

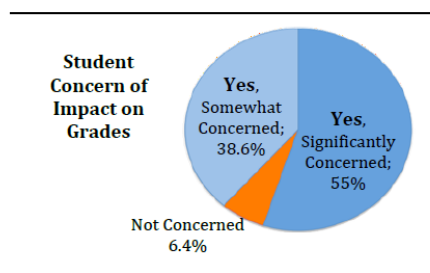
OPEN SOURCE TEXTBOOK REPORT

JANUARY 5, 2017



CURRENT IMPACT

Since 2006, the cost of college textbooks has increased by 73% - more than four times the rate of inflation.¹ Many students have opted for cost avoidance. In the report, *Fixing the Broken Textbooks Market*, it states that two-thirds of students did not buy or rent some of their required reading even though their decision may have impacted their grade in a course.² The image below illustrates that over 90% of the students opting not to purchase textbooks understood that their decision may impact their grades.³



From: Covering the Costs: Why We Can No Longer Afford to Ignore High Textbook Price³

In Connecticut, it has been projected that students at the 48 Connecticut higher education institutions spent over \$147 million in textbooks alone during the 2014-2015 academic school year.⁴

Undergraduate Textbook Costs in Connecticut

CT			Projected Textbook Costs	
Classification	Institutions	UG FTE	\$150/FTE/year	\$1,200/FTE/year
Totals	48	122,521	\$18,378,150	\$147,025,200

From: Lumen Learning⁴

Many students must utilize financial aid dollars to afford their college textbooks. Nearly 30% of all students attending public 4-year institutions use financial aid for textbook purchases while 50% of community college students must rely on financial aid for book purchases.³



TASK FORCE TO STUDY BEST PRACTICES WITH REGARD TO OPEN EDUCATIONAL RESOURCES

The Task Force (made up of faculty, student, and administrator representation from two and four year, public and private institutions) was established to study best practices with regard to Open Educational Resources (OER).

SUMMARY OF EVENTS

- **February:** The Task Force convenes and discusses the goals of the committee.
- **April:** The Task Force discusses the surveying of all Connecticut faculty in a similar manner to the Babson Survey Research Group. Dr. Tanya Spilovoy, Director of Distance Education and State Authorization of the North Dakota University System is a guest speaker. She shares her experience in running a state-wide survey for North Dakota public institutions utilizing the Babson survey tool.
- **May:** The University of Connecticut presents a modified Babson survey it utilized for their faculty survey for the Task Force to review. Evan Preston, the State Director for the CONN PIRG, is a guest speaker. He shares the student perspective of textbook costs and the impact on student outcomes.
- **June:** The Task Force worked towards the construction of a state-wide survey as well as a data collection template for OER awareness campaigns and adoptions.
- **July:** Jeremy Smith, the Digital Projects Manager in Scholarly Communication at the University of Massachusetts at Amherst, is a guest speaker. Jeremy shares his experiences supporting UMASS Amherst's OER program first launched in 2011. Those efforts have saved over \$1.4 million dollars to date.
- **September:** Representatives from the National Association of College Stores and Barnes & Noble were guest speakers. (Pat Haze, the Vice President of Course Materials, Ron Casey, the Manager of Textbook Inventory, Jay Chakrapani the Chief Digital Officer of Barnes & Noble, and Richard Hershman, the Vice President of Government Relations of the National Association of College Stores) The speakers shared their perspectives on the role of the book store in supporting affordable course materials.
- **October:** The Task Force finalizes the messaging and distribution of a state-wide OER faculty survey. Ethan Senack, a Higher Education Advocate for the U.S. PIRG, is a guest speaker. Ethan discusses the impact on student access and outcomes when faculty implement publisher material that utilizes an 'access code.' <http://www.studentpirgs.org/sites/student/files/reports/Access%20Denied%20-%20Final%20Report.pdf> Marina Phillips and Michael La Barbera from Housatonic Community College are guest speakers. They discuss the adoption and impact of OER materials in the Math and Developmental Math departments. To date, the institutions has saved students over \$325,000 from the implementation of low/no cost materials. Adrienne Kelly, the Director of Education Technology for Tunxis Community College is a guest speaker as well. Adrienne discusses the OER awareness and adoption efforts occurring at Tunxis and also discusses the development of a cross-departmental 'Going Open'

committee that supports institutional OER efforts.

