the cheapest place to buy from, because they were already online, always having access no matter where I am because it is posted online I was able to do readings while on the train. Easier to go back an locate material,

not carrying extra heavy books is also good. With less books to buy you have less
to worry about and can just focus on the learning part. (Brandle, S.M., et. al.,
2018)

The most obvious pedagogical benefit of OER is access to materials. As Nicole Allen,

Director of Open Education at SPARC, remarks, "students cannot learn from books they can't

afford" (2018). While seemingly obvious, this underscores a deep issue of how students cannot

learn when they do not have access to books. Students report that they cannot purchase the

textbook, and as a result drop courses and earn poor grades (Florida Virtual Campus, 2016). In

the CUNY Zero Textbook Cost survey, students noted they had immediate access anytime and

anywhere to their materials. The importance of access cannot be underestimated. Due to lags in

financial aid disbursements, students will often wait to purchase commercial textbooks until they

have the funds to do so. Students also delay the purchase of textbooks to see if it is being used in

the class or if they can share with a classmate.

These transitions have created courses that are more engaging for students. One faculty

member remarked that course evaluations have improved -- not because of the lack of textbook

cost -- but because the course is more engaging, and students can sense she has rediscovered her

enthusiasm for the course. Faculty can engage creatively in the process of redesigning their

course, rather than be limited by the published textbook. Faculty appreciates the ability to curate

from a number of textbooks, without creating the burden of one or multiple textbook costs for

students.

The process of redesigning the course with OER helps faculty deepen their pedagogy.

One Lehman faculty member who participated in the initiative reflected that, "OER pushed me

to search for new material on the subject of the class. Instead of 'adapting a book' for the class

-- I feel like I am adapting 'a world' for the class. I found many OER (Creative Commons-licensed) sites with much better illustrations and explanations than I used before." (Y. Gorokhovich, personal communication, November 14, 2016). Without a textbook that includes assessments, an Economics faculty member redesigned their his course to include a research assignment and an information literacy session with the Business Librarian.

The faculty participants in the OER initiative have been distributed by discipline throughout the College. Faculty across the college were interested and all that were interested received support from their Department Chair. Some faculty participants redesigned multiple courses with OER - one likened the process to eating Pringles, as in, "once you pop, you can't stop." Faculty who have adopted OER in one course tend to explore OER for their other courses, reporting that it is an effective practice for both the zero cost nature for students and the pedagogical impact.

Discussion

As libraries are contemplating how to demonstrate relevance in their larger institution, they must "provide value and demonstrate their worth to their institution, librarians should be building relationships across campus to integrate their services deeply within the educational mission of their home institution" (Delaney & Bates, 2015). OER presents itself as an opportunity to develop relationships and as a key trend within academic librarianship (ACRL Research Planning and Review Committee, 2018). The library is uniquely positioned to lead OER initiatives as librarians tend to have relationships across the college through liaison roles, and have expertise searching repositories and developing resource guides, advising on issues

such as copyright and Creative Commons licensing, and collection development and management. Librarians have also long been aware of the issues surrounding the lack of affordable textbooks through the development and maintenance of reserve textbook collections.

Librarians have taken the lead on OER initiatives, which has led to the development of the title of OER Librarian. One prominent question around OER librarianship is whether this is a new role for librarians or an extension of previous responsibilities in a new context. To some extent, this depends on the nature of the initiative. Library faculty at Lehman College were well-positioned to adapt and remix existing OER initiatives and materials to develop one focused on adoption of OER. Creation of new OER, or even adaptation of existing OER, requires greater knowledge of publishing, peer-review, and platforms than adoption does.

The Open Resources Librarian engaged the departmental liaison librarian for subject expertise and to strengthen relationships between the Library and the faculty. This role positions the Library as experts on OER, an emerging trend in the academy. Library faculty presented on OER at the Provost's Council, Dean's Council, the general faculty meeting, and with student leaders. These invited presentations are evidence of the alignment between the OER initiative and the institutional goals. While the Library's typical functions and activities contribute to the overall institutional mission, these projects typically do not warrant multiple presentations to high-level stakeholders.

As most initiatives will not have a large influx of state funding, starting small can begin the campus conversation. Leveraging the opportunity of a small amount of funding provided by the Provost to pilot the OER initiative repositioned the Library's role within the college. The imperative to reduce textbook costs for students aligns the Library with the 90x30 initiative. The

faculty interested in exploring OER opt in to the training and are given a stipend for their time. The minimum viable product in the initiative is a ZTC course, which allows for a wider variety of resources, even though copyrighted resources have fewer permissions than open ones. OER do not yet exist for every course and library resources as well as freely available copyrighted ones fill an important gap.

Librarian expertise, institutional support, and stipends provide a base to initiating an OER program. The time needed to support faculty is sign

ificant. While faculty receive stipends to participate in the initiative, librarians do not. It aided the development of the initiative that the position was formally dedicated to OER. The Library is investigating community of practice models so faculty at Lehman can support each other in adopting OER and create a space to discuss shifting classroom practices as one person, or even a working group, cannot support the entire campus in adapting and maintaining resources. Partnerships with stakeholders, such as the Provost's Office, Deans, Online Education, and Enrollment Management are forming to discuss the supports needed for faculty to engage with OER/ZTC.

