Charlotte Initiative
Course Use Research Team
White Paper

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1. INTRODUCTION

Libraries have a unique opportunity to provide the materials for classroom and instructional use through their collection of e-books that satisfy the three Charlotte Initiative principles, potentially saving students and faculty hundreds of dollars a year on costs. The three principles have implications for development and reimagining of classroom use of scholarly works. Although the majority of class assignments on our campus at the introductory level are formally designed for introductory coursework, a significant portion of titles used by the campus for instruction for upper undergraduate and graduate levels do not fall into the category of formal textbooks. They are scholarly, academic, and even technical works not designed as textbooks but originally targeted for working scholars. Humanities and social science academic titles, not formally designed textbooks, account for over a third of books assigned for courses on the UNC Charlotte campus.

As part of the larger Charlotte Initiative project, the Course Use Research Team was convened to discuss the issues around promoting the use of library purchased e-books and course use books or textbooks on campus. The Course Use Research Team is comprised of both librarians who have implemented programs on their campus and publishers who have a keen interest in how the books they sell to libraries are being used and how course use titles affect the print sales of these books. The team has had discussion and done research on several areas of which we would like to share with the broader audience to open the discussion about this very interesting topic. In our original charge, we planned to discuss Open Educational Resources (OER) as part of our research, but as the discussions progressed, we realized that this topic was mostly out of scope in relation to the Charlotte Initiative as a whole. We instead decided to focus more on e-books purchased by the library and published by both commercial and non-profit/university press publishers.

This white paper will include contributions from various members of the group covering topics that we have discussed at length and have presented on at the Charlotte Initiative Open Conference held on March 9-10, 2017. In truth, because this is a relatively new topic, we may have created more questions than answers, but we hope to inspire other libraries, publishers, and platform providers to explore ways to make this content available in courses and ease textbook costs for students.
2. TEXTBOOK AFFORDABILITY AND THE ROLE OF THE LIBRARY

a. Literature Review

i. Historical Perspective

Concern over the rising cost of college textbooks looms over students and their families each semester. According to the Bureau of Labor Statistics, the consumer price for college textbooks has increased by 88% from January 2006 to July 2016 (Bureau of Labor Statistics, 2016). Many articles cite this increasing price of textbooks over the decades as authors look for possible library offered solutions, (Sommer and Estabrook, 1990; Crouse, 2007; Murphy, 2015). The need to find alternatives to the high cost commercial textbook traditionally required by faculty is addressed in articles published recently with authors often noting the connection between cost and students choosing not to purchase the textbook each semester, (Buczynski, 2006; Massis, 2013; Lyons & Hendrix, 2014; and Ferguson, 2016).

A look at the literature from the past decade found that many academic libraries are actively engaged in dealing with the issue of student textbook needs through a variety of innovative programs that establish precedent for what works as well as present challenges posed by the programs. As the literature reveals, reserve programs have moved beyond traditional print resources to include e-books and open resources electronically available through open source platforms.

ii. Textbooks on Reserve in Academic Libraries

Traditionally, reserve programs for general education undergraduate courses place copies of physical textbooks in the university or college library to be made available to students. These are generally provided by faculty who donate extra copies of the books they will use in their courses each semester. If the library owns the tiles, they might be pulled from the library shelves and set aside for a limited check out period for use within the library only. To increase the offerings, libraries may choose to use their own budgets to supplement the reserve program and ensure students have access to textbooks in the library. One example of this is the program the University of Minnesota Libraries piloted from Spring 2005 to Spring 2006 organized after the Undergraduate Initiatives Council provided survey results indicating that undergraduates at the university identified having a textbook collection in the library highly important. Faculty in selected departments placed copies of textbooks on reserve for their students to use, and the library allocated a total of $2,000 to cover textbooks that were not provided by the departments. The textbooks had good circulation numbers though librarians found the challenges with this program included getting the
word out to students that the books were available, and collecting the textbooks from faculty by the first day of class, (Crouse, 2007).

In many cases, after investigating the feasibility of a print reserve program offering all of the required lower-division undergraduate textbooks in the library, it is deemed too expensive for the library to sustain. In 2007, Mary Laskowski wrote about the challenges encountered with a partnership between the Undergraduate Library of the University of Illinois at Urbana-Champaign and the Illini Union Bookstore, the university-affiliated campus bookstore. Together they created a textbook reserve pilot project to put copies of required undergraduate textbooks on reserve in the library that the library had essentially “rented” from the bookstore. The books were purchased and returned at the end of the semester. The program was successful, but ultimately too costly to sustain for the library, (Laskowski, 2007).

Grossmont College Library in El Cajon, California, piloted a similar print reserves program during the 2010-11 academic year. After making a change to their collection development policy, the library allocated $4,000 of their print budget to purchase textbooks not available through faculty donations. Realizing this was not enough to cover the cost of all needed textbooks, priority was placed on student requested textbooks specifically, also emphasizing their student-centered mission. Purchases were made through the college bookstore in order to support business on campus. The challenges of the program included faculty members bringing books in after the library already purchased them, and many of the textbooks being paperback, so time was spent reinforcing them in technical services. Despite the challenges, the program was determined to be a success and a decision was made to continue after the pilot ended, (Middlemas, Morrison, & Farnia-Hess, 2012).

iii. Course Use e-book Pilot Programs

Linked within the Learning Management System

An alternative to traditional print programs that would alleviate some of the challenges mentioned above with print reserves are e-book initiatives. e-books eliminate the physical wear and tear prevalent with print editions, and allow for versatility in accessing reserve books through the library website or course learning management system (LMS). Mara Rojeski (2012) discusses the results of a pilot program initiated in the library allowing e-books to be linked within the Dickinson College LMS during the Spring 2011 term. The social sciences liaison librarian implemented the program with an interested faculty member who choose electronic texts for one class during the term. Only e-books that allowed for multiple or unlimited users were selected. Challenges encountered include limited availability of titles in electronic form, single or multiple user restrictions, and
printing restrictions and other platform incompatibilities. Despite these concerns, the faculty member was happy with e-books overall, and others in the department expressed interest in using e-books in their courses.

