Cool Tools
to Support
UDL in
Schools

Equal
Opportunity

Educational
Technology
Conference

Remove
Barriers

All
Students

**Universal Design
for Learning Center**
at OCALI

OCALI

www.ocali.org / 614.410.0321

Jeff
McCormick

Cool Tools to Support UDL in Schools
February 13, 2013   8:00am - 8:45am
Room C120-122

Jeff McCormick
Program Director
Universal Design for Learning Center at OCALI

Achieve - Graduate - Succeed

Lesson Goals
Gain knowledge of the origins of UDL.
Learn the three principles.
Develop an awareness of UDL resource tools.
Have fun learning.

I Can...
I can identify the origins of UDL.
I can explain the three principles of UDL.
I can locate UDL resource tools.
I can have fun learning.

O C A L I   **Ohio Center for Autism and Low Incidence**

What is UDL?

Universal Design for Learning (UDL)

Universal Design for Learning (UDL) is an educational framework based on research in the learning sciences, including cognitive neuroscience, that guides the development of flexible learning environments that can accommodate individual learning differences.

The Three Principles

Multiple Means of...

Representation
Give learners several ways to acquire information.

Expression/Action
Supply learners with alternatives to demonstrate what they know.

Engagement
Challenge learners interests and motivate them to succeed.

Origins of UDL

"Everyone Thinks Differently"

Our Brains R Unique: If you can read this you have a strong mind:

7H15 M3554G3
53RV35 7O PR0V3
H0W 0UR M1ND5 C4N
D0 4M4Z1NG 7H1NG5!
1MPR3551V3 7H1NG5!
1N 7H3 B3G1NN1NG
17 WA5 H4RD BU7
N0W 0N 7H15 LIN3
Y0UR M1ND 1S
R34D1NG 17
4U70M471C4LLY
W17H 0U7 3V3N
7H1NK1NG 4B0U7 17,
B3 PROUD! 0NLY
C3R741N P30PL3 C4N
R3AD 7H15.

Technology as a Tool

When teachers "perceive" technologies as part of their teaching and part of students' learning, there can be greater gains to both surface and deep understanding.

Source: The Learning Edge: What Technology can do to Educate All Children

Student	Environments	Tasks	Tool
	Supports & Challenges		
Needs Abilities Interests	Instructional Physical Social/Emotional Policy	Participation Instruction Communication Productivity	Devices Services Strategies Modifications
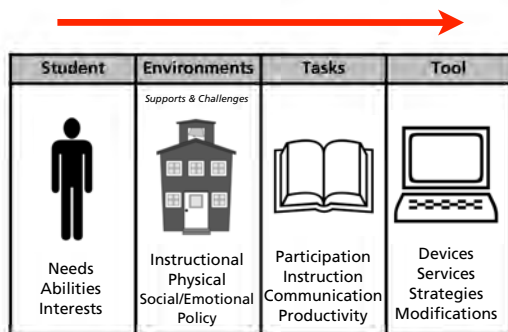
Source: SETT Framework - Dr. Joy Smiley Zabala, Ed. D., ATP

Cool Tools

Computer Tools
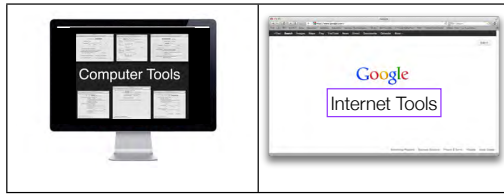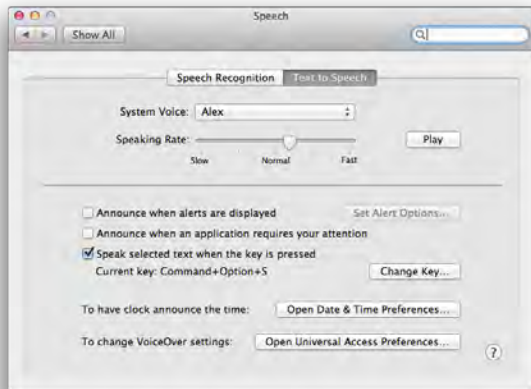

Text to Speech Benefit: Students can benefit from hearing text on the computer screen spoken. Individuals who have difficulty decoding and understanding text may comprehend printed content much better when it is read out loud.

Talking Calculator Benefit: Provides auditory feedback to help a student check the accuracy of the keys pressed and verifies the answer before transferring to paper.

Safari Reader Benefit: Article appears without distracting content optimized for easy reading. Reader stitches together articles that are continued over multiple webpages and broken up by ads, menu bars, and other items on webpages.

