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Open Education: The Moral, Business & Policy Case for OER

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Except where otherwise noted, this work is licensed under http://creativecommons.org/licenses/by/4.0 Why are we educators?



Children Reading Pratham Books and Akshara By Ryan Lobo http://www.flickr.com/photos/prathambooks/3291

# Affordances of Digital Things

# Cost of "Copy"

For one 250 page book:

• Copy by hand - \$1,000

• Copy by print on demand - \$4.90

• Copy by computer - \$0.00084

CC BY: David Wiley, Lumen

## Cost of "Distribute"

For one 250 page book:

- Distribute by mail \$5.20
  - \$0 with print-on-demand (2000+ copies)

• Distribute by internet - \$0.00072

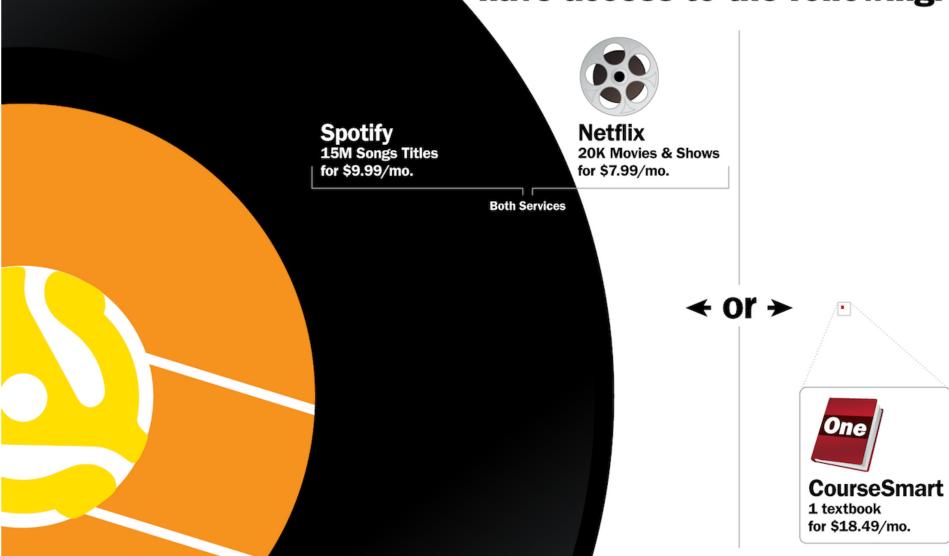
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# Copy and Distribute (and storage) are "Free"

This changes everything

CC BY: David Wiley, Lumen

# For ~\$20 per month, Students have access to the following:





Based on information from a blog post by David Wiley. URL: opencontent.org/blog/archives/2348

## **Open Educational Resources**

including: open textbooks



Nonprofit organization Free copyright licenses Founded in 2001 Operates worldwide



