I. Introduction:

A. Background: Textbook cost increases have far outpaced inflation over recent years, while at the same time there have been consolidations in the publishing industry and the development of open access alternatives. This is a familiar scenario to serials librarians, and one for which librarians are well-qualified to engage with their campus faculty. The University Library Advisory Council (ULAC) determined to discover opportunities for collaboration at a statewide level to foster initiatives related to textbook affordability. These initiatives may address Open Educational Resources (OER), Open Access Textbooks (OAT), library-licensed content, interlibrary loaned content, and freely-available content, among other possibilities.

B. Formation of and charge to the group: In May of 2016, ULAC representative Wanda Brown approached the members of this working group to thank them for their willingness to serve, and to propose an initial meeting so that the group could review its charge, target time frame, and leadership. The charge to the group was stated this way: investigate possible system-wide textbook affordability initiatives (including but not limited to open textbook development/adoption, streaming video, course-adopted e-books, interlibrary loan); report to ULAC by December 1, 2016.

C. This report details findings of the working group and options for system-wide initiatives respectfully submitted for ULAC consideration.

II. Summary of Activities at UNC Schools:

In response to a survey and follow-up emails sent to library contacts at each UNC institution, it is evident that many UNC institutions are actively providing textbooks and other OER to students in a variety of ways to help address textbook affordability.

ECU, NCSU, and UNCG offer grants to faculty to replace traditional print textbooks with alternatives, whether collections of library ebooks, videos, and articles, or writing entirely new textbooks for their disciplines that are then available as free ebooks or low-cost print books. NCSU has focused on creating alt-textbooks that support pedagogical innovation. Examples from the first two years include student-created videos for a chemistry lab, use of the GitHub repository for iterative work on educational applications, and working with the Makerspace to 3D print bones for a Veterinary Anatomy course.

ECU, UNCC, and UNCG are actively purchasing ebook versions of required textbooks for selected courses. ECU and UNCG have jointly received an LSTA grant to support this project. ASU is exploring implementing a similar program. UNCC maintains a database for faculty to search for ebooks owned by the library or ebooks that can be purchased by the library to be
used as textbooks.

NCSU and WSSU provide every textbook on course reserves. NC A&T reported that until budget cuts five years ago they would purchase all textbooks to place on course reserves. FSU also provided all textbooks on course reserves in the past. Six reported that they currently provide some textbooks on course reserves (ECU, FSU, UNCA, UNC-CH, UNCSA, and WCU). More might offer course reserves for textbooks, but did not report doing so, perhaps not thinking of the service in terms of textbook affordability or perhaps because often faculty decide what to place on reserves rather than the placement being at the direction of the library.

UNCG and NCSU are members of the Open Textbook Network, a community of schools, universities, and institutions working to promotes access, affordability, and student success through the use of open textbooks. UNCG hosted a campus event with OTN in the fall of 2016 that introduced open textbook to their faculty. NCSU is planning a similar event in the spring of 2017.

ECU and FSU specifically reported that they allow interlibrary loan requests for textbooks. More might offer the service for textbooks, but did not report doing so, perhaps not thinking of the service in terms of textbook affordability. Traditionally, most libraries throughout the country have actively attempted to avoid requesting textbooks through interlibrary loan, but that trend appears to be changing.

FSU reports that students receive the majority of their textbooks under a bookstore rental program that is paid for as part of their tuition. ASU and WSSU also report that many students use the bookstore’s rental program for many of their textbooks. More institutions’ bookstores likely offer a rental service for textbooks, but the libraries did not report the service, perhaps because the phrasing of the survey question was about what the library has implemented to address textbook affordability.

Four institutions reported that they have no current initiatives relating to textbook affordability (ECSU, NCCU, NCSSM, and UNCP). They might not have considered course reserves, interlibrary loan, and bookstore textbook rental services as relevant responses to the survey. For more information, consult Supplement A, ULAC UNC Institutions & Textbook Affordability Survey (Responses).

III. Summary of Activities at Selected Schools Nationwide

Many colleges and universities outside of the UNC system have implemented programs to relieve the cost of textbooks of their students either locally or through their state system. The committee created a survey and contacted 15 organizations ranging from small independent universities, large state schools, and state university systems, to gather information on the general structure of their programs and how they might inform any programs we might implement in North Carolina.
The surveys were sent to programs that ranged from providing textbooks on reserves, providing textbooks using library ebooks, and encouraging faculty to develop and/or use Open Educational Resources.

