# Recommendations to Save on Student Textbook Costs 

## Prepared by

The Adhoc Senate Committee on
Student Textbook Savings

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## Executive Summary

The cost of college textbooks is an unreasonable burden on many students, and adds considerably to the expense of their education. The difficulties that many students experience in paying for course materials can significantly affect their success as students. Student surveys indicate that about $70 \%$ of students have elected to forego purchasing a required textbook during their college career; and, about $30 \%$ report they frequently do so. Student surveys have also found that $49 \%$ of students take fewer courses per semester due to high textbook costs, $27 \%$ of students drop a course because of a high-cost textbook, and $17 \%$ of students fail a course due to their inability to afford the required textbook.

The cost of textbooks has gained national attention in recent years. The Higher Education Opportunity Act (HEOA), passed by the 110th U.S. Congress, includes several provisions relating to textbooks. In addition, a number of state legislatures, including that of Utah, have undertaken aggressive action to lower textbook costs. Numerous universities and colleges around the nation have initiatives in place to save students money on textbooks.

In 2013, the University of Utah Academic Senate, under the leadership of Allyson Mower, established the AdHoc Senate Committee on Student Textbook Savings to explore ways of saving University of Utah students $\$ 500$ per year on textbooks. The Committee examined available research, compiled institutional data, conducted a student survey, and formulated recommendations which are summarized below in order of the time and effort required to implement them.

1. Move toward using low-cost versions of existing materials. Immediate savings on student textbook costs can be realized by promoting practices that allow students to use less expensive textbook options, such as used textbooks, rental textbooks, and library copies. Raising awareness of textbook costs and alternative options is critical, and requires support by the administration and libraries. Faculty cooperation will also play a large role.
2. Encourage the adoption of available open course materials. Textbook costs can be lowered by promoting the use of free, open textbooks and other open educational resources (OER), instead of requiring students to purchase commercial textbooks. Administrative and library support is needed to assist faculty in the adoption of OER.
3. Support the development of new open course materials. Textbook costs can be lowered by creating free, open textbooks specifically written for courses offered at the University of Utah. An example of success in this regard is "Open2010", an open textbook for WRTG 2010, that currently saves an estimated $\$ 500,000$ per year on textbook costs. The faculty's willingness to author open textbooks coupled with administrative support is needed.
4. Create a university body to realize the long-term vision. The University should create a new administrative position or assign responsibility to an existing administrator with authority to oversee the implementation of the above recommendations. A standing committee with representation from the relevant stakeholders (students, faculty, librarians, bookstore staff, etc.) should also be created.

## Contents

1 Acknowledgments ..... 4
2 Purpose ..... 4
3 Introduction ..... 4
4 Interest ..... 7
4.1 Local Interest ..... 7
4.2 National News Coverage ..... 9
4.3 Textbook and OER Legislation ..... 9
4.4 Initiatives at Other Institutions ..... 11
5 Data ..... 13
5.1 Textbook Costs at the University of Utah ..... 13
5.2 Student Behaviors and Attitudes about Textbooks ..... 15
5.2.1 2014 U of U Student Textbook Survey ..... 15
5.2.2 2014 U.S. PIRG Student Survey ..... 21
5.2.3 2012 Florida Student Textbook Survey ..... 22
5.2.4 Piracy ..... 23
5.3 Faculty Behaviors and Attitudes about Textbooks ..... 24
5.3.1 2013 GAO Study ..... 24
5.3.2 2010 Florida Faculty Survey ..... 24
6 Available Resources ..... 25
6.1 Campus Bookstore ..... 25
6.2 Open Educational Resources ..... 28
6.3 Library ..... 30
6.4 Copyright Policies ..... 31
7 Recommendations ..... 35
7.1 Move toward using low-cost versions of existing materials ..... 35
7.2 Encourage the adoption of available open course materials ..... 40
7.3 Support the development of new open course materials ..... 42
7.4 Create a university body to realize long-term vision ..... 43
8 Conclusions ..... 44
9 References ..... 45
10 Appendix ..... 47

## 1 Acknowledgments

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## 2 Purpose

The AdHoc Senate Committee on Student Textbook Savings was formulated in December 2013 by the Academic Senate, under the leadership of Allyson Mower, with the charge of recommending ways to save students at the University of Utah $\$ 500 /$ year on textbooks. The Committee was asked to report back to the Academic Senate Executive Committee on April 21, 2014. The Committee met a total of nine times during the Spring semester of 2014. This report represents the outcome of those discussions.

## 3 Introduction

The college textbook market is unique to most other markets in that the primary consumers (students) do not actually choose the product that they purchase. Textbook publishers do not market their products directly to their consumers, but rather to faculty who are responsible for deciding which materials are required by students. Publishers often provide free samples to faculty to promote their products. Because faculty do not actually purchase these products, a disconnect tends to exist between faculty and students with regard to the economics of the textbook industry. Unlike a typical market, no checks and balances exist between consumers and providers in the textbook industry. In this manner, students constitute a captive market, which has lead to a dramatic inflation of textbook prices by publishers. As shown in Figure 1, new textbook prices have risen at a rate of about $6 \%$ per year, compared to overall consumer prices that have only increased by about $2 \%$ per year (GAO, 2013). This translates into an $800 \%$ increase in textbook costs over the past 30 years, which is a faster rate than medical services at $575 \%$, new home prices at $325 \%$, and the consumer price index at $250 \%$, based on data from the Bureau of Labor Statistics (Perry, 2012).


Figure 1: Increase in college textbook prices relative to college tuition and the inflation of overall consumer prices. [Taken from GAO (2013)]

Interestingly, five textbook companies control more than $80 \%$ of the $\$ 8.8$ billion textbook publishing market, giving them near market monopoly and protecting them from serious competition (Allen, 2013b). In 2012, the top three textbook publishers, McGraw-Hill, Wiley, and Pearson, had profile margins of $25 \%, 15 \%$, and $10 \%$, respectively (Band, 2013). In the past decade, the profit margin of firms in the publishing sector has increased $2.5 \%$. Without the ability of students to choose more affordable options, publishers are able to drive textbook prices higher without fear of repercussion. There are few other organized markets in the United States that are similar, prescription drugs being one.

In order to institute cost savings on textbooks, it is important to understand several interrelated issues including: (i) the different modalities that exist for distributing curricular materials, (ii) the resources available for obtaining educational materials, (iii) the influence of technological advances on education, (iv) student behaviors and attitudes about textbooks and textbook costs, and (v) faculty behaviors and attitudes about textbooks and textbook costs. Table 1 lists common options for obtaining curricular materials. Although students may lower their costs by purchasing used textbooks, digital textbooks, or renting materials, the price of new textbooks often sets the cost of these other items. For example, college bookstores typically sell used books for about $75 \%$ of the new print price (GAO, 2005).

Bookstores may acquire used textbooks either by buying used textbooks back from students

Table 1: Common Options for College Course Materials. [Taken from GAO (2013)]

| Type | - | Textbook |
| :--- | :--- | :--- |
|  | - | Supplemental material |
|  | - | Interactive system |
| Format | - | New print (including loose-leaf and other lower-cost options) |
|  | - | Used print |
|  | - | Digital book (including PDFs and books for e-readers) |
| Delivery channel | - | National online retailer |
|  | - | Other bookstore (not school-affiliated) |
|  | - | Open-source provider |
|  | - | Library |
|  | - | Peer exchange |
|  | Pransaction method | Purchase |
|  | - | Rent |
|  | - Borrow |  |
|  | - | Download free of charge |

or from the wholesale market. In the case of the former, bookstores may offer as much as $50 \%$ of the new textbook cost (regardless of whether the student originally purchased the textbook new or used) if faculty plan to reuse the textbook in the future (University of Wisconsin, 2007). Under this scenario, it is possible then for a student to pay a net cost of $25 \%$ of the new textbook price. However, if a faculty member chooses not to reuse a textbook or fails to notify the bookstore in a timely manner regarding textbook selection, then the bookstore will pay less for that particular used textbook. In this situation, the bookstore may offer only the general wholesale price, which usually ranges from $5 \%$ to $35 \%$ of the new textbook price (GAO, 2005), or may not buy the used book at all.

The approach of this Committee was to identify a number of strategies that could save students money on textbooks. These strategies are organized in Section 7 according to time and effort to implement. The final recommendations are similar to those outlined by Senack (2014) following his analysis of college student survey data obtained by the Student PIRG as discussed in Section 5.2.2. The strategies requiring the least effort leverage available resources that could have an immediate impact on textbook cost savings to students at the University of Utah, and involve better communication of textbook pricing information to both students and faculty. Recommendations of ways to improve communication at the University of Utah are presented in Section 7.1.

Strategies requiring more time and effort focus on a shift toward the development and adoption of open educational resources (OER) at the University of Utah. OER includes "open
textbooks" (i.e., textbooks that can be made available online and licensed under the terms that grant the public the right to freely access, customize, and distribute the material) and "open courseware" (i.e., educational materials that are organized as courses and freely accessible online, often including course planning, lecture notes, assessment tools, and other thematic content); see Section 6.2. The open courseware movement was spearheaded in 2002 by MIT OpenCourseWare, which is a web-based publication of virtually all course content offered at MIT. Despite a decade or more of work in the area of OER, adoption rates by faculty remain relatively low. If OER were used in more courses to supplant commercial textbooks, the cost savings to students would be tremendous. Recommendations for potentially increasing OER use at the University of Utah are presented in Sections 7.2 and 7.3 .

## 4 Interest

There has been much interest in the topic of textbook costs both on a local and national level. This section describes local interest in the present Committee, national media coverage of textbook prices, political interest in textbook and OER legislation, and initiatives at other universities to save students money on textbook costs.

### 4.1 Local Interest

The Salt Lake Tribune published an article in December, 2013 about the Committee; quotes from two Committee members, Rachel Wooton and David Wiley, were included (Whitehurst, 2013). The Daily Utah Chronicle also published an article about the Committee in January, 2014 that described the goals of the Committee and included several quotes from Rachel Wooton and Allyson Mower, Senate President (Turner, 2014).

Drs. Carol Diener, Professor Emeritus of Psychology, University of Illinois at Urbana Champaign, and Ed Diener, Alumni Distinguished Professor of Psychology (Emeritus), University of Illinois at Urbana-Champaign, contacted Allyson Mower, Senate President, about their interest in the Committee. The Dieners are founders of the Diener Education Fund (http://nobaproject.com/about-noba), a non-profit organization with the mission of reinventing higher education to serve the changing needs of students and professors. Currently, their work is focused on the Noba Project, which is an open and free online platform that provides high-quality, flexibly structured textbooks on educational materials.

