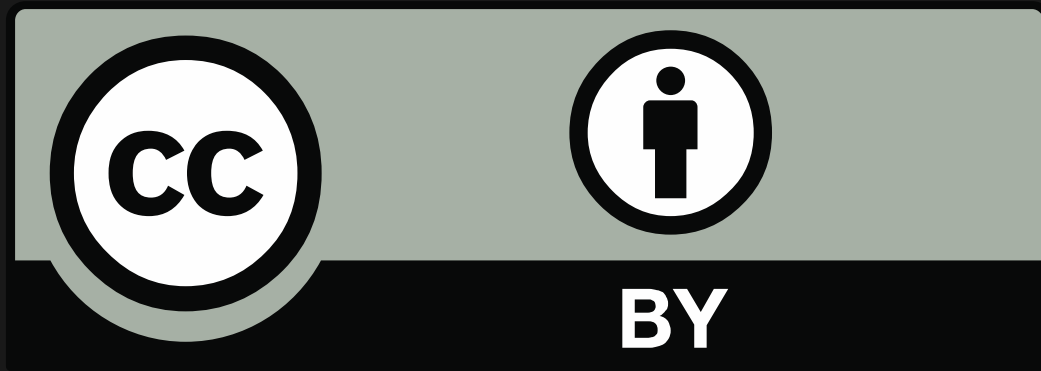




**Dr. Cable Green**  
**Director of Global Learning**  
**cable@creativecommons.org**  
**twitter: @cgreen**





Except where otherwise noted, this work is licensed under  
<http://creativecommons.org/licenses/by/4.0>

# Attribution:



Jennifer Wolfe

Partner, The Learning Accelerator

Karl Nelson

Director, Digital Learning, WA Office of Superintendent of Public Instruction

Barbara Soots

OER Program Manager, WA Office of Superintendent of Public Instruction

David Wiley

Co-Founder, Lumen Learning

Nicole Allen

Director of Open Education, SPARC

# Knowledge is Magical

can be given without being given away

# Physical Expressions Are Not

to give a book you must give it away

Simulation for the Social Scientist Gilbert and Troitzsch

GIBBONS FAIRWEATHER

# COMPUTER-BASED INSTRUCTION

Educational Technology Publications

1 LACOMPTÉ  
SCHENSUL

DESIGNING & CONDUCTING ETHNOGRAPHIC RESEARCH

2 SCHENSUL  
SCHENSUL  
LACOMPTÉ

ESSENTIAL ETHNOGRAPHIC METHODS

3 SCHENSUL • LACOMPTÉ  
MSTFIS • BORGHETTI

ENHANCED ETHNOGRAPHIC METHODS

4 SCHENSUL • LACOMPTÉ  
TROTTER • GROMLEY  
SINGER

MAPPING SOCIAL NETWORKS, SPATIAL DATA, & HIDDEN POPULATIONS

6 LACOMPTÉ • SCHENSUL  
LIEBES • SINGER

RESEARCHER ROLES & RESEARCH PARTNERSHIPS

7 SCHENSUL  
LACOMPTÉ  
& Reviewers

USING ETHNOGRAPHIC DATA

Conducting Research Surveys via E-Mail and the Web

Schneider et al.

RAND

Keigeluth  
Carr-Chellman  
INSTRUCTIONAL-DESIGN  
THEORIES AND MODELS  
Volume III  
MOUTON

Training Complex Cognitive Skills

van Merriënboer

EDUCATIONAL  
TECHNOLOGY  
PUBLICATIONS

Cognitive and Computational Approaches

Instructional Design

WEB-BASED LEARNING

Smith  
Ragan

THE IN THE PRIN

# When Expressions Are *Digital*

they also become magical

# An Indescribable Advance

the first time in human history



# Both Knowledge and Expressions

can be given without being given away

# Unprecedented Capacity

we can share as never before

# Unprecedented Capacity

we can *educate* as never before

# What Does “Share” Mean?

online it means copy and distribute

# Educational Sharing

also means adapting or editing

# 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

# 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

Copy and Distribute (and storage)  
are “Free”

This changes everything



# Except We Can't

© forbids copying, distributing, and editing

© Cancels the Possibilities

of digital media and the internet

Internet/Tech  
Enables



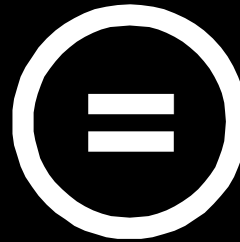
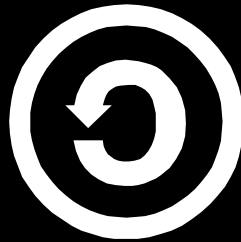
Copyright  
Forbids

what to do?



Nonprofit organization  
Free copyright licenses  
Founded in 2001  
Operates worldwide

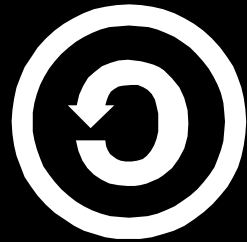
**Public  
Domain**



# Step 1: Choose Conditions



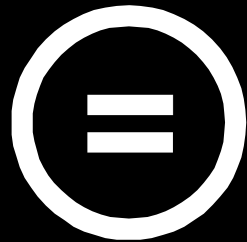
Attribution



ShareAlike



NonCommercial



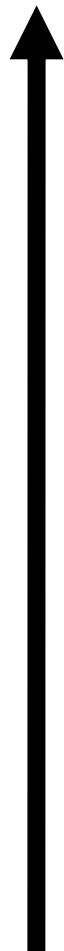
NoDerivatives

# Step 2: Receive a License

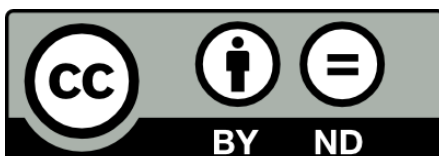
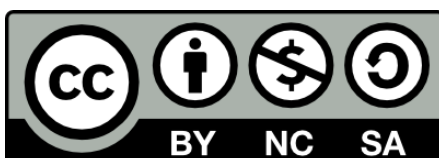
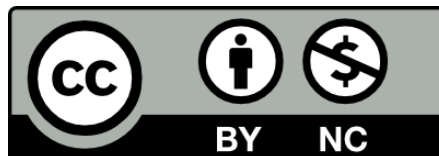
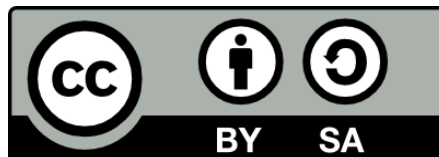