Of the 15 organizations, 8 responded to the survey. Below is a chart of the survey results:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Years active</th>
<th>Number of faculty</th>
<th>Faculty stipend</th>
<th>State laws</th>
<th>Provost/president support</th>
<th>Grants/funding</th>
<th>Full time librarian</th>
<th>Advertise</th>
<th>Other</th>
<th>Still active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oklahoma</td>
<td>3</td>
<td>2014, 5 2015, 15 2016, 22</td>
<td>Max. 2,500.00</td>
<td>-</td>
<td>Yes</td>
<td>University, art and math dept.</td>
<td>yes</td>
<td>yes</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>Mt. St. Mary</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Offered free text books to transfer students</td>
<td>no</td>
</tr>
<tr>
<td>Temple</td>
<td>6</td>
<td>7-10 yearly</td>
<td>1,000.00</td>
<td>-</td>
<td>-</td>
<td>Library budget</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>Ohio</td>
<td>1</td>
<td>9</td>
<td>1,000.00</td>
<td>-</td>
<td>-</td>
<td>Library budget</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>yes</td>
</tr>
<tr>
<td>State of California</td>
<td>2</td>
<td>1,000 at various stages, state wide</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>State Council</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>UCLA</td>
<td>3</td>
<td>40</td>
<td>-</td>
<td>Yes</td>
<td>yes</td>
<td>Acmi, vice chancellor, state</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>Kansas</td>
<td>3</td>
<td>2014, 12 2015, 13 2016, 17</td>
<td>Yes</td>
<td>-</td>
<td>Yes</td>
<td>Provost, grants</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>Georgia</td>
<td>3</td>
<td>2015, 167 2016, 171</td>
<td>Yes, to institutio n not faculty</td>
<td>No</td>
<td>yes</td>
<td>state</td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>3</td>
<td>Hard to track, state wide</td>
<td>Max 2,000.00</td>
<td>-</td>
<td>-</td>
<td>Hecc, state</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
</tr>
</tbody>
</table>

What we gleaned from the results is that most programs are still in their infancy, at 3 years or less, most offered faculty/departments stipends to participate in the program, and several of the most successful institutions had enthusiastic support from their provost or president. This information will be useful as the state of North Carolina considers designing a similar program of our own. For additional information, see Supplement B, Affordable Textbook Initiatives at Non-UNC Schools.
IV. Potential Actions at ULAC Schools

A. **Promotion of OER/OAT and library-licensed resources**: A low-cost option that could be folded into existing library outreach activities, liaisons could engage faculty to promote Open Educational Resources, Open Access Textbooks, and library-licensed resources for use in their courses. Setting up a LibGuide and crafting messages to the faculty would be common ways to accomplish this promotion. Partnerships with national organizations such as OpenStax or the Open Textbook Network have also been effective for many institutions.

B. **Stipends for Transition**: Many schools across the country provide stipends for departmental faculty to adopt, adapt, or create OER for use in their classes. OER need not be the only option; some programs, such as Rutgers, also permit low-cost materials, and many also permit the adoption of library-provided resources. See Affordable Learning Georgia for an example of a system-wide approach to fostering this transition.

C. **Purchases of Required Textbooks**: Libraries could purchase required textbooks, in either electronic or print form. Several of the UNC system libraries purchase print copies of required textbooks (normally placing them on reserve), and at least 3 currently purchase electronic copies. NSCU Libraries and ECU have collected data on potential savings they are willing to share.

D. **Course-Pack Cost Reduction**: Libraries could work with their campus bookstore to review course pack reading lists. Electronic resources may have license provisions permitting course packs without requiring additional fees. For examples, see UCLA and Toronto.

E. **Shared Set of Resources**: To provide internal training and awareness, ULAC libraries can create, contribute to, and encourage the use of shared resource lists. These shared resources may include readings on OER, example textbook affordability programs from other intuitions, commonly-linked OER or OAT providers, and other resources that would help a library establish its own LibGuide, for instance, or provide resources for liaisons to promote OER. Liz Siler at UNCC created a substantial reading list, to which working group members have added some additional citations. This reading list could be one of the shared resources.

F. **Explore UNC Press partnership**: Recently the University of North Carolina Press established an Office of Scholarly Publishing Services. Director John McLeod has described several “Affordable Access and Open Access Projects” in Supplement C, OSPS Affordable Access and Open Access Projects. The Office of Scholarly Publishing Services might be open to additional partnerships with ULAC members.

