



# Got Tech?

## Using Technology to Access Educational Materials

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# Who are we?

(screenreader)

## *Robbin*

- Special Education teacher by heart and education – 25 years
- Bachelor's in Elementary and Special Education; Master's in Curriculum and Instruction
- Assistive Technology Consultant
- Adjunct Faculty – University of Nevada, Reno
- Special Education Mentor/Facilitator for New Teacher Center
- State Board Member: Nevada Governor's Council on Developmental Disabilities and Special Education Advisory Committee

## *Elizabeth*

- Special Education Teacher in WCSD – 10 years
- Bachelor's in Elementary and Special Education; Master's in Early Childhood Special Education
- Assistive Technology Consultant
- Former Officer and Member of the Nevada Branch of Council for Exceptional Children's Division of Early Childhood
- Advocate for a school-aged family member recently identified as having dyslexia
- Mom to a two-year old daughter

# Today's Agenda

- AEM – Accessible Educational Materials
  - Barriers
- IDEA – Individuals with Disabilities Education Act
- Dispelling Myths: AT is NOT a Crutch
- Implementation
- Exploration – Free Resources, Chrome, iOS
- Dyslexia and AEM
- Let's Practice....
- UDL – Universal Design for Learning



# AEM (Accessible Educational Materials) and UDL (Universal Design for Learning): An Introduction

**Youtube: AIM and the 21<sup>st</sup> Century Classroom**

<https://www.youtube.com/watch?v=QoHHIWRqQis&t=22s>



# Barriers at school.....

- What are some reasons students choose not to do their work or participate?
- What are some reasons students choose not to use their assistive technology?
- *Implementation (or lack of) is most common issue with AT*



# AEM (Accessible Educational Materials) and UDL (Universal Design for Learning): An Introduction

Youtube: UDL:Reducing Barriers

<https://www.youtube.com/watch?v=xTShQyw3m8o>

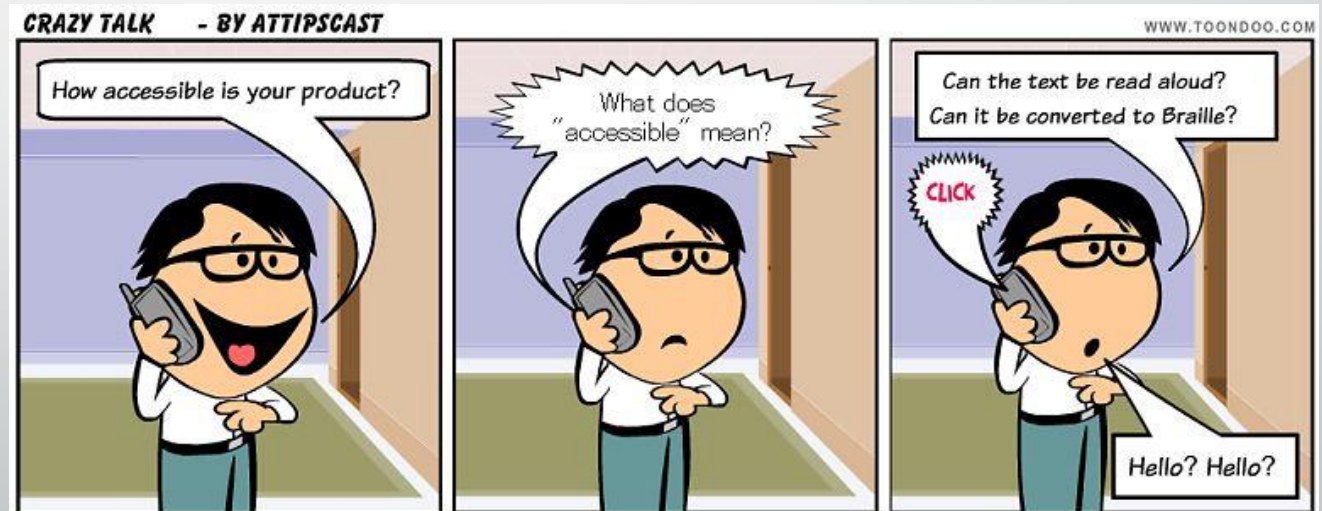


# AEM (AIM)

## Accessible Educational Materials

- Accessible Educational Materials are required by law – the IEP team MUST consider whether the student can access their curriculum without accommodations, modifications or adaptations

- [AIM Basics](#)
- [www.AEM.cast.org](http://www.AEM.cast.org)



# Individuals with Disabilities Education Act (IDEA)

- IDEA (Individuals with Disabilities Education Act) specifically focuses on accessible formats of print instructional materials
  - Testing?
  - Concerns we commonly hear?

