

CSU-PUEBLO: A DOER* CAMPUS BY 2028

BACKGROUND AND IMPLEMENTATION PROPOSAL

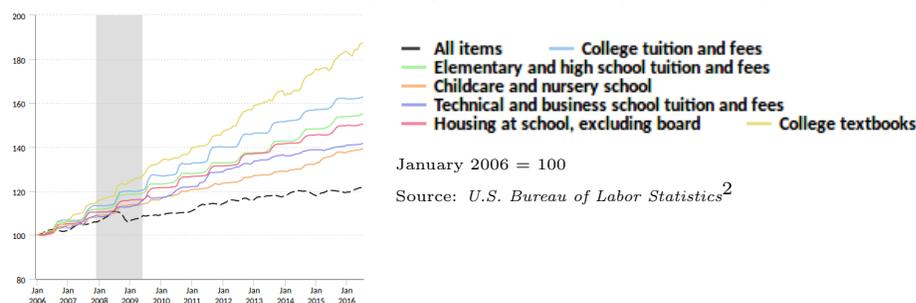
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*“Open Educational Resources” means high-quality teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits free use or repurposing by others and may include other resources that are legally available and available to students for free or very low cost. Open Educational Resources may include full courses, course materials, modules, textbooks, faculty-created content, streaming videos, exams, software, and other tools, materials, or techniques used to support access to knowledge.*¹

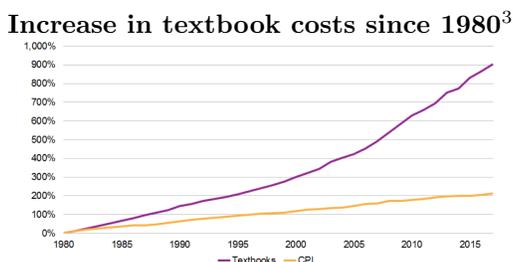
STUDENTS’ ECONOMIC REALITIES

We see in this definition that one type of OER is **free textbooks**. This may seem to be an oxymoron: all students (and some professors) today know that most textbooks are the exact opposite of free, they are instead *prohibitively expensive*. This is quite literally true, and well documented. Textbooks prices have in fact been increasing more quickly than other school-related expenses:

Consumer price indices for tuition and some other school-related items, not seasonally adjusted, January 2006-July 2016



In fact, comparing to the over-all Consumer Price Index [CPI], textbook prices are on an extraordinary trajectory:



Terrifying as that curve of skyrocketing textbook costs is, even compared to the base rate of inflation, it is happening in the context of dramatic increases in macro-level financial burdens on students.

*“DOER” = “Default Open Educational Resources”

¹definition in Colorado’s HB18-1331 (30 April 2018), based on one from the William and Flora Hewlett Foundation

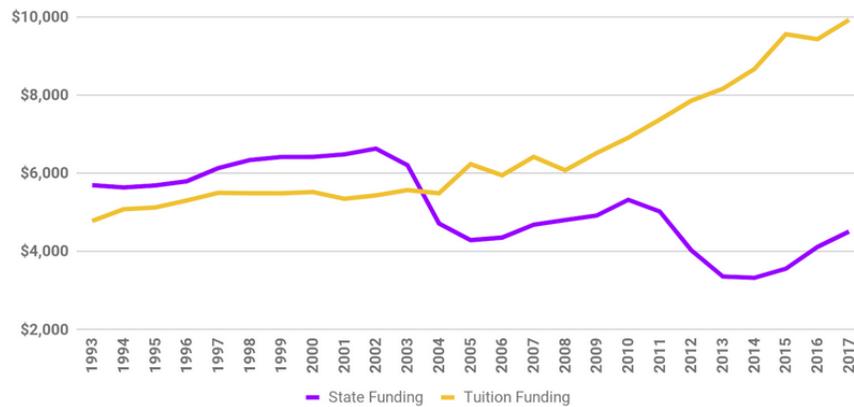
²<https://www.bls.gov/opub/ted/2016/college-tuition-and-fees-increase-63-percent-since-january-2006.htm>