The Diener's met with the Committee on March 19, 2014 to share their experiences writing an open-source textbook for an introductory psychology course. The book has already been completed; but, they were struggling with low adoption rates. They are in the process of employing the following strategies to try to increase adoption rates: (i) providing active learning exercises, (ii) developing companion materials such as a test bank of questions, powerpoint slides, classroom activities, (iii) offering rewards to students who use the book and post a youtube video. They also discussed the possibility of adding quizzes at the end
of each module so students could self-assess their learning.
The Committee Chair also received a personal email from Jay Jordan, Associate Professor, Department of English and University Writing Program, who recently co-authored an open textbook entitled "Open2010" for WRTG 2010 (the required first-year writing course). Dr. Jordan coordinated WRTG 2010 for 4 years. He graciously shared some of his personal experiences writing an open textbook. Dr. Jordan decided to write "Open2010" to make the distribution of WRTG 2010 resources more efficient, and because he was aware of rising textbook costs as well as the never-ending cycle of new editions being printed by publishers (even if the new content is minimal). Dr. Jordan indicated that he was not directly compensated for his efforts, though the Director of the Writing Program was extremely supportive. Because he served as coordinator of WRTG 2010 at the time, Dr. Jordan was released from regular teaching obligations, which helped him complete the open textbook project in a timely manner. Dr. Jordan noted that when he undertook the project, he had already checked off his requirements for tenure. He advocates that "faculty who are thinking about such projects should DEFINITELY consult with their directors/chairs about compensation, grad/UG assistants, release time, and RPT implications."

Dr. Jordan also commented on the subsequent adoption of "Open2010" and impact to students. All new instructors for WRTG 2010, must use "Open2010" during their first semester. Thereafter, instructors of WRTG 2010 may choose from an approved list of textbooks, which includes "Open2010". Dr. Jordan consulted with the current coordinator of WRTG 2010, Casey Boyle, and together, they estimate that about 110 sections of WRTG 2010 (out of a total of 124 sections offered during the 2013-14 academic year), or about 2,530 students, currently use "Open2010". In the other sections of WRTG 2010, where instructors require commercial textbooks, the cost of those textbooks can range from $\$ 75-\$ 135$. Therefore, one can claim that "Open2010" results in a cost savings totaling over $\$ 500,000$ per year.

Drs. Jordan and Boyle were asked to comment on the main reason that instructors choose not to use "Open2010". They said that some instructors switch back to a commercial textbook because of familiarity and prior experience using a particular commercial textbook. However, this percentage appears to be small. Nearly all of the first-time instructors within the past two years continue to teach with "Open2010". Instructors who have abandoned commercial textbooks to adopt "Open 2010" do so because they are interested in drawing from shared materials generated in the colloquium. The colloquium is a semester-length, graduate course ( 2 credit hours) that is required of all first-time instructors in the Writing Program. The colloquium includes a weekly meeting, during which the course coordinator may cover a variety of topics ranging from general pedagogical questions to specific lessons/assignments in "Open2010" to assigned readings from literature on composition pedagogy and theory.

The fact that nearly $90 \%$ of the sections for WRTG 2010 are currently using "Open2010" makes a strong argument that institutional investment in open resources could play a large role in solving the problem of high textbook costs over the long-run. In other words, the experience with "Open2010" suggests that, if professors are supported in creating open materials needed for a course, future offerings will likely adopt them (when given that option).

### 4.2 National News Coverage

This section provides a short review of some of the press surrounding textbook costs and online alternatives to traditional education. This, in no way constitutes an exhaustive review of the national news coverage on this issue, but simply indicates that the cost of textbooks is a hot topic in society right now.

Just last month, CNN.com posted an article entitled "How some colleges are offering free textbooks" (Grinberg, 2014). This article describes the concept of open-source textbooks and notes several different resources for aiding in the adoption process. The article quotes a number of students who have benefited from the switch to open textbooks, as well as several faculty from various universities, including one member of this Committee (David Wiley). Scott Roberts from University of Maryland said, about the open textbook movement, that "this removes a major barrier to access for students who already are at a greater risk for underperforming".

A recent article from the U.S. News and World Report (Bidwell, 2014) reported on the struggle of college students with high textbook prices. This article referenced findings from a student survey that is discussed in more detail in Section 5.2.2. An article last year from U.S.A. Today (Schick and Marklein, 2013) reports that students are saying "no" to costly textbooks in a variety of ways, according to data released from a survey by the Book Industry Study Group. In that survey, $34 \%$ of students reported downloading course content from unauthorized websites, which was up from $20 \%$ in 2010 . In addition, $31 \%$ of students said they photocopied or scanned pages from other students' books, which was up from $21 \%$ in 2010. The article also cites a 2012 study by the National Survey of Student Engagement that found one in four first-year students and one in three seniors frequently did not purchase required course material due to cost.

In 2012, Time magazine and The New York Times both published articles about Massive Open Online Courses, MOOCs (Pappano, 2012; McCracken, 2012). Whereas traditional online courses charge tuition and limit enrollment, MOOCs are usually free and massive. The enrollment for a single MOOC course is typically on the order of tens of thousands or more. MOOCs do not offer credit and therefore do not count toward a degree, though certificates may be granted by the instructor for successful completion. Nevertheless, the demand for learning in this new style is overwhelming. In fact, a company called "Coursera", a non-profit MOOC provider run by a professor from Stanford, claimed that it had reached 1.7 million members in its first 10 months of operation. Most courses being offered in the MOOC format are developed by university faculty and represent adaptations of actual courses offered at those universities.

### 4.3 Textbook and OER Legislation

Policy and legislation around textbooks and open educational resources have gained national momentum in the recent years. A little over five years ago, the United States Congress enacted the Higher Education Opportunity Act (HEOA) that includes several provisions to ensure students have access to information about selected course materials (Public Law

110-315, 110th U.S. Congress). In accordance with HEOA, when publishers provide faculty with information about textbooks and supplemental materials, they are required to provide the price at which those products would be made available to the school's bookstore ( 20 U.S.C. $\S 1015 b(c))$. Publishers are also required to provide a description of the revisions made between current and prior editions of a given textbook. In addition, schools are required to disclose information on textbooks to students and campus bookstores ( 20 U.S.C. $\S 1015 \mathrm{~b}(\mathrm{~d}),(\mathrm{e}))$. To the maximum extent possible in their online course schedules, schools are required to provide the International Standard Book Number (ISBN) and retail price for the required and recommended materials for each course listed in the schedule. HEOA also encourages schools to provide information to students about institutional textbook rental programs, buyback programs, and any other cost-saving strategies (20 U.S.C. §1015b(f)).

The U.S. Government Accountability Office (GAO) conducted a small study to examine how a select number of schools were implementing the HEOA textbook information provisions (GAO, 2013). Four of the schools in the study provided textbook information to students by adding links from their school's online course schedule. In some cases, these links would redirect the user to the bookstore's website that lists textbook information for each course. One school had modified their course schedule in order to provide textbook information directly on the course schedule webpage. One student commented that it was useful to have course and textbook information in one place. A key element in this system is having appropriate deadlines for textbook selection by faculty. Students interviewed in the study reported that they benefit from having timely and reliable textbook information. Students also said that they use ISBNs of required textbooks listed on their bookstore's website to research textbook prices in order to find the most cost effective option.

Since HEOA, several states have taken an aggressive approach to lowering textbook costs through legislation/policies specifically related to OER. Below are those bills that have been enacted in 2012. Note, there are several other bills and policies that were proposed but did not pass (see http://www.openaccesstextbooks.org/legislation.html).

- Florida, House Bill 5201: requires the Florida Virtual Campus (FLVC) to "promote and provide recommendations concerning the use and distribution of open-access textbooks and educational resources as a method of reducing costs, and work with postsecondary educational institutions to develop a standardized process for the review and approval of open-access textbooks." FLVC coordinates the state's postsecondary education distance learning courses and degree programs, and is overseen by the Chancellors of the Florida State University System and Florida College System.
- Washington, House Bill 2337: requires the superintendent of public instruction to take the lead in developing openly licensed courseware aligned with the common core state standards.
- California, Senate Bill 1052: requires the California Open Education Resources Council to establish a competitive request-for-proposals process in which faculty or other parties would apply for funds to produce high-quality, digital open source textbooks for 50
lower division courses with the highest enrollment in the public postsecondary schools. The bill also requires the Council to promote strategies for using open source textbooks.
- California, Senate Bill 1053: provides for the establishment of the California Digital Open Source Library that will serve as a repository for open source material and manage a web site for students, faculty, and staff to easily find, adopt, utilize, or modify course materials for little or no cost.
- Utah State Office of Education: the USOE is remixing and/or creating new open textbooks in language arts, math, and science for grades 6-12 and encouraging all districts/schools in the state to adopt these books. The USOE is also sponsoring informational meetings and professional development designed to help faculty successfully implement open textbooks.
- Oregon, House Bill 4058A: the Higher Education Coordinating Commission will convene a work group to examine and recommend adoption strategies for making textbooks more affordable to students at all post-secondary schools in Oregon.

At the federal level, U.S. Senators Dick Durban (D-IL) and Al Franken (D-MN) introduced a bill in November, 2013 known as the "Affordable College Textbook Act" that would direct the Secretary of Education to make competitive grants to institutions of higher education to support pilot programs that expand the use of open textbooks in order to achieve savings for students (http://beta.congress.gov/bill/113th-congress/senate-bill/1704).

### 4.4 Initiatives at Other Institutions

There are numerous universities and colleges around the nation that have recent initiatives related to textbook cost savings, especially the adoption of open educational resources. In some cases, these initiatives were originally developed by students who brought the issue of textbook costs to the attention of faculty and administrators. Some examples in this category include "The Maryland Open-Source Textbook Initiative" (http://m.diamondbackonline. com/news/local/article_220ab632-1415-11e3-8930-0019bb30f31a.html?mode=jqm) and the "Tacoma Community College OER Project" (http://open.tacomacc.edu).

Increasing the use of open textbooks on college and university campuses, however, relies on the existence of high-quality open textbooks. In order to be a viable option in the classroom, open textbooks must adhere to the same high standards of quality set by publishers of commercial textbooks. Although it may not be intuitive, faculty and universities alike can benefit from assuming roles as publishers of textbooks and developers of e-learning environments (Moxley, 2013). There are some free content-management systems, such as Joomla, Drupal, or WordPress, coupled with inexpensive web hosting packages that can assist faculty in building communities around educational materials. Tools and resources to aid in selfpublication, however, are somewhat lacking. Therefore, funds are needed to create incentives for faculty to write and review open textbooks, pay for editorial/publication services, and support the development/maintenance of web-based repositories. The burden of this expense is currently falling on the shoulders of individual institutions, though state legislation (and
possibly federal legislation in the near future) are assisting as well as some philanthropic organizations. Note, MIT (2014) claims that their open courseware costs from $\$ 10,000$ to $\$ 15,000$ per course. For comparison, the cost of self-publishing a book with professional help lies in the range $\$ 3,800$ to $\$ 38,000$ per book (Sattar, 2013). Academic monographs can be professionally published for $\$ 8,000$ to $\$ 15,000$; but, textbooks are often more expensive because they contain a lot of images, tables, sidebars, etc.