## ASSISTIVE TECHNOLOGY

- The Individuals with Disabilities Education Improvement Act (IDEA) 2004 defines assistive technology as:
  - Any item, piece of equipment or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities.
- Assistive technology can make students more independent learners, improve speed and accuracy, motivate students to set high goals, reduce stress, bolster confidence, and can help learners reach their full potential by bypassing their learning deficits.
- IDEA mandates that a student's need and use of assistive technology is documented in their IEP.



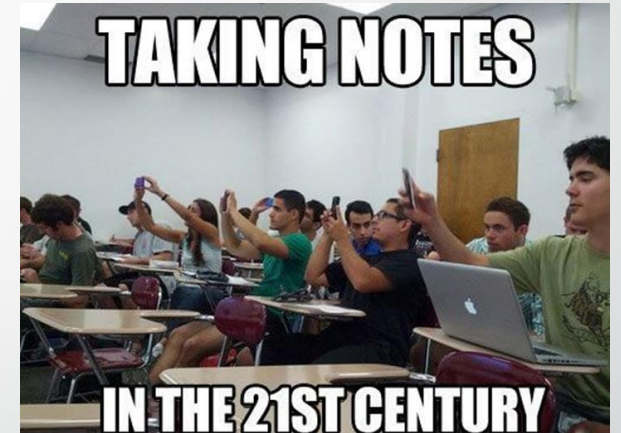
# Motivation when introducing supports is key...



- We need to consider (as educators and parents):
  - What types of tasks do we have them doing?
  - Are they motivating and personal?
  - Are we scaffolding with high interest topics to allow them to learn to use technology?
  - Are we modeling and teaching or just expecting them to “do it”?
  - Are we giving them immediate feedback?

# Dispelling myths: AT is Not a Crutch

- The Case Against Assistive Technology
  - <https://www.youtube.com/watch?v=ny5n7F1FlaM>
- AT evens the playing field
- AT can increase reading levels
- AT increases engagement and confidence, allowing the learner to successfully complete assignments and expectations
  - It can be used throughout their education and lifetime



# Supports Continue Throughout Students' Education

- Most universities and community colleges have a Disability Resource Center (DRC)
- Students have access to the same supports they use in K-12 education
- The DRC evaluates their needs and provides them with what they will need for that environment
- University of Nevada-Reno DRC: <http://www.unr.edu/drc>



# Common Technology Supports Used Include.....

- Text to speech (Snap and Read, screen readers, Speak feature, Google Chrome extensions)
- Word Prediction (CoWriter, iOS/Siri)
- Speech to Text (Windows Speech Recognition, Siri, Dragon Dictation)
  - Can be frustrating for some students, use with caution due to testing requirements
  - Should be used with text to speech
- Grammar check (Word, Ginger)
- Digital text (Bookshare, Overdrive, online texts, YouTube)
- Keyboard alternatives (touchscreens, iAnnotate, )



(See AT website for more options (next slide).....these are some of the supports typically used)

# Implementation

- “I’m a member of the student’s team. What can I do to ensure that my students have accessible materials?”
- Washoe County Schools/Departments/Assistive Technology
  - [Http://www.washoeschools.net/Domain/278\\](http://www.washoeschools.net/Domain/278\\)
  - WCSD Website-
    - Departments tab
      - Assistive Technology
        - AEM and Bookshare
        - Reading Resources
- Let’s Explore....

## ASSISTIVE TECHNOLOGY

- Department Homepage
- AT Supports & Services
- AAC Resources
- Writing Resources
- Math Resources
- Reading Resources
- AEM and Bookshare
- AT & 21st Century Learning
- Manuals and Training Videos

# Bookshare and Digital Text (Highlights and Need-to-Knows)

- What is Bookshare?
  - History
  - Must have a print disability to use Bookshare
    - <https://www.bookshare.org/cms/bookshare-me/who-qualifies>
  - Not best resource for picture books
- If not eligible, but digital text is necessary, school will need to provide
  - Check other resources like YouTube, library, textbook publisher's website, other schools, etc.
- Need app to read downloaded books on a tablet