³again, U.S. Bureau of Labor Statistics, <https://www.bls.gov>



Like all states, Colorado has been significantly reducing state support for higher education, so that now the great majority of the cost is born by students, not the public:

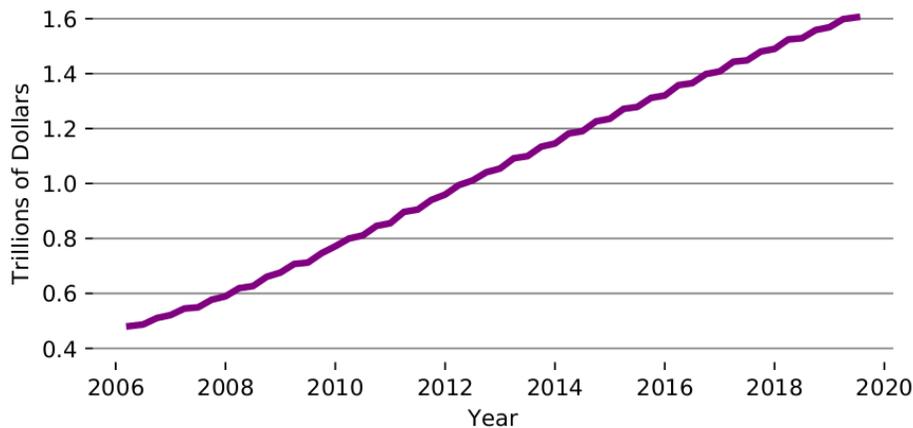
Funding Sources For Higher Education In Colorado⁴



(In fact, in a [large] majority of states in the U.S., a [large] majority of funding for so-called “public higher education” comes from student tuition dollars: it might reasonably be said that truly public higher ed no longer exists in the United States⁵.)

With this burden being passed on to students, there is frequently no alternative to financing education with debt. This has had the well-known consequence of a truly astonishing total student debt load:

Total Student Debt in the U.S.⁶



What about student debt born particularly by CSU-Pueblo students? Using the most recent cohort for which this statistic has been published⁷

the average total debt of 2015 CSU-Pueblo graduates was \$28,914

(compared to the state-wide average in Colorado of \$25,840⁸). Since our over-all degree completion rate that year was 33%⁹, that figure for average debt load of graduates only scratches the surface of the student debt which accrues to all students at CSU-Pueblo.

⁴State Higher Education Executive Officers Association, <https://www.shceo.org>

⁵outside of the military service academies, perhaps

⁶U.S. Federal Reserve, <https://www.federalreserve.gov/releases/g19/HIST/default.htm>

⁷The Institute for College Access & Success’s site <http://college-insight.org/>, based on IPEDS data

⁸Student Debt and the Class of 2015, 11th Annual Report, <https://ticas.org/files/pub.files/classof2015.pdf>

⁹completion within 150% of expected time; Source: again, <http://college-insight.org/>

These enormous financial burdens have a students' ability to satisfy their own basic economic needs. The research of the *#RealCollege* team from the Hope Center for College, Community and Justice (<https://hope4college.com/>) at Temple University has assembled precise numerical measures of this crisis. In particular, CSU-Pueblo participated in the *#RealCollege* survey last academic year, which found¹⁰ that in a sample of CSU-Pueblo students

- **45% were food insecure in the prior 30 days**
- **53% were housing insecure in the previous year**
- **17% were homeless in the previous year**

Note this well-designed survey, also used nationally, had around 600 respondents on our campus and so likely yielded a quite reliable description of our entire student body.

To bring this back around to the subject of **textbooks**, consider the debt load born by CSU-Pueblo students and the percentages of students suffering from the basic needs difficulties, both just noted ... and the amount they spend on textbooks. The College Board estimates¹¹ that students at four-year institutions needed to budget **\$1,240** for books and supplies in the 2018-19 academic year. Student Financial Services at CSU-Pueblo estimates¹² that students needed to budget **\$1,800** for books and supplies in the academic year 2017-18¹³.

