

Open-source textbooks can help drive down the overall cost of college

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A wave of policies in the past five years has attempted to ensure that students have access to affordable course materials. Efforts driven by the Higher Education Opportunity Act of 2008 (HEOA) relied mostly on textbook rental and buy-back programs, offering used textbooks and providing students with information about textbook costs before the course enrollment period.¹

Despite those efforts, the cost of textbooks has continued to be a problem for students. According to the Government Accountability Office, textbook prices skyrocketed 82 percent between 2002-12, and the average student budget for books and supplies has grown to \$1,207 annually.² In its statement of rationale for legislative action, [California's S.B. 1053](#) (2012) asserts that the average annual student budget for textbooks at California's community colleges can be almost 150 percent of the cost of tuition, causing many students to forgo purchasing them altogether.³ Leading states are looking beyond the HEOA to find bigger savings for students. The result is a dramatic shift toward Open Educational Resources (OER).

Additional Resource

ECS State Policy Tracking Database on [postsecondary textbooks](#).

There is growing national and international interest in OER as a way to help financially distressed states reduce costs and save students millions of dollars.⁴ OERs are defined as teaching, learning and research resources that are open licensed — users can legally adapt and redistribute the content because they reside in the public domain or have been released under an open intellectual property license.⁵ While several states have used legislation to encourage the use of *electronic* and *digital* learning resources, such resources are not necessarily freely usable as OERs — and therefore can still be expensive for students. This brief focuses on state initiatives — legislated and not — that advance the use of OER specifically as a strategy to reduce textbook costs at the postsecondary level.

Key takeaways from this report

- Textbook costs are of great importance to state leaders because of the ties to postsecondary affordability.
- Trending: Policies related to Open Educational Resources (OER) **California, Florida, Minnesota, North Dakota** and **Washington** have pursued successful initiatives to support the creation and use of OER through legislation.
- Non-legislative approaches are gaining traction through pilot programs in **Arizona, Minnesota, New York, Texas** and **Virginia**.

Legislative Initiatives

While the most common trend has been to establish task forces to study open source and electronic textbooks, states such as **California, Florida, Minnesota, North Dakota** and **Washington** have taken their policies a step further. Such states are supporting development of OER resources, encouraging programs to expand their use and creating libraries of OERs that are available to the public.

California

[CAL. EDUC. CODE § 66408](#) and [§ 66409](#) establish the California Digital Open Source Library and the California Open Education Resources Council. The library houses open source materials while providing a web-based way for students, faculty and staff to easily find, adopt, utilize, or modify course materials for little or no cost. The council is required to determine a list of 50 lower-division courses in the public postsecondary segments for which high-quality, open source textbooks and related materials will be developed or acquired. The council must review and approve developed open source materials and promote strategies for production, access and use of open source textbooks at campus libraries. The council will submit a final report by Jan. 1, 2016.

Florida

Florida's efforts began with a 2010 initiative to encourage faculty to develop and use open-source textbooks, ([FLA Stat. ANN Sec 1004.085](#)) using the state's existing digital repository of instructional materials.⁶ Their work has evolved through the establishment of the Florida Academic Library Services Cooperative. [Florida's H.B. 5101](#) (2014) revises [FLA. STAT. ANN § 1006.73](#) to establish a single library automation system that all public postsecondary education institutions will use to support their learning, teaching and research needs. Statute mandates the development of a standardized process to review and approve open-access textbooks and education resources. According to the Open Doors Group, Florida will be able to scale up the use of open-source textbooks in all lower-division courses because there is a statewide common course numbering policy in place, making coordination across campuses easier.⁷

Minnesota

Minnesota has taken a unique approach by using OERs as a performance funding goal. [SF 1236](#) (2014) states that Minnesota State Colleges and Universities must collect data on the number of OERs available and used. Additionally, they are required to reduce instructional costs for students by 1 percent and use those savings to support OERs.