**eReserve Project**

Similar challenges were found in a 2014 eReserve project at the University of Minnesota Libraries, (Riha & LeMay, 2016). The Interlibrary Loan (ILL)/Course Reserve Required Reading Pilot Project partnered two departments within the library to assist with student demands for required course materials. After complaints regarding single-user access e-books, the library chose to only purchase e-books that allowed for multiple users during the pilot, and would continue this practice going forward. Challenges included the importance of multiple simultaneous user e-books, the lack of availability of many titles in electronic format, and limited functionality of e-books including the inability to download or print a whole e-book, difficult platforms that are not user friendly, and digital rights management (DRM) restrictions when it comes to saving or using an e-book.

**Preloaded on an Electronic Reader**

Another approach discussed in the literature is to provide devices with the electronic course materials pre-loaded. Bruce Massis (2013) reports on universities that have gone to electronic textbooks, many providing students with tablets fully loaded with course materials. Massis discusses the program at The University of Texas, San Antonio which introduced its all electronic Applied Engineering and Technology Library in 2010; Virginia State University that began providing access to electronic textbooks through Flat World Knowledge in 2010; and Lynn University in Florida who began their liberal arts first-year core curriculum with media rich electronic resources when they partnered with the university’s technology department. They preloaded all course materials on a mini iPad and sold the device to students for $475, 50% less than they would spend on printed course materials and they got to keep the iPad. In 2014 the program grew to include undergraduate students enrolled in the day courses, new MBA students, and EdD students, (Lynn University, 2014).

**vi. Open Educational Resources (OER)**

**Textbooks**

When discussing e-books for course use, one must not overlook the recent move by many institutions to use open access materials (OER). A review of the literature finds many references and articles addressing OER materials in relation to textbook affordability and initiatives to find innovative alternatives to traditional textbooks. In addition to textbook
reserve programs such as those mentioned above, many universities are adopting open textbook programs that use freely available textbooks such as the University of Minnesota Open Textbook Library, [http://open.umn.edu/opentextbooks/](http://open.umn.edu/opentextbooks/), the University of South Florida ([http://tap.usf.edu/](http://tap.usf.edu/)), and Rice University’s OpenStax, ([https://openstaxcollege.org/](https://openstaxcollege.org/)). Other universities are going textbook free all together, using open resources for courses instead (University of Maryland College, and the University of Texas, Rio Grande).

These materials are often created by faculty members, as in the case of Oregon State University among others, and made freely available to their students and to the academic community at large through a Creative Commons license (Chant, 2014). Drawbacks to freely open and available resources include a concern for a professional product with high quality, academically sound information. The goal of the Charlotte Initiative focused on e-book acquisition by libraries looking at business models, licensing, user experience, and preservation. Based on this, the Research Team saw OER as outside the scope of our endeavor, and therefore did not focus on open resources. However, it is relevant to mention the option here and to highlight some of the literature focused on innovations coming out of the OER movement.

**Faculty Incentive Open Textbook Initiatives**

Teaching faculty have created their own supplemental materials for decades, whether in the form of coursepacks printed at the copy center, or online websites or webliographies. Many OER campus initiative programs incentivize innovative approaches by faculty who seek to develop their own materials through open textbook programs or creating their own textbook with the help of grant money and often with technical help through the library. Programs such as the Alt-Textbook Project at North Carolina State University Libraries, funded by the North Carolina State Foundation, provide grants from between $500 and $2000 to support faculty who wish to find alternatives to traditional resources by seeking out open resources or creating their own and publishing on an open platform (Free, 2014; Billings, Cross, O’Connell, Raschke, Roh, 2014). Similar programs are established at San Jose State University and Temple University (Bell, 2014).

In 2016, Rutgers University Libraries began the Open and Affordable Textbook Project (OAT). Grants awarded in the first year support faculty who create their own materials to replace the current purchased textbook or gather open materials and textbooks to incorporate into their courses in lieu of the purchased textbook. Project savings are based on the enrollment in each course and the cost of the materials being replaced, and are estimated at $1.6 million for the first year of the program, ([https://www.libraries.rutgers.edu/open-textbooks](https://www.libraries.rutgers.edu/open-textbooks)).
In 2016, the University of Tennessee at Chattanooga library began a two-year pilot program providing support for faculty who wish to redesign existing courses and better align them with current open and/or electronic offerings. This program incorporates faculty authored or procured materials with purchased or licensed materials already in the library collection, (http://www.utc.edu/library/collections/affordable-course-initiative.php).

Open Access Programs Partnering the Library with the University Press

Apprehension over the quality of OER resources is acknowledged in the literature and is of particular concern when choosing an open textbook as the core requirement for a course (Buczynski, 2006; Morris-Babb & Henderson, 2012). One way to ensure high quality academic materials is to partner librarians and the university press associated with the university system. Libraries have played a large role in textbook affordability efforts in higher education and partnerships with the affiliated university press increases the level of quality both in content and end product. Oregon State University Libraries and Press, both committed to high academic and peer-reviewed materials, partnered with the Open Educational Resources and Emerging Technologies unit on campus to develop an open textbook publishing program (Sutton & Chadwell, 2014). The public university system in Georgia began its Affordable Learning Georgia (ALG) initiative in 2014 focusing on faculty support to create textbooks. A partnership was also established with the University Press of North Georgia when an open history textbook was produced developing a model for editorial and peer-review services for faculty produced materials, (Gallant, 2015).

v. Etextbook Programs Utilizing e-books In the Library Collection

Greg Raschke and Shelby Shanks (2011) discuss textbook initiatives at North Carolina State University (NCSU) including a move into the area of digital textbooks to help alleviate students’ struggle with the high cost of books each semester. The University also looked at alternative textbook models including open access textbooks. Beginning in 2009, a textbook reserve program was put in place providing print editions of required texts in the library. The following year, the head of the physics department inquired about textbook alternatives and contacted NCSU libraries who secured a site license for a digital textbook that could be made available for all students and faculty. This awareness spread throughout campus and faculty began to use licensed electronic books, among other textbook alternatives to alleviate the high cost of textbooks for students.
e-books in the Classroom, part of the University of South Florida’s Textbook Affordability Project (TAP) began in 2011, was initiated to help alleviate the high cost of textbooks to their students. In addition to offering traditional print textbook reserves in the library, a database of e-books in the library collections that meet favorable conditions for course use is available to faculty who wish to adopt digital course materials and by so doing, saving students the cost of purchasing a textbook and ensuring all students have access to required texts, (http://tap.usf.edu/).