# Commons Commons



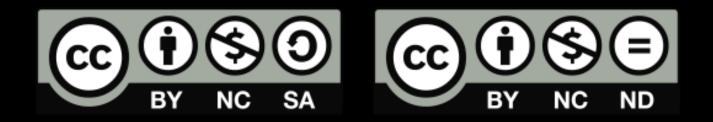
# Step 1: Choose Conditions

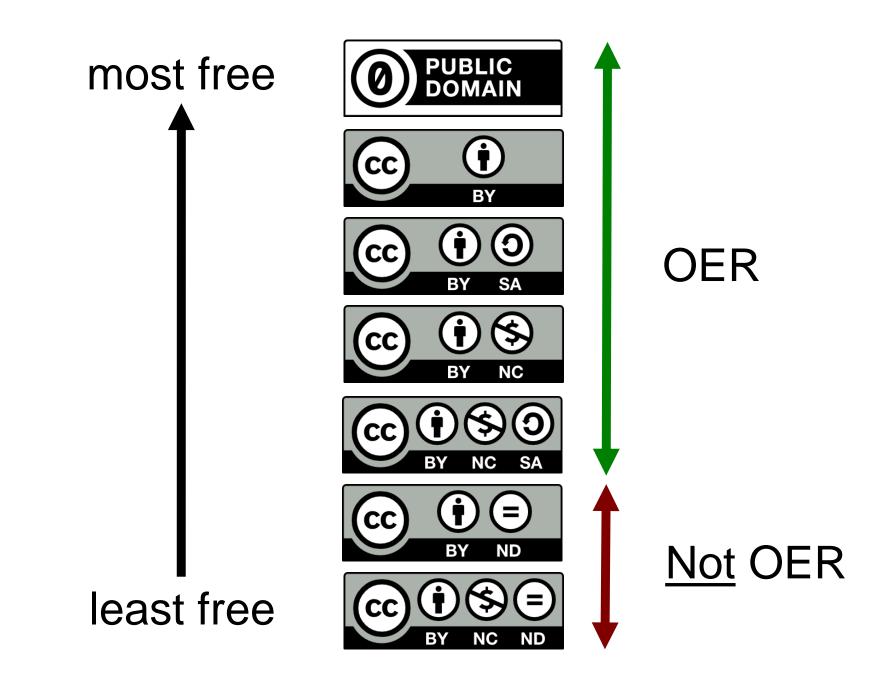


# Step 2: Receive a License

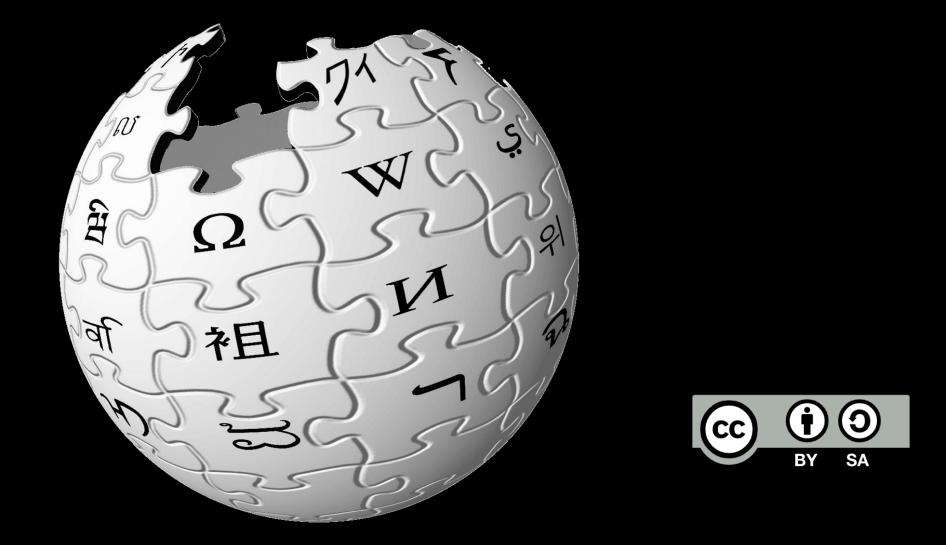








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| Syria             | Taiwan                  | Tanzania    | Thailand       | UK:<br>England<br>and<br>Wales | UK:<br>Scotland | Uganda   | Ukraine         | Unported          | Venezuela      | Vietnam        |              |



Wikipedia: Over 77,000 contributors working on over 22 million articles in 285 languages

### Explore / Creative Commons

Many Flickr users have chosen to offer their work under a Creative Commons license. and you can browse or search through content under each type of license.

### Here are some recently added bits and pieces:

### **Attribution License**







From ghcheng85 extremadura



From ghcheng85



From psoe extremadura

» 57,753,429 photos (See more)

### **Attribution-NoDerivs License**



From

**EWULibraries** 



From

**EWULibraries** 





From Green-ru





"Creative Commons is a non-profit that offers an alternative to full copyright." creativecommons.org

### Briefly...

Attribution means: You let others copy, distribute, display, and perform your copyrighted work - and derivative works based upon it - but only if they give you credit.