Dropping that textbook cost to **\$0** by using OER should then have significant consequences for the access and affordability of an education at CSU-Pueblo.

STUDENTS' EXPERIENCES WITH OER

If the transition to OER reduced the quality of the education we could deliver, then the elimination of textbook price pain would be of much more debatable value. It is easy to believe that "you get what you pay for," and therefore to doubt that zero-cost OER could be quality resources supporting a quality education.

On the contrary, several studies have shown that student satisfaction with OER is high and student performance does not decrease when classes switch to using OER. A recent meta-study¹⁴ in this area described itself and its over-all findings in its Abstract [emphasis added]:

... This present study synthesizes results from sixteen efficacy and twenty perceptions studies involving 121,168 students or faculty that examine either (1) OER and student efficacy in higher education settings or (2) the perceptions of college students and/or instructors who have used OER. Results across these studies suggest **students achieve the same or better learning outcomes when using OER while saving significant amounts of money**. The results also indicate that **the majority of faculty and students who have used OER had a positive experience and would do so again**.

In fact, it should not surprise us if students do better when their courses use OER: even if there were no financial difference, the incredible ease of use of having the course materials available to all students on the first day of class, simply by clicking on a link in the syllabus, presumably makes students more likely to have and to use those resources. Studies have proven this to be the case:

Students assigned open textbooks were almost twice as likely to report using their textbooks, they used them more frequently, and for more time per week overall. Students assigned open textbooks also perceived a greater degree of overlap between the textbook, lecture, and quiz material than did students assigned traditional textbooks.¹⁵

Of course, when students do face particular financial hardship, as many CSU-Pueblo students do, we might expect that the ease of access of OER compounded with their lack of [commercial] textbook price

¹⁰private report from the *#RealCollege* team to CSU-Pueblo

¹¹<https://trends.collegeboard.org/college-pricing/figures-tables/average-estimated-undergraduate-budgets-2018-19>

¹²<https://www.csupueblo.edu/student-financial-services/cost-of-attendance.html>

¹³for some reason, the most recent available on our website

¹⁴Hilton, John. "Open educational resources, student efficacy, and user perceptions: a synthesis of research published between 2015 and 2018." *Educational Technology Research and Development* (2019): 1-24.

¹⁵Cuttler, Carrie. "Students' Use and Perceptions of the Relevance and Quality of Open Textbooks Compared to Traditional Textbooks in Online and Traditional Classroom Environments." *Psychology Learning & Teaching*, vol. 18, no. 1, Mar. 2019, pp. 6583, doi:10.1177/1475725718811300.

pain would have a particularly beneficial impact. An important recent study¹⁶ from the University of Georgia in fact found that on their campus,

the DFW rate decreased by 1/3 among Pell-eligible and minority-identified students in large, gateway classes which switched from commercial textbooks to OER.

If we could realize the same improvement in student success at CSU-Pueblo, with its particular student demographics, merely by switching to OER, the implications for retention and persistence would be considerable.

A HISTORY OF OER AT CSU-PUEBLO

Informal OER use has been happening at CSU-Pueblo for quite some time, certainly at least the last decade. Faculty in a number of departments have used existing OER (Biology, Chemistry) and created new OER (Engineering, Spanish, History, Mathematics). Additionally, there has probably always been in-house production of materials which would surely have been OER if their authors had known about the intellectual property licenses¹⁷ which guarantee the openness required for OER.

CSU-Pueblo joined the Open Textbook Network [OTN] in 2016, in a joint effort of the Library and the Center for Teaching and Learning [CTL]. The OTN is one of the premier organizations supporting OER in the United States at the moment. They run the Open Textbook Library¹⁸ [OTL], which contains more than 660 high quality full OER textbooks, almost all of which have detailed peer reviews by expert faculty members), help member campuses build OER programs, and provide other support services to the OER community¹⁹.