OER SURVEY FINDINGS

In October 2016, a survey (based on the Babson Survey Research Group's work) was distributed state-wide in an effort to gauge faculty awareness, perception, and acceptance to adopting Open Educational Resources. The University of Connecticut provided the resources to construct, capture, and analyze the survey results.

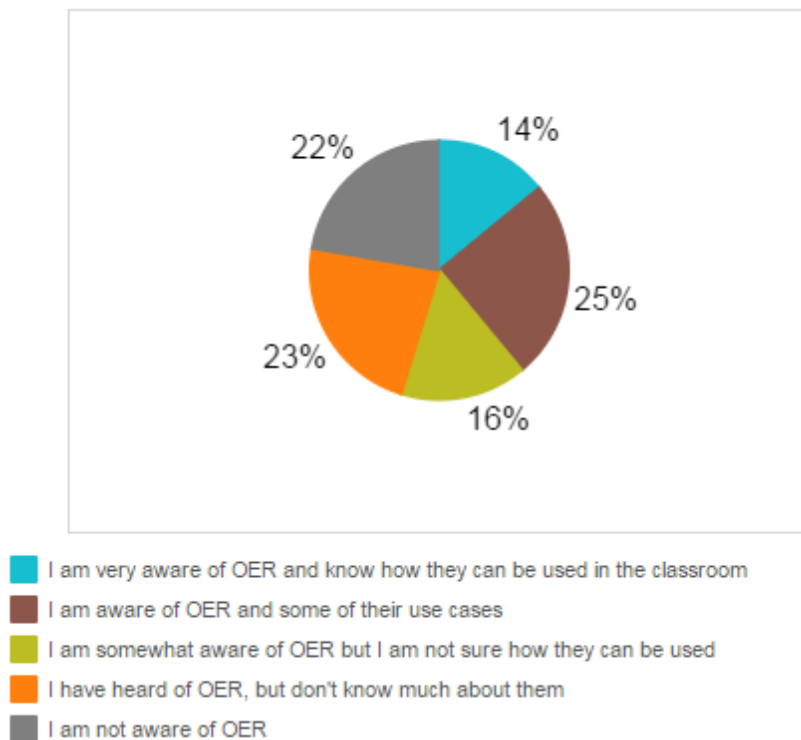
The complete survey results can be found at:

<https://public.tableau.com/profile/publish/DRAFTOpenEducationResourcesSurvey/Story1#!/publish-confirm>

The following highlights a few key findings from the nearly 1,000 respondents:

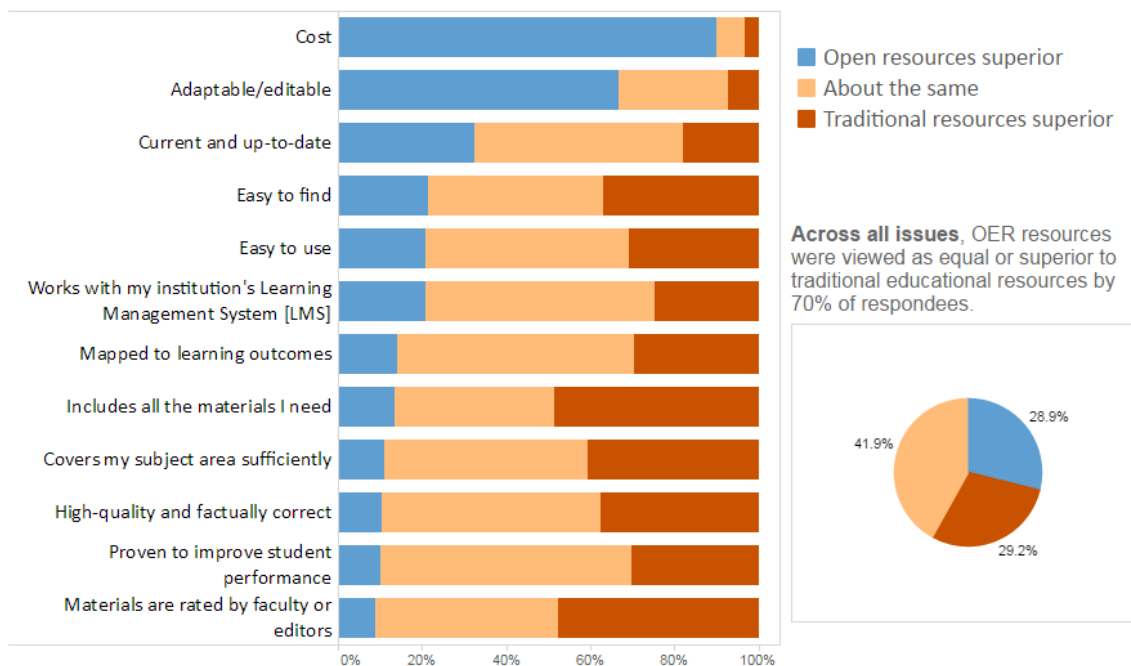
HOW AWARE ARE YOU OF OPEN EDUCATIONAL RESOURCES (OER)?

