

The Open Opportunity

Dr. Robert Dillon
Director of Innovation- Affton Schools
@ideaguy42
rdillon25@gmail.com

A top-down view of a wooden workbench cluttered with various hand tools. On the left, a hammer with a wooden handle and a metal head is prominent. In the center, a pair of blue-handled pliers and a pair of orange-handled side cutters are visible. To the right, there are several screwdrivers with different handle designs, including one with a textured grey handle and another with a black handle. Scattered around are numerous screws, nuts, washers, and hex keys. The tools are arranged in a somewhat organized but busy manner, suggesting a workspace in the middle of a project.

Retooling of Schooling

A profusion of tech has shifted the kinds of educational materials used in the classroom.

Nearly three-quarters of respondents (73%) said they now use open educational resources more than textbooks.

TES Global- 3/9

**10% USING OER AS
PRIMARY MATERIALS**



K-12 EDUCATORS

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 repurposing by others.

Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

PAST EFFORTS



January 1999: The **University of Tübingen** in Germany publishes a video series of its lectures online. This was considered by many to be the first official instance of open educational resources.



November 2003: China Open Resources for Education (**CORE**) is founded in partnership with MIT OpenCourseWare, aiming to provide these resources to hundreds of universities in China.



September 2006: The Khan Academy is launched by MIT graduate **Salman Khan**. This new program made K-12 educational materials in most subjects available for free to any student in the world.



May 2007: Apple unveils iTunes U, a service originally created to organize and distribute educational audio, video, and PDF content for college students. The service was later expanded to include K-12 materials.



March 2009: YouTube launches **YouTube EDU**, a free channel that organizes premium educational materials from hundreds of colleges, universities, professors, and thought leaders.



August 2009: Governor Arnold Schwarzenegger approves **California's Free Digital Textbook Initiative** to provide access to digital high-school level textbooks.



September 2010: Stanford University offers a set of free online courses that draw more than 350,000 enrollments around the world.



April 2011: Bangladesh becomes the first country to digitize a complete set of textbooks for grades 1-12.



March 2012: TED Ed launches in an effort to bring **top-quality educational videos** from the world's top teachers to the masses, free of charge.

Why OER for You?

**DEMOCRATIZED
INFORMATION**

**BROADENED
THE PROVIDERS**

**SCALE
PLATEAUED**

WILD WEST of SHARING

OER Intelligence Report- 2013



<https://vimeo.com/43401199>

edutopia

EDUTOPIA- OER

BARRIERS

TIME

DESIRE

ABILITY

**How could OER
positively impact
instructional
design?**



OFFICE OF
Educational Technology

FACT SHEET

Openly licensed educational resources can increase equity by providing all students, regardless of zip code, access to high quality learning materials that have the most up-to-date and relevant content.

Secretary John King

Increase Equity.

All students have access to high quality learning materials that have the most up-to-date and relevant content because openly licensed educational resources can be freely distributed to anyone.

The background of the image is a dense, overlapping pattern of US dollar bills, primarily \$100 bills, which are slightly faded and semi-transparent. The bills are scattered across the entire frame, creating a textured, financial backdrop. The text is overlaid on this background in a clean, white, sans-serif font.

Save Money -

Switching to educational materials that are openly licensed enables schools to repurpose funding spent on static textbooks for other pressing needs, such as investing in the transition to digital learning.