b. Course Use Programs by Charlotte Initiative Participants

Evident by the review of literature above, academic libraries are participating in textbook affordability measures in numerous ways. Traditional textbook reserve programs now may include e-books, and libraries are posting lists of course use friendly licensed materials that allow for multiple users and can be linked through the learning management system. The Course Use Research Team includes several participants that currently manage textbook programs through their library using e-books they have purchased from vendors. Throughout our conversations over the last year, we have discussed different issues related to these kind of programs and would like to use this opportunity to bring these conversations out to the public so we can broaden the conversation for a wider audience.

Types of Programs

Based on our research and the work on the librarians serving on this committee, library provided e-textbook programs have taken two forms and in some cases, a combination of both: mining the bookstore list and comparing it to the collection to determine e-book availability and creating a database of e-book titles faculty could choose from to use in their courses. This section of the paper will discuss these types of programs and issues that librarians have faced.

i. Using Bookstore list to purchase books

Two examples of successful programs working with the bookstore and using the bookstore list to identify library e-books as course use titles are San Jose State University and University of Arizona.

*San Jose State University Library*

At San Jose State University, the library first began working with its campus partner the Spartan Bookstore (a Barnes & Noble outlet) in 2012 to create a “Textbooks Available as e-books in the Library” list. Before each semester begins, the bookstore shares its list of
required textbooks with the library’s Technical Services department. When the library first started matching the list of textbooks to the library’s collection of over 130,000 multiple-use e-books, it was a painstaking process. The layout of the two title lists was not a precise match and the data needed to be reformatted by hand. Over time, this procedure was automated, but the processing still takes several days. When the list is completed, it is posted to the library’s website.

The benefits to students makes the investment of staff time worthwhile. In the first semester, the usage of the 126 e-books on the list increased by 794% compared to the previous term’s usage. The courses involved had an enrollment of more than 1,700 students, and it was projected that the Textbooks Available as e-books in the Library list saved students more than $50,000 in that semester alone. Since 2012, the list has included 150 to 200 titles a semester and receives an average of 9,000 page views annually. In addition to the students, the bookstore has benefited. By supporting this service over the years, the bookstore has generated a great deal of goodwill and is viewed as a valuable campus partner.

University of Arizona Libraries

Since 2012, the University of Arizona Libraries (UAL) have worked with the campus bookstore to provide access to multi user e-book versions of required course texts. On average, UAL is able to provide e-book access to 16% of the total list of textbook adoption requests, potentially saving students an average of $450,000 per semester.

Prior to each semester, the bookstore sends the list of textbook adoptions to the library. UAL staff search the list to identify which titles are owned or can be purchased in multi user e-book format. When this process is complete, the list of library-available e-books is sent back to the bookstore in case adjustments to print stock are necessary, and to track impact of the program on sales over time.

e-books used as part of this program are from a variety of publishers, on a variety of platforms, and with a variety of multi user licenses (including non-linear lending/access models, three-user, and unlimited user licenses). Criteria include perpetual access and multi or unlimited use license. At this stage, UAL does not limit to the Charlotte Initiative principles of unlimited use or DRM free e-books, although this may change.

Making sure students and faculty are aware of this service is key. Once e-books are identified and purchased (if necessary), access is pushed out via three channels. First, the library e-book is linked in the student’s booklist along with other purchase options, including buying or renting the new or used print copy from the bookstore. Second, e-
books are linked in relevant course pages in D2L, the campus course management system. Finally, notification emails are sent by liaison librarians to faculty teaching courses for which there is a library e-book available.

The challenges inherent in the process are largely due to time constraints. Searching the list, identifying matches in the library's collection, purchasing available e-books, and generating the three access outputs is still largely a manual process, and one that must be completed in a relatively quick turnaround time. Future areas of improvement include finding points of automation in the workflow, as well as reconfiguring workflow so that library staff can see faculty textbook requests earlier in the adoption process.

Combined with its OER efforts, UAL's course materials program is part of a broader strategy to encourage faculty to use open educational or library-licensed resources in place of costly textbooks. Textbook affordability is a campus-wide goal, and for UAL, working with the bookstore, faculty, and other campus units to lower the cost of enrollment for students continues to be a critical project.

**Textbook Adoption Data**

One key to making programs like UAL and SJSU work, is through cooperation with the bookstore. When working with an independent bookstore, this can be relatively straightforward, but when working with larger chain bookstores, libraries might need to work with academic administration to ensure cooperation. The Louisiana statewide academic network has created a successful strategy when faced with resistance from the bookstore.

The Louisiana statewide academic library consortia has worked on developing scalable statewide models for course use e-books based on the successful model at LSU and other Charlotte Initiative participants. Consortia staff assist sites with evaluation of their textbook adoption data as well as navigating purchasing, licensing, and discoverability issues. Obtaining data from campus bookstores proved to be one of the most challenging aspects of the project and leveraging the support of the Board of Regents to acquire that data was critical at some institutions. While the Higher Education Opportunity Act requires that bookstores provide information about textbook assignments, that data is sometimes released only in a web-based inventory system. The Louisiana Library Network (LOUIS) members have encountered obstacles from bookstore management in obtaining data files with course adoption data. Some bookstores have indicated to library administration that course adoption data files are proprietary information and not institutional property. The lack of consistent and timely data files often prevents libraries from acquiring e-books for student use in a timely manner.
This situation could be alleviated by course adoption data collection happening at the campus, rather than through the contracted bookstores, though campus or consortia technology infrastructure to do so is nascent. Alternatively, libraries should be active participants in the contract negotiations with third party bookstores to clarify the rights of the campus to access their course adoption data. Further research into the extent of this situation is needed including an investigation of best practices for advocacy and policy development by libraries.

ii. E-Textbook Database

Along with using the e-books the library already has, librarians are partnering with academic departments and individual teaching faculty to promote openly available resources to reduce the cost of course materials for students.

