



Open Education Resources Committee Report

April 2018

Background

The price of a college degree continues to rise. In addition to tuition and fees, course materials, such as textbooks, add to the cost of a student's education.

- According to the [National Association of College Stores](#), the average price of a college textbook rose from \$57 in 2007-2008 to \$80 in 2015-2016.
- The [College Board](#) analyzed 2017-2018 school data and concluded students spent up to \$1,250 on course materials including textbooks and associated technologies.
- Pitt's [Office of Admission and Financial Aid](#) suggests students plan on spending \$772 per year on textbooks.
- A 2016 report by the Babson Survey Research Group describing the results from a sample of higher education faculty reported considerable differences in textbook costs by discipline as shown in the chart below.¹

AVERAGE COST OF REQUIRED TEXTBOOK BY DISCIPLINE

Discipline	Average Cost
Computer and Information Science	\$68
Liberal Arts and Sciences	\$69
Social Sciences	\$74
Education	\$87
Natural Sciences	\$101
Business	\$132
Professional	\$155
Health and related	\$182

The high cost of course materials has become a barrier to learning. One study by the Florida Virtual Campus reported that in order to reduce costs, students will either not take a class if the book is costly, drop or withdraw from a course because of the cost of the textbook, or take the course without buying the textbook.² A 2014 report, [Fixing the Broken Textbooks Market](#), found that students recognized that not purchasing a textbook would impact their grade in a course, but did not do so anyway. The results of these studies suggest there is a relationship between textbook costs and a student's progress towards a degree.

In January 2018, the University of Pittsburgh's Student Government Board passed a [resolution](#) supporting expanded use of Open Educational Resources (OER) and open textbooks as a means to control costs. The resolution calls on faculty to expand the use of OER, the administration to support faculty with grants and incentives, the library to assist with resources, and the government to support the Affordable College Textbook Act.

¹ Allen, I. E., & Seaman, J. (2016). *Opening the Textbook: Educational Resources in U.S. Higher Education, 2015-16*. Pearson: Babson Survey Research Group.

² Donaldson, R. L., & Shen E. (2016) *2016 Student Textbook and Course Materials Survey* Florida Virtual Campus

Charge to the Committee and Membership

In response to the Student Government Board's resolution, and out of an interest in keeping access to course materials as affordable as possible for students, the Provost convened a working group to learn about current practices and trends, and explore opportunities with open educational resources.

Charge: The committee will evaluate the current availability of OER, awareness of OER on campus, barriers to OER adoption, and models for creation of these resources by Pitt faculty. It will make recommendations to the Provost on how to support and advance the use of OER at the University.

Committee Membership:

- **Nancy Tannery** (Chair), Assistant Provost
- **Erik Arroyo**, Assistant Director of Academic Support Services, University Center for Teaching and Learning
- **Lauren Collister**, Director, Office of Scholarly Communications and Publishing, University Library System
- **Janice Dorman**, Professor of Nursing, Epidemiology & Human Genetics, School of Nursing
- **Joseph Grabowski**, Associate Professor, and Director of Undergraduate Studies, Department of Chemistry
- **Joseph Horne**, Director, Teaching Commons, University Center for Teaching and Learning
- **Krishani Patel**, Vice President, Student Government Board and Chief of Cabinet
- **Monica Rattigan**, Director of University Stores
- **Kyle Ann Whittinghill**, Lecturer and Undergraduate Advisor, Department of Geology and Environmental Science
- **Frank Wilson**, Assistant Professor of Sociology and Criminal Justice , and President, University Senate

Open Educational Resources

Pitt's Student Government Board defines Open Educational Resources (OER) as “syllabi, lesson plans, lab books, worksheets, video, lectures, textbooks, and full courses published under an Open License that allows their reuse and repurposing by others and are freely available for anyone to use online.”

The Scholarly Publishing and Academic Resources Coalition (SPARC) defines Open Educational Resources (OER), as “teaching, learning, and research resources that are free of cost and access barriers, and which also carry legal permission for open use.” Open means faculty members or students are free to retain, reuse, revise, remix, and redistribute these educational materials.

Other AAU institutions have initiated programs in support of OER.