most free



least free

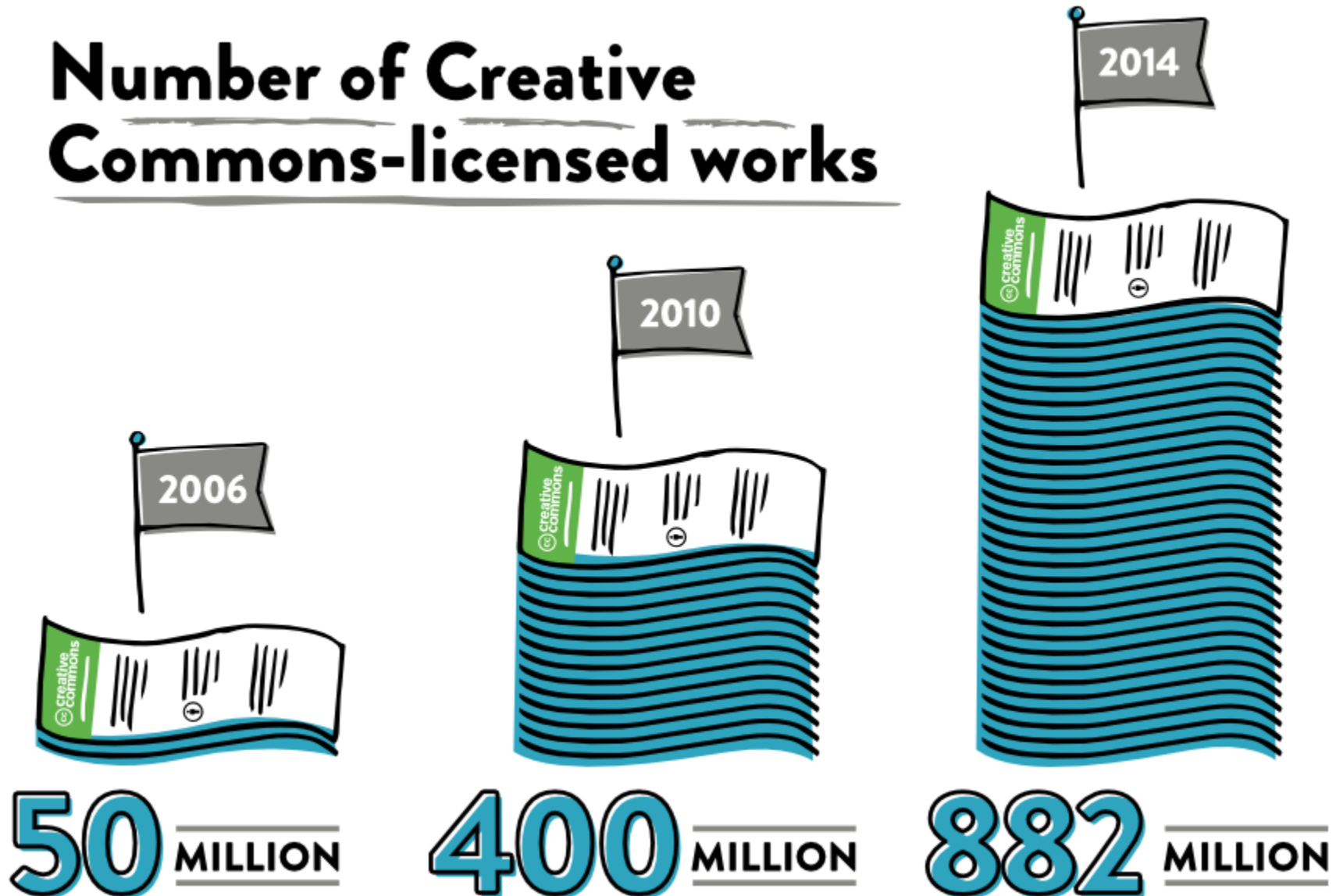


OER

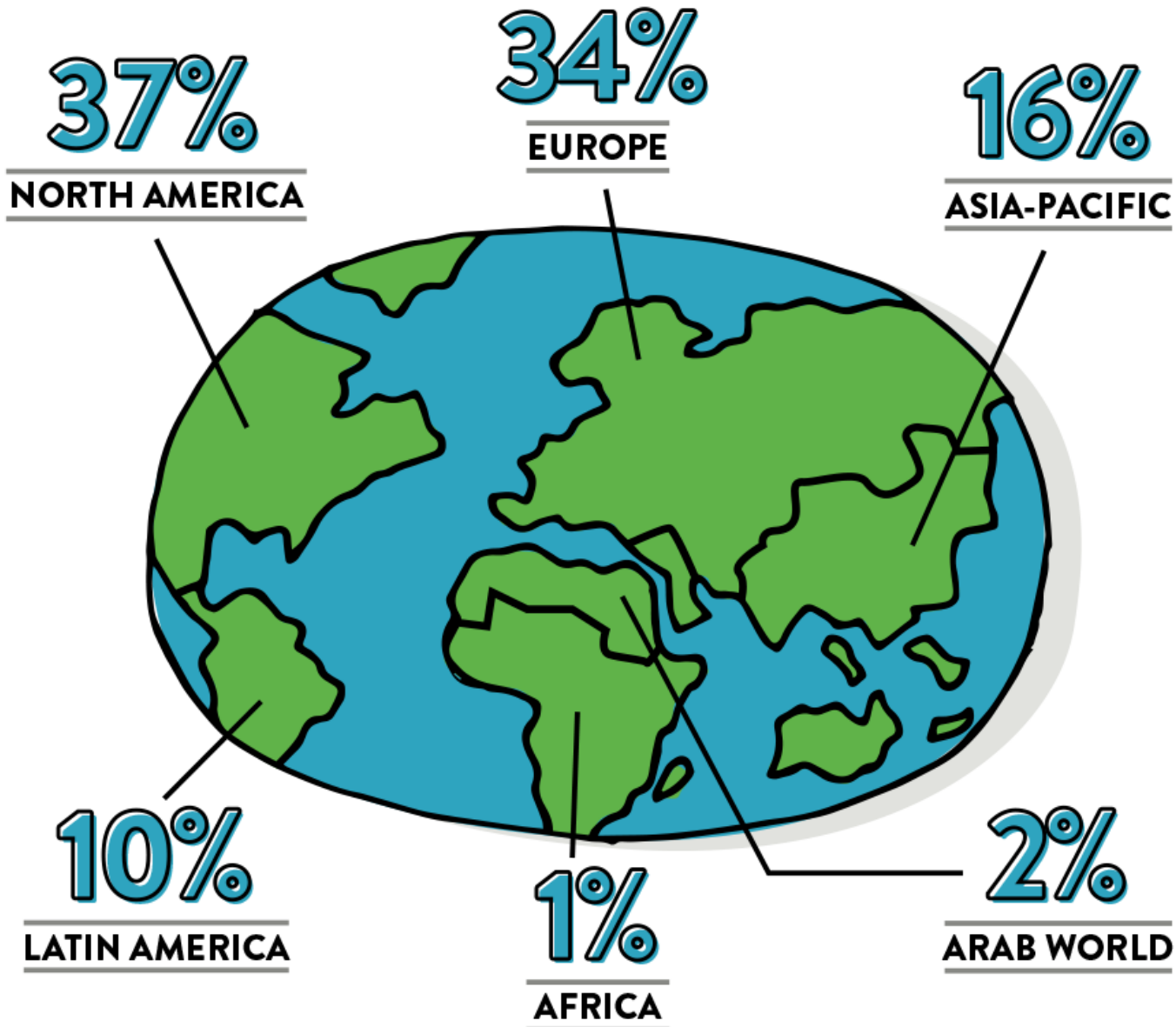


Not OER

# Number of Creative Commons-licensed works



# Where CC-licensed works are published





**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  
melissa.delzio



From ghcheng85



From psoe  
extremadura



From ghcheng85



From psoe  
extremadura

» 57,753,429 photos ([See more](#))

## Attribution-NoDerivs License



From  
EWULibraries



From  
EWULibraries



From  
EWULibraries



From Green-ru



From Green-ru

» 16,451,170 photos ([See more](#))

## Attribution-NonCommercial-NoDerivs License



From  
FamilyCreative



From  
FamilyCreative



From  
FamilyCreative



From  
FamilyCreative



From lonnydub

» 79,451,026 photos ([See more](#))



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

[creativecommons.org](http://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 means:

You let others copy, 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.

