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Open Textbooks: Access, Affordability, and Academic Success (2020)

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Open Textbooks: Access, Affordability, and Academic Success (2020)

Abstract

Concerned about the high cost of commercial textbooks? Open textbooks are full, real textbooks, used by many faculty across the country, and licensed to be freely used, edited, reproduced, and distributed. Adopting an open textbook ensures that all students have immediate access to a zero-cost book and provides faculty 100% control over their learning materials. Attend this workshop to learn more about why open textbook adoption is on the rise, and hear from Gettysburg professors who made the switch after last year's workshop.

After the workshop, participants will be invited to write a short review of an open textbook they might assign in a course (please note: open textbooks are not available for all subjects). Your review will be shared in the Open Textbook Library so it may benefit other faculty considering open textbooks. Eligible workshop participants who write a review will receive a $200.00 stipend, payable upon receipt of the review.

This workshop is generously supported by the Johnson Center for Creative Teaching & Learning, the Associate Provost for Faculty Development, and Friends of Musselman Library.
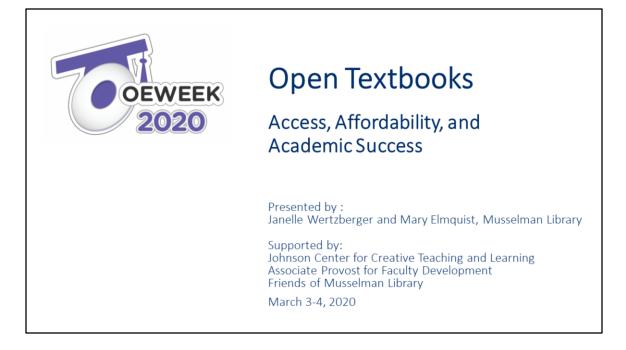
Keywords

open textbooks, OER, textbook affordability

Disciplines

Scholarly Communication

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Open Textbooks

Access, Affordability, and Academic Success

Presented by :
Janelle Wertzberger and Mary Elmquist, Musselman Library

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March 3-4, 2020
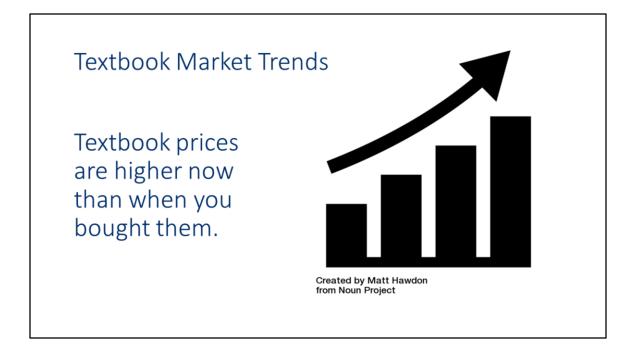
Happy Open Education Week! [introductions]

Some of you have heard us talk about textbook costs and textbook affordability in other venues. Textbook affordability is a big umbrella, and today we're going to focus on a smaller topic that lives under that umbrella: open textbooks, or Open Educational Resources (OER). By the end of the session, you should:
- Be familiar with textbook market trends and how they affect the student experience
- Understand the benefits that that both learners and teachers can get from using OER
- Feel empowered to choose OER as a strategy to improve teaching and learning

Today:

- Textbook market trends and impact on students
- An alternative: Open Educational Resources
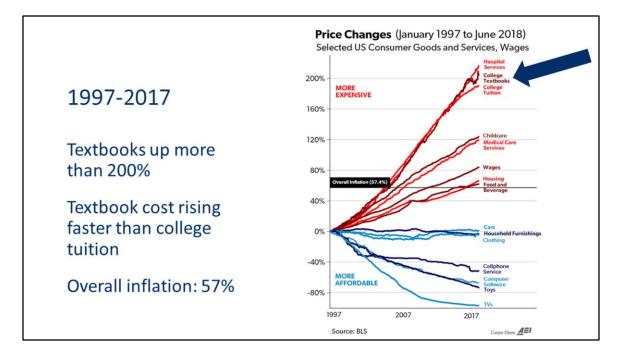- Benefits of OER for learners
- Benefits for teachers
- Choosing open

Here's a quick overview of what we'll cover today –
- Textbook market trends – which are changing swiftly
- Open Educational Resources as a way to sidestep the effects of that market
- Benefits of OER for learners, and pedagogical benefits for teachers
- Some practical tips on how to consider using OER, and how to choose an open textbook

Let's start with textbooks. Simply put, textbook prices are definitely higher now than when you last bought them. If you haven't looked up your own books on the bookstore website, I encourage you to do that. Your favorite book may have inflated a bit since you last checked, or perhaps it came out with a new edition you weren't aware of.
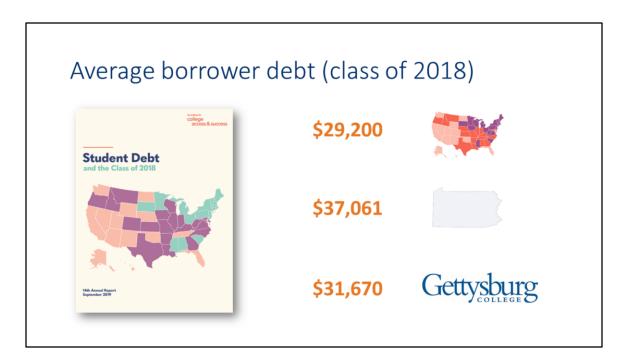
Know what your books cost. But also know that what you think is a reasonable price may differ from what students think is reasonable. We'll get more into that later. For now, I'd like you each to think how much students should spend, per course, and hold that in your mind (or jot it down).