G. **Explore partnerships with General Administration**: A recent memo to Chief Academic Officers from GA was a request for proposals for “Actualizing Innovations Meant to Scale” (AIMS); Open Content/Open Educational Resources were explicitly mentioned in one of the concept areas: “Deploying Academic Innovations for Affordability.” ULAC members could
explore concerted action with or through GA. An additional contact might be Matthew Rascoff at GA for technology integration of OER. The University System of New Hampshire has recent experience with a statewide initiative. Their slides are here, and Executive Summary of an OER Grant Pilot here. Rhode Island also has a state-level initiative, begun by the governor and headed up by a bookstore director.

H. Explore potential partnership with BiblioLabs: BiblioLabs hosts the Home Grown ebook collection available through NC LIVE. They have recently expressed an interest in hosting OER. There would be a fee for the university to participate, and almost certainly savings if multiple campuses contracted with BiblioLabs. The high profile of NC LIVE would help bring exposure to OER hosted by BiblioLabs, and if multiple campuses are participating, could help create a critical mass of OER for a state-level repository.

I. Inter-institutional initiatives: ULAC members could facilitate departmental faculty from multiple campuses adopting common materials for common core classes like required math, chemistry, or biology classes.

V. Issues to Address
Creation and successful implementation of Open Educational Resources is complex. Issues and concerns must be addressed in order to be successful. Topics to consider include academic freedom, bookstore relationships, sustainability, availability of resources from introductory to specialized levels of study, availability of materials ancillary to the actual open textbooks, and assessment.

A. Academic Freedom: The selection of textbooks and other learning resources rests with faculty. Academic freedom protects faculty as they make decisions for in person or online classroom teaching. They choose materials based upon suitability for the course, and OER may serve well as replacements of commercially published textbooks. Beyond the clear concern of textbook affordability for students, faculty consider the quality of the resources in determining use of OER. Some repositories of OER offer the option for users to evaluate resources and post their reviews, and OER may be peer reviewed. Faculty can use that information when considering value of available OER. Faculty expect content standards to be maintained. Within their departments and institutions faculty have had a mix of experiences. A situation at California State University at Fullerton arose when a faculty member chose to use free online learning resources along with a lower priced textbook rather than assigning the more expensive textbook approved by the department for the multisection course. Associate Professor Alain Bourget received a reprimand, which he challenged before a faculty grievance committee. In other situations, faculty may offer pushback when asked to use OER in their
classrooms if they have selected commercial resources as fitting for their students. The expansion of OER use may result in a potential loss of royalties to faculty for textbooks that they have published, which may affect willingness to adopt OER.

B. Relationship with Campus Bookstore: Campus bookstores can be cooperative, supportive, and valued partners in incorporating OER into learning resources for use at the university, college, or community college. Through active communication and working effectively together, the campus bookstore, library, and other institutional stakeholders can provide solutions for students. A common workflow has the campus bookstore providing the library with adopted course lists for review of potential alternatives through OER and ebooks in library collections that allow for unlimited or multi-users. Some bookstores provide print-on-demand options on site or through a local print publisher for students who want a low cost hard copy of an open textbook. According to a survey prepared for the Independent College Bookstore Association by The Campus Computing Project, 72% of responding faculty strongly agreed or agreed that the campus bookstore was a trustworthy source of information about course materials. With bookstores working collaboratively with faculty and librarians on promoting access to OER, strong partnerships have been established. Students have numerous options for purchasing or renting textbooks, or they may choose not to purchase the textbook at all. Campus bookstores have been evolving for a number of years, and they no longer rely primarily on textbook purchases for their success; rather, they are actively diversifying the services and merchandise that they offer.

C. Sustainability: Faculty who are motivated to engage in assigning or producing OER for use in their classes need support, including financial, technical, and legal/copyright resources to be able to sustain active use of OER. That requires an ongoing commitment to expand the number of faculty who create OER, while also supporting faculty when updates to resources are needed to preserve value. Sustainability depends upon wide adoption of a resource rather than use in only a single course at a single institution. The use and reuse of quality OER by end users — teachers and learners — is the goal.

Awareness is essential for discovering potential OER from available offerings. Informing faculty of the potential value of assigning OER is a starting point for fostering interest and encouraging the adoption or creation of OER. Librarians have been active in directing faculty to OER in their disciplines, and many academic libraries offer library guides that compile information into a convenient location. Faculty require time to evaluate OER materials before adoption. Creating an open textbook is a substantial commitment of time and resources. Training is needed for
Adequate financial resources are a basic factor in making OER sustainable. Grant funding through academic institutions and foundations has long been a means of support for OER. The William and Flora Hewlett Foundation has provided millions of dollars in funding for university-based OER projects worldwide, and there are other foundations and major supporters who help to finance initiatives. University and college administration, including provosts, academic libraries, faculty teaching and learning centers, and other supporters may offer mini-grants to support faculty who are seeking or creating OER. Success in developing OER requires a long term approach to communicating with and engaging stakeholders, so they share a commitment to creating and supporting open educational resources. Students who prefer to use a textbook in print may be able to purchase a low-cost print-on-demand copy of their assigned open textbook, allowing them access to the online version as well as a physical copy.