*Louisiana State University*

Louisiana State University (LSU) Libraries began a course use e-book program in 2014. Until this point, LSU Libraries had largely relied on subscription e-book packages for collection development. These titles were bound by DRM and had either single or multi-user licenses that required a multi-step process for users to check out and download a time-limited local copy. After receiving numerous usability complaints, and with a new emphasis on e-book collections, the Libraries shifted to the purchase of large e-book packages from Springer, Wiley, and Project Muse that supported the three principles of the Charlotte Initiative. Simultaneously, titles from subscription packages with DRM were largely shadowed or removed from the catalog. Likewise, demand driven acquisition (DDA) plans, which allowed for user-driven purchasing of e-books with DRM, were discontinued. The platform used by the Libraries for title-by-title e-book purchasing, Yankee Book Peddler’s Gobi service, was adjusted to only enable purchase of DRM-free, unlimited user e-books. Given the unlimited user license of these newly-added titles, the Libraries began to review collections for alignment with required course use titles, modeling this program off of the approach used at UNC Charlotte.

Using a bookstore-provided list, LSU librarians match required textbooks with e-books existing in the collections or available for purchase. This matching process has become refined over time but generally it begins by finding alternative ISBNs for a required textbook, given that the e-book version of the ISBN may not be the ISBN listed on the bookstore list. Then, this set of ISBNs is compared against publisher and aggregator title lists—the spreadsheets listing e-books sold under the three Charlotte Initiative principles. For LSU, these publishers include but are not limited to: Springer, Wiley, JSTOR, Project
Muse, Oxford University Press, Cambridge, and Taylor and Francis, including subsidiaries CRC Press and Routledge. Additionally, LSU checks the bookstore list against its Knovel subscription, which provides DRM-free, unlimited user e-books, but without perpetual access. These matches are then sorted to separate current holdings from potential purchases. New titles are purchased via Gobi.

All course use titles are promoted on a student-facing webpage: www.lib.lsu.edu/e-books. Faculty teaching affected classes are contacted and provided information briefly outlining the program and what the unlimited user and DRM-free elements of the e-book mean for course use. A permalink to the title is provided, which a professor can add to the syllabus and share with students. Additionally, using an XML-feed from the student-facing webpage, affected courses in the university’s learning management system are auto-populated with an e-textbook block. This provides students enrolled in a course with a direct link to the course use title.

3. CAMPUS OUTREACH

One of the biggest hurdles that libraries face when trying to implement these open or library provided textbook options to their campus, and resistance from the faculty and students. Below are the strategies that SJSU, UAL, and LSU used to get gain campus buy-in to their programs.

**Outreach and Advocacy at San Jose State University**

In 2010, the California State University (CSU) Chancellor's Office launched the Affordable Learning Solutions (ALS) initiative. ALS was created to help lower the cost of classroom materials for students by promoting free or low-cost academic content to faculty. In 2012, San Jose State University (SJSU), one of the 23 campuses in the CSU system, joined the campaign.

The most challenging part of promoting ALS at SJSU was and remains recruiting faculty. Librarians at the University Library coordinate the campaign, and when the initiative first began a variety of recruiting methods were used. Some librarians knew faculty members who were already strong supporters of the ALS goals and promoted events to them personally. Other librarians had served on technology-themed committees and were able to draw from those committee members. The library’s associate dean also urged department chairs to promote ALS events in their faculty meetings.

The first scheduled events were two-day workshops that incorporated instructional design as part of the curriculum. The two-day format was quickly abandoned because of the time
investment involved for the library coordinators and for the faculty. One takeaway from these events however, was the effectiveness of faculty talking to other faculty. Presentations by professors who had adopted low-cost material were part of the agenda, and these faculty were very upfront about the benefits and challenges of reworking their classes. These presentations made the process more real and accessible to the workshops’ faculty participants.

An early mistake was overlooking the campus’s distance faculty. Since then, several distance faculty have participated in the program and it is well worth the effort of reaching out to this group with webinars and targeted emails.

Another initial strategy was surveying faculty and students to get some data about their views on the cost of classroom materials and on using online materials in the classroom. The data collected was incorporated in library outreach to faculty because it demonstrated students’ ongoing concern about the cost of textbooks and its impact on their education. At SJSU and other campuses in the CSU system, a number of students try to get through their classes without ever buying the required books because they are not able to afford them. Sharing data supporting this fact was very persuasive to faculty.

In addition to the challenge of recruiting faculty was the challenge of finding open resources for them to use. Discoverability has always been an issue for open educational resources and SJSU faculty teach three to four classes per semester so their time is very valuable to them. In recognition of their time constraints, an online guide was created to list resources categorized by department and by college (libguides.sjsu.edu/openresources). This gives faculty a jumping off point and makes the task of locating open resources simpler.

A major component of faculty outreach at SJSU are grants to support the course redesign required to incorporate open resources into a class. From the beginning, SJSU received grants from the Chancellor’s Office averaging $20,000 a year. The Textbook Alternatives Project (TAP), which was modeled on a similar program at CSU Chico, was the first program to offer grants to campus faculty.

Initially, faculty were offered TAP grants from $500- $2,000 depending on their course enrollment, but this was changed after the first year to a flat $1,000 for all faculty involved. Applicants were required to submit a proposal that included the number of course sections they taught per term, the average enrollment, the current cost of course materials, the projected cost and description of new materials, and details on how these materials would be assessed. Librarians rated the grant proposals using a rubric; the most heavily weighted criterion was the savings to students.
Grant winners were recognized in several ways. Faculty profiles were posted online in the library's Faculty Showcase (library.sjsu.edu/als). One year, the participants' deans and colleagues were invited to a faculty recognition event called "da Vinci Day" where grant winners were given lunch and a keepsake poster highlighting their projects and outcomes. Additionally, letters of recommendation were sent to grantees' department chairs and directly to the faculty themselves. These letters were designed to be included in faculty dossiers and annual evaluations as evidence of service to students and a commitment to teaching and learning at SJSU.