These data from the Bureau of Labor Statistics show how prices have changed in the past 20 years. Note that college textbooks and college tuition are way up top – the only thing that tops them is hospital services. Inflation over this time period has been about 57%, but textbook prices are up more than 200%.

As tuition rises, so does student debt… and it's important to look at debt as we consider the context in which students make decisions about textbooks.

Source: https://www.aei.org/publication/the-chart-of-the-century-makes-the-rounds-at-the-federal-reserve/

Here's what we know about student debt (which, of course, includes debt related to textbooks). This information comes from The Institute for College Access & Success

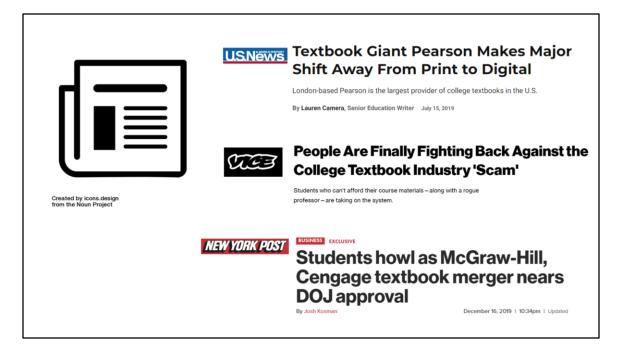Student debt is high – record high. The national average borrower debt for the Class of 2018 was $29,200.

We also know that Pennsylvania is a high-debt state, with average borrower debt of $37,061. No state has higher student loan debt except Connecticut.

What about our students? The good news is that the Gettysburg student average debt is lower than the state average, but it's still higher than the national average.

What else do we know about students and loans? Anecdotally, we know that students are becoming more skittish about taking out loans, and they avoid it when they can. They have to pay the tuition bill to stay enrolled in classes… but guess what they don't have to pay for? Textbooks. This is a bill that comes on the heels of lots of other bills, and sometimes there's just no money left. We also hear that students on financial aid often refuse the "last dollar" aid that should cover incidentals like textbooks, because the last dollar aid comes in the form of an unsubsidized federal loan, and they don't want to borrow money that accrues interest before they even graduate. Or maybe last dollar aid comes in the form of a work-study job, so they haven't earned the money at the start of the semester.

U.S. average debt: $29,200; Proportion of students with debt: 65%
PA average debt: $37,061; Proportion of students with debt: 67%
Gettysburg College average debt: $31,670; Proportion of students with debt: 64%

Data about student debt is available online from The Institute for College Access & Success -
https://ticas.org/our-work/student-debt/
Source: https://ticas.org/interactive-map/

Textbook Giant Pearson Makes Major Shift Away From Print to Digital

London-based Pearson is the largest provider of college textbooks in the U.S.

By **Lauren Camera**, Senior Education Writer   July 15, 2019

People Are Finally Fighting Back Against the College Textbook Industry 'Scam'

Students who can't afford their course materials – along with a rogue professor – are taking on the system.

BUSINESS   EXCLUSIVE

Students howl as McGraw-Hill, Cengage textbook merger nears DOJ approval

By Josh Kosman   December 16, 2019 | 10:34pm | Updated

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from the Noun Project

In addition to skyrocketing prices, there are other trends coming out of the textbook publishing industry that are framed as affordability solutions for students. But things are not always as simple as they seem. Here are some recent headlines.

Textbook publisher Pearson announced that they will update all U.S. titles in digital format ONLY. From Pearson's perspective, this move will provide more current information to students at a lower price. From the perspective of professors and students, it means print editions are no longer available for most titles - despite print being a format preference of some students. In the student textbook survey we conducted with Gettysburg students last fall, 86% of respondents preferred print books. It's also important to recognize that all digital books means that students can't sell and buy used books, as digital materials cannot be resold in the U.S. Doing digital completely removes the option of buying a used book or reselling a used book.
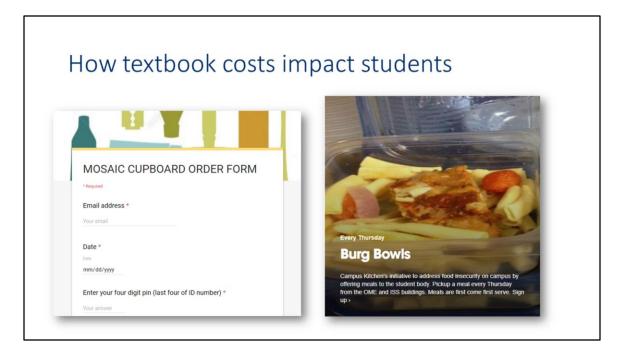
Continuing the theme of selling back books and buying used books… Perhaps you've heard of a lawsuit in which independent college bookstores are suing a college for using an "inclusive access" program, which is a program in which students enrolled in a course are automatically billed for digital textbooks. From the publisher's perspective, it's good for students and teachers when students have the assigned

course materials on the first day of class. From the student perspective, this type of model removes their agency as consumers – they can't choose where to buy a book from, what format to buy, or whether to buy it at all. Maybe they want to share it, or use a library copy, rather than be billed for it. Just last week, a report came out about automatic textbook billing. Contracts between bookstores and institutions were investigated, and investigators found that many "failed to deliver real savings for students and reduced faculty and student choice." Source: https://uspirg.org/feature/usp/automatic-textbook-billing

