Part Two — Promotion and Adoption of Textbook Affordability and Affordable Course Materials:
Forensic Science

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As the Science Librarian at University of Central Florida Libraries (UCF Libraries), which is a subject liaison librarian position housed in the Research and Information Services Department (Reference), there are many opportunities to connect with faculty to present library led initiatives that support institutional goals and to share strategies on pedagogical success vis-à-vis utilizing the library's resources and services. Serving in this role has allowed for several librarian-faculty interactions leading to the successful promotion and adoption of course materials sourced by the library. For this case study, a reflection of how textbook affordability has been promoted to the UCF Forensic Science faculty will be highlighted and the process for the successful adoption of library sourced materials as the official class textbook will be discussed. The process will be outlined in a series of four steps, 1) establishing an "in," and developing the relationship, 2) why it matters- sharing library initiatives and their importance to wider institutional goals, 3) the quick turnaround-providing timely options across the program curriculum, and 4) working the "back and forth"- staying in constant communication in order to seal the deal.

Finding ways to successfully market library led initiatives to liaison faculty can be a daunting task for any academic subject librarian. The establishment of a strong relationship is key in this process as information shared with faculty about library led promotions serving a wider institutional mission are not always freely known. In every encounter with a faculty member regarding their library instruction needs or at the invitation to present at a departmental faculty meeting, the subject librarian must be prepared to share the new initiatives and be ready to field inquiries as questions arise. In the case of the forensic science faculty at UCF, working with the program chair on an upcoming accreditation visit where UCF Libraries' staff is instrumental in providing library analyzes and the need to be prepped for an on-site interview, allowed for the first "in" with the departmental faculty. This first step is instrumental in establishing rapport and demonstrating the importance of a mutually beneficial relationship between teaching faculty and the non-teaching faculty librarian. Working to develop and foster these relationships where there is a foreseeable need, helps to facilitate dialogue beyond the simple one-off request for class library instruction.

In providing specific support to an academic department, the subject librarian gains trust from their faculty and is provided with an opportunity to show the librarian's expertise in following through on a request that is of vital importance to the forward progression of departmental goals. When things go well, the faculty are more inclined to listen to new ideas and mutually beneficial campus wide initiatives once initial relationships have

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developed and as primary faculty needs have been met. Moving past the first step of establishing the "in" can be the biggest hurdle for some subject librarians and this can range in difficulty depending on the nature of each academic department. Finding those nuances and working the needs of each department is instrumental is establishing strong relationships with impactful reciprocation. In our case, after the librarian successfully passed the accreditation visit and all it entailed throughout the year's process, the faculty understood their subject librarian's level of commitment and were more open listen to initiatives the library was promoting.

Once the initial relationships have been built up and the faculty-librarian bond has grown, it is time for the next step: why it matters- sharing library initiatives and their importance to wider institutional goals. In this step the librarian begins the discussion on important library promotions which in this case is about textbook affordability. Building on the initial faculty led need for librarian support, with the library providing needed expertise in return, there is a chance for the subject librarian to rise to the occasion to present new promotions/services. However, the introduction needs to be presented in a way that provides context into why it all matters to everyone involved and how it helps to serve a wider overarching institutional mission.

The discussion begins with the introduction to textbook affordability by defining terminology and presenting impactful statistics that get the faculty's attention. It helps to have the library's support in creating professional marketing materials that can be shared with faculty when meeting in person. Never underestimate the power that thumbing through a brochure or pamphlet can have on leaving an impression and it serves to provide documentation that can be shared with other faculty colleagues after the liaison librarian visit is over. Creating a conversation around how the rising cost of textbooks affects faculty directly and having specific departmental statistics can be handy to show the impact to students in one area. This will help to drill the message home and to leave a mental mark on the significant dilemma rising text book costs play on overall student success. Sharing personal stories from our students helps the faculty relate and provides a context as to why they should opt for considering an alternative to a high-priced textbook.