The TAP grants had a significant effect. In their first semester, the 34 redesigned courses cumulatively saved students more than $1,460,000. The TAP grant program ended in 2015, but in the same year, the California State Legislature passed AB 798, the College Textbook Affordability Act. AB 798 provided $2 million to the CSU and California Community College systems to reduce the cost of a college education by encouraging faculty to adopt lower-cost class materials.

SJSU asked for and received $49,000 to be spent over two years. If the campus meets its goal of saving students at least 30% on classroom materials in 49 class sections, it will have the option to renew its grant for another two years. To recruit faculty, the library offers grants modeled on the TAP program. These new $1,500 stipends are called Teaching with Engaging and Affordable Material (TEAM) grants. These grants come with strict criteria mandated by the state. Targeted courses must use currently existing open resources that are free; licensed for acceptable use by students and faculty; accessible; and have a print version available. This final criterion can be met through working with the campus bookstore.

To promote TEAM, the library advertised the grants at the annual New Faculty Orientation, via email to all faculty through the Provost's Office, and through emails sent by individual liaison librarians to their departmental faculty. Together with the Center for Faculty Development, two lunch-and-learn workshops were held for interested faculty. These were followed later in the semester by two support sessions where faculty mentors presented on their experiences converting their courses to open resources. The faculty mentors were recruited from the cohort of TAP grant winners. In the first semester it was offered, seven faculty members received TEAM grants.

Although ALS is now in its sixth year at SJSU, librarians still face hurdles in promoting open education. There is concern among the faculty about increased workload. Open resources often do not come with the supplementary material—PowerPoints, test banks, homework platforms—that accompany traditionally published textbooks. This requires individual
faculty to create their own material. This can be especially problematic for tenure-track faculty because the tenure review process does not recognize using or creating open resources as significant. Accessibility also causes anxiety. Determining if online material is accessible to disabled students is often problematic. Also problematic is an open resource’s currency and longevity. Faculty wonder if resources will be updated on a regular basis and remain accessible online. Librarians seek to answer these concerns in their workshops and outreach, and the campus culture is increasingly receptive to open education. A mandatory part receiving AB 798 funds was the passage of an Academic Senate resolution supporting the goals of the assembly bill and this was done with minimal debate.

**Outreach and Advocacy at University of Arizona**

The University of Arizona (UA) formed an OER Action Committee, with members from the UA Libraries, UA Press, UA BookStores, Office of Instruction & Assessment, Disability Resource Center, Office of Digital Learning (instructional designers), central IT, faculty, and student government leaders. Although the primary focus is OER, meetings also cover e-book initiatives and the BookStores’ inclusive access program, an opt-out model for digital course content delivery that automatically bills students for textbook access at a reduced rate. When talking to faculty and administrators at UA, we present library-licensed e-books, OER, and inclusive access as a suite of textbook-affordability options. Each semester, the BookStores invite librarians to speak with textbook coordinators. Librarians and bookstore leaders have given joint presentations at a Faculty Senate committee and are planning joint visits to campus departments in Fall 2017.

**Outreach and Advocacy at Louisiana State University**

LSU Libraries has led student- and faculty-focused outreach. Early in the project, a librarian presented to the Student Government (SG) Senate to share program information and engage student leaders. The goal of this was to keep student stakeholders informed and provide them with an outline of the initiative were they interested in sharing the program with other students or their own professors. After this presentation, interested senators contacted the librarian to determine how (SG) could support the initiative through funding. As a result, the senators and librarian successfully collaborated on a bill that secured $10,000 in funds.

With these funds, the Libraries built a faculty-facing platform to enable professors to proactively select e-books for course use ([http://lib.lsu.edu/e-books/faculty](http://lib.lsu.edu/e-books/faculty)). All titles in the search meet the three principles or are open access e-books or OER in the form of a textbook. The search includes titles currently available within the Libraries’ collection and titles that the Libraries will purchase if it is being assigned to a course. This search became
the centerpiece of faculty-focused outreach, including presentations at departmental meetings.

Both the student page (http://lib.lsu.edu/e-books) and the faculty page have been examined and enhanced through usability testing. These tests explored student and professors’ abilities to find the pages, navigate the search interfaces, and find titles. Through iterative tests, librarians improved the user experience for the two sites at the center of the course use initiative.

4. USABILITY OF E-BOOKS FOR COURSE USE

a. Student and Faculty Feedback

During the group discussions, one issue that was addressed was how to evaluate the success of these programs. As you will read further into the white paper, course use is of particular concern for publishers because they continue to make a significant amount of money from books that are adopted as course texts. If the library is providing these e-books for free, will students no longer want to purchase the print? In addition, the group agreed that knowing the impact of these programs would help with future programs. Members of the group from LSU and UNCC had already conducted surveys, but we thought it would be helpful to put together a sample survey for use at any institution that has implemented a similar program. We have put sample questions to use for your survey in Appendix A.

b. Platform Provider Information

How platforms provide access to e-books makes a huge difference on the user experience for students and faculty who use these e-books as course texts. The March 2017 e-books and the Academic Library Market: Charlotte Initiative Open Conference featured a panel discussion on e-book platforms. Moderated by an electronic resources librarian, the panel included participants from a platform solutions company, a large multinational publisher with its own platform, a scholarly aggregator also with its own platform, and a university press that partners with aggregators. Each panelist provided a unique perspective on the topic which gave the audience an opportunity to understand “behind the scenes” decisions and strategies that affect libraries and, perhaps most importantly, our end users. This section of our paper will reflect upon the panel discussion and offer some thoughts about the future of e-book platforms.

Platforms play a pivotal role in whether or not a content provider meets the three Charlotte Initiative Principles: irrevocable perpetual access and archival rights, unlimited
simultaneous users, and no digital rights management (DRM). Over the past decade, numerous publisher and aggregator e-book platforms have become available - some have overlapping content offerings (to different extents) while others are more unique. At the same time, web-scale discovery services have matured, allowing users to search their library’s physical and electronic holdings in one place. These expanded platform offerings combined with improved discoverability have made it unrealistic for most libraries to expect that all their e-books can be hosted in one or two places, and also, perhaps, undesirable, if some of the options include heavy DRM that has the potential to negatively impact the user experience.