And finally, McGraw-Hill and Cengage are planning to merge. Right now, each controls about 20% of the U.S. textbook market (Pearson has another 40%). This move would put 80% of all U.S. textbooks under two commercial entities, creating a duopoly. The reason many people object to this merger is that they believe it will lead to higher prices for students.

As you can see, it's a volatile time in the college textbook market with a lot of forces swirling around. Our students are caught up in those currents.

Headlines:
Source: https://www.usnews.com/news/education-news/articles/2019-07-15/textbook-giant-pearson-makes-major-shift-away-from-print-to-digital
Source: https://www.vice.com/en_us/article/pajze9/people-are-finally-fighting-back-against-the-college-textbook-industrys-scam
Source: https://nypost.com/2019/12/16/students-howl-as-mcgraw-hill-pearson-textbook-merger-nears-doj-approval/

How textbook costs impact students

MOSAIC CUPBOARD ORDER FORM

* Required

Email address *

Your email

Date *

Date

mm/dd/yyyy

Enter your four digit pin (last four of ID number) *

Your answer

Every Thursday

Burg Bowls

Campus Kitchen's initiative to address food insecurity on campus by offering meals to the student body. Pickup a meal every Thursday from the OME and ISS buildings. Meals are first come first serve. Sign up ›

There are two main ways to consider how textbook costs impact our students. One is in a more holistic way that includes all parts of a student's life, not just the part that is related to a specific course. Often students need to choose between buying course materials and buying something else. But what is that "something else"?

We know that some students need help buying toiletries and other essential consumables – this is the "Mosaic Cupboard" form, via which our students can confidentially request personal items. If you were having trouble buying soap, or menstrual hygiene products, a book with a 3-figure price looks unattainable.

Burg Bowls is a new initiative that addresses food insecurity among students by providing meals. This program is from Campus Kitchen, which you may have heard of before. Campus Kitchen opened in 2007 as a way to rescue prepared foods and repackage them with additional foods that are delivered to senior citizens, SCCAP clients, and other people in need in the Gettysburg (town) community. This is the first time I've seen them distribute food to our own students. This was a big wakeup call for me. No longer are we just harvesting food waste and distributing it to needy people in our town – we're collecting it to give to our own students.

Have you looked at the meal plan options and requirements for our students? First year students are required to have an unlimited plan, but older students can choose from plans that have 20, 12, or 7 meals per week. This is an area where some students trim their overall college bill. You can't choose a lower tuition plan, exactly, but you can choose to buy less food up front. Then your disposable income is used for things like food, personal items, and books.
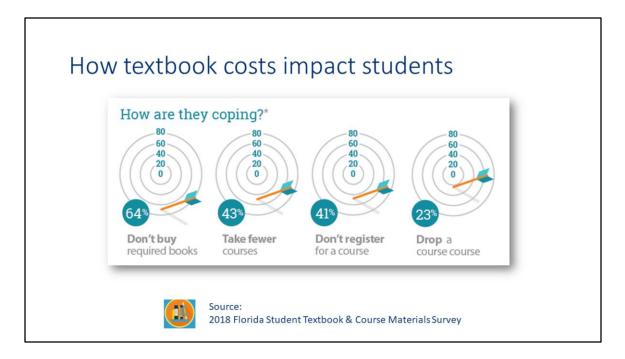

More about Mosaic Cupboard: http://www.gettysburg.edu/about/offices/college_life/ome/academic-support/

Mosaic Cupboard order form: https://docs.google.com/forms/d/e/1FAIpQLSe37k-ZXxVdt-qIDdOQ3ZLLaCtZ44VIyCQgw0hb8Yh-5gajHQ/viewform
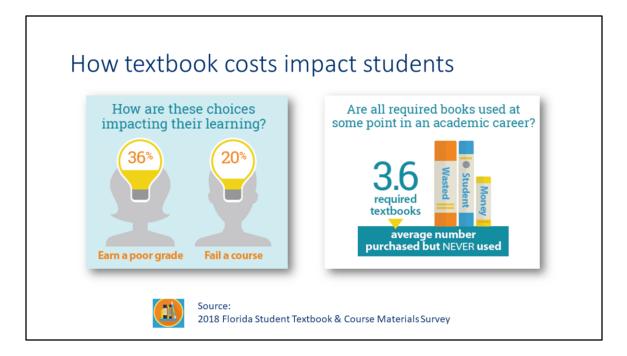
Burg Bowls signup form: https://docs.google.com/forms/d/e/1FAIpQLSfk9i_UNd7uJwmg40Dh07TenF0fDoYZ6UgjVyDAwhIAexCkvw/viewform