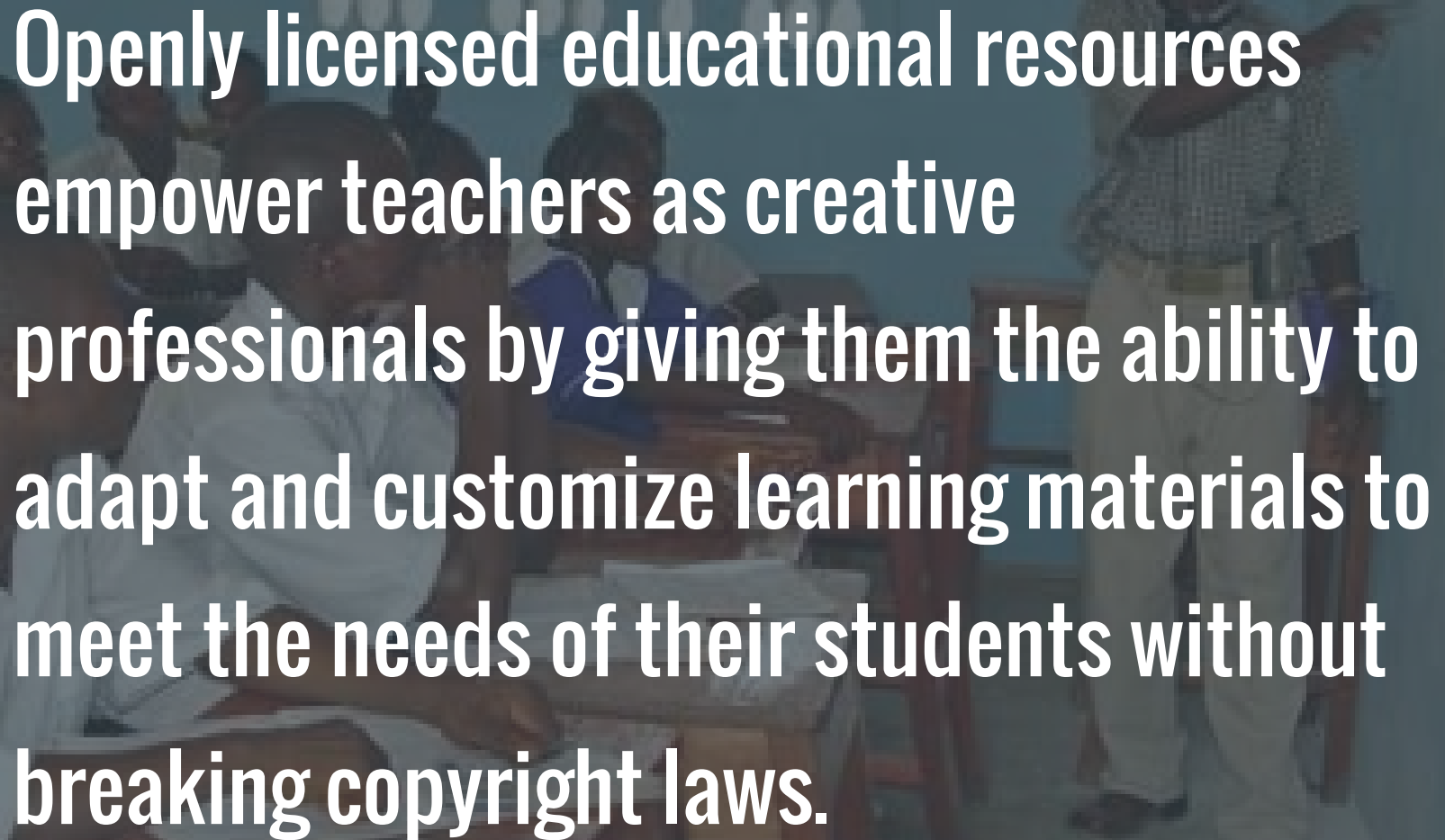
Keep Content Relevant and High Quality.

Traditional textbooks are perpetually outdated, forcing districts to re-invest significant portions of their budgets on replacing them.

The terms of use of openly licensed educational resources allows educators to maintain the quality and relevance of their materials through continuous updates.

Empower Teachers .

Openly licensed educational resources empower teachers as creative professionals by giving them the ability to adapt and customize learning materials to meet the needs of their students without breaking copyright laws.

A photograph of a classroom scene. A male teacher in a patterned shirt and light-colored trousers stands on the right, pointing towards a whiteboard. Several students are seated at desks in the foreground, looking towards the teacher. The room has a blue wall and a whiteboard.

Openly licensed educational resources support teachers as creative professionals by giving them the ability to adapt and customize learning materials to meet the needs of their students without breaking copyright laws.

Richard Culatta

#GoOpen

Launch Districts



learning
registry

sharing what we know



Creative Commons and OER

NUMBER *of* CREATIVE COMMONS-LICENSED WORKS



amazon.com[®]
 **and you're done.[™]**



What are you looking for today?

The resources you need for education, all in one place. By educators, for educators.

What are you looking for today?



Math

Science

English Language Arts

Social Studies

Arts



Discover

Search by subjects, grade levels, resource types, publishers, and standards.



Collect

Get instant access to the resources you want to use. It's fast and easy.



Share

Upload your resources. Rate the quality of what's here. Tell us what you think.