More than one panelist mentioned the importance of control and flexibility as components of a publisher or an aggregator’s platform strategy. Library electronic resources continue to be incredibly dynamic in their quest to meet users’ evolving needs and device preference, emerging business models, and new formats that have multimedia or interactive elements. Whether it decides to build one in house, outsource it, or partner with aggregators, a content provider must have a platform that can easily incorporate these different changes as needed. This can be achieved through small, iterative changes that are sometimes referred to as “agile development.” If a content provider is not continuously improving its user experience (based upon real-life user feedback), then it risks quickly becoming obsolete and, possibly, less likely to be used by our patrons. A provider could have the best content in the world but its value is limited if it cannot be easily accessed. One panelist said that publishers deciding their platform strategy need to consider the long-term effects of their decision since third party agreements tend to last for many years. Platform migrations are expensive and labor intensive for all involved (platform providers, publishers, and librarians) and should not be taken lightly!

Most panelists’ organizations perform some kind of usability testing, whether it’s by their own staff or contracted out to experts. Some believe it’s better to have an external perspective since outsiders might encounter problems that internal developers would miss due to being closely involved in the project. The goal of many providers seems to be that platforms are so intuitive that they require no training by either the vendor or library staff. Whether or not this is actually achieved is another issue, but the intent is a sensible one, especially for public service librarians. Instead of spending precious class time teaching students how to access the content, they could focus more on strengthening much-needed information literacy skills. Two panelists remarked that usability preferences can often differ between librarians and our end users. This can be challenging to balance since librarians tend to be vocal about their likes and dislikes, yet these desired features may not be useful or relevant to the platform’s primary audience.
One panelist indicated that librarians could be the best source of usability information since we tend to better understand our users’ needs. This highlights the importance of providers having advisory boards of librarians from diverse types of institutions to provide “real world” input on product design and functionality. These boards should be used to their fullest potential as they can help providers proactively avoid mistakes that could cause users unnecessary frustration. The panelist went on to suggest that libraries could transfer titles among aggregators as a way hold them accountable for improving their platforms. This would, of course, depend on publisher’s willingness to allow for transfers. It could prove challenging for a library with large numbers of titles from hundreds of publishers to move most of their e-books between platforms, but they could choose a few publishers from which they have the greatest quantity of titles and request that those be moved to a preferred platform. This might be a strategy used to encourage some commercial aggregators to decrease the amount of DRM on their platforms, particularly if it were done by a handful of large research libraries that have sizable holdings.

Interestingly, different e-book file types are used to serve separate markets. Publishers tend to use PDF files for the library market while EPUB is more prevalent in the consumer market. A panelist explained that EPUB is often inadequate for displaying scholarly works due to its lack of support for facing page translations, complex footnotes, and searchable math equations and tables. She suggested that libraries pressure the industry to improve the EPUB standard so it better supports academic needs. One could easily assume that EPUB is superior to PDF because of its ability to dynamically adjust to different screen sizes. Apparently, PDF’s are still the most appropriate format for scholarly content since they fully retain the print-like experience, which can be important when it comes to citing sources’ pagination and more.

All four panelists said their organizations are committed to ensuring their e-book content is accessible to those with disabilities. More and more libraries are required to thoroughly evaluate compliance with accessibility standards when considering a purchase. One panelist mentioned the challenges involved with retroactively making archival content accessible. Depending on the quantity of backfiles and staffing limitations, it could be a costly project. Hopefully improved automation in the future will assist smaller e-book providers with more limited financial resources in making their older titles fully accessible.

Looking to the future, one panelist expressed concern about consolidation within the platform industry and the vertical integration that could result. An example is a large publisher purchasing a platform company that provides services for other publishers of a variety of sizes. It’s unclear whether the platform provider will maintain publisher neutrality given its new owner. One possible outcome could be some large competing publishers moving their platforms to a neutral company, or bringing them in house so they
have more control over their own content and its associated functionality. To put it into a larger context, this consolidation is prevalent in the consumer media landscape where a cable company can control television distribution, Internet infrastructure (through which competing content is made available), cable content, wireless services, and more, often with minimal competition in the same market.

A primary focus of the Charlotte Initiative is researching and discussing the use of e-books as course use texts. As mentioned above, many academic libraries have started affordable course materials programs which encourage faculty to use library-licensed and/or open educational resources to supplement or replace traditional textbooks. Platforms have the potential to greatly facilitate classroom use of e-books by allowing complete e-book downloads via single files, offering highlighting and notetaking features (both at the individual and group levels), and providing a richer experience that goes beyond simple digital replicas of print originals (although those are important too). Libraries and e-book providers will need to work together closely to ensure that these emerging course-related needs are adequately met by platforms.

Improving existing industry standards and creating new ones where necessary is a good area to start. EPUB files should support unique aspects of academic monographs such as searchable tables and equations, complex footnotes, and facing page translations. This could then lessen scholars’ reliance on the PDF, which is an aging file format. Developing a standard highlighting/annotation tool that could be used across the vast majority of platforms would greatly benefit users who would no longer need to create individual platform-specific accounts. It is critical that these standards be widely adopted across the industry, otherwise they're of limited value.

Finally, libraries and e-book providers should be open to experimenting with new platform features, permit uses such as interlibrary loan, business models, and content types that are less text centric. It seems that too often we are still stuck in the legacy print world and not fully harnessing the potential of technology due to uncertainty, fear, and inflexibility. The past should not be allowed to impede future progress of e-books and their platforms.

5. BUSINESS MODELS FOR COURSE USE TITLES

A discussion point of particular importance to both the librarians and the publishers that served on the course use research team, was how to compensate publishers for titles they would normally sell individually to students, without charging too much to libraries who are often struggling with strained budgets. The section will give you a publisher
perspective on this issue as well as examples of current models that are currently being employed by publishers.