Noncommercial

You let others copy,

means:



distribute, display, and perform your work - and derivative works based upon it - but for noncommercial purposes only.

### **No Derivative Works** means:



You let others copy, distribute, display, and

perform only verbatim copies of your work, not derivative works based upon it.

### Share Alike means:



You allow others to distribute derivative works only under a license your work.



identical to the license that governs

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» 79,451,026 photos (See more)

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» 16,451,170 photos (See more)

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From















CERN releases photos under a Creative Commons License CC-

# Music















# bandcamp

# Journalism/Broadcast











ABC Australian Broadcasting Corporation





# Publishing

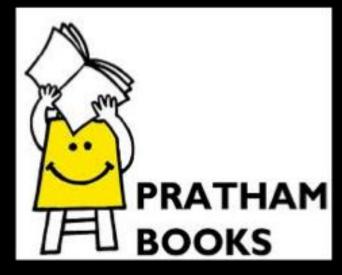
PeerJ

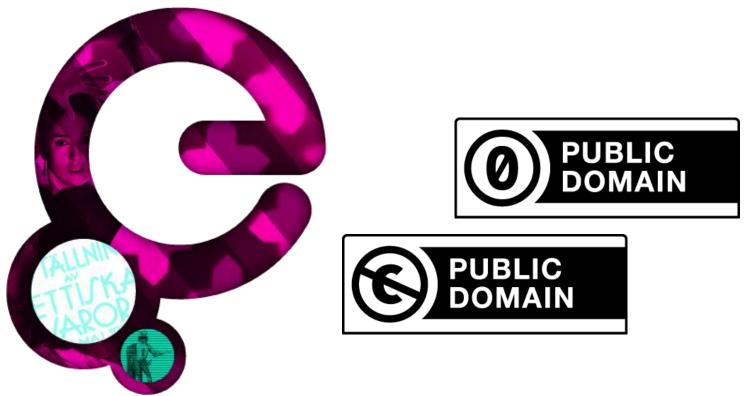












### **europeana** pomyśl o kulturze

Europeana: 30M metadata items under CC0, 5 million digital object with PDM and 2.8 million digital objects under one of the CC licenses



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Dow and MIT announce multivear collaboration for innovative educational outreach

Additional content to be added to MIT OpenCourseWare's Highlights for High School site CAMBRIDGE, MA - The Dow Che ...

Free course on Open Content Licensing for Educators The Open Content Licensing for Educators workshop is scheduled for 21 - 25 March 2011 and will be

### COURSES



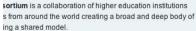




MEMBERS

### **Project Showcase**

Check out our new Project Showcase and see what great things our members are doing around the globe. Read more ...



### OCW in the News

Thu 03 Mar 2011 // THE OTHER Side of 50

#### Thousand Oaks Acorn

Wed 02 Mar 2011 // Dow gives \$2M to MIT for outreach fund Mass High Tech

Wed 02 Mar 2011 // Dow and MIT Announce Multiyear Collaboration for Innovative Educational Outreach **Business Wire** 

Sat 26 Feb 2011 // Turkish Academy of Sciences Launches MIT OpenCourseWare Translations PR.com

Fri 25 Feb 2011 // FGV Online e



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THE WILLIAM AND FLORA HEWLETT FOUNDATION

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# **Higher Ed**

# Study





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## **Utah Open Textbook Project**

Demonstrating the Cost Effectiveness and Educational Effectiveness of Open Textbooks