North Dakota

[North Dakota House Concurrent Resolution 3009](#) (2013) mandates that Legislative Management study the use of open textbooks in the North Dakota University System, including options to develop partnerships with other states to use open textbooks.⁸ The resolution led to a 2014 proposal that would build a partnership with the University of Minnesota, which created its library of free online textbooks in 2012. While the state Board of Higher Education has approved a budget of \$500,000 for open textbooks, the budget still needs approval by the Legislature before the partnership can be finalized.⁹

Washington

Washington is considered a pioneer in creating policies that promote and provide funding to expand the use of OER.¹⁰ In 2006, the state adopted [H.B. 1025 \(RCW 28B.10.590\)](#) to require faculty and staff members to consider adopting the least expensive textbook edition available — including OERs — and to collaboratively develop free online web and library resources. In 2009, Washington adopted [H.B. 1244](#) (Wash. Laws of 2009, Ch. 564), which appropriated \$1.2 million to the state's community and technical colleges to support OER to increase access, affordability and quality of courses. Thus the "[Open Course Library](#)" was developed. It is a collection of shareable course materials, including syllabi,

course activities, readings and assessments designed by teams of college faculty, instructional designers, librarians and other experts. Some materials are paired with low-cost textbooks (\$30 or less).¹¹ The project has saved students at least \$5.5 million to date, more than quadruple the state's original investment.¹²

The postsecondary system lags behind the K-12 system in state laws on open-source textbooks. ECS' policy databases reveal far more bills on OERs in the K-12 sector than in the postsecondary sector. Texas is a striking example — there are 18 sections in the K-12 education code that reference open-source resources but none in the postsecondary education code.

[H.B. 1909](#) (2011) includes the adoption of open educational resources as a strategy to create greater efficiencies in the community college system ([RCW 28B.50.515](#)). It transfers a percentage of student fees to fund a strategic technology plan geared to better support students and promote efficiency ([RCW 28B.12.031](#)). Washington's efforts have paved the way for other states to develop open course libraries.

Non-Legislative Initiatives

While legislative approaches can add power and stability to an initiative, several states have non-statutory initiatives that are gaining traction and positively impacting students. OER libraries have been created at the system and/or institutional level in **Arizona, Minnesota, New York** and **Virginia** without legislation. Additionally, an online library at Rice University provides access nationally.

Arizona

The Maricopa County Community College District is the largest community college district in the United States, serving more than 260,000 students each year.¹³ The goal of the [Maricopa Millions OER Project](#) is to save Maricopa Community College students \$5 million over five years.¹⁴ A task force and steering committee have been established to accomplish this goal. The project intends to build awareness, create professional development opportunities and technical support for faculty, and develop a marketing plan.¹⁵

Minnesota

The University of Minnesota's [Open Textbook Library](#) began in April 2012 as a project in the College of Education and Human Development. It is held up as an exemplary tool to help instructors find openly licensed, peer-reviewed textbooks. The latest count shows more than 167,000 visits to the library since it opened; an average of about 200 per day.¹⁶ In addition to the Open Textbook Library, the University of Minnesota's David Ernst offers workshops on OERs to faculty around the country. Through a strong network of colleges and universities, the open textbooks initiative at the University of Minnesota is quickly growing.

New York

[Open SUNY Textbooks](#) is an open access textbook publishing initiative established by State University of New York libraries and supported by SUNY Innovative Instruction Technology Grants. The pilot project was launched in 2012 to publish high-quality, cost-effective course resources by engaging faculty as authors and peer-reviewers. The initiative continues to grow.¹⁷

Virginia

The Virginia Community College System, composed of 23 campuses, is emerging as a leader in the use of OERs. The chancellor's initiative provides faculty with grants to develop OERs for high-enrollment courses. Tidewater Community College has taken an additional step by creating a two-year "[textbook-free degree](#)" program that uses OER for every course.¹⁸ [Northern Virginia Community College](#) and

[Reynolds Community College](#) are following suit. Preliminary data show that students using OERs have the same or better grades, retention and completion rates as students using print textbooks.¹⁹

National

[OpenStax College](#) is a nonprofit organization based at Rice University that offers students nationwide textbooks that are free online and cost between \$30 and \$54 in print versions.²⁰ Textbooks are peer-reviewed by educators to ensure they are readable, accurate and meet the scope and sequence requirements of college courses.²¹ In April 2014, OpenStax signed a distribution deal with a subsidiary of the National Association of College Stores that will further lower prices on print versions of OpenStax textbooks. The partnership will save shipping costs and increase distribution to 3,000 college stores around the nation. New textbooks will be released, targeting courses that enroll more than a million students at American colleges each year, such as pre-calculus, psychology and U.S. history.²²

Considerations

Funding

State initiatives, unfortunately, are no free lunch. While OERs themselves are free and can generate a significant return on investment, initiatives to support them still require funding. In California, for example, OER development has been delayed because of a lack of funding.²³ California S.B. 1053 makes the Open Source Library possible only if funding is provided in the annual Budget Act or another statute, through federal or private funds, or through a combination of state, federal and private funds.