More about student need beyond Gettysburg: https://www.insightintodiversity.com/oregon-state-university-program-is-a-sustainable-model-for-feeding-students-in-need/ and https://www.chronicle.com/interactives/insecurity

How textbook costs impact students

How are they coping?*

64% Don't buy required books
43% Take fewer courses
41% Don't register for a course
23% Drop a course course

Source: 2018 Florida Student Textbook & Course Materials Survey

The other way textbook costs impact students is related to academic progress and success. If you don't have the learning materials, you're not going to learn as well or perform as well in the classroom. These data are from the latest version of the Florida Student Textbook & Course Materials Survey, done in 2018 (it was previously conducted in 2016, 2012, and 2010). The survey audience is 21,400 students from all of Florida's public higher education institutions, which admittedly includes institutions unlike ours. However, the textbook affordability community often cites these results because of the magnitude of the study. This shows how students COPE with high book prices.

Source: https://dlss.flvc.org/colleges-and-universities/research/textbooks

How textbook costs impact students

How are these choices impacting their learning?

36% Earn a poor grade

20% Fail a course

Are all required books used at some point in an academic career?

3.6 required textbooks

Wasted Student Money

average number purchased but NEVER used

Source:
2018 Florida Student Textbook & Course Materials Survey

Here are some survey results that get to the heart of what you do as faculty. Over a third of the Florida respondents felt they earned a poor grade because of the cost of materials, and 20% failed a course.

At the same time, students sounded off about how many books were required and purchased, yet never used. (Caveat: we don't know if "never used" means the professor never got to them, or readings were assigned but the students just didn't crack the book, or students didn't use the book because it wasn't necessary, due to content shared in lectures or in the LMS, perhaps.)

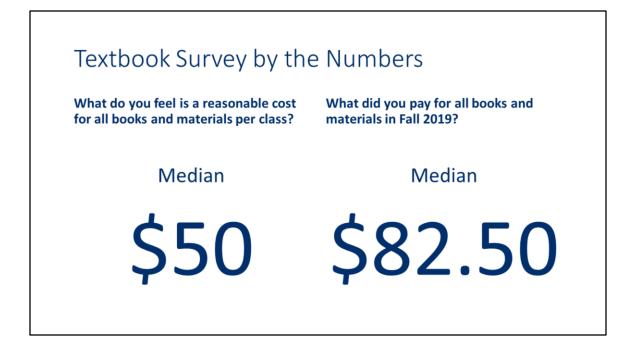https://dlss.flvc.org/colleges-and-universities/research/textbooks

Gettysburg College Student Textbook Survey

	All responses	First-gen	NOT First-gen	Pell Grant	NO Pell Grant
Share books with a classmate	16.4%	20.5%	13.7%	20.7%	14.7%
Only purchase some of the required books	15.8%	18.8%	15.0%	19.8%	14.7%
Check out from the library	11.6%	11.6%	11.3%	16.2%	10.4%
Struggle academically	14.6%	22.3%	11.1%	27.0%	8.7%

At last week's Friday Forum, we reported out about the results of our very own Student Textbook and Course Materials Survey. If you weren't able to make it, here are some of the highlights:

We looked at the way that students cope with textbook costs—the strategies they use to try to decrease the price they pay. We found that a lot of students who participated use the kinds of methods you might expect: renting books (both from the campus bookstore and off-campus sources) or buying and selling in the used marketplace. But we also saw some more drastic strategies, like sharing books with a classmate, checking out books from the library, and only purchasing some of their required books. These ways of coping were more likely to be used by first-generation students and especially by students who said they received Pell Grants over their peers who did not fall into those categories.

As a quick reminder: who are Pell students? The federal government says "students with exceptional financial need" are eligible for Pell, which is kind of vague. Other sources say students with family household income below $50,000/year are eligible, but most Pell grants go to students with family income under $20,000/year (source: https://www.scholarships.com/financial-aid/grants/federal-grants/)

When we asked about the effects of textbook costs, we found was that students in those same high-need groups were more likely to struggle academically due to the high costs of books. First-gen students were twice as likely to struggle as their non-first-gen counterparts, and Pell grant recipients were more than *three times* more likely than non-Pell respondents to face academic struggles.

A few other things we wanted to mention, because we think you might find it helpful, even though we're talking about no-cost books today:

We asked students what they thought was a reasonable price for ALL the books and materials in one class. Our median answer was $50, which is pretty close to the commonly quoted number of $40 as the cutoff for a low-cost course. So this—$50— is what we're using when we talk about a student-defined reasonable cost of books and materials per class at Gettysburg.
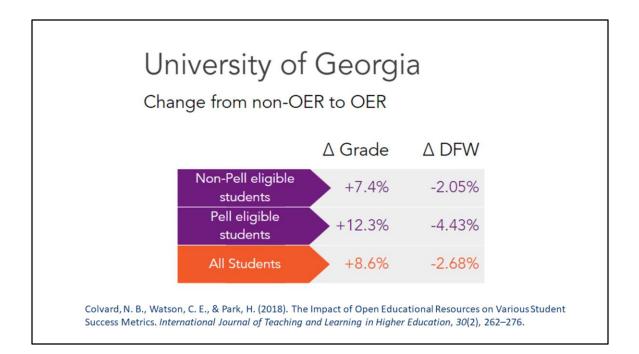
We also asked what they *paid* (so, after financial aid, discounts, and other money saving measures) for their books and other course materials for the entire Fall 2019 semester. Once we'd processed the data, we found that the median price paid was $330. Assuming that most students take 4 classes per semester…that's $82.50 per class, or more than half again as much as the reasonable cost they reported.