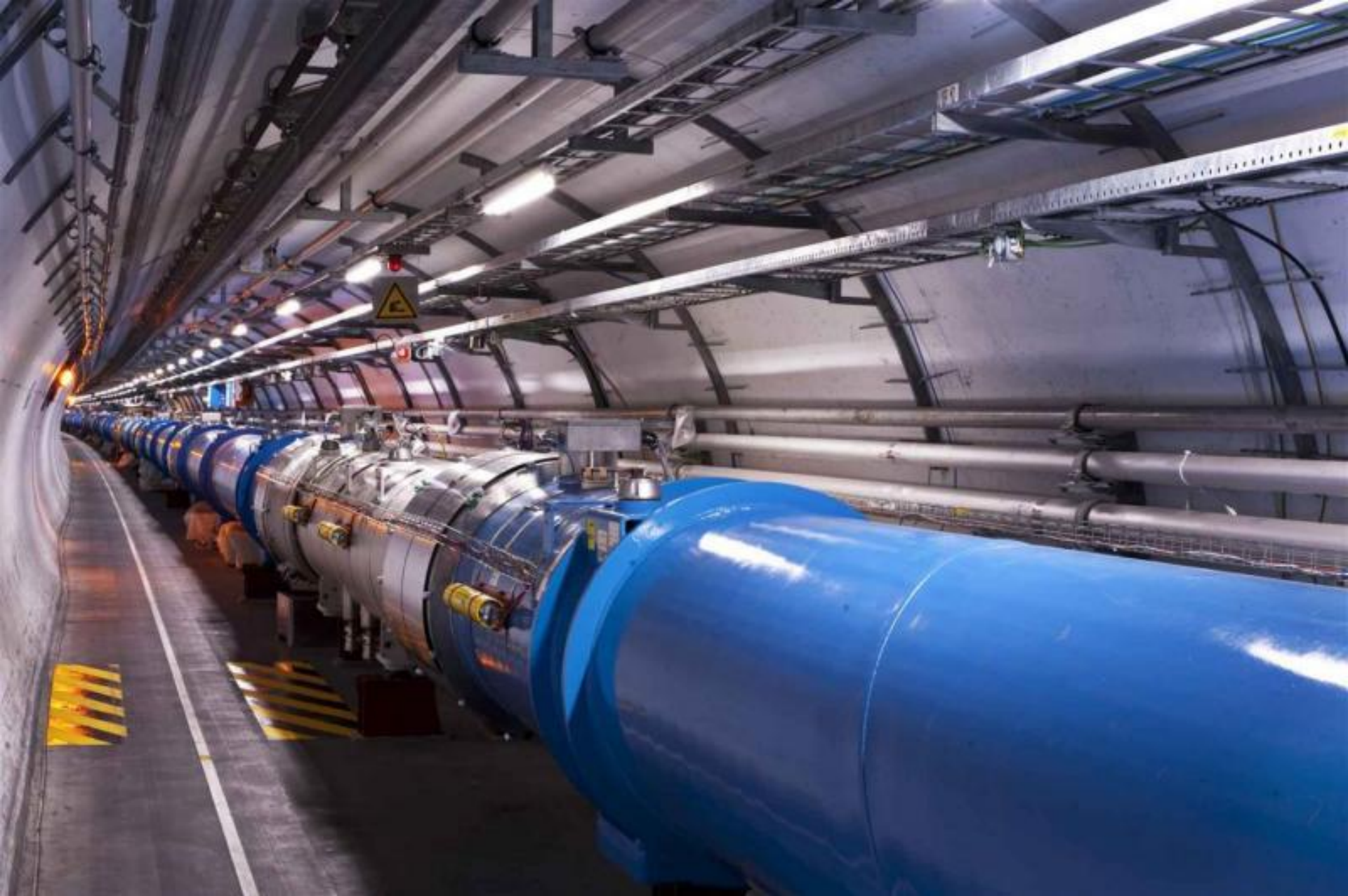


#### Share Alike means:

You allow others to distribute derivative works only under a license identical to the license that governs your work.



[Add a Creative Commons](#)



CERN releases photos under a Creative Commons License CC-BY-SA

You are here: **Home**

- Body & Mind
- Education
- Languages
- History & The Arts
- Money & Management
- Nature & Environment
- Science, Maths & Technology
- Society
- What's On
- About OpenLearn

**Women bishops: share your views**  
Share your views on women in religion as the Church of England votes against allowing female bishops [Read more >](#)

**Women bishops: share your views**

**Four born every second**

**Business Thinkers**  
Join the dots of the business world

COURSES

COMMUNITY

MEMBERS

**Project Showcase**  
Check out our new Project Showcase and see what great things our members are doing around the globe. [Read more ...](#)

[JOIN NOW](#)

## About OpenLearn



### Explore

Dip into insights from OU academics. Watch, listen, debate, play and discover more about your passions. [Read more >](#)



### Try

Take the next step with our LearningSpace - packed with thousands of hours of free OU course materials. [Read more >](#)



### Study

Turn your passion into a career changing qualification - study in depth with the UK's most flexible university. [Read more >](#)

sortium is a collaboration of higher education institutions from around the world creating a broad and deep body of ing a shared model.

## 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 // EGV Online e**

## Sponsors

THE WILLIAM AND FLORA  
**HEWLETT**  
FOUNDATION

### Sustaining Members

- ▶ African Virtual University
- ▶ China Open Resources for Education
- ▶ Japan OCW Consortium
- ▶ Johns Hopkins Bloomberg School of Public Health
- ▶ Korea OCW Consortium
- ▶ Massachusetts Institute of Technology
- ▶ Netease Information Technology (Beijing) Co., Ltd.
- ▶ Open University Netherlands
- ▶ Tecnológico de Monterrey
- ▶ TU Delft

27 28 29 30 31

## Search Courses

- Any Language -

**GO**

[Advanced Search](#)

## My Account

# Higher Ed

# Utah Open Textbook Project

Demonstrating the Cost Effectiveness and Educational Effectiveness of Open Textbooks



# Primary



# Open Educational Resources

**including:**

*open textbooks*

**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.

FREE

+

LEGAL RIGHTS:

REUSE

REVISE

REMIX

REDISTRIBUTE

RETAIN

Internet/Technology  
Enables



OER  
Permits

**Buscador**

**Cursos**

- Home
- Plano de Estudos
- Calendário
- Tarefas
- Material de Estudo
- Leituras obrigatórias



Massachusetts Institute of Technology © 200...  
O uso dos materiais dos cursos e do site... às condições e termos de uso d...

MIT » Ciência Política » Globalizaçã

17.196 Globalização, O



mesmo um fenômeno novo? É salários e a desigualdade, sobre produção e a inovação? Como desenvolvidos e países em des são alguns dos principais assu

Para ver o conteúdo original de

**Bookshare**

Home Membership Getting Started Community Volunteer Contribute About Us Help Contact Us

Email  Password

Remember Me  [Forgot Password](#) [Sign Up](#)

Search

[Advanced Search](#) [Browse](#)

**Quick Links**

- Newspapers & Magazines
- Reading Room
- Donate Now

**Books without Barriers**

**Accessible Books and Periodicals for Readers with Print Disabilities**

- Bookshare® is free for all U.S. students with qualifying disabilities.** Student memberships are currently funded by an award from the U.S. Department of Education Office of Special Education Programs (OSEP).
- Bookshare dramatically increases the accessibility of books.** Bookshare believes that people with disabilities deserve the same ease of access to books and periodicals that people without disabilities enjoy.
- A searchable online library.** Bookshare offers more than 70,000 digital books, textbooks, teacher-recommended reading, periodicals and assistive technology tools.
- Readers of all ages.** Bookshare offers affordable membership, unlimited library privileges and a community of Members, Volunteers, parents, publishers and authors.
- Latest Bookshare News and Events:**
  - Simon & Schuster Provides Digital Files to Bookshare.
  - Merriam-Webster Signs Agreement to Provide Digital Files with Worldwide Rights to Bookshare

**New and improved search available!**

You can now **find books** faster and easier than ever before!