For the case of our forensic science faculty, they were very intrigued by the issues of rising textbooks and they are aware of their own students who struggle with making ends meet. They were able to quickly connect the dots and to put the larger perspective into a localized example of how potentially they can help their students by considering the adoption of a new affordable course textbook. Next, as the subject librarian liaison, expert on locating suitable resources, the faculty will be provided with potential options for their course textbook. In showing faculty why it matters, the librarian provides information on how bad the problem is and how it affects students directly. Shining a light on the problem allows for an opportunity to discuss potential alternatives and for the librarian to work on suitable options based on criteria that the faculty provides for locating appropriate resources. The librarian made it successfully past step two only after the groundwork was laid on establishing the "in" and in providing the context for how textbook affordability affects us all.

After making a case for why it matters, the next step is the quick turnaround. Being swift here is key since we don't want to lose momentum or the faculty's interest in locating a suitable alternative to their current textbook. Getting key information from the faculty regarding course textbook requirements, reviewing the course syllabus to examine topical areas that might inform on appropriate textbook options, and asking faculty what kinds of things their ideal course textbook should have, are the first bits of information the librarian should collect. This is precisely the information collected from our forensic science faculty. The subject librarian requested specific information and was able to gain a quick understanding of what kinds of resources they might be interested in looking at.

Something else to consider for tracking metrics later, the class title, cost of current course text, and the number of students enrolled in the class each semester are things to keep track of so that once a new book is adopted,

direct student textbook savings across campus can be determined. Another item to discuss will be the types of resources faculty are okay with using for the course textbook. Questions like, would they consider using open educational resources if any are found in their subject area, or would they think about creating their own open educational text based on work they have pulled together? Knowing how comfortable a faculty member is with non-traditional textbook options is important as it will aid the librarian in their search.

For our forensic science faculty, they were not interested in creating their own text and they really liked the idea of locating a library sourced material that was suitable as a DRM-free eBook option that could be purchased under a multi-user license which would allow their large seated class sizes to have simultaneous users logged into the book at the same time. Knowing that this was an option really helped the subject librarian hone in on how to track down potential titles for the adoption of a new course textbook.

Once initial information is collected on what the faculty textbook requirements are, and a wish list has been created, the librarian gets to work and fast. Providing the quick turnaround to the faculty with a list of potential affordable resources they can examine as an alternative to their current textbook, gives them confidence to make a positive change that will help their students. If too much time passes, both faculty and subject librarian can get busy and move onto other projects making the adoption of new affordable textbook less likely. Make this a priority to turnaround a list of materials in one week's time if possible and try to set up a face-to-face meeting to go over potential options. Providing detail in an in person setting allows for the librarian to stay in front of the project and shows the library's willingness to go over and beyond in assisting faculty with this need.

In the case of our forensic science faculty, an in-person meeting was set but the faculty member did not have enough time to go through options ahead of the meeting. Much of the time spent at the first sit down was to go through resources one by one and to look them up online. A good thing to keep in mind is that if the subject librarian can bring a laptop computer to the meeting, it is a plus. Being able to share resources with faculty in addition to them looking things up on their end is helpful. In our case, the librarian was successfully able to show the forensic science faculty member the appropriate table of contents and to share other useful information about textbooks that they would not have been able to do on their own or without having a second device to use.

Another thing the subject librarian did during this meeting was to share resources from the library's book ordering system, GOBI. By showing faculty what options there are via the online library ordering software system, they are getting to see every book that is available within a topic and the faculty/librarian team can interchange and work through a variety of suitable options fast and easy. This is what happened in our case and it was only by way of using GOBI that the forensic science faculty member was able to hone in on two potential titles they were interested in adopting as their new course text. Getting down to the two options this quickly would not have happened without both parties being willing to do the work and to sit down and go through the process. The librarian came prepared and knowledgeable on what books were available, how to search for other potential titles, and knowing alternatives to find resources in several online eBook portals with ease. This all took some practice and working through searches well ahead of the face-to-face meeting with faculty and it is something that is highly recommended each subject librarian do. Once the quick turnaround has been presented we move on to the next step which involves staying on top of the project to seal the deal.