When compared to the national data collected by the Babson Survey Research Group, Connecticut faculty rank much higher in awareness with only 22% of the respondents indicating that they were not aware of OERs vs. the national percentage of 65%



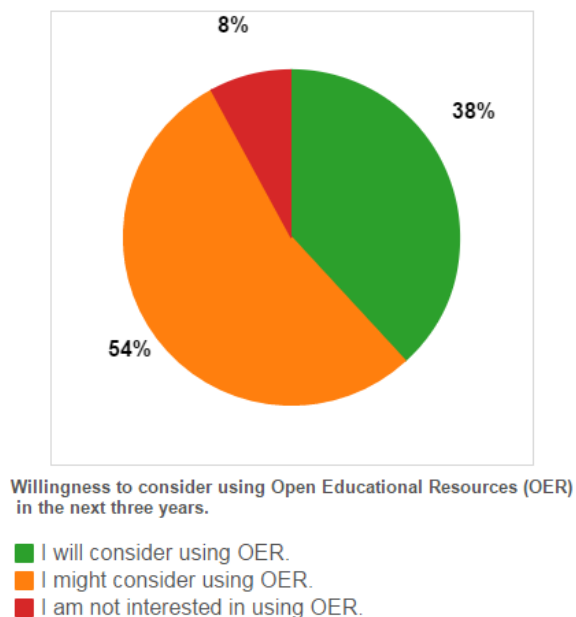
OPEN EDUCATIONAL RESOURCES COMPARED TO TRADITIONAL RESOURCES

When compared to the national data, Connecticut faculty had similar rankings regarding the benefits and challenges of adopting OER. Connecticut faculty identified ease of discovery and limited catalog of supplemental materials as key barriers to OER adoption.