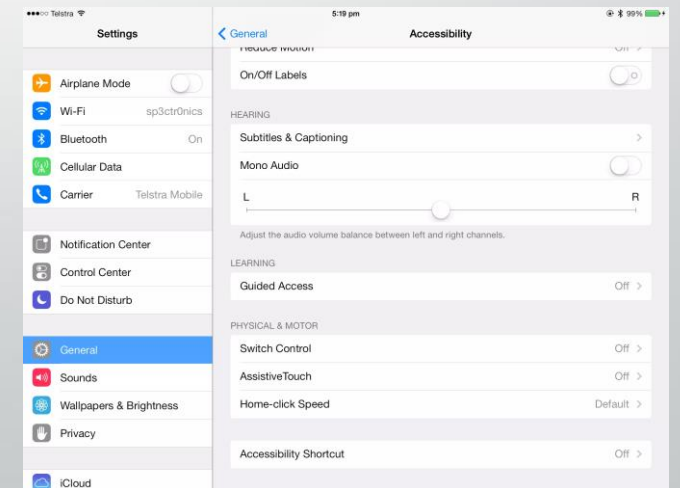
# Chrome Web Store

- Explore Web Store and Extensions
  - <http://www.controlaltachieve.com/2016/10/special-needs-extensions.html>
  - Note: You do not need a Google account or sign in to use extensions, although it is MUCH easier and your extensions will follow you from computer to computer
    - To use extensions without an account:
      - <http://superuser.com/questions/633706/how-to-install-extensions-in-chrome-without-a-google-account>



# iOS Accessibility

- iOS devices (iPhones, iPads etc.) have a wide variety of accessibility features built in
- Accessibility for iPhone/iPad: The Ultimate Guide
  - <http://www.imore.com/accessibility-iphone-ipad>





# Dyslexia info

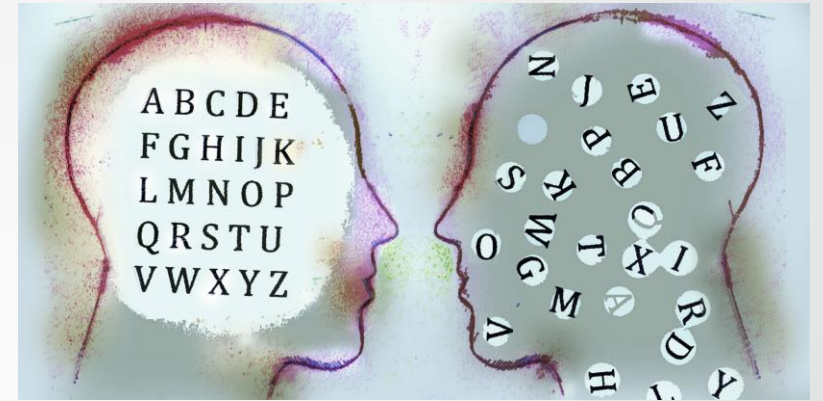
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- Dyslexia Resource Guide- [http://www.doe.nv.gov/Office\\_of\\_Special\\_Education/](http://www.doe.nv.gov/Office_of_Special_Education/)
- Google for Dyslexia: Using Chrome for Reading and Writing (Part One)
  - <https://www.noodle.com/articles/google-for-dyslexia-part-one>
- Google Extensions- Beeline Reader, OpenDyslexic font
- Understood – for learning and attention issues
  - <https://www.understood.org/>

# Case studies...what would you field test?

- Johnny Jim is a 5<sup>th</sup> grade student demonstrating difficulty in the area of written expression. He requires access to word processing for all written assignments due to dysgraphia. Use of a portable computer for word processing is made available to him through the school site's 1-to-1 technology program.
- Laura is a 4<sup>th</sup> grade student who's independent reading level is currently at the 1<sup>st</sup> grade level. She has excellent auditory comprehension. She has access to laptops on a cart, library and classroom computers.

# Activity:



- Think of a student and list current barriers for that specific student to accessing the curriculum
- Find a partner and share your list of barriers
- Discuss a tool or resource that you might use to remove the barriers for that specific student