University of Michigan Press (UMP) is a mid-size university press with annual sales just above $3 million. Like most university presses monographs that have been adopted for use in courses have historically played an important role in sustainability. The ideal book is one where the costs of development can be recouped in the first three years and then continuing annual sales (even of a small number of copies) provide surplus for reinvestment in new titles.

Such “adoptable” books have traditionally been thought of separately from true “textbooks” which are developed with purely teaching purposes in mind. UMP has an English Language Teaching program which is a true “textbook” list. The main market is individual students and libraries are viewed as ancillary, not core, customers. These are different from “adoptable” books.

At least 85% of UMP revenue still comes from print sales, but e-books are playing an increasingly important role. Not only is e-book revenue rising but UMP is increasingly seeing libraries considering e-books as an acceptable substitute for print -- particularly but not exclusively when the provider offers a DRM-free multiuser option with perpetual access. At this time we are keeping the true “textbook” list available to libraries in print only, although when we have the rights to do so we are making these available for Amazon Kindle, with an individual consumer in mind. For “adoptable” books we are having to make hard decisions about library availability.

On the one hand, we are excited to see e-book usage information that suggests adoption because this fulfills our non-profit mission to maximize access. A seasonal spike in usage or data from the Open Syllabus Project can reveal a use in class. On the other hand, we worry about losing the continuing revenue that has traditionally been so important for sustainability. The concern is that an e-book sale to one institution through JSTOR or Muse sold for multiuse at a small multiple of individual pricing (perhaps 1.5 x digital list price) will substitute for what used to be an annual sale of 30 print copies. While the current reality is that some students will continue to buy a print textbook even if an e-book is “freely” available to them (thanks to library licensing) we have to evaluate the risk that this will not always be so. This has led us to increasingly withdraw titles we consider “adoptable” from DRM-free, multi-user, perpetual use aggregations and restrict these books to single user purchase models.
Two aspects of “adoptable” books in the electronic environment are worth bearing in mind: Firstly, university presses have historically been able to wait to observe print sales patterns and then adjust discounts if a book turns out to have been adopted (usually allowing three years for this to be revealed). No such luxury is available in the e-book world where decisions about which aggregators and business models to participate in need to be made at the time of publication in order to make a frontlist sale. Secondly, editors often feel pressure from their authors to maximize revenue on adoptable books which may represent the triumph of hope over experience (since few monographs ever make authors money) but is a reality all the same. When a press makes a decision about which business models to include a book in it is often responding to the wishes of its authors not only its own self interest.

How do university presses get beyond this painful contradiction between the desire to maximize use and the reality of needing to fulfill the financial expectations of our parent institutions? Beyond radical models whereby the whole financing of university press publishing is flipped, a couple of options seem possible. At UMP we are very interested in models where an extra sale is triggered by use, such as in the de Gruyter pilot, especially if those include other provisions such as links within the library catalog for students who might want to purchase a discounted print copy. In the longer term we recognize that we need to get beyond such a focus on title-by-title revenue to build our own e-book collections where the focus is on the financial return we need from the complete package of content not each constituent title. In this kind of model (e.g., Springer e-book collections), concerns about which books are “adoptable” and which are not can be put aside. We are currently working with Lyrasis to launch a UMP e-books collection (comprehensive, DRM-free, perpetual access) in 2019 but we recognize that many libraries will continue to prefer to work through aggregators rather than investing in yet another platform so it is not a complete solution.

b. Business Models

As reflected in the previous section, during our meetings both with the Course Use Research Team, but also with the larger Charlotte Initiative Working Group, publishers are concerned with the library using its purchase to support course use, because a significant amount of the money they make is through course adoptions. This fear is also backed up by the survey questions answered in the larger environmental scan.

Libraries and publishers, over the last few years, have been working together to figure out solutions to this problem through new business models. A few of the Course Use Research Team members have participated in these programs and each libraries’ experience was discussed. As the market continues to evolve and alternatives, including Open Textbooks
and OER are becoming prevalent, these models may not be viable but they are worth discuss because libraries and publishers working together towards textbook affordability is a lofty goal, and something that can be incredibly beneficial to students now and into the future.

One caveat when discussing these models is with the collaboration of publishers and librarians, none of the cost of these textbooks would be passed onto the student. There are currently models being employed where every student pays a flat fee for the textbook and access to ancillary materials at a reduced cost for a guaranteed return for the publisher. Although these models have been successful, they are not the focus of our discussion.

When discussing the business models for course use e-books, there were two models that prevailed: charging the library based on usage, and purchasing a certain number of copies of an e-book based on the size of the class using it.

i. Usage Based Model

The usage based model that is currently being piloted by Walter de Gruyter with the Harvard University Press, Princeton University Press and Columbia University Press, is based entirely on how much a book is used. For this pilot, the presses released some titles they had previously held back because of their potential to be course use titles.

Participants in the pilot would buy the entire package of titles from each publisher at a flat rate. Throughout each year, the libraries would monitor the usage and if a title is used 3.5 times the number chapters within the title, because the books are provided by chapter, then the library would buy an additional copy. More about the project itself can be reviewed through the presentation given at our open conference, titled Sustainable Business Models for e-books - Insights from YBP and Publishers (http://charlotteinitiative.uncc.edu/ci/openconference/recordings).