Hand off to Mary

So, with our students' situations in mind, let's switch gears to talk about what faculty can do. One of the options is what we're here to talk about today: open educational resources and open textbooks.
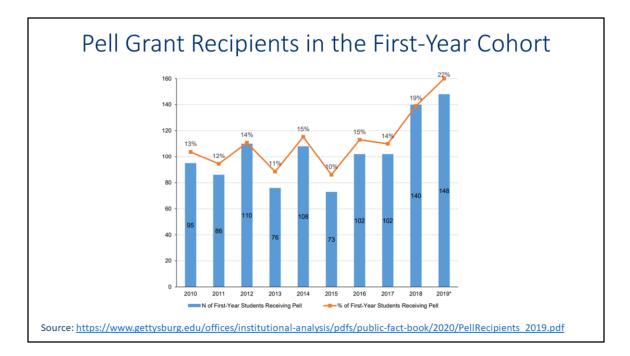
For many professors, the easiest and most lasting approach to get to a $0 course cost (or at least close to it) is to adopt an Open Educational Resource, or OER. OER are completely free to access online, which means you can use them as an EQUITY STRATEGY. Using OER ensures that all students have equal access to your learning materials at a price that can't be beat. There are other ways you may be able to REDUCE the cost of your course materials, but OER are absolutely zero cost. So, we're going to focus on those today as a best case scenario.

University of Georgia

Change from non-OER to OER

	Δ Grade	Δ DFW
Non-Pell eligible students	+7.4%	-2.05%
Pell eligible students	+12.3%	-4.43%
All Students	+8.6%	-2.68%

Colvard, N. B., Watson, C. E., & Park, H. (2018). The Impact of Open Educational Resources on Various Student Success Metrics. *International Journal of Teaching and Learning in Higher Education*, *30*(2), 262–276.

Research shows that shifting from a commercial textbook to OER can make a big difference. This 2018 study from the University of Georgia shows that while all students benefit from courses shifting from commercial textbooks to OER (with better grades and lower rates of Ds, Fs, and withdrawals), Pell-eligible students benefit the most. Remember, from our textbook survey: we found that Pell Grant recipients were three times more likely to struggle academically because of textbook costs over their non-Pell peers.

Students from households with this level of family income are among our most vulnerable. As we saw earlier, these are the students who are likely to struggle with buying a $100 or $200 book for one class (or six $15 books for one class).
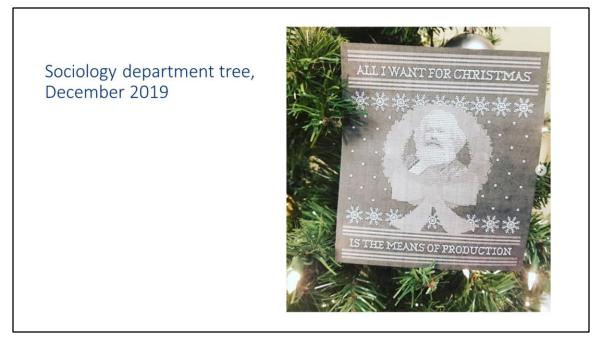
How many Pell students are in your classes?

13

Pell Grant Recipients in the First-Year Cohort

Source: https://www.gettysburg.edu/offices/institutional-analysis/pdfs/public-fact-book/2020/PellRecipients_2019.pdf

This graph is from the Gettysburg College Fact Book. In this academic year, 148 first-year students have Pell grants. That's 22% of the first year class.

In our entire student body, 18% of all students have Pell grants this year (according to our Financial Aid Director). Given the demographic and enrollment projections for higher education, this number is likely to go up in future years.

Teaching a zero-cost class, whether or not you use OER, can be expected to positively impact student learning in our community.

Sociology department tree, December 2019

But the benefits of teaching with OER go beyond the idea of free textbooks for students. Adopting OER can also be a SUSTAINABILITY STRATEGY for instructors. Many faculty switch to OER because they see little value in the updates commercial publishers push out with each new edition, especially in the context of price increases. Or they know information or representation is missing from commercial textbooks. Or they want to customize their course by relying less on a single commercial text and bringing in additional materials. They want the academic freedom to fully control their readings and other learning materials, to change them how and when *they* want to change them, rather than when commercial publishers do. They want to control the means of production.