**Professional Development Workshops**

Bookshare is now offering **professional development workshops!** These workshops qualify for use of ARRA funds.

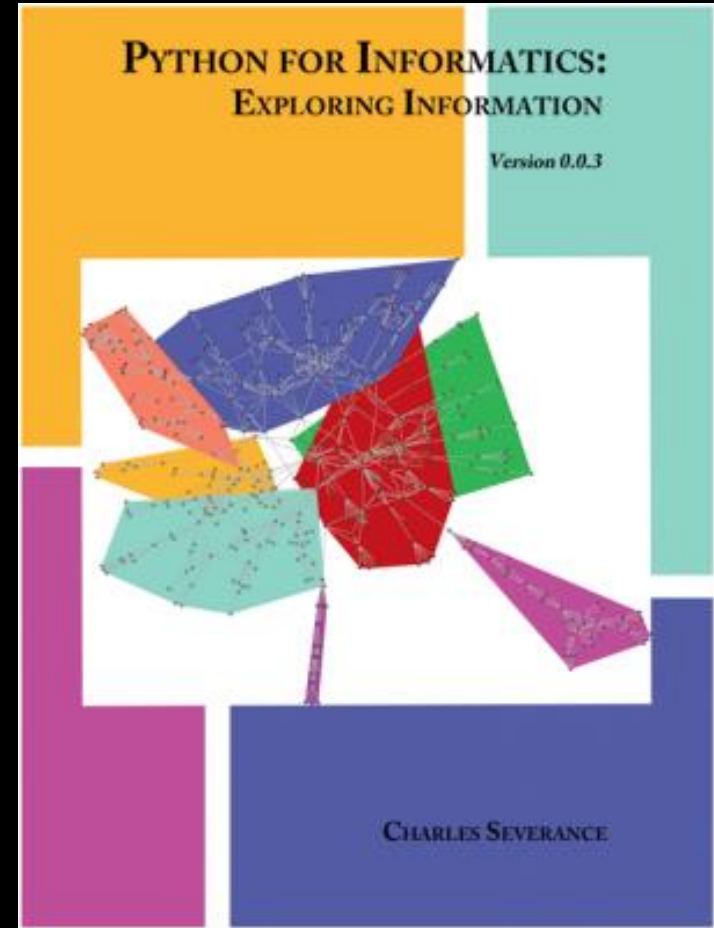
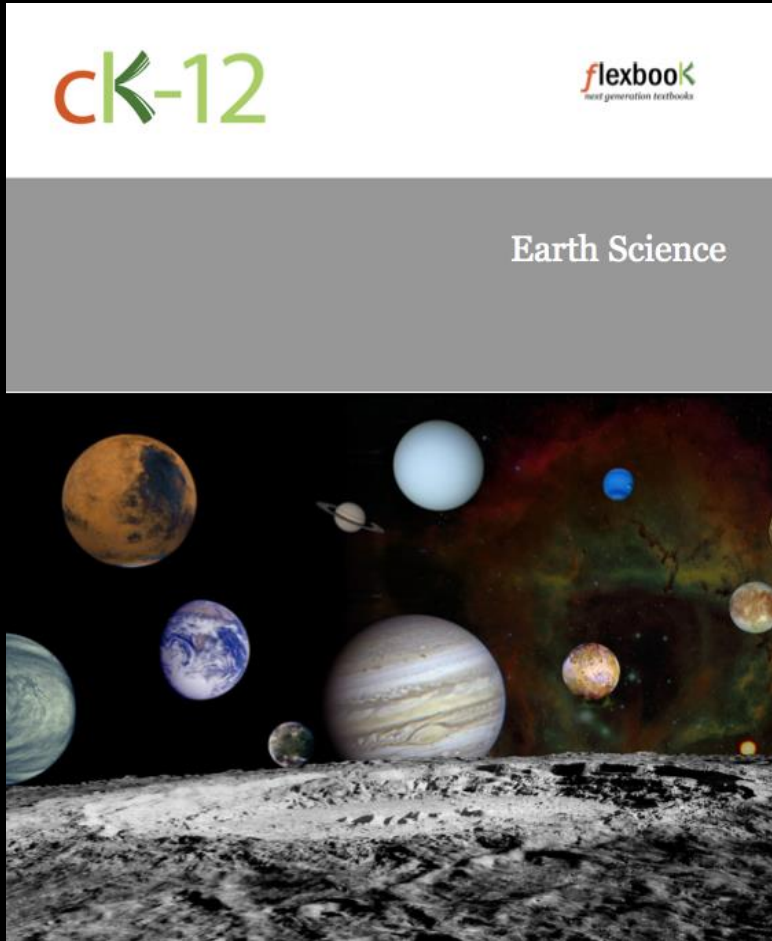
**Members' Wish List**

The Members' Wish List has more than 800 books. **Your small gift** will bring great pleasure. The **Bookshare carolers' video** will tell you more!