One of the great successes of the OTN has been campus workshops where faculty and others are exposed to the theory and practice of OER, after which they are encouraged to read a text in the OTL and write a review for a small honorarium. Experience has shown that faculty who attend the workshops and write a review often (more than 40%) go on to use an OER in their own classes.

In the summer of 2017, pursuant to Colorado's [SB17-258](#), the Colorado Department of Higher Education appointed an Open Educational Resources Council which studied the existing use of OER in public institutions of higher education in the state and made a recommendation for a program to support the increase of OER use in Colorado.²⁰

The 2017 Council's proposal was transformed into a bill that became the law [HB18-1331](#), which created a new Open Education Council to sit for three more years, as well as giving the Council funds to be disbursed as grants supporting OER around the state.²¹

The state grant program was supported with approximately half a million dollars from the Colorado General Fund in its first year. CSU-Pueblo applied for and was given \$45,000 in this first year of state OER funding. So far, we are supporting the creation of an OER textbook for ENG 101/102

which has saved CSU-Pueblo students approximately \$53,000 this semester alone.

The state grant funds are also being used to purchase a PressBooksEDU hosting service for OER textbooks created or adapted on our campus. The PressBooks platform is widely used in the OER world because it is quite easy to use to produce very professional-looking texts which are also easy to modify and adapt as desired, and which interoperate well with accessibility tools such as screen readers.

Colorado General Fund support for a second year of state OER grants has been increased to approximately one million dollars. The call for proposals recently was announced, and CSU-Pueblo will again apply for these funds and there is every reason to believe we can get up to twice as much as we did in the first year.

The application for state OER grant funds privileged institutions which had a formal "OER Committee" on their campus. At CSU-Pueblo, an ad-hoc committee with membership from nearly all colleges,

¹⁶Colvard, Nicholas B., C. Edward Watson, and Hyojin Park. "The Impact of Open Educational Resources on Various Student Success Metrics." *International Journal of Teaching and Learning in Higher Education* 30.2 (2018): 262-276.

¹⁷basically, [Creative Commons](#) licenses like the one at the bottom of the first page of this document

¹⁸<https://open.umn.edu/opentextbooks/>

¹⁹JP at present serves on the OTN Steering Committee, which provides strategic oversight and advice to the OTN.

²⁰JP was nominated by our provost and served on this council.

²¹JP again was nominated to and served on the Council, as chair for its first year.

the CTL, the Library, and IT, self-organized into what we might call the *PuebloER Committee*. The specific individuals serving on the PuebloER Committee have changed a bit over the last six months (largely due to recent staffing changes in the Library), so the current membership of this committee is:

- Rhonda Gonzales, Dean of the Library
- Margie Massey, Faculty in Teacher Education (CEEPS) and President of the Faculty Senate
- Lona Oerther, Visiting Assistant Professor of Library Services
- Adam Pocius, manager of Innovative Technology
- Jonathan Poritz, Faculty in Mathematics and Physics (CSM) and Director of the CTL
- Leticia Steffen, Faculty in Mass Communications and Associate Dean, CHASS

A DECISION POINT FOR OER AT CSU-PUEBLO

It is a particularly good moment for CSU-Pueblo to make a bold move towards OER use. OER mesh very well with Vision 2028. Just to make some of this very explicit, note these connections with our new Guiding Principles:

- **Transform Learning:** OER allow, and in fact encourage, the use of customized resources which match perfectly an instructor's pedagogical purpose. In fact, a whole new methodology, called **Open Educational Practice [OEP]**, has sprung up recently which includes things like collaborative texts that increase student engagement.
- **Develop People:** The creation of OER gives our faculty much greater visibility for their pedagogical work, while innovations such as OEP help bring them into the very forefront of today's scholarship of teaching and learning.
- **Engage Place:** A frequent customization that is made in OER is to particularize resources to the time and place of a particular class on a particular campus.
- **Build Knowledge:** OER creation certainly entails the advances the knowledge base in the service of public good.
- **Empower Students:** Pedagogical approaches like OEP empower active students in their own education, while of course removing economic barriers to student success only serves to empower more, and more diverse, students.
- **Impact Society:** Releasing new and adapted/improved OER back to the global scholarly community has the broadest possible impact for our pedagogical work.