OER:
Free + Permissions

Permissions =
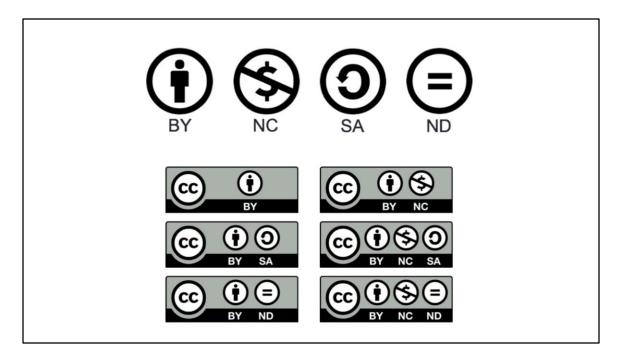**copy, share, edit,**
mix, keep, use

In short, many faculty switch to OER for the pedagogical benefits. In addition to being free to read and use, OER are free of most copyright restrictions, meaning it's legal to copy, share, edit, mix, keep and use those materials.

Note that "copy" means you can print and reproduce—some learners prefer print materials and open textbooks *can* be printed! (In fact, in our own textbook survey conducted last fall, 86% of student respondents said their preferred format is print.) Some providers have created high-quality, low-cost print editions like the ones we brought along. Even if there isn't one of these for your course, you can print a book yourself or have the campus print shop make copies—completely legally.

"Edit" and "mix" mean that you can alter the materials to suit the way you organize your course and what you cover. You can add, subtract, and rearrange chapters, images—anything in the material. You can make a textbook that matches the way you teach your course and the way your students learn.

What makes all this sharing and remixing possible is open licensing. The one most commonly used license in OER is the Creative Commons license. This logo may look familiar to you.
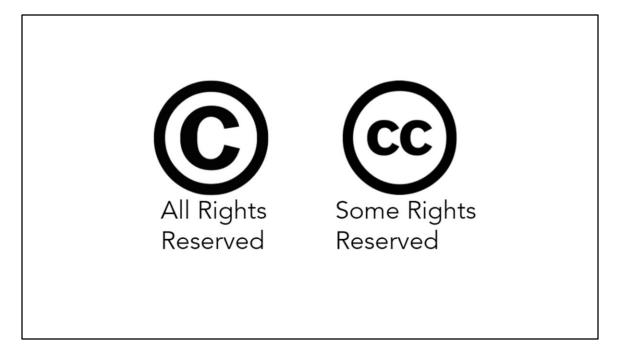
These are the elements of a Creative Commons license.

BY means "attribution" – credit your source
NC is "noncommercial" – it means you can use this material to make a new thing as long as you're not profiting from your new thing (you can sell it as long as you don't profit—e.g., the campus print shop can charge for copies; they just can't mark them up.)
SA is "share alike" – it means you can use this material to make a new thing as long as you license your new thing with a "SA" license. I think of this as a "pay it forward" license.
ND is "no derivatives" – it means you can use this material to make a new thing as long as you don't revise this material. You can supplement it, but you can't change it.
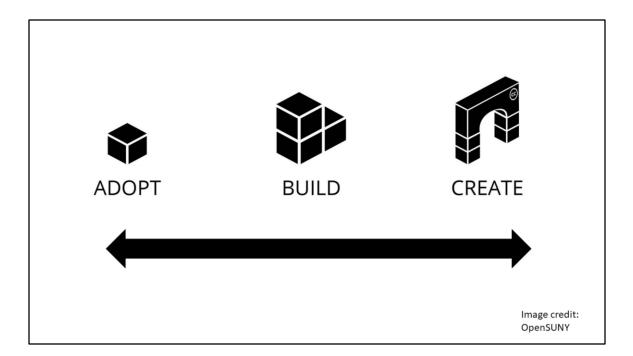
The elements can be mixed and matched to create six different licenses. The CC-BY license is the most open, and the CC-BY NC ND is the most closed. Many people working in open education argue that the bottom two licenses (containing ND) are actually NOT open, because they don't allow derivatives. In fact, the Open Textbook Library now will not add new books that don't allow derivatives… which is great for you, because you know anything you find there can be edited and changed as you need!

These licenses are all over teaching materials on the web. Now that you know what they are, you might start to notice them in some pretty varied places!

Just a quick note that even though the CC logo looks a bit like the regular copyright logo, a CC license does not replace or restrict copyright or the protections it gives to authors. These two things can exist side by side on the same work. CC licenses give authors a way to signal to downstream users what they can and cannot do with the work, without the users having to seek explicit permission from the creator. An author can retain their copyright AND openly license their work. (It almost sounds too good to be true!)

I hope it's becoming clear how beneficial CC-licensed materials can be to an instructor who is a mixer-and-matcher. Maybe you have a textbook but you don't use all of it. Maybe you'd rather teach it in a different order. Maybe you want to supplement it with other materials. Maybe you even created some of those other materials. If all those things had CC licenses on them, you could remix your own textbook and give it to your students. They could read it online or print it. You could even have our campus print shop reproduce and bind it, as CC licenses allow duplication.