The last step requires constant communication and "working the back and forth" where again, time is of the essence. After the initial face to face meeting has occurred and the faculty is left with a list of potential textbook options for future adoption, the ball is left in the faculty's court. But they need to be aware there is a two-way street game going on. So, following up and staying in direct and consistent communication with faculty is vitally important. Make sure to let faculty know that a follow up email will be placed in a suitable time after the initial meeting has taken place. A good time to suggest might be within a one- or two-week timeframe to see how they

feel about it. If that seems fine, then stay on top of things, create an alert via an online email calendar that will serve as a reminder to get back to them on that date. Do not allow extra time to pass, stay with it and be diligent. The goal is to get an alternative title adopted that will be free or at a reduced price for the student.

In staying on top of things, the librarian reinforces the idea of how important textbook affordability is as an overarching issue impeding student success and it helps faculty to connect to how they can play a role in combating the issue on their campus and for their own students. Also, as the librarian gets close to sealing the deal with faculty, they are providing follow through and attentiveness that portrays them as a partner in this process and not as a service provider outright. This relationship building can help later on as other mutually beneficial situations may arise where the faculty and librarian will need to work together. In the case with our UCF forensic science faculty, the librarian followed up with the two titles, assisting in acquiring a review copy via interlibrary loan for the faculty to look through initially. With the librarian having gone the extra mile to have acquired physical copies of the books for review, the faculty was the one who then quickly reached out to inform their subject liaison librarian that they had selected a new book and would be ready to adopt it for the following fall term which was two semesters away.

Through the culmination of persistent hard work and through the evolution of four steps- 1) establishing an "in", 2) showing why it matters, 3) providing a quick turnaround, and 4) working the "back and forth" to seal the deal, one hundred students for all future introduction to forensic science classes taught at UCF by one faculty member will save over $120 dollars each on their course textbook. For one class alone, the saving is $12,000. Since the process worked well, the subject librarian to the forensic science program has now received two other requests to go through the same process with other course and by other faculty members in the same department. Good news travels fast as once one successful adoption has taken place in a department or program, it can lead to many more.

Endnotes

1. This graphic represents price changes of selected US consumer goods over a twenty year period, controlling for inflation rates. While some items, such as televisions and software, have become more affordable, other items, like hospital services and college textbooks, have grown increasingly expensive. The chart is based on aggregated US Bureau of Labor Statistics data. Barry Ritholz, "Price changes (Jan. 1997-Dec. 2017): Selected US Consumer Goods and Services, and Wages." Accessed December 17, 2018. https://ritholtz.com/wp-content/uploads/2018/02/pricechanges.png.

2. FLVC: Florida Virtual Campus, *2016 Student Textbook and Course Materials Survey: Results and Findings* (Tallahassee, FL: 2016), 6-8. http://www.openaccesstextbooks.org/pdf/2016_Florida_Student_Textbook_Survey.pdf.

3. See, for example, Lane Fischer, John Hilton III, T. Jared Robinson, and David Wiley, "A Multi-institutional Study of the Impact of Open Textbook Adoption on the Learning Outcomes of Post-secondary Students," *Journal of Computing in Higher Education* 27, no. 3 (2015): 165-168, which analyzed over 4900 students using open textbooks, and Nicholas B. Colvard, C. Edward Watson, and Hyojin Park, "The Impact of Open Educational Resources on Various Student Success Metrics," *International Journal of Teaching and Learning in Higher Education* 30, no. 2 (2018): 267-271, which analyzed over 10,000 students using open textbooks.

4. Public Law 110-315, 110th Congress, *Higher Education Opportunity Act*, Washington, DC: GPO, 2008, Section 133, https://www.govinfo.gov/content/pkg/PLAW-110publ315/pdf/PLAW-110publ315.pdf.

5. Introduced by Senator Richard Durbin, D-IL, the Affordable College Textbook Act was introduced to expand the use of open textbooks for the purpose of achieving savings for students. Senate Bill 2176, 114th Congress, *Affordable College Textbook Act*, Washington, DC: GPO, 2015, Section 2, https://www.congress.gov/bill/114th-congress/senate-bill/2176/text.

6. "OER State Policy Tracker," SPARC, accessed December 17, 2018, https://sparcopen.org/our-work/state-policy-tracking/.