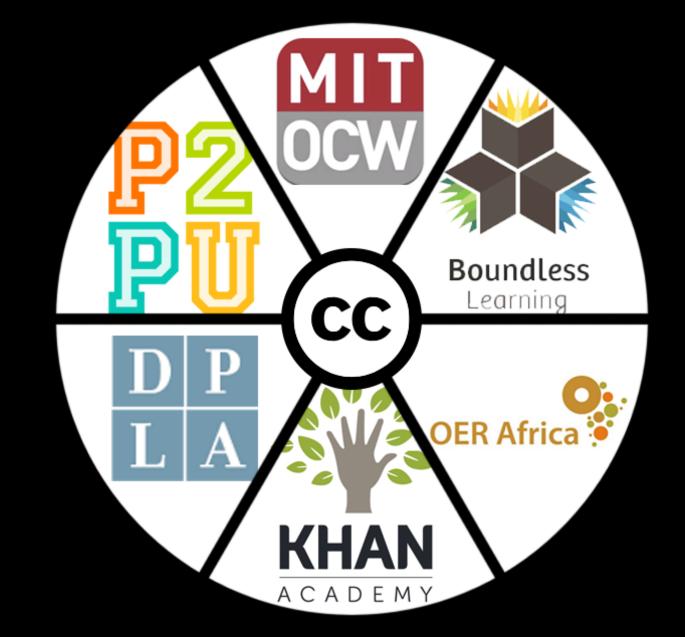
**CK-12** 



# Primary



Digital Learning Department Office of Superintendent of Public Instruction



## **Open Educational Resources (OER)**

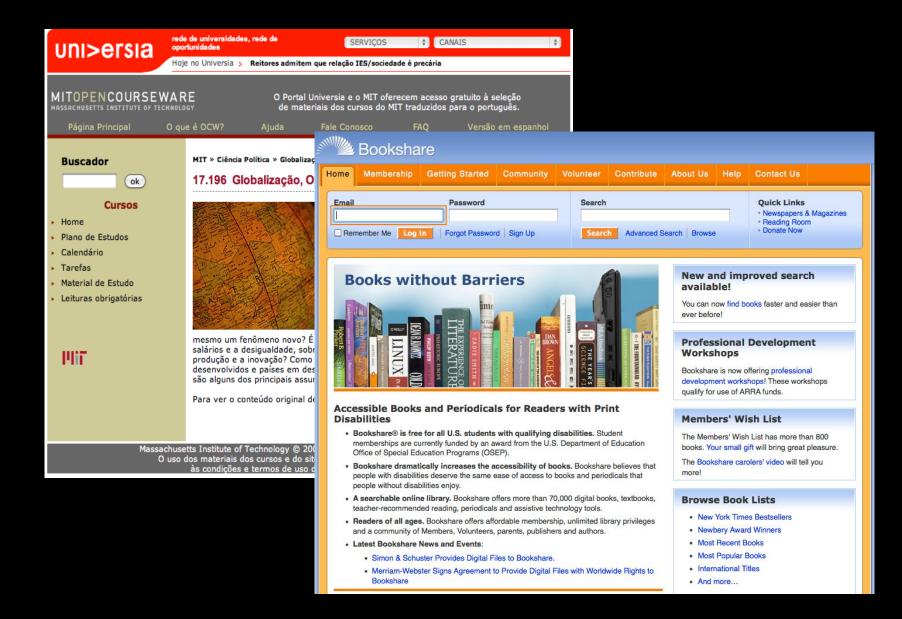
**OER** are teaching, learning, and research materials that reside in the public domain or have been released under an open license that permits their free use and re-purposing by others.