- Rutgers University's [Open and Affordable Textbook Program](#), has awarded 32 grants to faculty to incorporate low-cost or no-cost materials into their classes. The university estimates students have saved \$1.6 million.
- The Ohio State University's [Affordable Learning Exchange](#) (ALX) began in 2015, with the goal to reduce or eliminate textbook and class material costs. The program estimates the results will save Ohio State students close to \$1 million on course materials.
- [Affordable Course Transformation](#) at Penn State University (ACT@PSU) is a grant-based program to help faculty transform courses using open or affordable content.

Legislators are recognizing OER as a way to make higher education affordable. The U.S. Congress has included funding for a \$5 million open textbook grant program in the FY 2018 omnibus appropriations bill recently signed into law. The [grant program](#) will “support projects at institutions of higher education that create new open textbooks or expand their use in order to achieve savings for students while maintaining or improving instruction and student learning outcomes.”

Recent studies have shown that when instructors use OER and open textbooks, the quality is as good or better than a traditional textbook. Also, use of OER is associated with the same or better student outcome, including course completion and overall grade.^{3,4,5}

Conversations with Pitt faculty, either one-on-one or through a small focus group, provided the committee with some commonalities. Faculty were interested in learning about OER and open to the idea of adding OER to their courses. There were concerns about the quality and availability of OER in their disciplines. The ability to adapt and customize content was appealing.

“I am strongly considering adopting an OER text for my intro to psych class. However, switching texts would involve a considerable amount of new prep and I’m currently working on a course re-design...”

Pitt faculty response when asked about possibly using an OER in a course

³ Allen, G., Guzman-Alvarez, A., Molinaro, M., & Larsen, D. (2015). Assessing the impact and efficacy of the Open-Access ChemWiki Textbook Project. *Educause Learning Initiative Brief*.

⁴ Fischer, L., Hilton III, J., Robinson, T. J., & Wiley, D.A. (2015). A multi-institutional study of the impact of open textbook adoption on the learning outcomes of postsecondary students. *Journal of Computing in Higher Education*, 27:3.

⁵ Allen, G., Guzman-Alvarez, A., Smith, A., Gamage, A., Molinaro, M., & Larsen, D.S. (2015). Evaluating the effectiveness of the open-access ChemWiki resource as a replacement for traditional general chemistry textbooks. *Chemistry Education Research and Practice*, 16:939.

“I wanted a resource students could use to reinforce topics covered in class without adding the expense of a book that wouldn't be used much.”

Pitt faculty response when asked the reasons an OER was selected for a course

Recommendations

In order to implement an OER culture at Pitt, and ultimately reduce the cost of course materials for students, the committee makes the following recommendations:

1. Create a standing committee in the Office of the Provost in order to provide a targeted and sustained OER awareness program.
2. Incentivize faculty development through funding models to adapt and adopt OER into course materials:
 - a. Small grant programs ranging from \$500-\$2,000 to promote adapting and open textbook or OER course component changes such as online homework, lab manuals or support materials
 - b. Development funding from \$2,000-\$5,000 to support individual or team-based development of open textbooks, or for combining an open textbook with course-specific development
3. In order to promote the creation of OER course materials by faculty, recognition of these efforts should be noted in annual reports and promotion and tenure processes.
4. Based on assessments done in prior OER research, develop assessment models to measure student outcomes in courses using OER.
5. Create a mechanism for students to identify OER course materials in course catalogs.
6. Consider course material affordability in a broader sense:
 - a. Convene a working group to investigate new approaches around the selection and costs of course materials.
 - b. Encourage the institution to license one audience response system and encourage faculty to consider using this system. Students currently incur costs for these types of systems through fees or hardware purchases.
 - c. Pilot “inclusive access” programs which provide digital materials directly into a course through Blackboard (CourseWeb). The costs are 50%-60% lower than the comparable print textbook and are added to students’ tuition and fees a process many students prefer.

- d. Incentivize faculty to move self-published lab manuals and similar products from paper-based versions to a cost-free electronic version within an established platform such as Blackboard (CourseWeb) or Electronic Lab Notebook. (For example, Chem 0120 Lab Manual, through the University Store on Fifth, is \$36.25)

One goal in the [Plan for Pitt](#) states that “We aspire to be a university that prepares students to lead lives of impact through a supportive environment focused on a holistic and individualized approach to learning inside and outside the classroom.” One of the strategies to attain this goal is to promote access and affordability. Reducing the cost of course materials is one way to meet this strategy.