The Minnesota legislature leverages performance funding and instructional cost savings to incentivize investment in OERs. Regardless of strategy, without sufficient resources, state textbook affordability projects, specifically OER projects, may stall. Non-legislative initiatives tend to rely on grants or one-time allocations — which have their benefits and drawbacks as well. The Minnesota Open Library, for example, continues to grow with the support from grants in excess of \$40 million to support institutions and organizations that develop and provide online access to open educational content.²⁴

Meeting the Needs of Faculty

Open-source textbooks are still a developing area of policy. Findings on the success of programs are inconsistent. A Chronicle of Higher Education article reported that in Washington, some professors complained that the materials they needed were not available through open textbooks.²⁵ Additional challenges include the independent nature of postsecondary institutions, concerns about academic freedom and the quality of content and shifting costs to the higher education system. As more peer-reviewed resources become available and acceptance of OERs increases, we are likely to see a shift in attitudes. Continued research is necessary.

Student Experience

Several studies have found that students still prefer print textbooks over digital textbooks. It is therefore important for OERs to offer a better digital experience and lower cost print versions.²⁶ As students transition to using OERs, they are spending much less on textbooks. A 2013 study by Student Public Interest Research Groups reports big savings for students. Findings show that Washington State Open Course Library has saved students \$5.5 million since its inception. Students who take OCL courses save \$96 on average per course over using an expensive, traditional textbook.²⁷

“In higher education, faculty’s academic freedom is probably the most important thing they have. Their right to choose their course material, basically anything academic, is their call, and all we can do and all that’s appropriate to do is educate them about open educational resources, specifically open textbooks. You answer questions and help remove barriers.” — *David Ernst, chief information officer at the University of Minnesota’s College of Education and Human Development.*

Looking Ahead

Open Textbooks and the P-20 Continuum

Oregon's Textbook Affordability work group reported to the Legislature that the current and emerging shift to the creation of a "seamless" P-20 state system and the adoption of Common Core may soon require a more coordinated approach to instructional materials and that digital and open educational resources should be important components of that effort.²⁸ As students leave the K-12 system with experience using electronic and open educational resources, their expectations for access to such resources may drive change in the postsecondary environment.

Dual Enrollment

Dual enrollment is one strategy states are employing to reduce postsecondary remediation rates and increase college-going and college completion, particularly among underserved student populations. Yet the high cost of college textbooks — which many states require dually enrolled students to bear on their own — prohibit low-income and even some middle-income students from participating in dual enrollment programs.

Utah is one example of a state that has addressed open source textbooks as part of a strategy to enhance access to dual enrollment. TICE (technology-intensive concurrent enrollment) courses are online or hybrid classroom/online courses. The enabling legislation requires that, when possible, TICE courses use open source materials available to all state institutions of higher education in order to reduce costs ([53A-15-101\(4\)\(c\)](#)). States might want to consider following Utah's example in encouraging the use of open source textbooks to expand access to dual enrollment courses, both online and in brick-and-mortar settings.

"Utah's open textbooks are a great use of technology. Texts get into classrooms quickly and can be updated as needed rather than on a publishing schedule — something that's particularly important in science. The open textbook also adds to Utah's reputation as the most cost-efficient school system in the country." — *Utah State Superintendent of Public Instruction Larry K. Shumway.*

Conclusion

The price of textbooks continues to be a cost barrier for postsecondary students, even though some states are making notable efforts to bring those costs down. Open Educational Resources are an emerging policy option as states, postsecondary systems and institutions consider how to best develop libraries and collections of OERs.

Academic titles are becoming increasingly available, and the quality of resources continues to improve with the advancement of OER peer reviews. Developments in technology have enhanced graphics and bookmarking capabilities of electronic texts.²⁹ Despite improvements, states must put the hard work into understanding the experiences of faculty and students. As with all major reforms, faculty need support as they navigate the changing higher education landscape.

Continued research on the use of OERs and their impact on learning and affordability will be critical as states find ways to lower higher education costs and reduce barriers for low-income students.

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Endnotes

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