61 results for "Math"

Refine by

Grade

Clear

- Kindergarten (8)
- Grade 1 (17)
- Grade 2 (19)
- Grade 3 (25)
- Grade 4 (24)
- Grade 5 (17)
- Grade 6 (22)
- Grade 7 (20)
- Grade 8 (19)
- Grade 9 (13)
- Grade 10 (12)
- Grade 11 (11)
- Grade 12 (10)
- Not Grade Specific (11)

Subject



Document

Math Vocabulary Wizard: Expert Examples (with Canva)

Monica Burns

Not Rated

ACHIEVABLES ● Students will apply a math term to the real world. ●
Students will identify visuals that represent the definition of a math

Grades: 6, 7, 8, 9, 10, 11, 12

Subjects: Math

Standards: CCSS / MP.3, CCSS / MP.4

Resource Types: Instruction



Document

TenMarks Math Madness

Becky Snyder

Not Rated

Step by step description how to set Tenmarks Math Madness goals for your class.

Grades: Not Grade Specific

Subjects: Math

Resource Types: Instruction



▼ Standards

Clear

CCSS (32)

▼ Resource Type

Clear

- Assessment (10)
- Classroom/School Management (2)
- Instruction (35)
- Professional Development (2)

► Time to Complete

Clear

▼ Content Format

Clear

- Document (50)
- Image (2)
- Online Resource (5)
- Video (4)

▼ Rating

Clear

- ★★★★★ & Up (14)
- ★★★★☆ & Up (16)
- ★★★☆☆ & Up (16)
- ★★☆☆☆ & Up (16)

Document

Subjects: Math

Document

Prerequisites for Math Standards

Katherine Kayastha

Not Rated

Using the prerequisites from TenMarks Math Teach, a list for 1st grade through Algebra of prerequisite skills for various math standards.

Grades: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Subjects: Math



Document

Who needs math?

Rebecca Frase

★★★★☆ (1)

All students to research careers that use math everyday. Have them present their unique career and show how math is useful.

Grades: 5, 6, 7, Not Grade Specific Standards: CCSS / RI.6.7

Subjects: Math

Resource Types: Instruction



With Math I Can - Growth Mindset Page

Jill Florant

Not Rated

Take the With Math I Can growth mindset pledge and access worksheets, lesson plans and other growth mindset ...





Upload Your Educational Resources



Drag Your Resources Here

(Contents of Folders Will Upload As Individual Files)

[See Supported Resource File Types](#)

Or

- + Browse Your Computer
- + Browse Google Drive
- + Add Online Resources





Microsoft

Google

A blue speech bubble with a white background and a blue border. The word "edmodo" is written inside in a blue, lowercase, sans-serif font. The speech bubble has a tail pointing to the left.

edmodo



+ LEARNER OPTIONS

[Register Now!](#) | [Log In](#) | [Help](#)

[Discover](#) | [Create](#) | [Connect](#) v | [Learn More](#) v

Discover. Share. Create.

OER Commons is a dynamic digital library and network. Explore open education resources and join our network of educators dedicated to curriculum improvement.

What are you looking for? Subject v Education Level v Standard v

OER Commons

Search IOER...

Search

Browse

Education and career resources ▶

Member-created content ▶

Explore

Online libraries of curated resources ▶

Learning Lists of lessons, activities, and curricula ▶

Share

Open your own online resource library ▶

Tag, upload, or create a resource ▶

Create a learning list ▶

PARTICIPATE
— LEARNING —

Find. Connect. Collaborate.



NEW! Check out our new Participate Chats™ for Twitter

See a list of chat participants and collect resources in realtime

Search our extensive database of resources and collections

I'm looking for...

Search

<https://www.participate.com/chats>

Grade Levels

- Common Core
- Art
- Creative Expression
- English Language Arts
- Mathematics
- Productivity
- Science
- Social Studies
- World Languages

Pre-K

Kindergarten

1st Grade

2nd Grade

3rd Grade

4th Grade

5th Grade

6th Grade

7th Grade

8th Grade

9th Grade

10th Grade

11th Grade

12th Grade

[View all collections...](#)

Moderators (3)



Participants (98)



Show all

Resources (87)

Three things to know about new-ish U.S. Education Secretary John King Jr. @teacher_project

It's official: John King isn't acting anymore. On Monday, the U.S. Senate voted 49 to 40 to confirm

Log In - The New York Times @jcasap

Profiles in Blended Learning | Edgenuity Inc. | Where Learning Clicks @jsslackman

Profiles in Blended Learning Series Hear school and district representatives from across the country discuss innovative online and blended learning implementations. Find out how

http://poll.fm/tp/5kaf7 @tomwhitby

Gender Studies | 25 Teenagers Recommend Readings for Womens

lightspeedtek 9:31 AM

Register NOW! How 2 Navigate Landscape of the 21st Century Class webinar Dr. Julie Carter @GreyEDSolutions <https://t.co/GnMgfMxQET> #edchat