ADOPT   BUILD   CREATE

This continuum shows the range of ways professors can engage with OER. The most straightforward action is to adopt an open textbook or OER, perhaps swapping it for a commercial textbook. That's what our emphasis is on today precisely because it's the easiest way to start using OER.
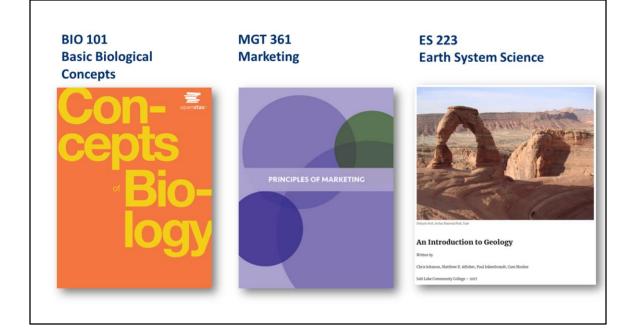
A next-level action is to adapt existing OER to your needs, perhaps by editing, or remixing, or a combination. You can build an OER with existing parts.
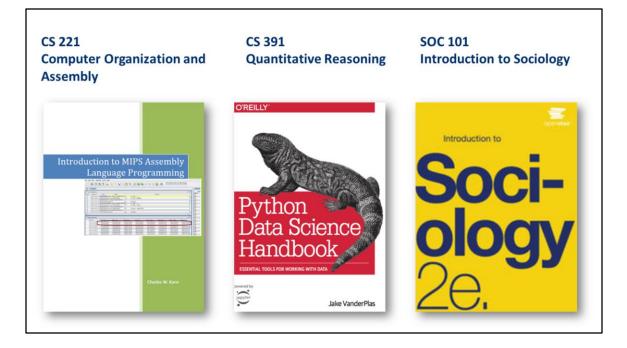
And finally, some teachers are motivated to write an OER that suits their needs and those of their students.

Again, we're focusing on adoption today—although some of you teach classes for which there is no existing OER to adopt, so I know you're thinking about whether it's possible to build what you need.
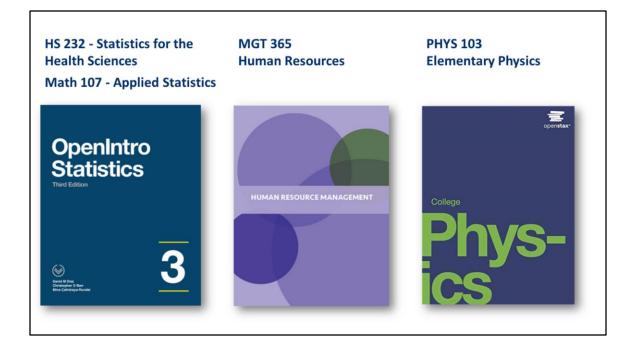
Many Gettysburg professors have already adopted open textbooks. So, let's take a look at some of them:
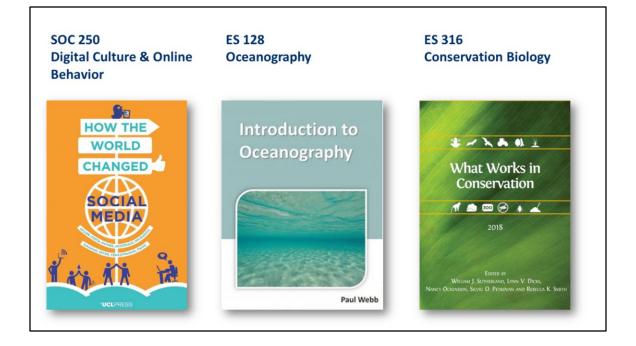

Image source: https://textbooks.opensuny.org/information-for-faculty/

**BIO 101
Basic Biological
Concepts**

**MGT 361
Marketing**

**ES 223
Earth System Science**

CS 221
Computer Organization and Assembly

Introduction to MIPS Assembly Language Programming

Charles W. Kann

CS 391
Quantitative Reasoning

O'REILLY®

Python Data Science Handbook

ESSENTIAL TOOLS FOR WORKING WITH DATA

powered by jupyter

Jake VanderPlas

SOC 101
Introduction to Sociology

Introduction to

Soci-ology 2e.

By the way, this first book was authored by a Gettysburg professor. He shares it in our open access institutional repository, The Cupola, and it's used by people all over the world.

HS 232 - Statistics for the Health Sciences

MGT 365 Human Resources

PHYS 103 Elementary Physics

Math 107 - Applied Statistics

SOC 250
Digital Culture & Online Behavior

ES 128
Oceanography

ES 316
Conservation Biology

Faculty perspective

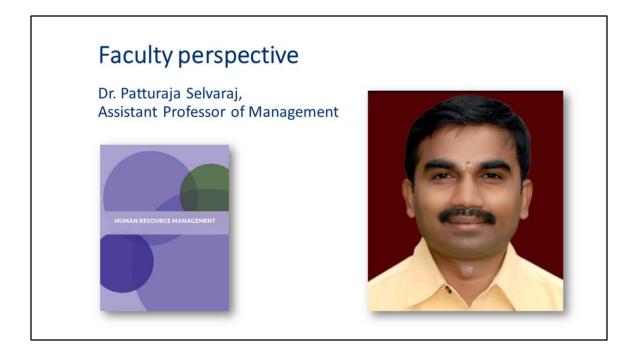Dr. Alecea Standlee,
Assistant Professor of Sociology

But don't take it from me! Alecea Standlee is here today to share a little bit about her experience using open textbooks in her classroom. She attended this same workshop last year and wrote a book review for the Open Textbook Library.