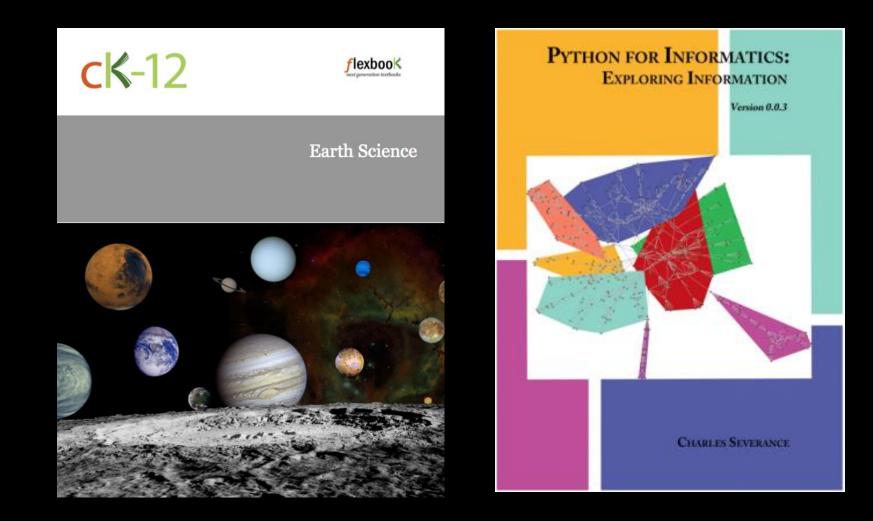


Image © from <u>http://www.cnn.com/2013/06/28/showbiz/heat-director-buddy-cop</u>

Adaptation by Nicole Allen, SPARC, CC BY



# Translations & Accessibility

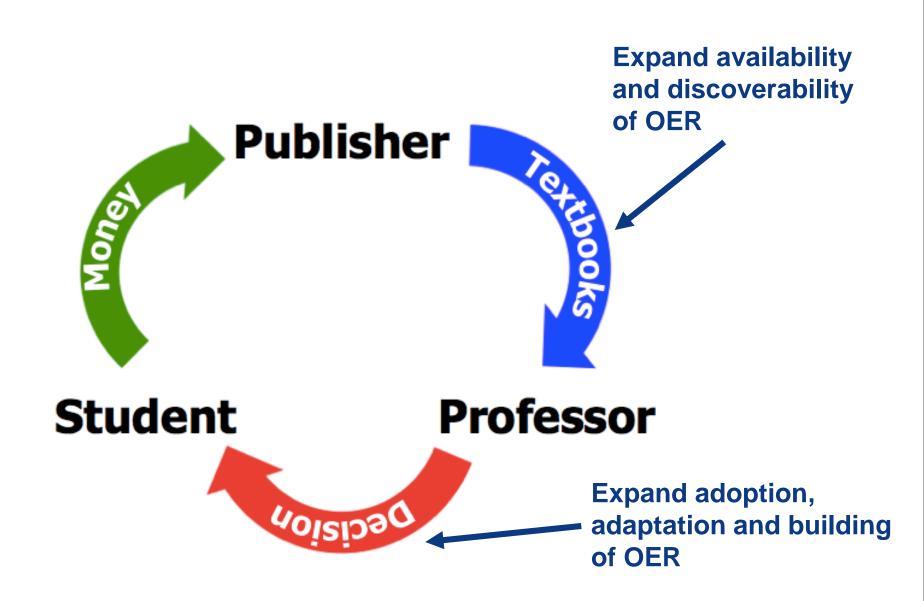


# **Customization & Affordability**

# / Open Textbooks



### (Article): University Business: College textbook forecast: Radical change ahead



Nicole Allen, SPARC: CC BY

#### A Growing Library

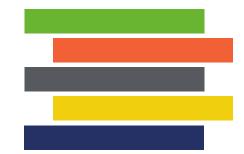






#### CC BY: OpenStax Colleg

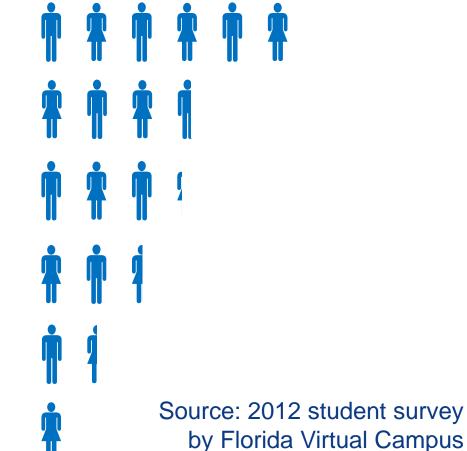
# \$30 MILLION+ SAVED!