Internet Tools

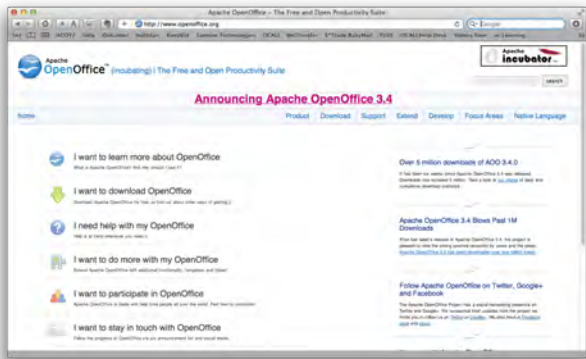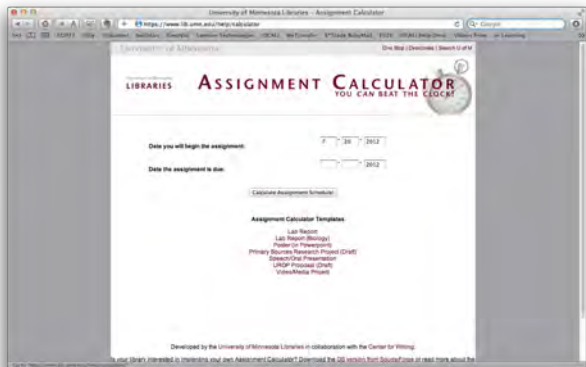**osalt.com** Benefit: Allows teachers and students access to open source software programs.

OpenOffice Benefit: Open-source office software suite for word processing, spreadsheets, presentations, graphics, and databases.

OpenDisc Benefit: High quality collection of open source software for the Microsoft Windows operating system.

Assignment Calculator Benefit: Helps students organize assignments from a bank of existing assignments (e.g. research paper, speech, video, etc.) or create their own from scratch.

Springnote Benefit: Allows students to create pages, to work on them together and to share files. A great tool for group project collaboration.

Stixy Benefit: Helps students organize on flexible, shareable web-based bulletin boards. Users can create tasks, appointments, files, photos, notes, and bookmarks.

bubbl.us Benefit: Students can brainstorm online. Create color mind maps to print or share with others. Almost no learning curve.

WorksheetWorks.com Benefit: Helps educators with paper-based teaching materials. Topics include math, geography, english, scientific notation and more.

Visuwords Benefit: Helps students who are visual learners. Visual online graphical dictionary. Look up words to find meanings and associations with other words and concepts. Learn how words associate.

Khan Academy Benefit: Students who are visual learners have access to a library of over 3000 videos covering everything from arithmetic to physics, finance, and history - hundreds of skills to practice.

Bitesize Benefit: Provides information to students on english, math and science. The site condenses content into bite-sized information with illustrations and activities to explain concepts.
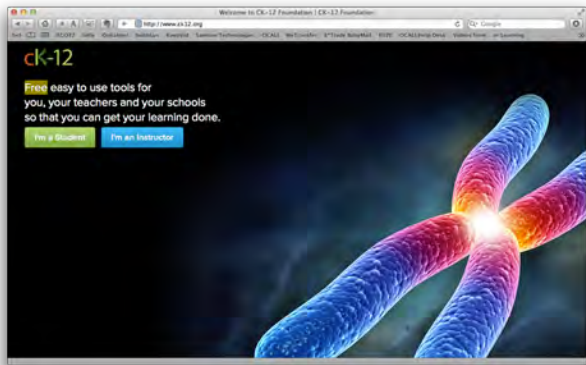
ck-12 Benefit: Allows students and educators to access high quality educational content that can serve both as core text as well as provide an adaptive environment for learning. Also provides exercises and resources on subject matter.

Blio Benefit: Provides students with an e-reader software platform.

BookRix Benefit: Provides an online destination where authors can showcase their writing. Users can design personal profile pages with a pictures, videos, music play lists, and more.

Tar Heel Reader Benefit: For students who need easy-to-read, accessible books. The books may be downloaded as slide shows in PowerPoint or Flash format. Each book can be speech enabled and accessed using multiple interfaces.

Storyline Online Benefit: Streaming video program featuring famous people reading children's books aloud.

Books Should Be Free Benefit: The website provides thousands of free audio books that you can download in mp3, iPod and iTunes format for your portable audio player.

UMS Benefit: Downloadable software programs to help students solve and explain algebra or calculus problem step-by-step.

NASA Benefit: Website provides educational materials to teachers that focus on science and exploration. The site also provides students with hands-on, interactive activities that focus on all aspects of science.

Cool Math Benefit: Provides teachers access to online math lessons, math games and fun math activities.

Zondle Benefit: A website that enables teachers and students to create games to support their learning needs - phonics games, science games, language games and lots more.

BibMe Benefit: The fully automatic bibliography generator. It's an easy way to build cited page for students.

MakeBeliefsComix Benefit: Online educational comic strip generator that helps students foster their literacy and writing skills.