Sustainability is a concern in the OER ecosystem. One faculty member remarked that the work of changing their textbook to OER never quite feels done, as new materials continue to emerge. The funding for the project will not continue at the same rate from the state government, nor should funding continue to drive this work. Conversations are emerging around if and how OER might count in tenure and promotion practices. Within the three traditional tenets of tenure and promotion, scholarship, teaching, and service, some make the case that where this work falls depends on how it is being used. For example, creation of OER that becomes adopted globally

could be a case of public scholarship, while adapting and teaching with an OER might be innovative teaching. The Library can begin this conversation, but it falls to personnel and budget committees to make the determination. However, counting this work toward tenure and promotion provides larger incentives than nominal grant funds and shows the true values of the institution.

Conclusion

Increasing educational attainment is an imperative for everyone working in higher education. The benefits for students, their families, and the community provides an imperative for decreasing barriers to completion. The cost of textbooks is a hidden cost which causes delays in coursework or dropping of classes. Librarians have long sought to alleviate these issues for students through imperfect means, such as reserve collections. While librarians do not select course materials, they can help faculty discover OER and the options available for both cost savings for students as well as improved pedagogy. OER offers new opportunities for librarians to maximize their skill set to support faculty to eliminate a hidden cost, which enables students to achieve their degree. Aligning institutional goals with librarian skill sets demonstrates the value of the library more concretely than many programs the library can offer.

References

American Association of University Professors. (2018). Statement on the freedom to teach.

Retrieved from https://www.aaup.org/news/statement-freedom-teach#.XXKT3pNKiu4.

ACRL Research Planning and Review Committee. (2018). 2018 top trends in academic libraries:

    A review of the trends and issues affecting academic libraries in higher education, *79*(6).

    https://doi.org/10.5860/crln.79.6.286.

Advisory Committee on Student Financial Assistance. (2006). Mortgaging Our Future: How

    Financial Barriers to College Undercut America's Global Competitiveness. Washington,

    DC: Advisory Committee on Student Financial Assistance.

Allen, N. (2018, March). *Open Education: Reducing Costs, Expanding Access, Improving*

    Pedagogy. Education presented at the SCELCapalooza, Los Angeles, CA. Retrieved from

    https://www.slideshare.net/txtbks/open-education-reducing-costs-expanding-access-impr

    oving-pedagogy.

Broton, K., & Goldrick-Rab, S. (2016). The dark side of college (un)affordability: Food and

    housing insecurity in higher education. *Change: The Magazine of Higher Learning*,

    48(1), 16–25. https://doi.org/10.1080/00091383.2016.1121081.

Brandle, S.M., Beck, S., Beth, A., Brancaccio-Taras, L, Cooney, C., DiSanto, J.M., Hays, A.,

    Katz, S., Miles, L., and Morrison, A. (2018). *CUNY ZTC Student Survey, Spring 2018*

    [Data set]. http://bit.ly/CUNYZTCSurvey.

Chetty, R., Friedman, J., Saez, E., Turner, N., & Yagan, D. (2017). *Mobility report cards: The*

    role of colleges in intergenerational mobility (No. w23618). Cambridge, MA: National

    Bureau of Economic Research. https://doi.org/10.3386/w23618.

Colvard, N. B., 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), 262-276.

Commission on the Future of Undergraduate Education. (2017). *The future of undergraduate*

    education: the future of America. Cambridge, MA: American Academy of Arts and

    Sciences. Retrieved from

    macad.org/multimedia/pdfs/publications/researchpapersmonographs/CFUE_Final-Report

    /Future-of-Undergraduate-Education.pdf.

Delaney, G., & Bates, J. (2015). Envisioning the academic library: A reflection on roles,

    relevancy and relationships. *New Review of Academic Librarianship*, *21*(1), 30–51.

    https://doi.org/10.1080/13614533.2014.911194.

Ernst, D. (2017, September). *Open textbooks: access, affordability and academic success*.

    Presented at the CUNY Open Textbook Network Workshop, New York, NY. Retrieved

    from

    https://docs.google.com/presentation/d/1T9PhrGE1xAbWVTUAVwhIiCPV37UxNmNf

    mcO0zZbMhIU/edit?usp=drive_web&ouid=109658293512371684310&usp=embed_fac

    ebook.

Florida Virtual Campus Office of Distance Learning & Student Services. (2016). *2016 student*

    textbook and course materials survey. Retrieved from

    http://www.openaccesstextbooks.org/pdf/2016_Florida_Student_Textbook_Survey.pdf.

Gorokhovich, Y. (2016, November). Personal interview.

Hewlett Foundation. (n.d.) Open educational resources. Retrieved from

    https://hewlett.org/strategy/open-educational-resources/.

Lehman College 90x30. (n.d.). Retrieved from http://www.lehman.edu/90x30/.

Ma, J., Pender, M., & Welch, M., (2016) Education pays 2016: The benefits of higher education

    for individuals and society. *Trends in Higher Education Series.* Retrieved from

    https://trends.collegeboard.org/sites/default/files/education-pays-2016-full-report.pdf.

Seaman, J. E., & Seaman, J. (2017). *Opening the textbook: Educational resources in US higher*

    education, 2017. Babson Survey Research Group.

Straumsheim, C. (2017, April 4). "A mean amount of money." Retrieved from

    https://www.insidehighered.com/news/2017/04/14/cuny-suny-plan-major-expansion-oer-

    efforts.

UNESCO. (2002). *Forum on the impact of open courseware for higher education in developing*

    countries. Final report. Paris: UNESCO.