#### open**stax**™ COLLEGE

CC BY: OpenStax College

## There is a direct relationship between textbook costs and student success



60%+ do not purchase textbooks at some point due to cost 50% take fewer courses due to textbook cost

31% choose not to register for a course due to textbook cost

23% regularly go without textbooks due to cost

14% have dropped a course due to textbook cost 10% have withdrawn from a course due to textbook cost

How are your students supposed to learn with materials they can't afford and are not buying?

#### What can you do?

#### The Open Textbook Initiative

#### University of Minnesota



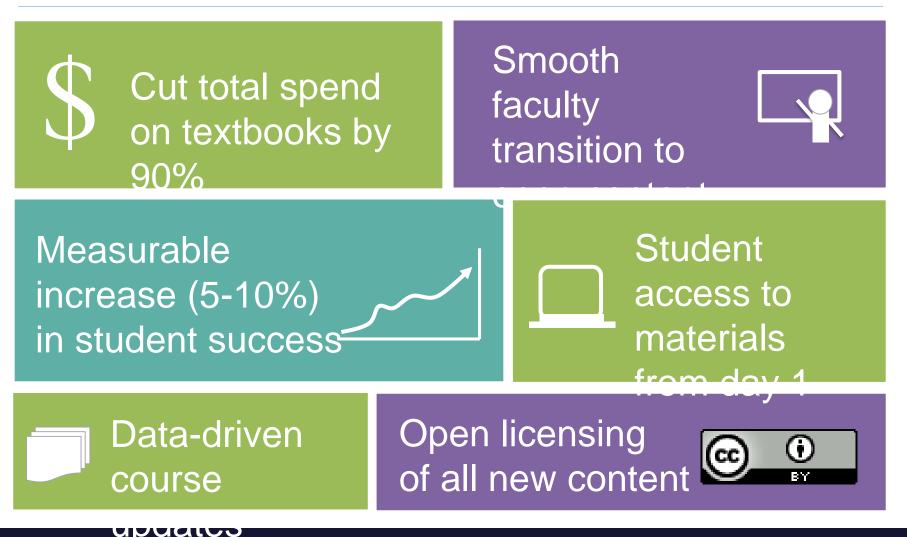


Received funding to provide faculty development on your campus:

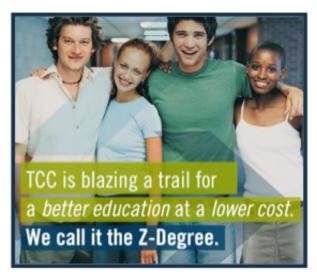
- The impacts of high textbook costs
- Open textbooks as a solution
- Stipends for faculty reviews of

open textbooks For more information: <u>http://z.umn.edu/opentextbooks</u>

#### **Typical Results with Lumen**



## Tidewater Community College is making college more affordable.



Z-DEGREE

The cost of college textbooks has risen 812% since 1978, more than the rates of inflation, health care, new home prices, and college tuition.

More and more, college students are unable to afford their textbooks, and as many as 70% of students have reported avoiding buying at least one textbook for their courses. Not surprisingly, these students do not do as well academically.

As of May 2013, if a TCC student purchased all of the textbooks required for a business administration degree, that student would spend \$3,678.95 on new books. While used textbooks may lower this price, their availability is, at best, uneven.

But the problem with printed textbooks goes beyond financial cost; textbooks "cost" students and teachers in other ways as well.