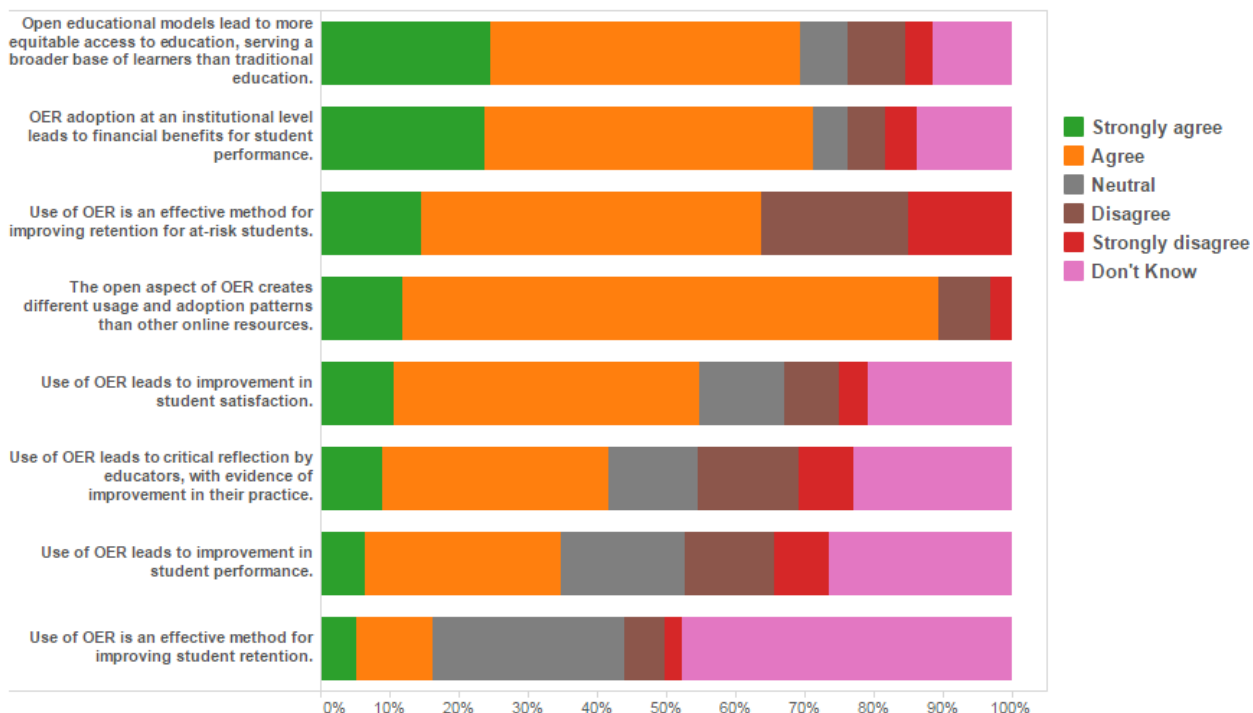
WILLINGNESS TO CONSIDER OER

92% of the respondents indicated a willingness to consider OER adoption over the next three years.



ASSESSMENT OF OER OUTCOMES

The majority of survey respondents felt that OER presented opportunities for a more affordable and equitable learning experience. Some questions persist about the impact of OER in student performance.



REPRESENTATIVE COMMENTS FROM THE SURVEY:

- "I'm glad you're doing this research and look forward to learning more about customizable OER resources. Bulkpacks are great. Inexpensive, digital bulk packs would be even better. One consideration that didn't appear in your survey question is the lead time required to create a bulk pack. You have the measure "easy to use," but that's not the same thing. I'm talking about the time it takes to put together a course pack".
- "I think more info in this area would be helpful. I am always looking for new ways and ideas to incorporate things into my courses, but I need to have everything clearly laid out and a colleague or contact if I have questions. Unfortunately, there often aren't enough hours in a day to just figure it out."
- "I have not yet used OER, but I am very curious."
- "I am unaware of where to obtain OER resources on the subject matter I teach. A search through Google and Ask yielded nothing subject related."
- "Hi - I teach physics and the material presented in these courses is about 400 years old. The textbook industry provides many expensive options for texts, and I typically allow my students the freedom to buy an older addition, which can cut the price to zero or some other small fraction of the cost of a new book. The place where publishers have an advantage is the homework grading system. Universities used to have resources for graduate student graders, but these are gone. It is not possible for instructors to grade hundreds of homework assignments/week, so they must use online resources. This is where Wiley, Freeman, Cengage, etc can charge hundreds of dollars and is more of a cost driver than the text".

AWARENESS BUILDING - UPDATED

Over the past three years, New England higher education organizations have hosted a variety of Open Education Resources events, providing Connecticut institutions an opportunity to gain better understanding of both the student and faculty benefits from OER adoption.

Many institutions have held local/regional workshops and seminars designed to expose faculty to this movement. Some institutions have developed committees and working groups in an effort to support institution-wide OER adoption. Almost all libraries have an OER library guide that provides a collection of vetted materials and search options to assist faculty in the selection and evaluation process.

The following captures the reported awareness efforts happening at Connecticut's public higher education institutions. There may be others that this report does not detail.