TDSkay 9:31 AM

How every school can promote safety in a digital world: <https://t.co/OXMkVs4SdI> #edtech #edchat

ExitTicket 9:31 AM

Instructional Strategy Benefits - #edtech #edchat #sbgchat <https://t.co/vwbHd1XM8e>

LearningList 9:31 AM

We can help you support ELLs. Our reviews and alignment reports include adaptions for ELLs. #educhat #edchat <https://t.co/mXNR3dQ6Vd>

mentoringminds

#ProjectBasedLearning: A Tool for Engaging ELLs (help your ELL students love learning!) <https://t.co/WNep6pPwUH> #PBL #edchat #education

Aordover 9:32 AM

Ring me like a bell: reflections on the #SXSW2016 education conference: <http://tinyurl.com/jnbesz>. #edchat #teaching @avantgame

UKEdMag 9:32 AM



Message...

#edchat
132 chars left

Submit

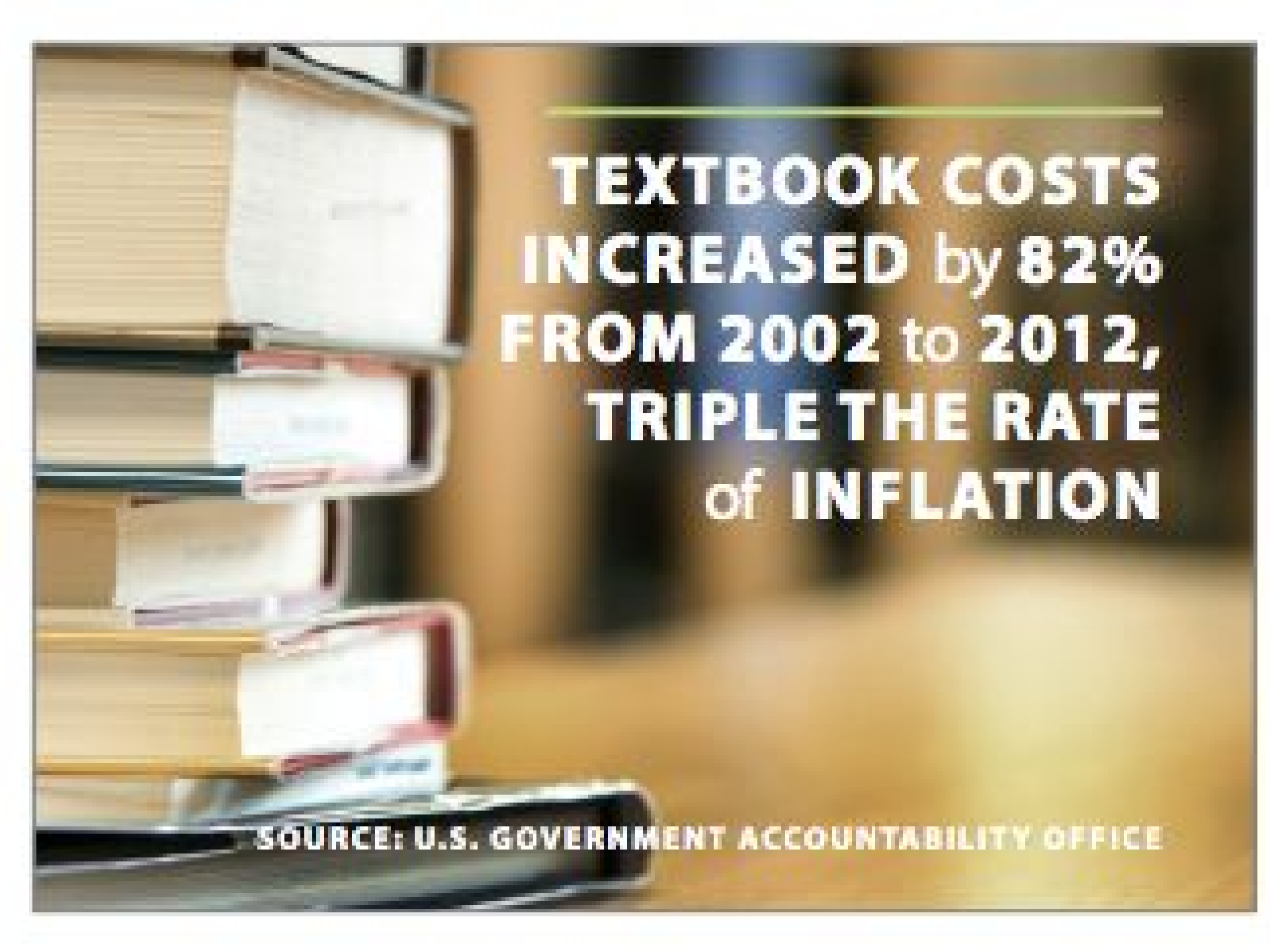
Participate Chats

BARRIERS

QUALITY

SHARING at SCALE

CORE

A stack of several textbooks is shown on a wooden desk. The books are of various colors and thicknesses, with some pages visible. The background is a blurred wooden surface, likely a wall or another part of the desk. The text is overlaid on the right side of the image.