How the World Changed Social Media – used in SOC 250 Digital Culture & Online Behavior
Sociology 2e – used in SOC 103 Introduction to Sociology

Faculty perspective

Dr. Patturaja Selvaraj,
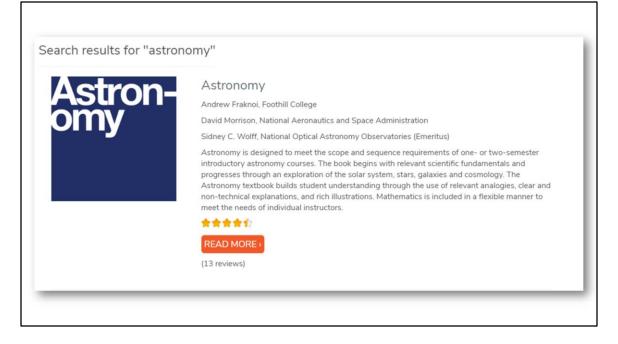Assistant Professor of Management

HUMAN RESOURCE MANAGEMENT

But don't take it from me! Patturaja Selvaraj is here today to share a little bit about his experience using open textbooks in her classroom. He attended this same workshop last year and wrote a book review for the Open Textbook Library.

Human Resource Management – used in MGT 365 Human Resources
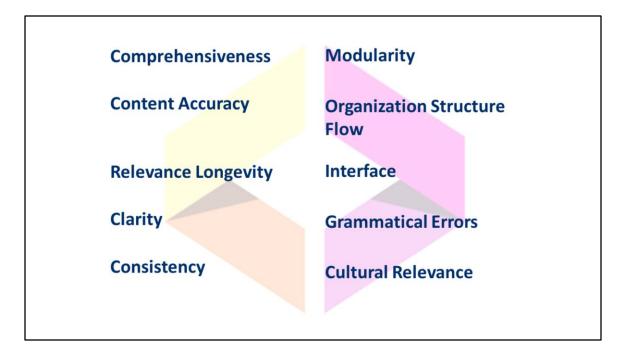
Finding OER

open.umn.edu/opentextbooks

Hopefully by now you're intrigued and want to know more about what OER might be a good fit for your courses and where to find them.

The tool we recommended you use when you registered for this session is the Open Textbook Library. It's based at the University of Minnesota and it collects open textbooks – only book-length resources that can support a full course with a single book. If you are looking to swap a commercial textbook for an open textbook, this is the first place I recommend to look for a title. It also includes reviews written by professors (including the 16 Gettysburg professors who wrote reviews last spring).

As an example: if I look for astronomy books, I can quickly see titles, authors, and brief descriptions, as well as the rating, which looks to be about 4.5 stars averaged over 13 reviews.

When I click through, I can see a table of contents, author information, links to the book, as well as the full content of those 13 reviews.

Comprehensiveness

Content Accuracy

Relevance Longevity

Clarity

Consistency

Modularity

Organization Structure Flow

Interface

Grammatical Errors

Cultural Relevance

The reviews all follow a rubric with these 10 criteria. These reviews are not the scholarly narratives you might find in peer-reviewed journals. They are fairly utilitarian and designed to be easy to write and use.

Of course, there are other places you can find open textbooks or Open Educational Resources (which, as a category, includes things that are smaller than a single textbook that supports an entire course). Here are a few.

I should also note that some OER will be findable in the new Barnes and Noble campus bookstore adoption portal, as well. (AIP – Adoption & Insights Portal) As I understand it, the administrative assistants complete much of the logistical work related to adoption reporting, but keep an eye out for more info about this portal—in addition to be a new place to browse for OER, it may also (as the name implies) give you some insights on things like the price of the textbooks you may be using already.

If you'd like to focus your time on evaluating potential course materials rather than hunting for them, outsource the search to a friendly librarian. Only you can decide if a source will support your course learning goals, but we can jump start that process by sending you a short list of titles to look at. We also might know about sources that are brand new, not well indexed on the web, or things that are in development.

With that, I'm going to hand it off to Janelle to tell you a little bit more about how the book review and stipend process works!

Book review/stipend

Is there a textbook in the Open Textbook Library that fits your class?

$200 incentive will be paid for:
1. Attending today's workshop, AND
2. Reviewing a textbook in the Open Textbook Library

Hand off to Janelle

So…. About that stipend opportunity that may have caught your eye. If you are here today, and you are a faculty member of any rank, you are eligible for the book review stipend.

How it works

1. You will receive an email with a link to the online review form. *The email will come from someone at the Open Textbook Network!*
2. Complete a concise review by April 15, 2020.
3. The review will be posted on the Open Textbook Library site under an open license.
4. Incentive will be paid.

Here's how it works:
You will receive an email from someone at the Open Textbook Network in Minnesota – not me! – so look out for that and try not to assume it's spam. I will provide the names and emails of everyone here today to OTN so they can coordinate the review process. They will send instructions and reminders. After the due date passes, they will let me know who completed the review so I can put the wheels in motion to pay the stipend.

The due date is 6 weeks out: April 15.

Thank you!

Questions? Email OER@gettysburg.edu

Slides: https://cupola.gettysburg.edu/librarypubs/131