7. 2017 Florida Statutes, *Textbook and Instructional Materials Affordability,* Tallahassee, FL: Florida Senate, 2017, 1004.085, http://flsenate.gov/Laws/Statutes/2017/1004.085.

8. Kevin Dougherty and Rebecca Natow*, The Politics of Performance Funding for Higher Education: Origins, Discontinuation, and Transformations* (Baltimore: Johns Hopkins University Press, 2015).

9. Board of Governors of the State University System of Florida, "Board of Governors Performance Funding Model Overview," https://www.flbog.edu/board/office/budget/_doc/performance_funding/Overview-Doc-Performance-Funding-10-Metric-Model-Condensed-Version.pdf.

10. Board of Governors of the State University System of Florida, "Board of Governors Performance Funding Model 2014-2015," https://www.flbog.edu/board/office/budget/_doc/performance_funding/University-Slides_2014-15.pdf.

11. Board of Governors of the State University System of Florida, "Board of Governors Performance Funding Model 2016-2017," https://www.flbog.edu/board/office/budget/_doc/performance_funding/University-Slides_2016-17.pdf.

12. For a more expanded definition of OER, see the Hewlett Foundation website; "Open Educational Resources," Hewlett Foundation, accessed December 17, 2018. https://hewlett.org/strategy/open-educational-resources/.

13. The OpenEd Group, out of Brigham Young University, is comprised of faculty and researchers dedicated to expanding student access to open course materials and researching impact of those adoptions on student behaviors and outcomes. To facilitate this exploration, they have devised the *COUP Framework for Evaluating OER*, which is comprised of four strands with a variety of questions under each strand. "The COUP Framework," The OpenEd Group, accessed December 18, 2018, http://openedgroup.org/coup.

14. "The COUP Framework," http://openedgroup.org/coup.

15. "The COUP Framework," http://openedgroup.org/coup.

16. "The COUP Framework," http://openedgroup.org/coup.

17. "ALG Statistics, Research, and Reports," Affordable Learning Georgia, accessed December 20, 2018, https://www.affordable-learninggeorgia.org/about/reports.

18. Christina Hendricks, Stefan A. Reinsberg, and Georg Rieger, "The Adoption of an Open Textbook in a Large Physics Course: An Analysis of Cost, Outcomes, Use, and Perceptions," *The International Review of Research in Open and Distributed Learning* 18, no. 4 (June 2017), accessed December 18, 2018, http://www.irrodl.org/index.php/irrodl/article/view/3006/4220.

19. John Hilton III's synthesis of reported research, "A Synthesis of Research on OER Efficacy and Perceptions Published between September 2015—September 2018," presented as a paper presentation at the 15th Annual Open Education Conference, Niagara Falls, NY, October 11, 2018, includes findings from studies conducted by Gregory Allen et al (2015), Rajiv Jhangiani et al (2018), Virginia Clinton (2018), and Nicholas Colvard et al (2018), all of whom reported that students using open textbooks performed equally well or better than students using traditional textbooks. In "Evaluating the Effectiveness of the Open-access ChemWiki Resource as a Replacement for traditional General Chemistry Textbooks," *Chemistry Education Research and Practice* 16, (September 2015), DOI 10.1039/C5RP00084J, Chemistry faculty Gregory Allen, Alberto Guzman-Alvarez, Amy Smith, Alan Gamage, Marco Molinaro, and Delmar S. Larsen compared academic performance of students in a Chemistry course using an open wiki (ChemWiki) with students using a traditional textbook and found groups did not substantially differ. The authors ultimately surmised that the ChemWiki serves as a viable alternative to traditional textbooks. Similarly, Rajiv Jhangiani, Farhad Dastur, Richard Le Grand, and Kurt Penner reported that cost savings to students through use of open textbooks does not come at the expense of resource quality or student performance, in "As Good or Better than Commercial Textbooks: Students' Perceptions and Outcomes from Using Open Digital and Open Print Textbooks," *The Canadian Journal for the Scholarship of Teaching and Learning* 9, no. 1 (April 2018), DOI https://doi.org/10.5206/cjsotl-rcacea.2018.1.5. Virginia Clinton, comparing student performance in two Introduction to Psy-