**TEXTBOOK COSTS
INCREASED** by 82%
FROM 2002 to 2012,
TRIPLE THE RATE
of INFLATION

SOURCE: U.S. GOVERNMENT ACCOUNTABILITY OFFICE

A photograph of a brown and white tabby cat sitting at a kitchen sink, drinking water from a chrome faucet. The scene is dimly lit with a greenish tint. The word "CONSUME" is written in large, white, bold, sans-serif capital letters across the center of the image, partially obscuring the cat's face and the water stream.


CONSUME

A black and white cat is shown drinking water from a modern, curved faucet in a sink. The cat is positioned on the right side of the frame, leaning towards the faucet on the left. The background is a plain, light-colored wall. The overall image has a slightly desaturated, muted color palette.

CONSUME Platform Access Search, Grab, Go Easier Search

A pair of hands is shown from a top-down perspective, gently cupping a small, purple, multi-petaled flower. The hands are positioned in the center of the frame, with the fingers slightly curled around the flower. The background is a solid, muted green color. The word "CONTRIBUTE" is overlaid in large, white, sans-serif capital letters across the middle of the image, partially obscuring the hands and the flower. The text has a slight shadow or glow effect, making it stand out against the background.

CONTRIBUTE

A pair of hands is shown from a top-down perspective, gently cupping a small, delicate purple flower. The hands are positioned in the center of the frame, with the fingers slightly curled around the flower. The background is a soft, out-of-focus green, suggesting an outdoor setting. The overall mood is one of care and nurturing.

CONTRIBUTE
Upload
Sharing
Feel Reciprocity



CURATE

A large, cylindrical hay bale sits in a field. The background is a dark, overcast sky, and the foreground is a grassy field. The text is overlaid on the image in a white, sans-serif font.

CURATE

Evaluate Resources

Grow the System

Help Others Find the

Best Stuff

A group of people, including men, women, and children, are gathered on a beach at dusk. They are standing on a wooden pier or boardwalk that extends into the water. The scene is dimly lit, with the sky and water showing a soft, dark blue hue. The word "COMMUNITY" is overlaid in large, bold, white capital letters across the center of the image. The people are dressed in casual summer attire, such as t-shirts, shorts, and swimwear. Some are looking towards the water, while others are engaged in conversation. The overall atmosphere is one of a community gathering in a coastal setting.

COMMUNITY



COMMUNITY
Grow their PLN
Feels Like Their Go to Place

A grayscale photograph of a man with dark hair and a mustache, wearing a dark zip-up jacket. He is holding a mobile phone to his ear with his right hand, which has a ring on the ring finger. The background is a blurred indoor setting with large windows and circular pendant lights. The word "CONNECT" is superimposed in large, white, bold, sans-serif capital letters across the center of the image, partially obscuring the man's face.

CONNECT

A grayscale photograph of a man with dark hair and a beard, wearing a dark zip-up jacket. He is holding a mobile phone to his ear with his right hand. The background is a blurred indoor setting with large windows and hanging spherical lights. Overlaid on the image is white text.

CONNECT
Instructional Design
Seamless Tool

**How Could You
Create the
Conditions for OER
Success?**

OPPORTUNITIES



Almost all school desire this move. Many are looking for support, guidance, and time. Innovative schools are bouncing ahead, but all schools want quality resources with a lower price tag.

PARTNERSHIPS



OER is collaborative work. It would make sense to pursue multiple, fluid partnership that exist over short and long-term projects. Educators in OER will lean toward organizations embracing the ethos of OER in other ways.

PITFALLS



The Office of Education Technology could take a new shape with election. In addition, many folks in the office are currently moving on. The momentum of this work can't rely on them. They recognize this as well.

The Open Opportunity

Dr. Robert Dillon
Director of the BrightBytes Institute
@ideaguy42
rdillon25@gmail.com

2015 Hewlett Report on OER