UNIVERSITY OF CONNECTICUT

The Office of the Provost established a campus wide committee to oversee efforts to promote and provide resources and guidance to the faculty regarding the availability of free and low cost options for required course materials. The committee is chaired by Vice Provost Martha Bedard and includes members of Undergraduate Student Government, UConnPIRG, librarians, staff from the Center for Excellence in Teaching and Learning, an administrator from the College of Liberal Arts and Sciences, and faculty. Some of the actions taken, facilitated or supported by this group include:

- Submission of a grant proposal to the Davis Educational Foundation for the support of Open Texts at UConn – funded at \$99,000
- Approval of a resolution from the University Senate Student Welfare Committee submitted to the University Senate in support of the Open Textbook Initiative
- UConn Student Government (USG) resolution in support of funding the creation of an open textbook in Chemistry- funded at \$21,000
- Became an 'Institutional Partner' with OpenStax, a strategic partnership based on our demonstrated willingness to drive adoption of open educational resources (OER) on campus. Participated in monthly meeting of all 11 schools with programs under development.
- Press release and press conference promoting "Covering the Cost: Why we can no longer afford to ignore high textbook prices"
- USG resolution to support a symposium on Affordable Textbooks- funded at \$600 and held on April 19, 2016. <http://blogs.lib.uconn.edu/news/affordabletextbookssymposium/#.V6jpULgrKck>
- Creation of half time OER staff position in Library and Library working group
- Establishment of library guide <http://classguides.lib.uconn.edu/content.php?pid=662345> and website: <http://open.uconn.edu/>
- Marketing campaign via blogs, Daily Campus, local radio, and UConn story picked up as Associated Press "Big Story: Open source textbooks gain in push for college affordability"
- Workshops for faculty held at Storrs, Avery Point and Waterbury campuses
- Institute for Teaching and Learning lunch time seminar for faculty
- Presentation at Department Chairs meeting
- Survey sent to all faculty members. Results are under review and will be replicated and administered by UConn to the faculty in the CSU system. This will give us baseline data on awareness, barriers, and interest. Survey and analysis completed.

- Displays of low cost print versions of free electronic texts available from OpenStax at Storrs, Waterbury, Avery Point, and Stamford campuses
- Press Conference at UConn Storrs on September 9, 2016 with Representative Haddad and Senator Flexer and UConn faculty, students and administration to announce the release and formal adoption of the UConn supported open textbook Atoms First Chemistry.
- A newly instituted OER incentive program sponsored by the Provost was initiated with \$100,000 in funding to promote the adoption additional open materials in high enrollment undergraduate courses. <http://dailycampus.com/stories/2016/9/7/bookstore-press-conference-uconn-open-source-textbooks?rq=textbooks>
- Open Access Week Forum Oct 26, 2016 - “The Intersections Between Open Access, Open Educational Resources & Author Rights”. Two particularly notable presentations were “OA? OER? What’s the Difference?” and “Entering the Creative Commons.”
- UConnPIRG press release and press conference on October 12, 2016. Saman Azimi announced and discussed the release of new USPIRG report “Access Denied: The New Face of the Textbook Monopoly”. <http://dailycampus.com/stories/2016/9/23/uconnpirg-releases-report-on-the-new-face-of-textbook-monopoly?rq=open%20source>
- Presentation by UConn OER Librarian Kathy Labadorf at OpenEducation Conference 16. “Making it Easier—or Adventures in Open Textbook Adaption: Finding our way.

CONNECTICUT STATE COLLEGE & UNIVERSITY SYSTEM

Many of the 17 institutions of the CSCU system have OER awareness efforts underway. The system’s April 8th, 2016 Faculty Conference featured two different OER presentations. The CSCU Council of Library Directors has had multiple discussions on how libraries can support campus OER efforts. Lastly, the system has 6 different representatives participating in the legislatively created Open-Source Textbook Task Force. The system is currently planning an academic leadership summit for OER awareness and strategy for March 2017.

CONNECTICUT DISTANCE LEARNING CONSORTIUM

Since 2013, CTDLC has led a state-wide awareness campaign on the student and faculty benefits of Open Education Resources. CTDLC has conducted regional workshops, annual conferences, and presented at numerous campus events. CTDLC has also participated on a (inter)national level to form best practices in institutional adoption and support of OER. CTDLC is currently partnering with higher education institutions from Maryland to Massachusetts to coordinate a regional OER event for June 2017.