Animoto Benefit: A website that helps students create videos from photos, video clips, words and music.

TodaysMeet Benefit: Teachers can create blogging channels for discussions for classroom lessons.
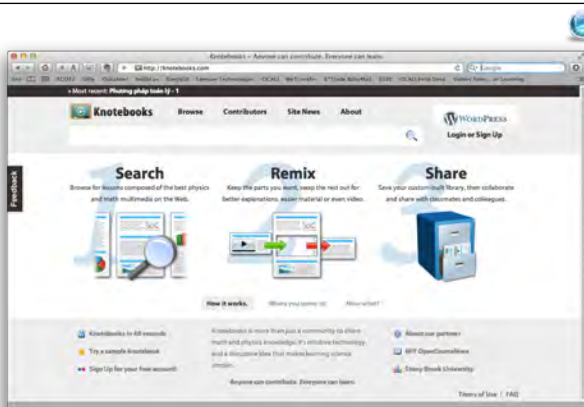
Knotebooks Benefit: A web-based tool that teachers can access for open educational resources (OER), providing users with the tools to create, collaborate on and share.

Prezi Benefit: A cloud-based presentation application and storytelling tool that uses a single canvas instead of traditional slides.

Storybird Benefit: Students can create short, art-inspired stories to share, read, and print. You can read them like books, play them like games, and send them like greeting cards.

Weebly Benefit: An easy-to-use tool that teachers can use to generate websites.

Google Site Benefit: An easy-to-use tool that teachers can use to generate websites.

Wordle Benefit: An internet-based tool that students can use to generate "word clouds" from text. The clouds give greater prominence to words that appear more frequently in the source text. You can tweak your clouds with different fonts, layouts, and color schemes.

The Center on Congress Benefit: The site helps teachers and students understand how democracy works and their role in our government by providing print, video and interactive resources.

Xtranormal Benefit: The site helps students create, share and watch interactive animated stories.

Knowmia Benefit: Teachers can search thousands of tutorial videos on any subject from the worlds best teachers.

"No one who ever bought a drill wanted a drill. They wanted a hole."

- Perry Marshal

Jeff McCormick
P 614-410-0380
E jeff_mccormick@ocali.org

Equal Opportunity

Remove Barriers

All Students

Universal Design for Learning Center
at OCALI
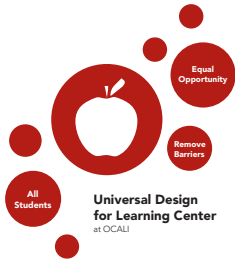
Cool Tools to Support UDL in Schools

OCALI

www.ocali.org / 614.410.0321

Cool Tools to Support UDL in Schools Resource Page

Tool	Location
Text to Speech	Choose Apple menu > System Preferences, click Speech, and then click "Text to Speech." Open the Text to Speech pane of Speech preferences. Select the "Speak selected text when the key is pressed" checkbox. By default, Option+Esc is used.
Calculator	Choose Finder > Applications > Calculator
Safari Reader	Choose Finder > Application > Safari
Free Software	
osalt.com	http://www.osalt.com
OpenOffice	http://www.openoffice.org
OpenDisc	http://www.theopendisc.com
Organization	
Assignment Calculator	https://www.lib.umn.edu/help/calculator
Springnote	http://www.springnote.com
Stixy	http://www.stixy.com
bubbl.us	https://bubbl.us
SpiderScribe	http://www.spiderscribe.net
WorksheetWorks	https://worksheetworks.com
Visuwords	http://www.visuwords.com
Academics	
Khan Academy	http://www.khanacademy.org
Bitesize	http://www.bbc.co.uk/schools/ks3bitesize
Reading	
ck-12	http://www.ck12.org
Blio	https://www.blio.com
BookRix	http://www.bookrix.com
Tar Heel Reader	http://tarheelreader.org
Storyline Online	http://www.storylineonline.net

Tool	Location
Books Should Be Free	http://www.booksshouldbefree.com
Math & Science	
UMS	http://www.umsolver.com
NASA	http://www.nasa.gov
Games	
Cool Math	http://www.coolmath.com
Zondle	https://www.zondle.com
Bibliographies & Comics	
BibMe	http://www.bibme.org
MakesBeliefsComix	http://www.makebeliefscomix.com
Communication	
Animoto	http://animoto.com
TodaysMeet	http://todaysmeet.com
Knotebooks	http://knotebooks.com
Presentations & Stories	
Prezi	http://prezi.com
Storybirds	http://storybird.com
Website Creation & Web Clouds	
Weebly	http://www.weebly.com
Google Sites	https://sites.google.com
Wordle	http://www.wordle.net
Videos	
The Center on Congress	http://congress.indiana.edu
Xtranormal	http://www.xtranormal.com
Knowmia	http://www.knowmia.com