This model is promising and could satisfy both the libraries and the publisher. The only issue that was raised was a time and cost cap for the libraries. Library budgets cannot sustain huge unexpected costs for an indefinite amount of time. Libraries would need to be able to cap the amount of money they spent on a single book in a year and also cap how long the book will be subject to additional purchases. One possible solution that could be considered, if the library was aware that a title was being used for a course is the library up front buys ten copies of a title at the first trigger, but then cannot be charged for any additional use. This way, the publisher gets their money up front, and the library is not on the hook for the book for an extended period of time.
Another issue that would cause this model to be insufficient, from the publisher’s side, is the contents of the book being hosted outside of the publisher’s platform. In this instance, the publisher would not be able to track the usage. There would need to be stipulations on how the book is provided to the users before access is granted, to ensure the usage can be tracked.

ii. Class Purchase

The class purchase model is a little more straightforward, but also a little harder to negotiate with vendors. The main idea is the library pays for the number of students in the class for the first two semesters, at a reduced rate, and the library can provide the e-book to the students free of charge. At UNC Charlotte, we negotiated with a vendor using this model and was given the rights to host the content on our servers for the students. At LSU, lower-level undergraduate classes, which are also the largest enrollment classes, fall largely beyond the scope of their course use program. Required titles for these classes are generally not sold to libraries as e-books in a format that adheres to the three principles. Additionally, these classes may require the purchase of an access code, which often provides access to an e-textbook in addition to a personalized online learning environment. The Libraries developed a pilot project to provide access to a title unavailable through library collections and to a lower-level, large enrollment course using a general education course in Geography where instructors did not use an access code. This project was with Wiley and it enabled the library to negotiate and purchase a license to a DRM-free, unlimited user e-book that was not being sold to libraries either through packages or as a title-by-title purchase.

This is a high upfront cost for libraries, but is something that can be budgeted for, since it is a one time cost. The essential factor the library needs to ensure is that the textbook will be used for a significant number of semesters and reach an adequate number of students to get a decent return on investment. For the vendors, it guarantees a certain amount of return on the course use text without having to deal with the loss once the book enters the secondary market.

Both these models have potential to significantly help students with textbook affordability and be beneficial for both libraries and publishers. As time goes on, we hope to see new models emerge as libraries try to help tackle the rising costs of textbooks.

6. CONCLUSION

Through our research, it is clear that academic libraries have a role to play when addressing textbook affordability on college campuses. There are many avenues libraries
can take to help ease the burden of textbook costs, including a combination of the avenues described throughout the paper. As a central player in textbook affordability initiatives, libraries face obstacles including faculty buy-in, bookstore cooperation, student preference for print books, and navigating the intricacies of purchasing e-book course adoption titles and traditional eTextbooks. Libraries and publishers have an opportunity to face these issues together to the benefit of the publishers, libraries, and ultimately students. Over the two years of studying this issue through grant funded projects, the market and approaches continue to change and progress. It will be exciting to see what the future holds as we continue to navigate these uncharted waters.
APPENDIX A

Course Use Research Team Members and White Paper Contributors

Research Team Leader
Liz Siler – UNC Charlotte

Research Assistant
Kelly Denzer – UNC Charlotte/ Davidson College

Publisher Members
Michael McCullough – Duke University Press
John McLeod – UNC Press
John Sherer – UNC Press
Charles Watkinson – University of Michigan Press

Librarian Members
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Cheryl Cuillier – University of Arizona
Emily Frank – Louisiana State University
Terri Gallaway – LOUIS
Charlie Remy – University of Tennessee Chattanooga
Emily Thompson – University Tennessee Chattanooga
Niamh Wallace – University of Arizona
APPENDIX B

Bibliography of Literature Review


APPENDIX C

Sample Survey Questions

In order to focus on the user experience for the students, the survey template includes questions specifically related to the use of the e-books. The asking students faculty about their use of these e-books can help us inform publishers how they are being used and what enhancements could be made to make them more useful to students. The two surveys took a different approach as one was looking at what students would prefer if e-books were offered and the other was looking at the student experience after they had used e-books in the classroom. Both of these perspectives are valuable so combining them seemed to be a natural fit. The survey template includes three parts:

Regarding what students used when the e-book was available:

Which of the following options did you use for your textbooks for this class (check all that apply):

- Print copy (via UNCC bookstore)
- Print copy (via other vendor)
- Print copy (via Atkins Library course reserves)
- Print copy (via Interlibrary Loan)
- e-book (via Atkins Library)
- e-book (via other source)
- None
- Other:

Why did you decide to not use the e-book from Atkins Library? Check all that apply.

- I did not know it was an option
- I prefer to use print textbooks
- I did not like the format of the e-book
- Other:

Why did you decide to use the e-book provided by Atkins Library? Check all that apply.

- Free
- Easy to access
- Downloads to eReader
- Environmentally friendly
● Only available as an e-book
● Other:

How did you read the e-textbook (select all that apply)
● Phone
● Tablet / eReader
● Desktop / laptop
● Printed out

Rank the importance of the following factors/features of assigned course materials: [Being able to read the materials in print]
Rank the importance of the following factors/features of assigned course materials: [Being able to read the materials online]
Rank the importance of the following factors/features of assigned course materials: [Ability to highlight or write on materials]

**Regarding what students like and/or dislike about using e-books as course materials:**

Rate from 1-10 your experience using the library's e-books, with 10 being the most positive and 1 the least positive
● Overall ease of use
● Convenience of format
● Ease of downloading
● Keyword searching
● Printing pages or chapters
● Saving chapters
● Making notes

Describe your experience using the e-textbook: (select all that apply)
● It was easy to use
● I preferred it over a print textbook
● This e-textbook saved me money
● Other: ______________
● It was difficult or frustrating to use
I would have preferred a print textbook
I didn't save much money because I printed out the e-textbook

Please share any comments on your experience with this e-textbook (Open ended)

Regarding students overall preference for course use materials:

If given the choice, and money was not an issue, would you prefer your textbook be in print or e-book format? Possible answers: `Print/e-book/Both-And why (open ended)

In the future would you consider using library online materials as course resources in addition to selecting at the bookstore? [Yes/No]

How likely are you to: [Not buy a textbook for your course because of the cost]

How likely are you to: [Drop a course because of the cost of the textbooks]

How likely are you to: [Feel nervous if you do not have a printed textbook for your course]

How likely are you to: [Feel comfortable using online materials for your course]

How likely are you to: [Prefer using print materials to online/digital materials]

What do you like or dislike about using online or digital materials in a class?

What do you like or dislike about using print materials in a class?

We hope answering these questions will help libraries and publishers learn what students preferences and needs are and assist helping to provide an optimal learning experience. If a library uses some or all of these questions in a survey administer to students the Charlotte Initiative Course Use Research Team would be very interested in hearing the results, so please contact at charlotte_initiative@uncc.edu.