Two institutions spearheading the development and promotion of open textbooks are University of Washington and Rice University. The Washington Open Course Library (http: //opencourselibrary.org) is jointly funded by the State of Washington and the Bill and Melinda Gates Foundation, and includes open textbooks for the 81 highest enrolled courses in Washington's community and technical colleges. The program received an initial investment of $\$ 1.8$ million and, to date, has saved students $\$ 5.5$ million (Allen, 2013a). Because the materials created by the program are "open", the savings will continue to grow.

Rice University started the ambitious "OpenStax College" program with the goal to provide free textbooks to $10,000,000$ students. OpenStax College receives funding from the William and Flora Hewlett Foundation, Laura and John Arnold Foundation, Bill and Melinda Gates Foundation, 20 Million Minds Foundation, and Rice University. In order to reach its goal, OpenStax College is marketing its open textbooks to college instructors around the country. Richard Baraniuk, founder and director of the Connexions platform that runs OpenStax College, said in a recent interview (Cherry, 2012), "We're providing things like exam copies for instructors to look at the books so they can adopt them. And just like the publishing companies, we've put in place the exact same development process that involves professional writers, peer review, testing in the classroom, copy editing, graphics, etc. The goal of OpenStax College is really to create textbooks that are a high-quality, viable alternative to the publishers' books ... We're spending hundreds of thousands of dollars per book ... But the payoff is that if these initial five books that we're releasing get even just 10 percent of the college market, that small investment could save students over $\$ 90$ million in the next five years."

The School of Business at Virginia State University (VSU) conducted an experiment whereby open source textbooks were implemented in eight core business courses at once (Kincheloe, 2010). The remarkable aspect of the experiment is that the faculty pulled this off in three months time, basically by spending the entire summer writing course content. The effort was spearheaded by Dean Mirta Martin who wanted "to create a model of access and affordability". In order to expedite the process of open textbook adoption, VSU partnered with Flat World Knowledge, an open source textbook publisher. Flat World Knowledge offered the Business School a bulk rate of $\$ 20$ per student per course that allowed students to download digital textbooks, study guides, audio versions and iPad edition, a bundle that would normally cost $\$ 100$. Early feedback was reported to be overwhelmingly positive. One of the main factors that the school will be looking at is whether the adoption of open textbooks has any effect on classroom retention, and eventually graduation rates. In speaking about the experiment, Dr. Martin stated that "I believe at Virginia State University we had the perfect storm: an incredibly supportive administration, an enthusiastic faculty, a persuasive
champion, students who were ready for change, and a revamped curriculum we could all believe in". She hopes to deliver all of the Business School's 30 courses digitally within 18 months.

There is another business model for reducing textbook costs based on university-level subscriptions of commercial textbooks. Indiana University started a project two years ago that requires students enrolled in certain courses to pay a material fee, which grants them access to an electronic copy of the assigned commercial textbook (or other materials) for the course (Young, 2011). Indiana has agreements in place with McGraw-Hill and a number of other publishers that supply these e-textbooks amongst other digital features, such as online quizzes. Since the university is buying in bulk for many students, the publishers have agreed to offer them a discount, the savings of which gets passed to the students. The university's vice president for information technology, who is leading the project, said that students save more money than if they purchased a new print book and resold it back to the bookstore at the end of the semester. Participation by faculty in the program is optional - so far, 22 courses have joined the project. The assessment data (from student surveys) indicated that $60 \%$ of students preferred the e-textbooks to the traditional print copies; though, satisfaction varied widely between courses. About $55 \%$ said they read less of the e-textbook than they would have from a print copy; while $22 \%$ said they read more from the e-textbook. Note, students do not own these e-textbooks; they only have access as long as they are enrolled at the university.

## 5 Data

The estimated national annual average cost for books and supplies at public institutions of higher education is $\$ 1,200$ (College Board, 2013). According to the National Association of College Stores, however, the expenditures on textbooks are declining, down about $5 \%$ from four years ago (Schmidt, 2012). This is believed to be due to students relying more and more on used books, textbook rentals, and digital resources; but, it could also indicate a shift in the types of materials that are being assigned by faculty.

### 5.1 Textbook Costs at the University of Utah

The Committee compiled estimates of textbook costs for the most popular majors at the University of Utah, as well as the most popular courses, as measured by number of degrees and enrollment, respectively. Enrollment and degree data for 2013 were supplied by the Office of Institutional Budget and Analysis (OBIA, 2013); textbook price information was supplied by the Campus Bookstore. Table 2 lists the price of new textbooks for each of the most popular courses at the University of Utah, rounded to the nearest dollar. If a course is taught in the fall and spring, the enrollment numbers reflect the total number of students for both semesters. The range of prices exist because (i) different sections of the same course may have different textbook requirements depending on the instructor, or (ii) students can choose additional options. In some cases, classes may require a response clicker, which costs $\$ 53.35$. Clicker cost has been included into the textbook cost for the classes that require

Table 2: Textbook costs for the most popular undergraduate courses in 2013

|  | Course |  | Textbook Cost |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| number | name | enrollment | clicker | new | used |
| WRTG 2010 | Intermediate Writing | 2326 | no | $\$ 0-\$ 98$ | $\$ 7-\$ 74$ |
| CHEM 1210 | General Chemistry I* | 1685 | yes | $\$ 225$ | N/A |
| MATH 1010 | Intermediate Algebra | 1664 | no | $\$ 251$ | $\$ 188.00$ |
| HIST 1700 | American Civilization | 1631 | no | $\$ 80-\$ 89$ | $\$ 60-\$ 67$ |
| MATH 1050 | College Algebra | 1630 | no | $\$ 140$ | $\$ 105$ |
| BIOL 1210 | Principles of Biology | 1619 | yes | $\$ 152-\$ 273$ | $\$ 57-\$ 106$ |
| BUS 1050 | Foundations of Business | 1517 | no | $\$ 79$ | $\$ 59$ |
| IS 2010 | Computer Essentials | 1366 | no | $\$ 189$ | N/A |
| ECON 2010 | Princ of Microeconomics | 1302 | no | $\$ 229$ | $\$ 187$ |
| MATH 1210 | Calculus I* | 1234 | no | $\$ 101$ | $\$ 76$ |
| NUTR 1020 | Sci Fndtn Nutr \& Health | 1221 | no | $\$ 104$ | N/A |
| MUSC 2100 | Hist of Rock'n Roll | 1200 | no | $\$ 117$ | $\$ 88$ |
| ACCTG 2600 | Survey of Accounting | 1167 | no | $\$ 229$ | N/A |
| MATH 1220 | Calculus II* | 1072 | no | $\$ 101$ | $\$ 76$ |
| MATH 1060 | Trigonometry | 1059 | no | $\$ 114$ | $\$ 105$ |
| PSY 1010 | General Psychology | 990 | no | $\$ 101-\$ 189$ | $\$ 76-\$ 119$ |
| BIOL 2325 | Human Anatomy | 938 | no | $\$ 362$ | N/A |
| CHEM 1215 | General Chemistry Lab I | 822 | no | $\$ 213$ | N/A |
| MUSC 3600 | World Music | 558 | no | $\$ 149$ | $\$ 112$ |
| CHEM 1220 | General Chemistry II* | 557 | yes | $\$ 225$ | N/A |
| MUSC 1236 | Survey of Jazz | 498 | no | $\$ 131$ | $\$ 98$ |
| BIOL 2420 | Human Physiology | 493 | yes | $\$ 145-\$ 194$ | N/A |
| PHYS 2210 | Phycs For Scien \& Eng I | 472 | no | $\$ 73-\$ 201$ | $\$ 22-\$ 55$ |

them, though students can use the same clicker for multiple classes. The textbook for MATH 1060 is listed as optional. Note, many sections of WRTG 2010 utilize "Open2010", in which case the cost of the textbook would be $\$ 0$ for the students in those sections. The courses with an asterisk are part of a series with a single textbook required for the series. There are nine courses in this list requiring textbooks that cost over $\$ 200$. The most expensive textbook on this list is that for BIOL 2325, Human Anatomy at $\$ 362$.

Table 3 lists the total cost of textbooks for the top five undergraduate degrees plus Mechanical Engineering, which is included for comparison purposes. Data for both new print books and used rental books are given. Note, the estimates in Table 3 were obtained by cross-referencing the courses listed in the DARS Report for the respective majors with the required textbooks for each of those courses. Since some flexibility exists in "elective" courses for each major, the total dollar amount for textbooks will necessarily vary somewhat from student to student. Table 3 shows that, of the majors listed, new textbooks for Psychology will cost students the most money, about $\$ 1,150$ per year assuming students graduate in four years; while, new textbooks for Economics will only cost the students $\$ 740$ per year. Also, Table 3 shows that

Table 3: Total estimated textbook costs for several popular majors

| Major | Textbook Cost |  |
| :---: | :---: | :---: |
|  | new | used rental |
| Psychology (BS) | $\$ 4,610$ | $\$ 2,090$ |
| Psychology (BA) | $\$ 4,730$ | $\$ 2,130$ |
| Mass Communication | NA | NA |
| Exercise and Sport Science | NA | NA |
| Human Development and Family Studies (BA) | $\$ 3,730$ | $\$ 2,030$ |
| Human Development and Family Studies (BS) | $\$ 3,810$ | $\$ 2,110$ |
| Economics (BA) | $\$ 2,945$ | $\$ 1,320$ |
| Mechanical Engineering (BS) | $\$ 3,530$ | $\$ 1,950$ |

students can reduce their textbooks costs by about $50 \%$ if they purchase the used rental option, rather than new. It would be interesting to calculate the dollar amount students spend on textbooks for the general education requirements versus those specific to their major.

### 5.2 Student Behaviors and Attitudes about Textbooks

### 5.2.1 2014 U of U Student Textbook Survey

The Committee put together a survey on textbook costs that was administered to students at the University of Utah (see the Appendix for a copy of the survey questions). There were 667 respondents out of a total of 7346 students who received the survey via email. The survey sample was stratified by gender. The number of students that received the survey was as follows: 346 professional students from Law, Medicine, Dental, 2000 graduate students, and 5000 undergraduates; of the undergraduates, equal proportions (1250 each) were sent to Freshman, Sophomore, Juniors, and Seniors. This yielded a $9.1 \%$ response rate. The percentage of respondents from each college are displayed in Figure 2. These numbers are consistent with the percentage of students enrolled in each college, as shown in Figure 3 .