TUNXIS COMMUNITY COLLEGE

Tunxis has formed a “Going Open Committee” made up of full time and part time faculty, administrators, librarians, and support staff. The committee has setup numerous meetings to further OER awareness, including two faculty showcases/conferences.

CHARTER OAK STATE COLLEGE

Charter Oak held a faculty summit during summer 2015 where faculty were exposed to the concept of Open Education Resources.

EASTERN CONNECTICUT STATE UNIVERSITY

Eastern Connecticut State University hosted a faculty luncheon on March 8, 2016 to invite faculty using OER to share with their colleagues. About 20 faculty and librarians attended. The Library Director at Eastern also gave an OER presentation to the Library Advisory Committee during the spring semester.

A presentation for the President's Extended Staff during the fall 2016 semester. A new event OER implementation event is planned for March 2017.

HOUSATONIC COMMUNITY COLLEGE

Housatonic has held multiple events for both campus representatives as well as the system at large. In the past year, Housatonic has invited all 17 institutions to participate in an OER awareness workshop that featured training on a no-cost homework replacement called MyOpenMath.

MANCHESTER COMMUNITY COLLEGE

On April 28, 2016, Tim Boto and Debbie Herman utilized the April 2016 Division Meeting to educate faculty and promote the use of OERs while recruiting faculty to participate in an open textbook pilot program for the 2016-17 academic year.

WESTERN CONNECTICUT STATE UNIVERSITY

Western held a faculty event on August 24th where OER was highlighted during the full session as well as featured in a break-out session.

QUINNEBAUG VALLEY COMMUNITY COLLEGE

Quinnebaug held an academic leadership discussion and full faculty OER awareness event in fall 2016.

CAPITAL COMMUNITY COLLEGE

Capital held an academic leadership discussion on OER in fall 2016.

CENTRAL CONNECTICUT STATE UNIVERSITY

Central Student Government Association held an academic meeting to explore OER in response to the rising cost of textbooks. Central is planning a joint effort with the SGA and campus administration for January 2017 to discuss OER adoption.

PRIVATE INSTITUTIONS

The following is not a comprehensive collection of OER awareness events from Connecticut's private institution and only represents specific events the Task Force has been made aware.

ALBERTUS MAGNUS COLLEGE

Albertus held a faculty workshop in January 2016 which featured sessions on OER awareness and adoption.

FAIRFIELD UNIVERSITY

In 2015, Fairfield held a local OER event that attracted attendees from across the state.

QUINNIPIAC UNIVERSITY

Quinnipiac has held various awareness campaigns on campus, leading to nearly 20 faculty OER faculty adoptions.

SACRED HEART UNIVERSITY

Sacred Heart has led awareness campaigns on campus, leading to a textbook review program initiated Fall 2016. The results of the review program will guide OER adoption for Spring 2017.

OPEN EDUCATION RESOURCE ADOPTION - UPDATED

For many institutions, faculty alone determine the needed course materials, including textbooks or open-source textbooks. Institutions may not know the full extent of OER adoption on their campus without educating faculty on OER and then surveying their usage. This report only captures what institutions have reported back; there may be additional OER efforts underway.

UNIVERSITY OF CONNECTICUT

UConn faculty are becoming more aware of the importance of keeping course materials, especially textbooks, affordable. Listed below are adoptions as well as steps taken to encourage and support this:

- UConn faculty member Dr. Ed Neth and colleagues completed the open Atoms First Chemistry textbook. It will be available for fall semester through OpenStax, and will be highly publicized, including at the national American Chemical Society annual meeting. The Chemistry department has agreed that it will be used for 3 sections, impacted nearly 2,000 students for a savings of approximately \$600,000. An open textbook in chemistry was piloted successfully in several chemistry section last semester leading to this widespread adoption.
- UConnPIRG students met with faculty across campus to ascertain their willingness to learn more about this topic, resulting in a list of potential adopters to target with information about resources in their discipline.
- A series of competitive mini grants are currently being offered to UConn faculty to both review OER materials in their discipline, or to redesign their course to use OER resources.
<http://open.uconn.edu/faculty-incentives-2/> 5 courses have been transitioned to date.
<http://open.uconn.edu/trailblazers/>. Applications are still being taken for Fall and Spring semesters.
- Provost announced \$100,000 incentive program and his leadership team including Vice Provost for Academic Affairs and Vice Provost for Libraries attended meetings with departmental leaderships to encourage proposals and explain value and availability of OER. Held follow up meetings with individual faculty members.
- Initial Provost incentive awards approved for replacement texts in core areas: Microeconomics, Academic Writing, Anthropology, Physical Chemistry, Pre-calculus, and ancillary materials for Chemistry.
- UConn Co-op donates \$300,000 for affordable textbook initiatives
<http://dailycampus.com/stories/2016/9/30/co-op-donates-300000-to-affordable-textbook-initiatives-in-years-to-come?rq=open%20source>