Because textbooks are frequently written for broad audiences in the hopes that they will fill the learning support needs and be adopted by large numbers of faculty and departments, they are filled with content and exercises that are superfluous to a specific course's learning outcomes. The cost here is in teaching efficiency and effectiveness.

#### All OER 2-Year Degree



# **CC-BY** licensed textbooks for 110 university courses

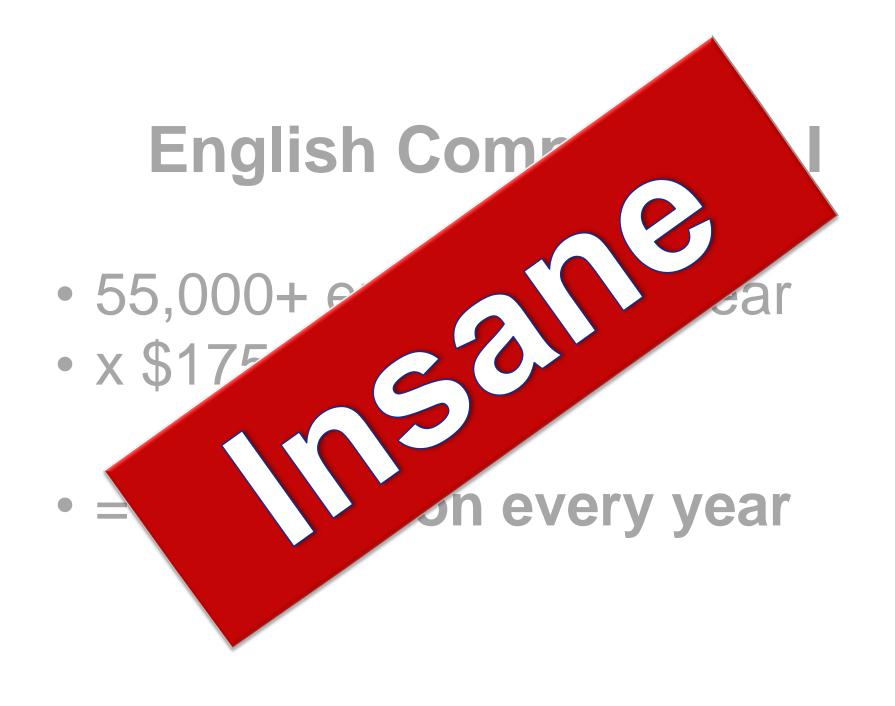
## WA Community Colleges:

- We must get rid of our "not invented here" attitude regarding others' content –move to: "proudly borrowed from there"
- Content is <u>not</u> a strategic advantage
- Nor can we (or our students) afford it

## **English Composition I**

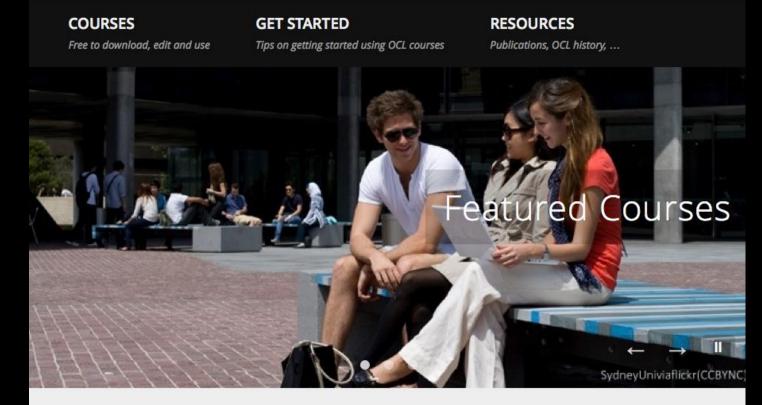
60,000+ enrollments / year
x \$175 textbook

• = \$10.5 Million every year



#### OPEN COURSE LIBRARY

#### download.remix.teach



#### Welcome to the Open Course Library

A collection of high quality, free-to-use courses that you can download and use for teaching. All content is stored in Google docs making it easy to access, browse and download.