Figure 4 shows the histogram of the amount of money students spend on textbooks each semester. These data indicate that the average amount of money students spend on textbooks at the University of Utah is about $\$ 427 /$ semester or about $\$ 850 / \mathrm{yr}$. This value is consistent with the cost for books and supplies of $\$ 1000 / \mathrm{yr}$ as listed by the University administration (OBIA, 2013). The discrepancy might be attributed to cost saving strategies employed by students, as discussed further below. The outliers in Figure 4 might be due to students misreading the question as money spent on textbooks each year rather than each semester. Students indicated that their most expensive textbook cost about $\$ 200$ on average. Figure 5 shows the relationship between the college of the students' major(s) and the amount of money spent on textbooks. The data indicate that students in the colleges of Dentistry, Law, and Social Work incur the highest textbook costs; while, students in the colleges of Architecture \& Planning, Education, and Mines \& Earth Science pay the least for textbooks.


Figure 2: Response from U of U Student Survey to the question "What is the College of your major(s)?"


Figure 3: Percentage of all University of Utah students enrolled in each college (undergraduate + graduate), based on Fall 2013 enrollment numbers.


Figure 4: Histogram of the amount of money students spend on textbooks each semester.


Figure 5: Average amount of money students spend on (i) all of their textbooks each semester, - , and (ii) their most expensive textbook this year, ■, divided according to the college of the students' major(s).

Figure 6 shows the various ways that students save money on textbook costs. The most popular method is purchasing used books, with $81.4 \%$ of respondents indicating that they utilize this method. The next most popular method was purchasing textbooks online at the lowest price, with $78.25 \%$ of respondents utilizing this method. Note, the Campus Bookstore provides a web resource for comparing prices between several different online providers such as Bookbyte, Amazon, ValoreBooks, AbeBooks, Alibris, amongst others. Over $65 \%$ of students said that they do not purchase optional textbooks. Less than half of the students (about 43\%) said that they rent textbooks. About one quarter of the students would purchase an ebook if available; and, a similar number indicated that they use free copies from the library. The other methods of saving money were borrowing, sharing with a friend, and using a free online resource.

Figure 7 shows the number of times that students have chosen not to purchase a textbook because of its cost. Perhaps the most disturbing result is that nearly $75 \%$ of students have chosen not to purchase a textbook at some point during their college career. Furthermore, almost $12 \%$ frequently do so ( 7 or more times). This is bound to have a negative impact on students' ability to learn the course material and successfully complete the course objectives, although the students were not asked to comment on this in the survey. Figure 8 shows how difficult it is for students to afford textbooks each semester on a scale from 1 (not at all) to 6 (very). The results indicate that $68 \%$ of students have a difficult time affording textbooks. Within this group, $19 \%$ find it "very" difficult (scale rating of 6 out of 6 ) to afford textbooks; while, another $20 \%$ find it "moderately" difficult (scale rating of 5 out of 6 ).

Correlations between several variables indicated that the average amount paid for textbooks per semester is positively correlated with the difficulty of affording books (0.24) and the number of times students have skipped buying textbooks (0.13). There does not seem to be a clear relationship between the students' perceived ability to afford textbooks and the actual amount of money spent on textbooks, see Figure 9. Across the board, students in every college on average found textbooks "somewhat" to "very" difficult to afford. As expected, the number of times students have skipped buying books is positively correlated with their year in school (0.19). There were no other significant correlations between the variables tested and gender, age, or year in school.

Figure 10 illustrates the likelihood of students to use the following types of methods to access a required textbook for class: buy new print, buy used print, textbook rental, physical copy at the library, online copy at the library, buy ebook, and borrow from someone else. The results indicate that students are overwhelmingly most likely to purchase a used print copy of a required textbook and least likely to purchase a new print copy. The likelihood of using a rental textbook was relatively flat, i.e., equal percentages were both least likely and most likely to use this modality. Over $30 \%$ of respondents were least likely to use either physical or online copies at the library. The aversion to using physical copies at the library could be attributed to the fact that the majority of students commute to campus, so accessing physical materials at the library may not be convenient for many students. However, students' aversion to using online copies of textbooks at the library was surprising. This may be due to a misconception that online materials can only be accessible if the


Figure 6: Response from U of U Student Survey to the question "How do you save money on textbook costs?"


Figure 7: Response from U of U Student Survey to the question "Over the time you have been at the University of Utah, how many times have you chosen not to purchase a textbook because of its cost?"


Figure 8: Response from U of U Student Survey to the question "On a scale from 1 to 6 with ' 1 ' being not at all difficult to ' 6 ' being very difficult, please rate how difficult it is for you to afford textbooks each semester."


Figure 9: Average affordability divided according to the college of the students' major(s), with '1' being not at all difficult to afford to ' 6 ' being very difficult to afford. The horizontal dashed line represents a response of 3.5 , which may be interpreted as the neutral response, i.e., not necessarily difficult to afford but not necessarily easy either.
student is using a computer in the library. Better communication about remote access of online materials available through the library might change this attitude.

In addition, the survey found that students are somewhat less inclined to use an ebook ( $25 \%$ said they were least likely to use this modality, while $10 \%$ said they were most likely). The finding in regard to ebooks seems to follow national trends. A recent article in The Digital Reader reports (based on data by the Book Industry Study Group) that only $6.25 \%$ of students used digital textbooks in 2011 and only $6.5 \%$ used them in 2012 (Hoffelder, 2013b). One reason for the low adoption rates of digital textbooks is the marginal cost savings. A study by Bowker Market Research reported that the average price of a paper textbook (both new and used) was $\$ 65$ in 2012; while, the average price of a digital textbook was $\$ 61$. A big drawback of digital textbooks is that students cannot easily resell them.

### 5.2.2 2014 U.S. PIRG Student Survey

The Student Public Interest Research Group (PIRG) conducted a survey of 2,039 college students from more than 150 different universities nationwide in the fall 2013 (Senack, 2014). The survey found that the average student spends as much as $\$ 1,200$ per year on textbooks. Of the students surveyed, $65 \%$ decided against buying a book required for a class due to the high cost. Moreover, nearly all of the students in this category were concerned that their


Figure 10: Response from U of U Student Survey to the question "On a scale from 1 to 6 with ' 1 ' being least likely to ' 6 ' being most likely, please rate the likelihood that you would use each method to access a required textbook for class (assuming each were available)."
grade would suffer because of it. Almost half of the students surveyed said that the cost of textbooks affects their decision on how many classes and which ones to take each semester. In many cases, these decisions end up prolonging the time to graduation. The study also found that $82 \%$ of students felt that they would do significantly better in a course if the textbook was available free online and buying a hard copy was optional. This constitutes a recent shift in student attitude. In the past, students have been somewhat wary of digital alternatives (Allen, 2010); however, the survey revealed that students are more interested now in exploring the use of technology and moving away from the traditional textbook market. The article concludes by stating that "if every student at the University of Wisconsin-Madison were assigned just one open textbook each semester, it would generate over $\$ 6$ million in student savings in just one year."

### 5.2.3 2012 Florida Student Textbook Survey

This purpose of this survey (Florida Virtual Campus, 2012) was to examine students' choices behind textbook acquisition and students' attitudes about textbook costs. The survey included 20,000 respondents representing students from all of the state universities in Florida and over $75 \%$ of its colleges including community colleges. The survey was conducted by the Florida Distance Learning Consortium (FDLC) as a follow-up to a survey administered in 2010. Both surveys were in response to a mandate in 2009 by the Florida Legislature (Section 1004.091(2), Florida Statutes) to promote the use of open access textbooks as a means of reducing textbook costs. In parallel with the 2012 student survey, the FDLC also
conducted a survey of Florida's postsecondary faculty to understand the climate for OER.
Results concerning the financial burden of textbooks costs on students are similar to those from the PIRG study described in the previous section. Specifically, $54 \%$ spent more than $\$ 300$ on textbooks for the Spring 2012 term and $19 \%$ spent more than $\$ 500$. In addition, $63 \%$ of Florida students reported not purchasing the required textbook because of cost and almost one-quarter reported doing without on a frequent basis. In some cases, the high cost of textbooks caused significant consequences, including students not registering for a course ( $45 \%$ ), taking fewer courses per semester ( $49 \%$ ), and dropping a course ( $27 \%$ ). Of the respondents, $17 \%$ said that their inability to afford the required textbook for a given course had caused them to fail that course.

Students used a variety of ways to save money on textbooks. The most popular cost saving method employed by $63 \%$ of Florida students is buying (selling) used copies from (to) the campus bookstore. Another popular method is buying from a source other than the campus bookstore ( $78 \%$ ). Nearly half of the students ( $43 \%$ ) shared textbooks with classmates as a means of reducing costs. Interestingly, a large portion of Florida students (74\%) reported that they would rent textbooks if it saved them money; and, $20 \%$ said that they used a reserve copy from the campus library. However, nearly half of the students ( $47 \%$ ) responded that they did not know whether their campus library provided textbooks for checkout (in print and/or digital formats).

Students were asked about the reasons why they may not be interested in using digital textbooks. Nearly three-quarters of Florida students said that they liked a print copy to write in and highlight text. About $60 \%$ said that digital textbooks are inconvenient to read; and, about half said that, with digital textbooks, it is difficult to move between different sections/pages of the book. Seventy percent of respondents indicated that having lifetime access to digital textbooks in their major area of study was important to very important; however, lifetime access to other textbooks was considerably less important.

Florida students were generally unaware of OER and their potential to save money. Almost three-quarters of respondents had never heard of open textbooks, and more than two-thirds had never heard of open courseware. Encouragingly though, $61 \%$ reported that they would be willing to pay a modest open textbook materials fee ( $\$ 5-\$ 10$ ) to support the authoring/editing of open textbooks.

### 5.2.4 Piracy

A recent article in The Digital Reader discusses the issue of textbook piracy amongst college students (Hoffelder, 2013a). The article cites a 2013 report by the Book Industry Study Group (BISG) based on results from a survey on student attitudes. In the survey, a larger percentage of students reported downloading pirated course content from an unauthorized web site compared to previous surveys ( $34 \%$ in 2013 versus $20 \%$ in 2010). In addition, the percentage of students who reported that they photocopied or scanned chapters of textbooks belonging to other students rose to $31 \%$ from $21 \%$ in 2010. The assumption is that students are driven to such measures as piracy due to their inability to afford high textbook costs.