# UDL

**UDL**  
**Universal Design of Learning**

INSPIRED BY A PUBLIC SCHOOL STUDENT WITH DISABILITIES

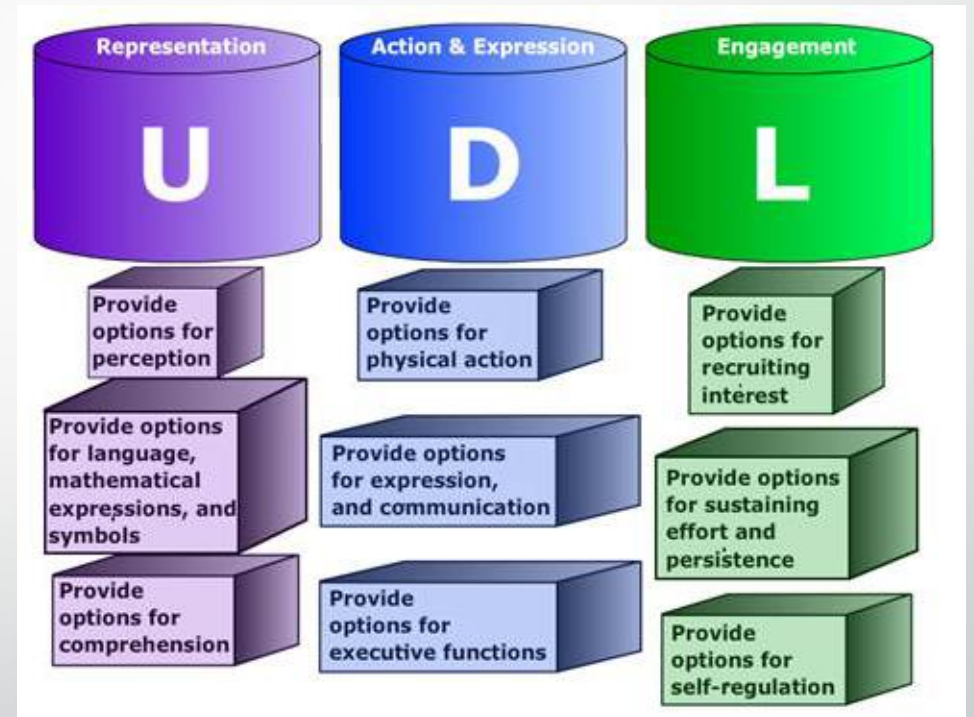
COULD YOU PLEASE SHOVEL THE RAMP?

ALL THESE OTHER KIDS ARE WAITING TO USE THE STAIRS. WHEN I GET THROUGH SHOVELING THEM OFF, THEN I WILL CLEAR THE RAMP FOR YOU.

BUT IF YOU SHOVEL THE RAMP, WE CAN ALL GET IN!

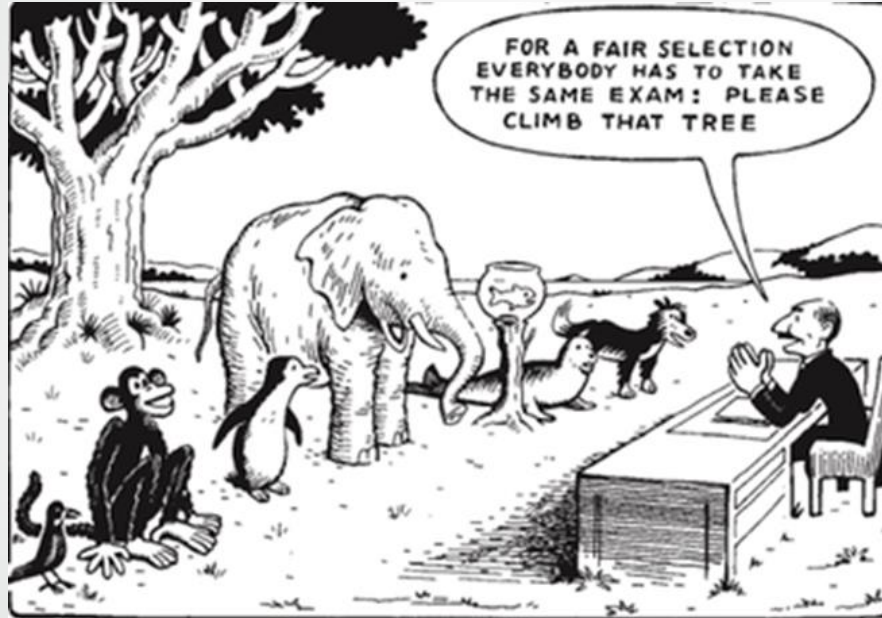
**CLEARING A PATH FOR PEOPLE WITH SPECIAL NEEDS CLEARS THE PATH FOR EVERYONE!**

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UDL Toolkit: <https://udltechtoolkit.wikispaces.com/>

# #thankyou



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Presentation  
(need Dropbox)

# References and Resources

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- Washoe County Schools/Departments/Assistive Technology: <Http://www.washoeschools.net/Domain/278\\>
- Bookshare Website and print disability qualifications: <https://www.bookshare.org/cms/bookshare-me/who-qualifies>
- Explore Web Store and Extensions: <http://www.controlaltachieve.com/2016/10/special-needs-extensions.html>
- To use Chrome extensions without an account: <http://superuser.com/questions/633706/how-to-install-extensions-in-chrome-without-a-google-account>
- Accessibility for iPhone/iPad: The Ultimate Guide: <http://www.imore.com/accessibility-iphone-ipad>
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