**Browse Book Lists**

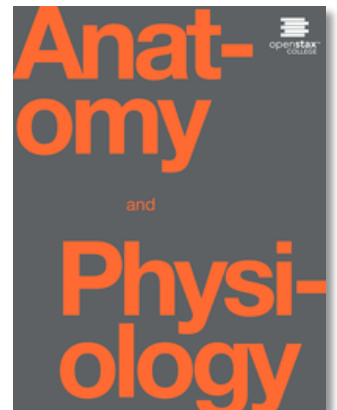
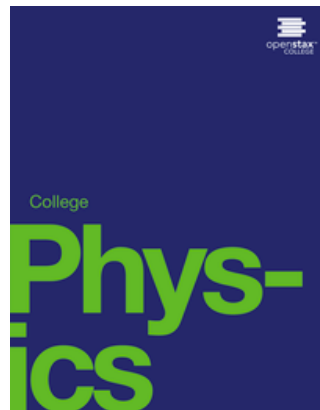
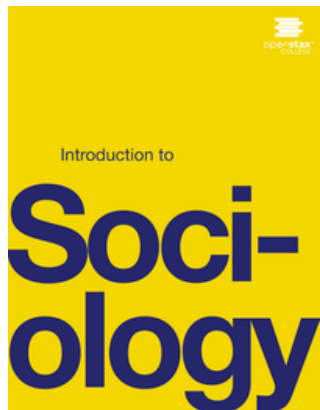
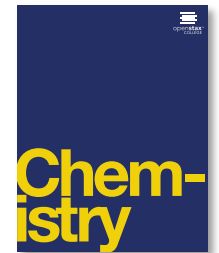
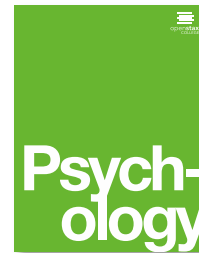
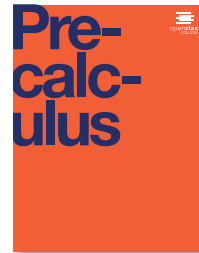
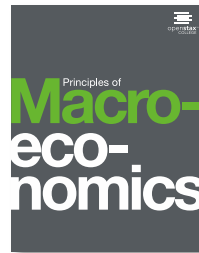
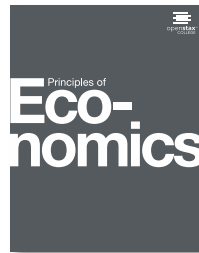
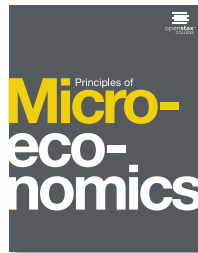
- New York Times Bestsellers
- Newbery Award Winners
- Most Recent Books
- Most Popular Books
- International Titles
- And more...

# Translations & Accessibility



**Customization & Affordability**

# A Growing Library



## Standards Aligned FlexBook® Textbooks

Filter:



CK-12 Physics Concepts - Intermediate

 OR



CK-12 Geometry - Basic

 OR



CK-12 Algebra I - Second Edition

 OR



CK-12 Physical Science Concepts For Middle School

 OR



Does it make **sense** for US K-12 Districts to collectively spend \$8 Billion / year on textbooks and the results are:

- Books are (on average) 7-10 years out of date
- Paper only / limited digital versions.
- Students can't write / highlight in books
- Students can't keep books at end of year
- All rights reserved... teachers can't update
- Parents often pay for lost paper books...



**DONE READING?**

**GOOD**

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

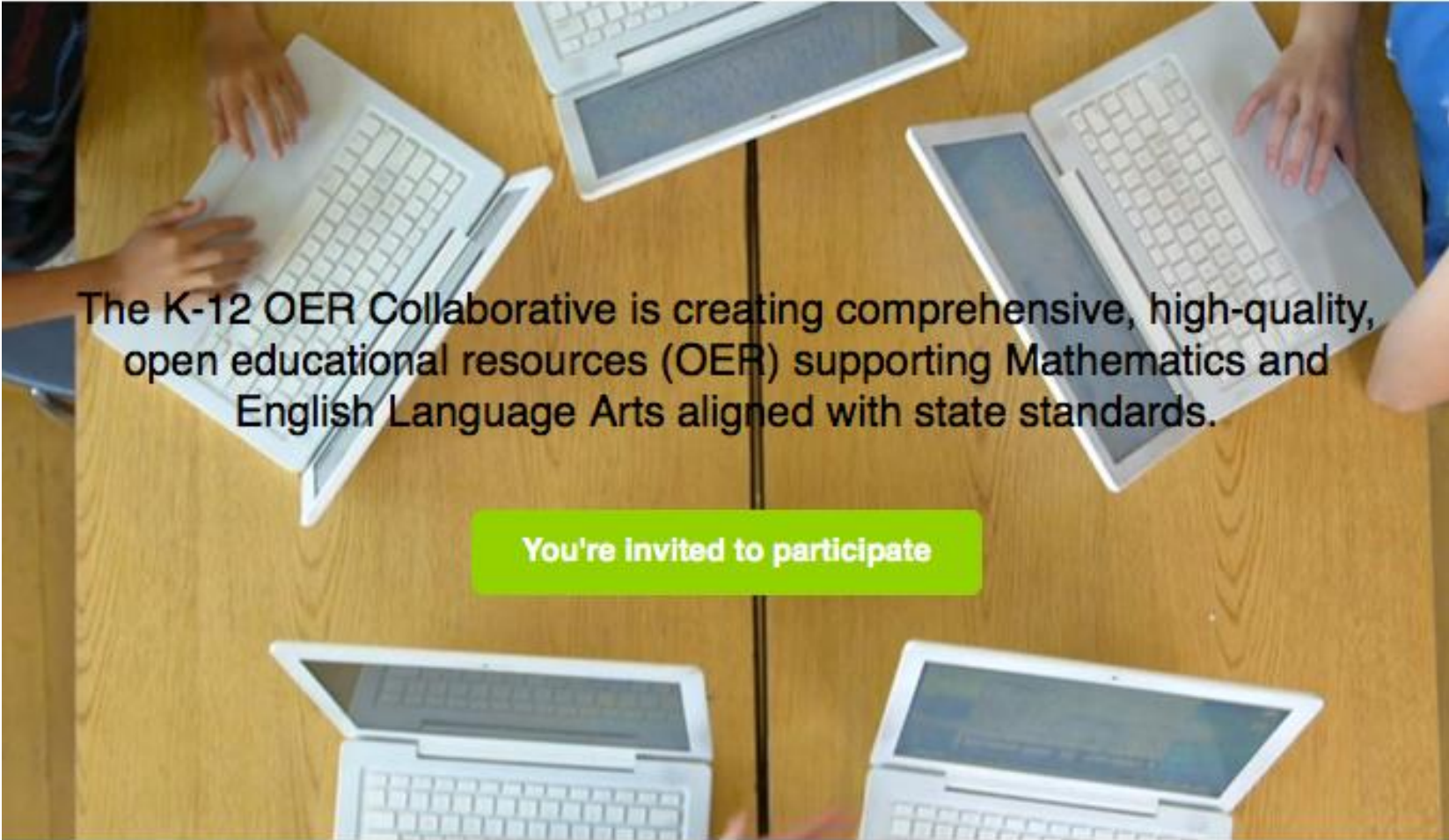
Adaptation by Nicole Allen, SPARC, CC BY