### 5.3 Faculty Behaviors and Attitudes about Textbooks

### 5.3.1 2013 GAO Study

The U.S. Government Accountability Office (GAO) was directed by HEOA to examine the implementation of new textbook provisions, as described in Section 4.3. GAO interviewed representative groups of faculty from a small sample of postsecondary schools in the United States, and found that the availability of textbook information as mandated by HEOA had little effect on their college textbook selection decisions (GAO, 2013). Faculty indicated that they choose the most appropriate materials for their courses over pricing and format considerations. One group of faculty stated that quality and relevance of the materials are key factors. Another group said that important considerations are whether the level is suitable for the students likely to enroll in their class and comprehensive enough to cover the content in their class. Faculty tend to consider pricing and format options only after they have identified the most appropriate course materials. GAO also interviewed some national campus retailers, who said that faculty do inquire about cost-saving options like digital formats and textbook rentals, but only after they have identified the best materials for a given course. Representatives of two campus bookstores and a faculty group indicated that online interactive systems that include a combination of instructional material, adaptive homework questions, exams, worksheets, or tutoring programs, are becoming more popular.

According to the GAO review, although faculty decisions concerning textbook selections have not changed much in response to publisher practices, faculty groups indicated that they were more aware of the affordability of textbooks than they used to be. A faculty group from one of the public schools expressed strong interest in finding textbook options that saved students money. This same group said that they put books on reserve in the library and use the same textbook multiple semesters, which allowed students to buy used versions at a reduced price. Faculty from one of the public schools also said that their school's guidelines encourage them to consider the price of course materials in making their selection decisions. One professor interviewed in the study said that he wrote his own lab manual for his course, which saved students about $\$ 50-\$ 60$. A music professor said that he taught his entire course by assigning links to websites with free online videos.

### 5.3.2 2010 Florida Faculty Survey

The Florida Distance Learning Consortium (FDLC) conducted a survey of higher education faculty and staff in 2012 (Florida Campus Survey, 2012) in order to assess the OER climate in Florida's postsecondary schools. Over 2500 respondents from 8 of Florida's 11 state universities and 22 of its 28 community colleges and state colleges participated in the survey. One of the key findings was that many faculty are unaware of textbook prices. Just over half $(52 \%)$ of the respondents indicated that they were always aware of the prices of the textbooks they assign. In addition, nearly one-quarter ( $23 \%$ ) of respondents did not know whether their campus library provided a copy of their textbook for check out.

Although nearly three-quarters of respondents had heard of open textbooks, only $6 \%$ reported actually using part or all of an open textbook in one or more of their courses. In
terms of choosing an open textbook, the top ranking factor was "pertinence of the content to the objectives of the course"; and, the second highest ranking factor was "accuracy of spelling, grammar, and facts". In deciding to use an open textbook, respondents ranked the following as most important: "currency of information" ( $75 \%$ ), "desire to reduce costs to students" ( $67 \%$ ), "accuracy of spelling, grammar, and facts" ( $64 \%$ ), and "scope of coverage" $(60 \%)$. Respondents also indicated that "time to find, review, and select open textbooks" was important, but less so than the others mentioned. In terms of deciding to author an open textbook, respondents ranked the following as most important: "time to develop an open textbook" ( $88 \%$ ), "support from administration (e.g., financial support or release time)" ( $63 \%$ ), "assurance of professional editing" ( $60 \%$ ), and "availability of co-authors" ( $57 \%$ ).

Many faculty perceived themselves as being likely to use OER in the future. Almost threequarters of respondents answered that they were either somewhat likely or very likely to use a portion of an open textbook. The same percentage indicated they would use other types of OER. More than a third of respondents said that they were somewhat to very likely to author a portion of an open textbook, although relatively few ( $3 \%$ ) had actually done so. A likely barrier to authorship, though, is the lack of institutional support. For example, only $7 \%$ of respondents indicated that the creation of open textbooks would be considered as a criterion for promotion and tenure at their institution.

## 6 Available Resources

There are a number of existing resources that faculty and students can leverage in order to increase student savings on textbook costs. These are discussed below.

### 6.1 Campus Bookstore

The Campus Bookstore is non-profit, independent book retailer that is dedicated to working with both faculty and students to identify and stock the most cost-effective textbook options possible. Important information relevant to textbook cost savings are listed below.

1. Each department on campus has an assigned textbook buyer. This buyer can assist instructors in determining the most cost-effective means of providing required, recommended, or optional course materials.
2. The Bookstore's website (www.bookstore.utah.edu) offers a variety of helpful resources.
(a) Textbook adoptions can be submitted online. This provides confirmation that the adoption has been entered. It also notifies the adopter if the book is an old edition or out-of-print. Note, adoptions are due March 1 (Summer), April 15 (Fall), and October 15 (Spring). Adopting early gives the Bookstore access to the highest supply at the lowest demand, which allows Bookstore staff to buy at better prices.
(b) Instructors are able to check the Bookstore's prices by looking up their courses as if shopping for their books.
(c) Instructors can access the list of books being rented in the store, which may differ from the online rental options. That information can then be added to a syllabus.
(d) Prior to buyback, a list of books being bought for resale in the store is posted online. Students will receive more money for books that are re-used for the coming semester. Therefore, it is important that faculty adhere to the adoption deadlines stated above.
3. The Campus Store has partnered with Verba Compare to show a price comparison chart on our website. This allows students to find the best available price directly from the University's site. Students can access this tool through the a link at the top of the home page for the Course Schedule or directly from the Bookstore site (www.bookstore. utah.edu) by clicking on Textbooks $\rightarrow$ CourseMaterials from the menu. Figure 11 shows the front-end of the Verba compare tool with a textbook from a course in Mechanical Engineering selected. When the button labeled Get Course Materials is clicked, a new window is created with price comparisons as shown in Figure 12. Rather than directing students to search online for the best deal, instructors can recommend the Bookstore's website as the primary resource. Note, the two students on the Committee indicated that they frequently use this resource. However, none of the faculty on the Committee were aware of this resource.
4. Along with Verba Compare, the Campus Store has partnered with Verba Compete. This allows the textbook buyers to identify the books that can be priced more com-


Figure 11: Snapshot from the Campus Bookstore website showing the front-end of the Verba Compare tool. One textbook from Mechanical Engineering has been selected.


Figure 12: Snapshot from the Campus Bookstore website Verba Compare tool that lists prices from different retailers for the selected textbook.
petitively with the online marketplace.
5. The Campus Store has been working with the university to establish a payment plan for textbooks. On the payment plan a student would be able to get all assigned materials at the start of the semester and pay for them in installments before the semester ended.

### 6.2 Open Educational Resources

The William and Flora Hewlett Foundation provides the most commonly cited definition of open educational resources (OER):

OER are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

While the term "open" is losing a specific meaning in the public sphere due to its overuse and misuse in marketing, the term retains a clear definition in the field of open educational resources. In this context, "open" refers to content that is licensed in a manner that provides users with the right to make more kinds of uses than those normally permitted under the law, and these copyright permissions are granted to users free of charge. The primary permissions or usage rights associated with "open" are expressed in the "5Rs Framework:"

1. Retain - People and institutions have the right to make, own, and control copies of the content (e.g., download, duplicate, store, and manage)
2. Reuse - People and institutions have the right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video)
3. Revise - People and institutions have the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)
4. Remix - People and institutions have the right to combine the original or revised content with other open educational resources to create something new (e.g., incorporate the content into a "mashup")
5. Redistribute - People and institutions have the right to share copies of the original, revised, or remixed versions of the content with others (e.g., give a copy to a friend)

Individuals and organizations have created over 500 million open educational resources through funding from private philanthropy, state and federal grants, and venture investment. Some of the best-known collections of OER focused on higher education include:

- Open Textbooks - OpenStax College publishes a wide range of open textbooks suitable for adoption in high enrollment general education courses.
(http://openstaxcollege.org/)
- Open Textbooks - Flat World Knowledge published a wide range of open textbooks suitable for adoption in business classes and high enrollment general education courses before changing business models. (http://saylor.org/books/)
- Open Video - Khan Academy provides thousands of brief instructional videos on STEM topics. The site also provides interactive, mastery-based mathematics practice. (http://khanacademy.org/)
- Open Simulations - Nobel Prize winning physicist Carl Wieman designed this collection of simulations to help students deepen their understanding of STEM topics. (http://phet.colorado.edu/)
- Open Courseware - MIT OpenCourseWare provides access to syllabi, reading lists, and practice exams for over 2000 courses offered by MIT. (http://ocw.mit.edu/)
- Open Textbook Reviews - The Open Textbook Library at the University of Minnesota provides peer reviews of open textbooks authored by post-secondary faculty. (http: //open.umn.edu/opentextbooks/)

In every case, the textbooks, videos, simulations, and other open educational resources provided by these and other organizations are completely free to use, and faculty, students, and staff have free permission to engage in the full set of 5 R activities with these materials.

There are certainly challenges in realizing widespread adoption of OER. For example, faculty indicated a concern about OER quality because of the uncertainty around the peer review process (Florida Campus Survey, 2012). Although several organizations have established criteria for reviewers to use while evaluating open textbooks (e.g., College Open Textbooks, MERLOT, Saylor Foundation, and Textbook Equity), no single authoritative standard yet exists. Vukovic (2009) suggested that peer reviews are "an important mechanism for quality assurance" of OER. Engaging the editorial services of a university press is one way to solve the issue of quality assurance. An example of this in practice is the University Press of Florida which publishes the Orange Grove Texts Plus (OGT+) imprint and pays qualified faculty to review the open textbooks. Questions remain in terms of how such services can be funded, obtained, and orchestrated. Possibilities include private funding, legislative funding, student fees, institutional support, and academic professional organizations.

There is also an emerging support marketplace for faculty and institutions looking to use OER effectively and at scale. While OER are (by definition) free to use, organizations like Lumen Learning provide technical and other support services for users of OER in the same way that companies like Red Hat provide technical and other support services for users of open source software.

In addition, the Committee Chair received an unsolicited personal email from the Apple Account Executive for the University of Utah (Tyler Hammond) listing a number of OERs compatible with Apple products, such as "iTunes U", "iBooks Author", etc. This may be a potential resource for those faculty planning to adopt OERs and is noted here as such.

### 6.3 Library

Librarians personally assist faculty with locating and procuring resources for courses and could be a useful conduit through which to spread awareness of and build interest in open courseware, open access textbooks, and other initiatives recommended by this Committee. The Library regularly hosts or provides training, seminars, and webinars on research tools and methods. Library workshops could be offered on how to best leverage and select open courseware or open access resources. The Library will explore ways to make students and faculty more aware of its capabilities and ensure that existing services are utilized fully.