CONNECTICUT STATE COLLEGE & UNIVERSITY SYSTEM

CSCU institutions have reported over \$600,000 in students savings from 2014 to present. Housatonic Community College represents over \$300,000 of the savings. Based on the success of the Housatonic initiative, CSCU is sponsoring a focused pilot on the expanded use of MyOpenMath throughout the community colleges math courses. The kick-off training event was held September 2016; faculty are currently working on implementing the OER materials for Spring 2017.

CONNECTICUT DISTANCE LEARNING CONSORTIUM

CTDLC runs a virtual high school program for the State Department of Education's Adult Education bureau. The program has limited federal funding. CTDLC has been able to expand the curriculum through the use of OER materials so that students have more options to complete their high school credit diploma. Additionally, CTDLC has been seeking grant opportunities for the CSCU system that would aid in the awareness and adoption of OER materials as well as the development of supplemental instructional materials.

HOUSATONIC COMMUNITY COLLEGE

Housatonic has been actively expanding its use of MyOpenMath and a companion OER workbook to save students taking math courses \$230 over the commercial option. Between fall 2014 and spring 2016, Housatonic has impacted over 1,500 students saving over \$350,000 in textbook costs. Additionally, Housatonic was just named a recipient of a 2 year grant of \$100,000 from the Achieving the Dream organization to develop new degree programs that utilize OER materials.

TUNXIS COMMUNITY COLLEGE

Tunxis' Hendree Milward has adapted the Housatonic MyOpenMath model and augmented his math course with Khan Academy OER materials. Hendree has recently completed his first semester teaching this course with OER materials and has saved 40 students over \$12,000.

MIDDLESEX COMMUNITY COLLEGE

Middlesex has adopted the Housatonic MyOpenMath model locally across five sections and has expanded into the Sciences. To date, these efforts have saved students nearly \$18,000.

MANCHESTER COMMUNITY COLLEGE

Manchester has launched a small OER pilot where they are offering faculty incentives to adopt low cost/no cost textbook replacements. To date, 4 full-time faculty and 1 adjunct faculty have joined the pilot, and will be working with the library to identify OER opportunities.

CHARTER OAK STATE COLLEGE

Charter Oak has expanded its OER adoption five course sections, including Statistics and two Human Resources courses. Since Summer 2016, the college has saved students nearly \$15,000.

EASTERN CONNECTICUT STATE UNIVERSITY

Eastern is still collecting information on OER adoption, but have efforts dating back to Fall 2014. While no student savings information is available at the moment, subject areas impacted by OER have been Math, Sciences, and Education.

WESTERN CONNECTICUT STATE UNIVERSITY

Western is also still collecting information on OER adoption and also has efforts dating back several years, specifically in Education.

SOUTHERN CONNECTICUT STATE UNIVERSITY

In 2014, Southern announced that Joe Fields had developed an OER math textbook (*A Gentle Introduction to the Art of Mathematics*) designed to replace an existing commercial resource valued at

\$150 per book.

NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE

Northwestern started OER adoptions for Fall 2016 in the Sciences. Northwestern will be expanding into Math for Spring 2017 as part of the CSCU OER grant initiative. These efforts have saved students over \$10,000.

CENTRAL CONNECTICUT STATE UNIVERSITY

In 2016, Amy Kullgren utilized an OER textbook for her Communications course, saving her 50 students over \$10,000 collectively.

PRIVATE INSTITUTIONS

The following is not a comprehensive collection of OER adoptions from Connecticut's private institution and only represents specific events the Task Force has been made aware.