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Funded by the Bill & Melinda Gates Foundation and the Washington State Legislature

Managed by the Washington State Board for Community and Technical Colleges





Does it make any sense WA State and K-12 Districts together spend \$130M/year

- on textbooks and the results are:
- Books are (on average) 7-10 years out of date
- Paper only / no digital versions.
- Students can't write / highlight in books
- Students can't keep books at end of year
- All rights reserved... teachers can't

## **Open Policy**

## Current research funding cycle does not maximize dissemination, economic efficiency, social impact











Government RFPs announced, research grants awarded

Scientific research conducted and papers written

Articles submitted to journals and peer review occurs

Acceptance in journals; authors transfer copyright to publishers



Slow scientific progress, poor return on public investment

\$7.

Articles published in mainly closed access journals

Public granted little or no reuse rights beyond access to read articles

Libraries subscribe or public pays per article fee to view on publisher's website

## Optimized research funding cycle maximizes public access, economic efficiency, social impact











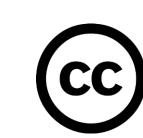
Government RFPs announced, open license requirements included, research grants awarded

Scientific research conducted and papers written

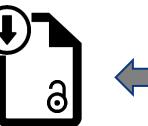


Acceptance in journals; public access policy ensures deposit in open repository











Accelerated scientific progress, optimal return on public investment Public granted full reuse rights under open licenses

Public can download articles from open access repository Articles published in traditional journals under embargo When the Marginal Cost of Sharing is \$0...

- educators have an ethical obligation to share

 governments need to get maximum ROI by requiring publicly funded resources be openly licensed resources

governments and educators need openly licensed content: (a) so you can revise & remix
(b) buying and maintaining is cheaper than leasing (w/time bombs)



White House issues directive supporting public access to publicly funded research



#### \$2 billion over four years CC BY required



#### California Community Colleges require Creative Commons Attribution for Chancellor's Office Grants & Contracts

Publicly funded resources should be openly licensed resources.



#### Institute for Open Leadership

1<sup>st</sup> Institute: January, 2015

#### Faculty: My asks of you:

(1) Before you order your textbook(s for next semester... please look at Open Textbooks (e.g., OpenStax) and other OER. (2) What OER can you reuse, revise remix from others? (3) License your works with CC!

## College Leadership: My ask of you:

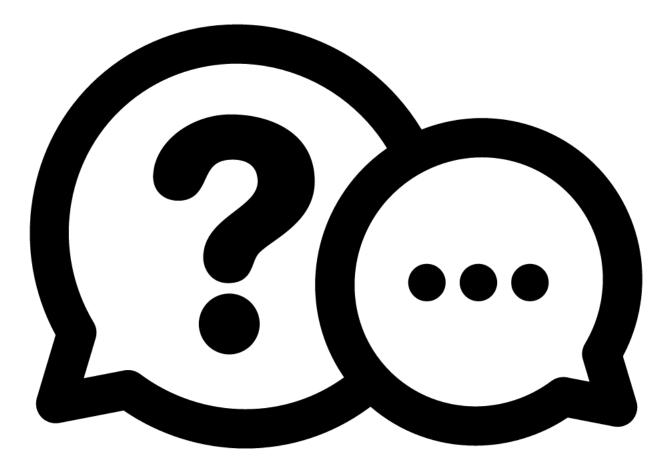
- Add OER / OA to strategic plans
- Open Policy on discretionary gran
- Support faculty: time/money/PD
- Make this a Univ-wide conversati
- Make heroes out of open leaders
- Track & report cost savings, KPIs
- CC licenses on your MOOCs

## the opposite of open isn't "closed"

### the opposite of open is "broken"

Attribution: John Wilbanks





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#### Dr. Cable Green Director of Global Learning cable@creativecommons.org twitter: @cgreen



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