The Library spends approximately $\$ 1,000,000$ per year on books, music, video resources, and other similar materials; and, last year the Marriott Library spent over $\$ 100,000$ on acquiring materials specifically requested by students and faculty. Therefore, many textbooks and assigned readings are already held by University libraries, some in print and some in digital form. It has been standard practice in University libraries to not purchase many textbooks, especially in disciplines outside of mathematics and engineering. Buying textbooks on a large scale is not a viable option for university libraries, particularly at large research universities. The library at the University of Illinois in collaboration with the Illini Union Bookstore aimed to provide at least one copy of textbooks for every class. Unfortunately, this endeavor failed completely (Laskowski, 2007). At Virginia State University, the library has reserve copies of textbooks for basic general education courses, such as Biology, History and Psychology. At the University of Wisconsin - Madison, the library sponsors a program to place the highest cost textbooks on reserve. Other libraries have focused on working with faculty to identify, purchase and place on reserve all recommended and optional textbooks (but not required textbooks). The Marriott Library is open to exploring how a portion of its budget may be used to help reduce textbook costs to students at the University of Utah.

The Marriott Library provides access to electronic textbooks when available, though the collection is limited since many publishers choose not to sell electronic versions of core textbooks to libraries. The Library has acquired collections from a number of providers, such as Knovel Engineering, Safari Technical Books, and APA Books. The Library also has purchased many individual titles and collections from various ebook aggregators, including ebrary, EBL, and Ebsco. All of these works can be found using the Usearch catalog.

The Library's Espresso Book Machine can automatically print, bind, and trim books and can be used to make low cost reprints available on demand to faculty and students. It can create a 300 page book in about seven minutes. For example, this machine may be used to print a hard copy of an open textbook, which may prove useful if the University moves toward adopting more OERs in replacement of commercial textbooks.

The Library also provides many databases and journals which are suitable for use as course materials or for student research. Library resources effectively support non-traditional, inquiry-based models of teaching and learning such as resource-based learning, cognitive apprenticeship, problem-based teaching, learning by design, capstone programs, and project-
based learning.
Interlibrary Loan / Document Delivery and Suggest a Purchase services allow students and faculty to request books, media, sheet music, and other resources not held by University libraries.

Any course materials may be placed on reserve, and some resources can be made available in electronic format by the libraries to ensure the widest possible availability to students.

The library is also willing to explore partnerships with various campus entities to ensure that education about and use of new cost-saving resources can reach the widest possible audience and be delivered in an effective manner. The library has experience hosting a variety of content and could work with groups on campus, such as Teaching and Learning Technologies, to devise effective ways of providing electronic resources to students.

### 6.4 Copyright Policies

Faculty members who wish to move away from required textbooks may need to become educated in the copyright laws and policies that determine what and how they may provide materials to students. In many cases, faculty may not be aware of approaches and strategies that allow them to provide students with free forms of content while they remain in compliance with copyright policies. In this section of the report, a brief overview of copyright policy is provided followed by a list of specific strategies that may serve to reduce faculty reliance on expensive textbooks.

## Overview: Copyright and Fair Use

Copyright is intended to protect authors' rights for creative and (selected) intellectual works. Authors (also often called "creators" in copyright law) are given the exclusive rights to perform (and authorize others to perform) certain actions regarding the works, specifically to:

- Reproduce/copy the work
- Develop derivative works
- Distribute copies of the work
- Perform the work in public arenas
- Publicly display the work

Copyrighted works include (but are not limited to):

- Books (including textbooks)
- Plays or other dramatic works
- Music
- Dance/choreography
- Movies, videos, images, pictures

Although copyright laws originally were intended to protect creators interests and to provide them sufficient time to profit from their work, the duration of copyright protection has increased dramatically from its inception to current implementation (from 14 years to 100 years). However, even under the current (lengthy) duration of copyright protection, copyrighted works can be utilized for certain purposes under what is termed "Fair Use" policy.

Fair Use policy spells out limitations to creators' exclusive rights to their works, specifically when the copyrighted works are being used for transformative purposes of commentary, criticism, or parody. Fair Use guidelines (Section 107 of the U.S. Copyright code) provide four considerations that must be analyzed when determining if usage of a copyrighted work falls within the fair use guidelines:

- Purpose of the usage.
- Educational and nonprofit uses are more likely to be Fair Use. Commercial use is not.
- Fair Use is likely when the copyrighted work is used for critique, commentary, news reporting, teaching, scholarship, or research.
- Transformative use - where something new is produced - is a favorable factor in determining Fair Use.
- Use should be limited in scope, duration, access (e.g., not openly available to a broad audience for long periods of time).
- Nature of the copyrighted work.
- In general, factual or academic works are more commonly seen as falling within Fair Use guidelines as compared to creative works (e.g., movies). However, exceptions do exist to this criterion.
- Use is more likely to be Fair Use if the copyrighted work has been published previously.
- Amount and centrality of the copyrighted work used.
- Amount is considered relative to the work as a whole; usage includes only limited and reasonable portions.
- The portion of the copyrighted work used is not the central portion of the work as a whole.
- The amount used is only what is needed (e.g., entire movies are not posted if only a short clip is needed).
- Effect of the use on the market value of the copyrighted work. (This can include the potential market value of the work in addition to the current or actual market value.)
- The use of the copyrighted work will not impact its potential value in the marketplace.
- A legal copy of the copyrighted work is used as the source for delivery.
- Reasonable steps are taken to prevent unauthorized usage of the work that could reduce its value (i.e., steps to prevent use beyond the intended purpose and audience).
- The use will give proper attribution to the copyrighted work.

Understanding Fair Use Guidelines: Helpful Materials and Questions
Instructors who wish to make materials available to their students under Fair Use guidelines should consult the University of Utah copyright policy online (http://regulations. utah.edu/research/7-013.php). University policies must be respected in all provisioning of instructional materials. Faculty also should consider the following questions, as published by the American Library Association (http://librarycopyright.net/resources/ exemptions/), before making materials available to their students under Fair Use guidelines:

- Is the copy to be used a legal copy?
- Answer must be"yes" for Fair Use
- Will the copyrighted work be used for face-to-face teaching activities of a nonprofit institution in a classroom or similar place devoted to instruction?
- If yes, the work may be used under Fair Use guidelines

If the work is to be utilized online ...

- Will the copyrighted work be displayed or performed as part of mediated online instructional activities of a governmental body or an accredited nonprofit educational institution?
- Answer must be"yes" for Fair Use
- Is online access to the display or performance restricted to students officially registered in the course or to employees of governmental bodies as a part of their official duties or employment?
- Answer must be"yes" for Fair Use
- Was the copyrighted work produced or marketed primarily for a use OTHER than for performance or display as part of mediated online instructional activities?
- Answer must be "yes" for Fair Use
- Has the content under consideration for use been selected by the instructor or at his/her discretion?
- Answer must be"yes" for Fair Use
- Is the content under consideration for use directly related to the learning goals of the course?

```
\circ Answer must be"yes" for Fair Use
```

- Is the display of the work(s) under consideration for use in an amount comparable to that which is typically displayed in the course of a live classroom session?


## - Answer must be "yes" for Fair Use

- Is the to-be-shared content a performance (in part or in full) of a non-dramatic literary or musical work?
- If yes, acceptable as Fair Use
- If the content is something other than a non-dramatic literary or musical work, are reasonable and limited portions used?
- If yes, acceptable as Fair Use
- If you are planning on streaming audio or video content and the existing media is an analog copy (e.g., VHS, LP), is one of the following two statements true? A digital version of the work is unavailable for purchase in an unused copy. Or, the digital version that is available is subject to technological measures that are designed to prevent it from being copied.
- If yes, acceptable as Fair Use

Strategies for Reducing Materials Costs under Educational Fair Use Guidelines and U Policy

- Always use CANVAS when making copies available to students in a course.
- This limits (to a reasonable degree) the distribution of your materials to registered students enrolled in your course. Password protection provides a reasonable security measure to restrict access to the copied content.
- Provide limited amounts of content from multiple sources in order to comply with Fair Use guidelines and to cover course content. You may provide small portions of many different resources in order to cover course content while remaining within Fair Use guidelines.
- For example, professors may provide students with a copy of one chapter from several different editions of a textbook or from several (complementary) textbooks instead of assigning the purchase of a single textbook.
- Examples of acceptable amounts of copyrighted content include:
- Up to $10 \%$ or 1,000 words (whichever is less) of a copyrighted text work. Typically, one chapter from a textbook is acceptable.
- Up to $10 \%$, not more than 30 seconds, of music and lyrics from an individual musical work.
- Up to $10 \%$ or 3 minutes (whichever is less) of a copyrighted motion media work.
- No more than five images from a single artist or photographer; No more than $10 \%$ or 15 images (whichever is less) from a published collection of works.
- Use screen capture software (e.g., Jing, Camtasia) to record portions of movie/films rather than circumventing "Digital Rights Management" (DRM) restrictions for copyrighted films and movies. Screen capture videos can be provided to students via CANVAS for review, analysis, and critique.
- Consult the Marriott Library's copyright expert to get guidance on specific scenarios:

Allyson Mower, Scholarly Communications and Copyright Librarian. Email: allyson.mower@utah.edu. Phone: 801-585-5458

## 7 Recommendations

Based on the research conducted by the Committee as described above, several recommendations to help students save costs on textbooks are put forward in the following subsections. These recommendations are ordered in terms of increasing time and effort required to implement them.

### 7.1 Move toward using low-cost versions of existing materials

Immediate savings on student textbook costs can be realized by promoting practices that allow students to take advantage of less expensive options that are available for existing materials assigned in popular university courses. These options include: used textbooks, rental textbooks, ebooks, and library copies. Below are specific recommendations for the different members of the university community.

## 1. Action Items for Administration

The Administration can support this recommendation by providing institutional resources that help increase faculty awareness of textbook prices and options. This educational campaign should involve creative methods to disseminate textbook information beyond the routine solutions such as brochures (University of Wisconsin, 2007). To be most effective, strategies should refrain from requiring faculty to seek out information on their own, but should target faculty directly by providing textbook price information in ways that seamlessly integrate with typical course preparation methods employed by faculty. In this manner, the information is more likely to reach a larger number of faculty, thereby having greater impact on cost-savings. Ideas along these lines are proposed below.
(a) Update the online course schedule to include textbook price information that is readily visible when clicking the link for a given course number.