For these reasons, the vision implementation proposal to the CSU Board of Governors had an OER component, which received support.

As the example of the OER text for ENG 101/102 mentioned above, some quick wins are possible with OER, which will be important to prove to the BoG that our Vision implementation is worthy of continuing support.

OER is already being used in higher ed marketing²² and could possibly drive enrollment.

There is every reason to expect that the Colorado Department of Higher Education, following in the footsteps of other states, will soon require public institutions of higher education to make the OER status of courses visible to students when they register. It therefore makes sense for CSU-Pueblo to be collecting this information and setting up mechanisms to keep it up-to-date and to make it public.

We have funding from the first year of state OER grants, and have every reason to expect we will get funding again in years two and three of that program, if campus efforts continue and are successful.

Additionally, there are rumors that Governor Polis is perhaps interested in starting another program to encourage "zero textbook cost" [ZTC] degree pathways at public institutions of higher education in the state. While it is very difficult to achieve such ZTC degrees²³, a public affirmation of the DOER goal for CSU-Pueblo goal would commit to an unusual alternate approach and likely attract considerable state-wide (and perhaps even nation-wide) attention and approbation.

²²e.g., <https://youtu.be/d2-dPq-3Amg> and <https://youtu.be/LAdo2kc7srs>

²³and actually of unclear benefit, since they tend to consist of a particularly inflexible path through a degree program where the texts are all guaranteed to be OER

DOER IMPLEMENTATION AT CSU-PUEBLO

For the above reasons among others, we propose CSU-Pueblo immediately take the following steps:

- (1) Issue a “CSU-Pueblo as a DOER Campus” proclamation – see draft, below.
- (2) Give the PuebloOER Committee some more formal existence – perhaps it could be jointly recognized by, and report to, the Faculty Senate and the Director of Undergraduate Education.
- (3) Appoint an OER Coordinator – there is a salary budgeted in the second year of BoG-supported Vision activities for this position, but we cannot afford to wait that long. The position could be unfunded in its first year, but needs to exist for example to supervise and organize the remaining activities below.
- (4) Hire a OER instructional designer/technologist – there is is BoG funding for this position starting in the first year of the Vision 2028 implementation.
- (5) Hire an administrative assistant and/or one or more student workers to help with data collection, organization of trainings, maintenance of OER website, *etc.*
- (6) Start a process, in collaboration with our Faculty Senate, to figure out how to make some concrete benefit in the promotion and tenure process for those who use and create OER.
- (7) Start a process, in collaboration with our IT Department, to figure out how we can host OER IT services – such as, *e.g.*, free online homework systems – consistent with our current IT infrastructure and processes.
- (8) Continue PressBooks hosting contracting for the foreseeable future.
- (9) Develop a process whereby up-to-date OER use status can be determined for all classes and posted in a public way.
- (10) Do active PR/marketing for CSU-Pueblo based on this DOER initiative.
- (11) Support continuing professional development to make OER use and creation easier for our faculty.
- (12) Build and maintain campus website with useful information and tools for users and creators of OER.
- (13) OER Coordinator and staff build a complete inventory of all texts and other educational resources being used in all classes on our campus.
- (14) OER Coordinator and staff start to approach instructors who are using non-OER resources with lists of OER alternatives and support for transitioning their classes. Repeat until all courses converted!

CSU-PUEBLO AS A DOER CAMPUS PROCLAMATION [DRAFT]

Open Educational Resources, 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.

OER have been shown to contribute to access, affordability, and academic quality of educational programs and for this reason we announce the goal that

CSU-Pueblo shall become a Default OER [DOER] campus by 2028.

That is, students at CSU-Pueblo should be able to expect that their classes will, by default, use OER.

This goal in no way is intended to reduce pedagogical academic freedom at CSU-Pueblo. Some classes will not be able to use OER for various reasons, best judged by the particular faculty, but wherever possible, support will be provided to move courses to OER.