It can be challenging to determine whether materials are openly licensed through Creative Commons or are in the public domain. Access to individuals who can apply their expertise to investigating valid use of materials is necessary, because copyright and licensing can potentially limit use of resources. The complexity of permissions and restrictions to reuse and adapt OER demands support for faculty.

Faculty have valid concerns about their commitment to OER. While best practices include acknowledging creators of OER when using their resources, some faculty are concerned about a potential loss of attribution for materials they have made available as open access. Pre-tenure or non-tenure track faculty may not feel that they have the time to devote to discovery, adaptation, or creation of OER. With incentives for faculty and changes in tenure and promotion requirements that evolve to reward faculty who create OER, there will likely be more interest by faculty to participate in developing OER.

Local institutional repositories supported by academic libraries are one option for posting OER. For some academic institutions, open education sites like Rice University’s OpenStax offer a repository for materials and access to those resources. Organizations such as MERLOT offer a platform for curated collections.

Sustaining OER requires communities and networks for sharing content and best practices. Existing and new communities of practice across departments, disciplines, and institutions, as well as within professions, provide a strong foundation for developing resources that benefit faculty and other creators of content.
learners. Technical infrastructure and support is critical in sustaining OER. Multimedia components require additional capacity. Building content as modules allows for more creative use, reuse, and remixing, making the material more flexible and adaptable to a variety of learning situations. There is a challenge in preparing OER for a global audience. Attention must be given to translating materials, offering closed captioning for video, and creating learning objects that can be accessed even in circumstances when teachers and students have only basic technology to rely upon.

D. Available Resources, Ancillary Materials: Beyond the interest of individual faculty choosing to create or identify OER for use in their classes, initial efforts to incorporate OER on a broader scale focus on introductory courses and courses with many sections in order to have a wide favorable impact on student expenditures on textbooks. Some initiatives, particularly in community colleges, focus on entire degree programs rather than emphasizing course-by-course adoption.

Commercial publishers offer ancillary materials to supplement textbooks, and they compensate faculty for creating teaching guides, problem sets, tests, solution manuals, and model answers. Those kinds of materials may not be available for all open textbooks, which could limit interest by faculty who want to use supplemental instructor materials. Funding would provide an incentive for faculty to create ancillary resources.

Established OER platforms have committed to providing a means of supplying ancillary teaching resources. For example, MIT OpenCourseWare (which started its pilot phase in September 2002) offers course materials such as assignments, audio/video lectures, multimedia content, exams, image galleries, lecture notes and projects. The Institute for the Study of Knowledge Management in Education (ISKME) created OER Commons, a collaboration platform for OER. It provides access to a long list of resources beyond open textbooks, including assessments, case studies, games, homework and assignments, images and illustrations, lesson plans, student guides and syllabi. IT infrastructure and expertise is essential for being able to host such a diverse collection of learning objects.

E. Assessment: Assessment of OER most typically focuses on calculating cost benefits per course and across sections based on the number of students able to rely on open textbooks and other open learning resources as opposed to purchasing the textbook formally assigned for their course. Dollar savings and the return on investment for committing to adopt OER is often reported as a means of communicating to faculty, students and their parents,
university administration, legislators, and the wider public the success of their efforts. This may be particularly crucial for state higher education institutions. On the other hand, there is some perception that costs may be shifting from the students to the institution, so real cost savings may be hard to determine.

Student outcomes after using OER for their courses is another aspect of assessment. OER offer the opportunity for students to develop portfolios. Online testing can be set up in a manner that is effectively providing students practice in concepts, so, for example, students can take an online test any number of times to achieve a perfect score. Online platforms offer rich opportunities for collaborative learning. Using technology skills assessment resources can be set up to collect user/material interaction data with real-time data tracking that includes how much time a student spends with a resource, what pathways were selected in learning activities, and which resources are selected. Numerous studies have concluded that there is no negative impact on student learning when using OER as opposed to commercial textbooks.

VI. Supplementary Materials: See links for the following:
   A. ULAC UNC Institutions & Textbook Affordability Survey (Responses)
   B. Affordable Textbook Initiatives at Non-UNC Schools
   C. OSPS Affordable Access and Open Access Projects
   D. Link to Libraries and Textbook Research

Respectfully submitted,
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