In compliance with HEOA (as described in Section 4.3), the University of Utah provides textbook price information through the online course schedule. Currently, this information is accessible via a link at the top of the page listing the courses offered by each department/program, as shown in Figure 13. In the opinion of this Committee, the placement of this link is obscure, which means


Figure 13: Screen shot of the current online course schedule, showing the location of the link where students/faculty can obtain textbook price information. The Committee proposes that this information be linked to the actual course number.
that faculty are unlikely to be aware it exists. Whereas, students typically access the same information directly through the Campus Bookstore website (see Section 6.1 and Figure 11). Therefore, in order to increase faculty awareness of textbook selection and prices for various options, the Committee proposes that this information be linked to the course number directly, as illustrated in Figure 14. Faculty typically click the course number links to check on the enrollment status of the courses to which they are assigned. If textbook information were listed along with enrollment numbers for each course, faculty would readily see it, thereby considerably raising awareness of textbook costs and alternate options.
(b) Email department chairs at the beginning of each semester with a report listing the textbook price information for all departmental courses, and encourage the


Spring 2014 class information for MATH

| Class <br> (Index) <br> Number | Subject | Catalog <br> Number | Section | Titte | EnrollmentCap | Currently <br> Enrolled | Seats <br> Available | Textbook Costs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | $\begin{gathered} \text { New } \\ \text { Purchase } \end{gathered}$ | Used Purchase | eBook | Other Formats \& Vendors |
| 2479 | MATH | 1010 | 001 | Intrm Algebra | 130 | 127 | 3 | \$250.65 | \$188.00 | \$68.30 | \$7.80-\$14.79 |
| 2480 | MATH | 1010 | 002 | Intrm Algebra | 130 | 116 | 14 | \$250.65 | \$188.00 | \$68.30 | \$7.80-\$14.79 |
| 2481 | MATH | 1010 | 003 | Intrm Algebra | 130 | 124 | 6 | \$250.65 | \$188.00 | \$68.30 | \$7.80-\$14.79 |

```
© (C)2014 The University of Utah
Administrative Computing Services
201 S. Presidents Circle, Rm 150
201 S. Presidents Circle, Rm 150
```

```
Nondiscrimination Statement
Disclaimer
Privacy
Contact Us
```


## 

Figure 14: One possible way to modify the webpage listing the enrollment for a given course (in this case MATH 1010) to show textbook prices. Ideally, this page would also include reference information for the required textbook (name, author, publisher, edition, ISSN), and possibly also state whether or not the library owned a copy.
chair to share that information with their faculty to increase awareness.
Web-based software should be developed that will send an automatic email directly to department chairs regarding textbook selection and prices for the upcoming semester. The email could include a reminder of the institution's strategic goal with regard to cutting textbook costs (see Section 7.4). The email would ask department chairs to share this information with their faculty, either verbally at a faculty meeting or digitally by posting it on their department web page.
(c) Add a question on the standard student course evaluation forms regarding the cost of course materials compared to their perceived value in meeting the course objectives.

This is another way of providing feedback to faculty about textbook costs. The exact wording of this question should be determined by a follow-up committee (see Section 7.4).
(d) Update the resource information on syllabus design provided by the Center for Teaching and Learning Excellence (https://utah.instructure.com/courses/ 148446/wiki/syllabus-design) to include language about textbook selection.

Course syllabi should indicate other ways in which the material in the required textbook(s) could be accessed. For example, can the required textbook be ac-
cessed free via the library's collection? Or, are students permitted to use an older edition? Providing this information directly in the syllabus could help students make lower-cost textbook choices.

## 2. Action Items for Library

(a) Create a web page containing a list of textbooks organized by discipline that are contained in the library's collection, and make this information readily available to students and faculty via the library's website. This is currently being done at the University of Michigan for engineering textbooks (http://www.lib.umich. edu/art-architecture-engineering-library/winter-2014-engineering-textbooks-online).
(b) Create a brief online guide for faculty illustrating how Fair Use policies may be utilized to provide free educational material to students in their courses.

For example, faculty may scan one chapter from a given textbook and upload it to CANVAS for the students in their course to access. If there are multiple editions of a textbook, faculty could scan a different chapter from each edition and upload those to CANVAS. In some cases, this may be sufficient to cover all of the objectives in the course, such that students do not need to purchase any additional materials for the course. Librarians can assist faculty in putting together these materials and ensuring that Fair Use policies are met. Faculty may also need assistance with screen capture software, as described in Section 6.4. How-to guidelines and technical support by the library staff to assist faculty in using these types of tools would be extremely useful.

## 3. Action Items for Faculty

In order for used textbook, rental textbook, ebook, and library copies to be viable options for students, faculty must change their behavior and attitudes toward textbook selection.
(a) Become more aware of actual prices for the various textbook options.

Ideally, this information will be made readily available to faculty via the two mechanisms proposed above under Recommendations 7.1.1.a and 7.1.1.b.
(b) Respond promptly to Bookstore requests for textbook selections.

The Campus Bookstore operates under several deadlines that are crucial to its business function. In order to stock shelves in time for the beginning of the semester, the Bookstore requires textbook selections from faculty several months prior to the first day of class (see Section 6.1 for dates). Also, students receive a higher rate of return during buyback for books that will be re-used in the coming semester(s). Therefore, faculty that adhere to the adoption deadlines posted by the Bookstore and reuse the same textbook edition over consecutive semesters can have a significant impact on textbook cost savings to students.
(c) Include information in the course syllabus on alternative (lower cost) ways to access the required course materials, e.g., via the library collection, CANVAS
postings (within Fair Use policies), free online resources, and/or older editions of the textbook if permitted.
(d) Leverage Fair Use policy to provide free or lower-cost versions of materials that can be uploaded to CANVAS (see Recommendation 7.1.2.b. above and Section 6.4).
(e) Refrain from the use of custom textbooks that cannot be sold back to the Bookstore.
(f) Refrain from adopting new editions of a textbook when they are first released.

Students benefit from being able to purchase lower-cost used textbooks, which is only possible if an instructor uses the same textbook repeatedly. Since new editions of textbooks often contain only minor updates, faculty should consider simply using older editions of the same textbook unless the textbook changes are substantial and central to the quality of the information being covered.
(g) If adopting a new edition of a textbook, consider permitting students to use older editions.

In the process of adopting a new edition of a textbook, faculty should ask the publisher to identify the revised material (publishers are required to provide this information according to HEOA). Faculty could then leverage Fair Use policy (see Section 6.4) to scan up to $10 \%$ of the new edition and post that material on CANVAS (the library can assist with this). This would allow students using older editions to still benefit from some or all of the revised material in the new edition.
(h) Consider putting a personal print copy of the required textbook on reserve at the library for the semester.

If faculty own more than one personal copy of the required textbook, they might consider putting one of those copies on reserve in the library for the semester so students can access it freely. At the end of the semester, the library simply returns the textbook back to the faculty - it does not become part of the regular collection.
(i) Request library collections to purchase the electronic version of a required textbook.

Since the library will not be able to afford the purchase of print and/or electronic copies of textbooks for all courses, this recommendation is not a viable long-term solution. If the library becomes inundated with such requests, then a policy will have to be put in place to prioritize these purchases.

## 4. Action Items for Students

Student survey data indicate that a majority of University of Utah students are most likely to buy used textbooks and shop online for the lowest textbooks costs (see Section 5.2.1). Although these practices definitely contribute to notable cost savings, other strategies have been less widely utilized. Those that offer potential are listed below.
(a) Organize a campus student textbook exchange program (through ASUU) or consider utilizing an online textbook exchange program such as https://www.postyourbook.com.
(b) Consider purchasing rental books for courses not in one's major field of study.
(c) Consider selling books back to the Bookstore.
(d) Consider purchasing ebooks, when cheaper.
(e) Utilize free online copies of textbooks from the library when available.

In order to inform students which textbooks are available through the library's collection, the Campus Bookstore could include an indication on their Verba Compare site with a link to the appropriate library page (see Recommendation 7.1.2.a. above).

### 7.2 Encourage the adoption of available open course materials

Textbook costs can be lowered by promoting the use of free, open textbooks and other open educational materials, instead of requiring students to purchase commercial textbooks. This section focuses on strategies to promote the adoption of existing open educational resources. Note, the current data (see Section 5.3) suggest that faculty are unlikely to move to open materials unless they are able to author or access materials that are more customized for their courses/curricula. Below are specific recommendations for the different members of the university community.

## 1. Action Items for Administration

In order to facilitate the use of more open textbooks in courses at the University of Utah, it is necessary to provide institutional support to assist faculty in adopting available open course materials. Two possible ideas are listed below.
(a) Create an internal source of funding, similar to the University Teaching Assistant Program through the Graduate School or the Hybrid Course Development Grant through Teaching and Learning Technologies, to support the adoption of open course materials.

Funds would support activities related to the adoption of existing OER materials, such as identification of appropriate materials for a given course and modifications to course content needed in order to align the materials with course objectives (and vice versa). Other universities have begun offering similar types of funding opportunities. Two examples may be found through the respective library websites at Kansas State University (https://www.lib.k-state.edu/open-textbook) and Oregon State University (http://osulibrary.oregonstate.edu/oregon-state-university-open-textbook-request-proposal).
(b) Create a new position in the Center for Teaching and Learning Excellence or in the Library for a campus OER coordinator, whose dedicated role is to assist faculty in identifying and compiling open source material for specific courses.

## 2. Action Items for Library

(a) Create and maintain an OER web site for the University that is accessible via a "Quick Link" on the Marriott Library's home page.

This web site should contain a list of open textbooks and open courseware materials that are organized in such a way to help facilitate the adoption of OER by faculty. The Marriott Library might consider emulating websites developed by other university libraries, such as that by the University of Minnesota (http: //open.umn.edu/opentextbooks/) or the University of Massachusetts (http: //guides.library.umass.edu/content.php?pid=87648\&sid=4778756).
(b) Leverage the expertise of librarians with specific subject matter knowledge to consult with faculty in finding and adopting open materials that are well-aligned to course goals and subject area needs.

Since the selection of an open textbook can be daunting for many faculty, it would be helpful to have campus resources to assist with this process. Since many librarians have degrees in areas outside of library science, they can assist faculty in identifying potential OER materials for courses aligned with their area of technical expertise. Ideally, librarians would work together with the campus OER coordinator (see Recommendation 7.2.1.a. above) and would interface with the libraries' OER website (see Recommendation 7.2.2.a. above). One idea would be to target the adoption of open textbooks in the most popular courses (see Table 2), by finding librarians with subject matter expertise in those courses and sending them to the faculty responsible for teaching those courses to provide individual or group consultation in adopting open materials.
(c) Create some educational materials or a short training course to teach best practices for reading and annotating digital textbooks.

Based on responses from the survey (see Section5.2.1), students on average do not appear to be comfortable with the tools and practices of reading digital textbooks. Giving them the skills needed to work with digital materials effectively could increase their willingness to try this cost-saving method.

## 3. Action Items for Faculty

(a) When teaching a course for the first time, consider adopting an open textbook from the beginning, and taking advantage of open courseware to prepare lecture content.
(b) Consider revising current courses to allow for the adoption of available open textbooks or open courseware solutions instead of relying on commercial textbooks.
(c) Work in teams with other faculty to develop shared open materials for courses.
(d) Use existing online resources to review available open materials authored by others.
(e) Consider the use of non-textbook materials that are available online, including articles, videos, simulations, etc., to support course objectives.