# K-12 OER COLLABORATIVE

[www.k12oercollaborative.org](http://www.k12oercollaborative.org)

@k12oer





The K-12 OER Collaborative is creating comprehensive, high-quality, open educational resources (OER) supporting Mathematics and English Language Arts aligned with state standards.

**You're invited to participate**

## **About The K-12 OER Collaborative**

This project is a state-led collaborative, with support provided by many of the leading non-profits in OER and education.

**<http://k12oercollaborative.org/>**

# The K-12 OER Collaborative...

...is an initiative led by a group of states with the goal of creating comprehensive, high-quality, open educational resources (OER) supporting K–12 mathematics and English language arts that are aligned with state learning standards.

# Collaborative Participants

| States   | Supporting Organizations  |
|--|---|
| Arizona<br>California<br>Georgia<br>Hawaii<br>Idaho<br>Minnesota<br>North Carolina<br>Nevada<br><b>Oregon</b><br>Utah<br>Washington<br>Wisconsin | Association of State Supervisors of Mathematics (ASSM)<br>Achieve<br>Council of Chief State School Officers (CCSSO)<br>Creative Commons<br>iNACOL<br>ISKME (Institute for the Study of Knowledge Management in Education)<br>Lumen Learning<br>State Educational Technology Directors Association (SETDA)<br>State Instructional Materials Review Association (SIMRA)<br>The Learning Accelerator |

# Why are we doing this project?

- Providing options to schools and districts
- Lower costs for instructional materials
- Alignment to state standards
- Materials are adaptable
- Designed for digital
- Comprehensive

# The materials must include...

- A complete set of instructional materials
- Teacher materials that inform and support implementation
- Instructional adaptations for students with varying needs (e.g., special needs, English language learners, highly capable)
- Research-based instructional practices to support student learning and engagement



# The materials must include...

- A coherent assessment strategy, including performance tasks with student work examples, formative assessments, unit-level summative assessments, and rubrics to help teachers understand and interpret student performance
- Interactive and multimedia elements, where appropriate, that support quality teaching and learning
- Grade-level appropriate resources and strategies to help families support students with their learning and homework

# The materials must include...

- English Language Arts / Literacy: appropriately complex text sets
- Mathematics: materials demonstrate a balance of conceptual understanding, procedural fluency, and authentic applications across classroom activities, rich tasks, assessments, etc.