chology courses, one using an open text and another a commercial textbook, reported the open textbook saved students money without negatively impacting their learning, in "Savings without Sacrifices: A Case Study of an Open-source Textbook Adoption," *Open Learning: The Journal of Open, Distance, and e-Learning* 33, no. 3 (2018), DOI 10.1080/02680513.2018.1486184. Moving from assessing impact of instructor level adoptions to institution-wide changes, Nicholas Colvard, C. Edward Watson, and Hyojin Park analyzed 21,822 students from eight courses to arrive at the conclusion that not only does open textbook adoption save students money, it also improves course grades and decreases D, F, and Withdrawal grades. This held true across all student populations, but the trend was even more pronounced for Pell recipients, part time students, and populations historically underserved by higher education, in "The Impact of Open Educational Resources on Various Student Success Metrics," *International Journal of Teaching and Learning in Higher Education* 30, no. 2 (2018), free access to article at http://microblogging.infodocs.eu/wp-content/uploads/2018/07/IJTLHE3386.pdf.

20. See, for example, a RAND Education and Labor report that acknowledges while there are many factors that contribute to students' academic performance, research suggests that among school-related factors, teachers influence outcomes the most, in "Teachers Matter" Understanding Teachers' Impact on Student Achievement," RAND, accessed December 18, 2018, https://www.rand.org/education-and-labor/projects/measuring-teacher-effectiveness/teachers-matter.html. It is particularly important when researching impact of open textbook adoption on student performance, that "teacher effect" be controlled for.

21. Jessie R. Winitzky-Stephens and Jason Pickavance, "Open Educational Resources and Student Course Outcomes: A Multilevel Analysis," *The International Review of Research in Open and Distributed Learning* 18, no. 4 (June 2017), http://dx.doi.org/10.19173/irrodl.v18i4.3118.

22. Winitzky-Stephens and Pickavance, "Open Educational Resources."

23. Hilton, "Open Educational Resources."

24. TJ Bliss, Jared Robinson, John Hilton III, and David A. Wiley, "An OER COUP: College Teacher and Student Perceptions of Open Educational Resources," *Journal of Interactive Media in Education* 2013, no. 1 (February 2013), freely available at https://jime.open.ac.uk/articles/10.5334/2013-04/.

25. See, for example, Cailean Cooney, who reported that 97% of 67 students surveyed about the quality of the open text found it the same, somewhat, or much better than a comparable commercial textbook, in "What Impacts do OER have on Students?: Students Share their Experiences with a Health Psychology OER at New York City College of Technology," *International Review of Research in Open and Distributed Learning* 18, no. 4 (June 2017), accessed December 18, 2018, http://www.irrodl.org/index.php/irrodl/article/view/3111/4216; Hendricks, Reinsberg, and Rieger, "The Adoption of an Open Textbook," who found that 93% of 143 students surveyed reported quality of the open text to be the same or better than the commercial textbook; Barbara Illowsky, John Hilton III, Justin Whiting, and Jordan Dale Ackerman, who stated that 87% of 231 students found the open text as good or better than the commercial text, in "Examining Student Perception of an Open Statistics Book," *Open Praxis* 8, no. 3 (July-September 2016), accessed December 18, 2018, https://openpraxis.org/index.php/OpenPraxis/article/view/304/218; and Jhangiani and Jhangiani, "Investigating the Perceptions," who found that 96.5% of 307 students found the open text average, above average, or excellent in terms of quality.

26. "College Navigator," National Center for Education Statistics, accessed December 20, 2018 https://nces.ed.gov/collegenavigator/?id.

27. OpenStax is a nonprofit educational initiative dedicated to publishing peer-reviewed, openly licensed college textbooks that are freely available in digital format, and low cost in print. Partnering with such philanthropic luminaries as the Bill and Melinda Gates Foundation and The William and Flora Hewlett Foundation, OpenStax has published over forty textbooks, aimed primarily to support introductory college courses. The U.S. History textbook is freely available at https://openstax.org/details/books/us-history.