## 4. Action Items for Students

(a) Get comfortable reading/annotating digital textbooks.

One finding in a recent student survey by the Book Industry Study Group is that students' willingness to adopt digital formats increases significantly with exposure (BISG, 2013).
(b) Seek out help from the library in order to access digital material from the libraries' collection and learn best practices for reading digital textbooks (see Recommendation 7.2.2.c).

### 7.3 Support the development of new open course materials

"It would be almost ironic, if it weren't terribly sad, that universities need to pay traditional academic publishers like Elsevier millions of dollars each year to purchase access to publications written by their own faculty members." (Moxley, 2013) This section focuses on strategies to promote the development of new open educational resources. Below are specific recommendations for the different members of the university community.

## 1. Action Items for Administration

(a) Create a source of institutional funding to pay for the development of new open textbooks.

A possible source of government funds to support the development of open textbooks is the "Fund for the Improvement of Postsecondary Education" (http: //www2.ed.gov/about/offices/list/ope/fipse/index.html). However, it is likely that a large grant from a philanthropic organization will be needed in order to support the development of a significant number of open textbooks. One strategy might be to target the development of new open textbooks for the courses that satisfy the general education requirements, since this will have the biggest initial impact for Utah students. A good example of a successful enterprise in open textbook development and promotion is Rice University's OpenStax College, described in Section 4.4. Another possibility is to institute an OA textbook fee that students pay per credit hour in order to help finance the use of open textbooks at Utah.
(b) Promote the development of custom open textbooks for the most popular undergraduate courses with the largest enrollment.

Based on the data from Table 2, the courses with the highest enrollment and highest textbook cost are Algebra (MATH 1010, 1050), Trigonometry (MATH 1060), General Chemistry (CHEM 1210, 1215, 1220), Principles of Biology (BIOL 1210), Principles of Microeconomics (ECON 2010), and Survey of Accounting (ACCTG 2600). Investment in open course materials for these courses would have a significant impact.
(c) In terms of promotion and tenure, consider authoring open educational resources as evidence of scholarly accomplishment.

## 2. Action Items for Faculty

(a) Negotiate with department chairs for release time dedicated to authoring open textbooks and/or developing other open materials.
(b) Collaborate with other faculty to identify shared materials needs that could be addressed by common open materials.
(c) Develop a strategic plan for moving from publisher-supplied textbooks to low-cost or open materials by the year 2020 .

### 7.4 Create a university body to realize long-term vision

It is proposed that the University create a new administrative position, or assign responsibility to an existing administrative position, that will oversee university accountability of textbook costs and lead the movement toward utilizing more open educational materials on campus. It is important that this person have the necessary authority to implement recommendations and affect real change on campus in terms of textbook cost savings. This person would also establish a standing committee on "Textbook Costs and Open Courseware" (or other relevant name to be determined) populated by representative stakeholders, e.g., faculty, students, bookstore staff, librarians, etc. At some point, this standing committee should evaluate whether it could become part of an existing center on campus, such as the Center for Teaching and Learning Excellence, or whether to propose the formation of a new center.

Some ideas on the possible role of this standing committee are:

- develop an institutional policy regarding textbook costs that emphasizes a universitywide strategic plan to be cognizant of textbook costs and to continue to explore ways to reduce those costs,
- brainstorm ways of effectively communicating the recommendations to faculty as stated in the previous sections,
- make funding awards for the internal grant competitions suggested in Sections 7.2 and 7.3 ,
- conduct a survey of University of Utah faculty to better understand the climate for OER on campus,
- work with faculty/departments to facilitate the adoption of open textbooks in highimpact courses,
- work with the libraries to prioritize the purchase of electronic textbooks, if there are not enough funds to cover all such requests,
- research possible sources of external funding to support the development of OER at the University of Utah, and
- given enough interest, assemble a team of faculty to write a proposal to seek external funding for the development of OER at the University of Utah.


## 8 Conclusions

Rising textbook costs are a significant problem at universities nationwide and the University of Utah is no exception. Survey results from the University of Utah show that students find it difficult to pay for their books and that many students have decided not to buy textbooks for classes due to high costs. This creates a clear and significant barrier to fulfilling the University of Utah's mission to cultivate an "academic environment in which the highest standards of intellectual integrity and scholarship are practiced" (see http://admin.utah. edu/office_of_the_president/university-mission-statement).

The University should be proactive in addressing the problem of textbook costs by investing in short- and long-term solutions necessary to improve the affordability and accessibility of course materials (see Section 7 of this report). Short-term solutions focus on moving toward using low-cost versions of existing materials (see Section 7.1) and can be implemented with modest commitments of administrative support, departmental buy-in, library services, and faculty effort. Based on the data in Table 3, students could save almost $\$ 500$ per year on textbook costs (which was the original goal of this Committee) by simply purchasing used rental options of required textbooks. The key to realizing this cost savings in practice is for faculty to refrain from adopting new editions of textbooks unless they are crucial to meeting the course objectives. This allows students to buy used at less expensive rates and sell back at higher rates. Even though students may want to keep permanent copies of some textbooks in their major field of study for future reference, substantial cost savings is possible by exploiting the used textbook market.

Long-term solutions undoubtedly will include substantial use of open course materials that are developed locally as well as by external entities (see Sections 7.2 and 7.3). Locallydeveloped open course materials will require financial investment to fund faculty authoring of such materials; however, locally-developed open course materials are likely to meet the specialized needs and rigorous standards of specific courses and programs at the University of Utah. Based on the responses from students in the student survey conducted by the Committee, it is reasonable to claim that, if every undergraduate student at the University of Utah were assigned just one open textbook each year that replaced their most expensive commercial textbook, $\$ 4.9$ million in student savings could be generated in a single year.

The Committee urges the University to develop a long-range, strategic plan for funding and incentivizing the development and adoption of open course materials at the University of Utah. A central component of this plan will be the identification of a University body (either a new position or a position in the existing University leadership; see Section 7.4) who will provide oversight and accountability for campus entities engaged in activities related to reducing textbook costs and moving toward open course materials. It is also recommended that this administrative person formulate a standing committee comprised of representative stakeholders (students, faculty, bookstore staff, librarians, etc.) to assist in implementing and evaluating the strategic plan. The development and adoption of a strategic plan with administrative oversight will represent a significant and important investment in making higher education affordable, accessible, and equitable for our students.

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## 10 Appendix

The appendix includes a copy of the online student survey about textbook costs that was sent from ASUU to a random sample of students at the University of Utah, as described in Section 5.2.1.

From: Sam Ortiz, ASUU Student Body President
Subject: Help us decrease student textbook costs
Reply: rwootton@asuu.utah.edu

Hello University of Utah Students,

ASUU is working with many organizations on campus to decrease textbook costs for students at the University of Utah. As students, we know this is an important issue to many of you and would love your help in figuring out the best ways to decrease student textbook expenses. This survey is anonymous and should take just 3-5 minutes to complete. Your feedback will be a critical part of our recommendations for the University of Utah.

To access the survey please click here. If the survey does not open automatically, please copy and paste the following link to your internet browser's address bar:
http://www.studentvoice.com/p/?uuid=2645773983c743368b34819dfdd17be1\&p=1
Any additional feedback, questions, or suggestions may be sent to Rachel Wootton, ASUU Director of Academic Affairs, at rwootton@asuu.utah.edu.

Thank you so much for your help and have a great rest of your semester!

Best,
Sam Ortiz
Student Body President

Distribution of this message was approved by Mary G. Parker,
Associate Vice President for Enrollment Management, University of Utah
Phone (801) 581-3490, 201 S. Presidents Circle, Room 206,
Salt Lake City, UT 84112

On average, approximately how much money do you spend on textbooks each semester? (Please use whole numeric values only; Round to the nearest dollar-- do not use cents. e.g., $\$ 1,000.00=1000$ )
$\square$

Question 2

Approximately how much did you spend on your most expensive textbook this academic year? (Please use whole numeric values only; Round to the nearest dollar-- do not use cents. e.g., \$1,000.00 $=1000$ )
$\square$

Question 3

How do you save money on textbook costs? (Check all that apply)Rent textbooksPurchase used textbooksBorrow textbooksBuy textbooks online at lowest priceUse/purchase an ebook if availableUtilize free online resourcesDo not purchase textbooks listed as optionalShare textbooks with one or more friendsUse a library/reserve copy
N/A: I don't employ any methods to save money on textbooks
$\square$ Other:
$\square$

For each device, please check which of the following best applies to you:

Computer/laptop
321
iPad/iPhone (or other iOS device)
Android device
Windows phone/tablet
e-reader (e.g., Kindle)

Question 9

Do you use any of the above devices to access online or electronic textbooks?
Yes
ONo

Questions 10-16

On a scale from 1-6, with 1 being "Least Likely" and 6 being "Most likely", please rate how likely would you be to use each of the following methods to access a required textbook for class (assuming each were available).

3
4
5
6 Most Likely
buy new (print) textbook
buy used (print) textbook
textbook rental
physical copy at the library
online copy at the library
buy ebook
borrow from someone else

Over the time you have been at the University of Utah, how many times have you chosen not to purchase a textbook because of its cost?
$\bigcirc$1-23-45-67+

Question 18

On a scale from 1 to 6 with "1" being not at all difficult to "6" being very difficult, please rate how difficult it is for you to afford text books each semester.1 Not at all
-3
-4
○
6 Very

Question 19

What is the college of your major(s)? (Check All that Apply)
$\square$ Architecture and PlanningBusinessDentistryEducationEngineeringFine ArtsHealthHumanitiesLawMedicineMines \& Earth ScienceNursingPharmacy
Science
Social \& Behavioral Science
Social WorkUndeclared

Question 20

What is your current year in school?
First Year/FreshmanSophomoreJuniorSenior
Graduate Student

Please select your current enrollment status:Full-time

Question 22

Did you transfer into this institution?

Yes
No

Question 23

What is your gender identity?
Female
Male
Transgender
Self-identified gender (please specify):


Prefer not to respond

Question 24

What is your race/ethnicity? (check all that apply)
$\square$ AsianBlack/African American
$\square$ Latino/a/Hispanic/Chicano/aMiddle EasternNative American/American IndianPacific Islander/Native HawaiianWhite/Caucasian
Self-identified Race (please specify):
$\square$
Prefer not to respond

Are you an international student (holding a SEVIS visa group: F1, F2, J1, J2, BE, BP, B1, B2, WB, WP)?

Yes
No

Do you consider yourself a Veteran?
OYes
○No

Question 27

What is your age?

## Select Answer $\uparrow$

BACK