QUINNIPIAC UNIVERSITY

Quinnipiac has nearly 20 OER adoptions across multiple disciplines such as Math, Business, Sciences, and IT resulting in almost \$50,000 in student savings in the past year.

POTENTIAL BARRIERS TO ADOPTION

While a growing number of faculty and institutions are working towards lowering the cost of education for their students, a vast majority remains unaware of the low cost/no cost alternatives provided by Open Education Resources.

AWARENESS & TRAINING

While the recent survey results show an increase in OER awareness in Connecticut with only 22% not being aware, **a combined 61% of the respondents** indicated that they lack the knowledge on how to find and/or implement OER in their classes.

COMPENSATION/TIME

The exploration, review, and implementation of OER materials does require a time commitment from faculty to construct a new, or redesign an existing course. Successful initiatives in other states have established scalable stipends that correspond to the amount of work needed. Lower awards are often given for the review and/or adoption while slightly more is available for complex adoptions or minor adaptations; and larger amounts available for new works.

SUPPLEMENTAL MATERIAL AVAILABILITY

Some commercial textbooks are bundled with supplemental instructional materials like presentations and banks of assessment questions that reduce the faculty burden in course design. Some independent OER developments may not contain such supporting materials. Newer OER efforts by [OpenStax](#) and [Lumen Learning](#) do provide the required supplemental instructional materials.

PERCEIVED MANDATE/LOSS OF CHOICE

There may be a **perception** among some faculty that institutionally or legislatively supported OER efforts will eventually be mandated and may limit faculty's ability to choose or control their own materials. With improved awareness, faculty may come to realize that OER provide greater control and choice with the ability to revise and remix materials.

INSTITUTIONAL SUPPORT/COST

While OER materials are free and open by their licensing, there are institutional costs associated with the selection, evaluation, implementation, and maintenance of OER. Beyond the faculty, the library, instructional designers, and information technologists may be involved in the overall support of an OER initiative. Many institutions have successfully integrated OER into their strategic plans and have introduced modest course fees designed to offset institutional costs to support OER adoption. The students still realize significant cost savings.

POLICY

Institutions may need to consider their internal policies regarding intellectual property rights to material developed, as well as recognition for, faculty OER work towards tenure and promotion. Successful institutions have developed OER committees that represent a cross-section of the institution, including students, to discuss institutional concerns and benefits.

STUDENT ISSUES TO CONSIDER

During the OER Task Force discussions and testimony, student concerns that are beyond the actual cost of commercial textbooks but related were addressed. When commercial textbooks are assigned, there was a concern voiced regarding the timeliness of that notification prior to the registration date so that students could make informed financial decisions. Also, a concern was raised about the limited amount of financial aid available to students for the purchase of textbooks. Lastly, when commercial products are assigned that include digital Access Codes, the Access Codes generally bring additional costs and prevent the usage of used or rental book options as well as eliminate the opportunity for the student to sell back the textbook.

NEXT STEPS

Special Act 15-18 contains the following passage:

“The task force shall consider the development of a program to incentivize the creation or adaptation of open educational resources that will significantly reduce the cost to students of course materials, including, but not limited to, offering financial or academic or professional credit to faculty to create open educational resources.”

Based on Task Force discussions and survey findings, we recommend five avenues to explore:

1. Continued awareness efforts for faculty and administrators as well as students in OER and low cost alternatives
2. State-wide training opportunities for faculty and supporting staff on the adoption and adaptation of OER materials as well as providing? executive leadership on OER strategy and policy development
3. State sponsored clearinghouse of OER materials targeted for CT faculty
4. Incentive program for the review, adoption, adaptation, and creation of OER materials
5. Exploration of other state and system OER models

REFERENCES

1. *(Consumer Price Index*. Bureau of Labor Statistics. <http://www.bls.gov/cpi/>)
2. *(Fixing the Broken Textbook Market*. Student PIRGs (2014))
3. *Covering the Costs: Why We Can No Longer Afford to Ignore High Textbook Prices*
4. Lumen Learning
5. *Babson Survey Research Group: Opening the Curriculum: Open Education Resources in U.S. Higher Education, 2014*

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