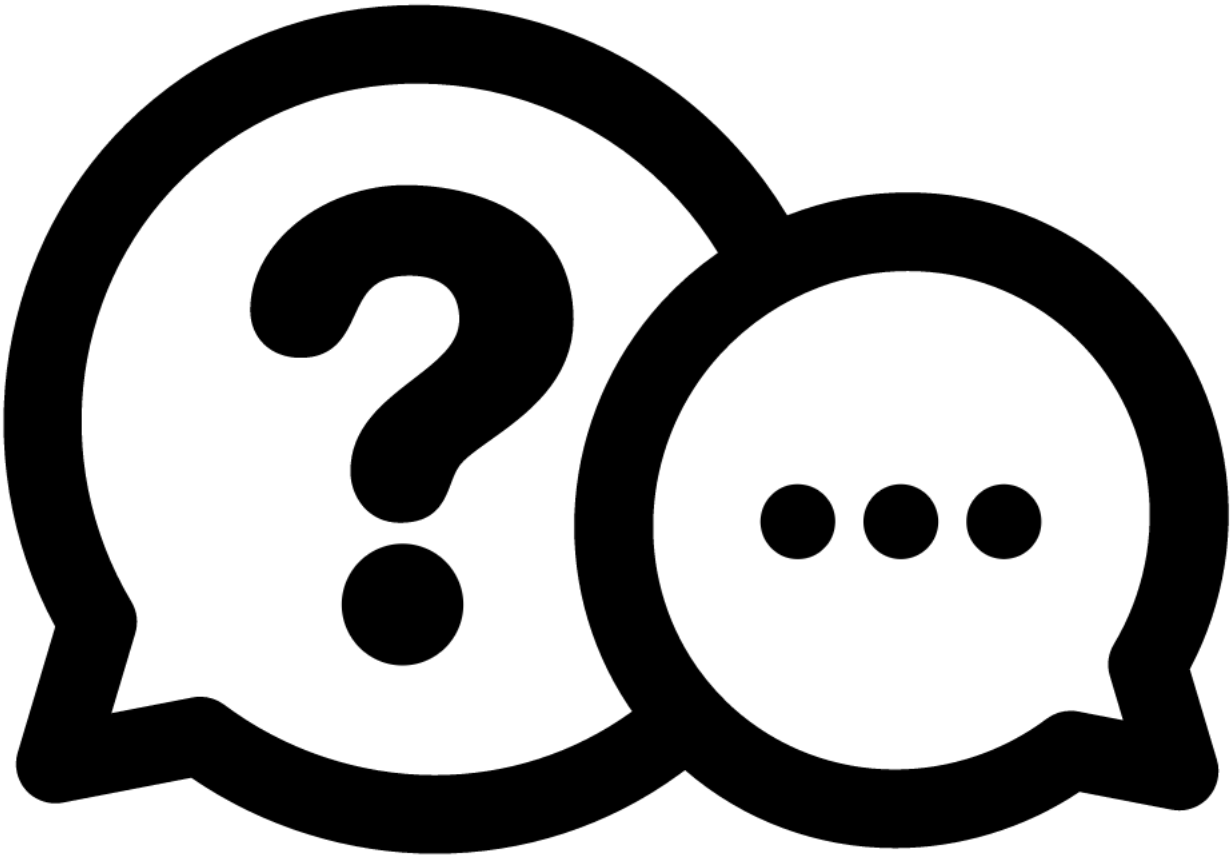
# Grades and Subjects

## English Language Arts/Literacy

- K-2
- 3-5
- 6-8
- 9-12

## Mathematics

- K-5
- 6-8
- 9-12 Integrated/International Pathway (Secondary Mathematics I, II, III)
- 9-12 Traditional Pathway (Algebra 1, Geometry, Algebra 2)





**Dr. Cable Green**

**Director of**

**Global Learning**

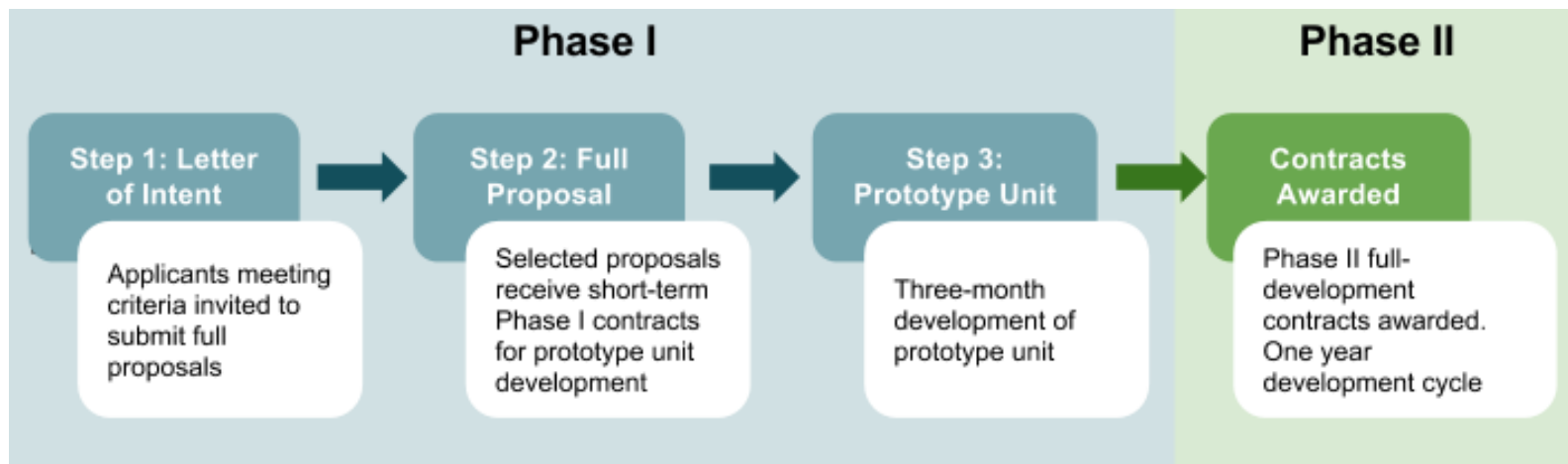
**[cable@creativecommons.org](mailto:cable@creativecommons.org)**

**[twitter: @cgreen](https://twitter.com/cgreen)**



# Request for Proposals

- Hiring contractors to develop materials
- Using the free market to get best solution at best price



- [k12oercollaborative.org](http://k12oercollaborative.org)

Ensuring Quality

# RFP Proposal Review

- Management & cost proposals reviewed by steering committee
- Content proposals reviewed by educators in 9 states

Goal: identify vendors to create “rapid prototype” sample units



# Rapid Prototypes

- Using Achieve's EQuIP Rubric
  - [achieve.org/equip](https://www.achieve.org/equip)
- Reviewed by expert educators
  - Nominated by participating states
- Partnering with Achieve and Student Achievement Partners

# Quality During Development

- Planning on using team of teacher reviewers selected from application process
- Each unit will be evaluated with the EQuIP rubric
- Each complete course will be evaluated with the IMET
  - [achievethecore.org](https://achievethecore.org)
- Attention to progressions within full courses as well as articulation vertically between grade bands

# Sustainability

- Improvements will be incorporated into a master version that will continue to be maintained
- More rapid improvements than current ecosystem provides

# Distribution

- Materials will be available on multiple platforms and in multiple formats
- Original files will be EPUB3
- EPUBs will be transformed into formats such as:
  - HTML
  - PDF (printing)
  - LMS interoperability formats (Common Cartridge, xAPI)
  - Etc...

# OER Resources

- iNACOL
  - [OER and Collaborative Content Development](#)
  - [OER State Policy in K-12 Education](#)
- SETDA
  - [Out of Print: Reimagining the K-12 Textbook in a Digital Age](#)
- Achieve
  - [State Policy Recommendations for Providing Educators Access to College- and Career-Ready Open Educational Resources](#)