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CONTINUUM OF TECHNOLOGY SUPPORTS FOR READING AND ALTERNATE FORMAT

ACCESSING HIGHER GROUND CONFERENCE 2015

Today's Agenda

- Overview of the ATRC at Colorado State University

- Overview of ATRC Services and Alternate Format selection process

- Case Studies

Assistive Technology Resource Center (ATRC)

ATRC Mission:

Ensuring equal access to technology and electronic information for CSU students and employees with disabilities as defined by the Americans with Disabilities Act and Sections 504 and 508 of the Rehabilitation Act.
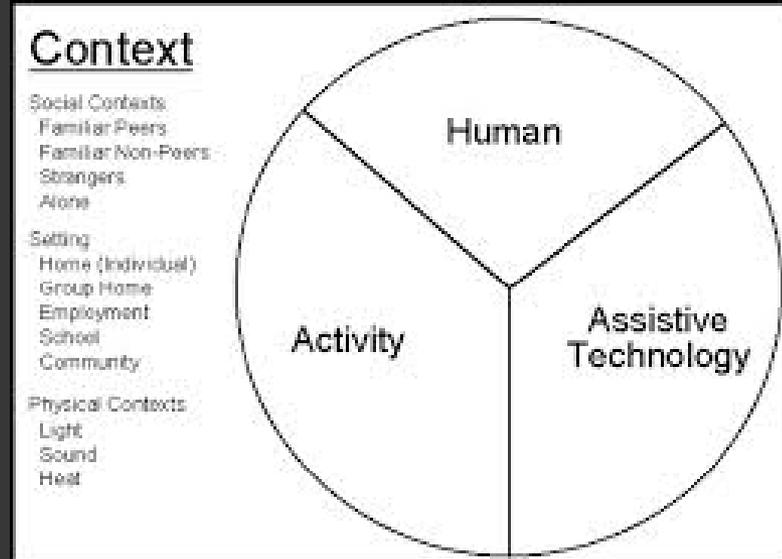
ATRC

- Housed in the Department of Occupational Therapy (OT)
- Definition of OT
- Our staff: Occupational Therapists, OT graduate students, AT IT Coordinator, CS student
- The ATRC provides direct AT services and consultation on campus

HAAT MODEL

- Human Activity Assistive Technology
- Framework describing elements of AT
  - Human
  - Activity
  - AT
  - Context

Intake Process

- Required authorization paperwork
- Guided interview to identify:
  - Barriers and strategies in academic areas
  - Technology and mobile device use
  - Where they prefer to use AT
  - Campus supports
  - Self Advocacy, Health and Well-being
- Learning Style Survey
- Rating Form (OT outcome measure)

Alternate Format Assessment

- Alt Format Continuum Handout
  - Guides staff and student through the alt format and reading supports available
  - Description of the AT
  - Compatible formats
  - Players
  - Location
- *Note: this continuum focuses on supports for students non-apparent print disabilities

Alt Format Assessment cont'd

- ⦿ Staff goes through the handout and demos the AT

- ⦿ Once preferred AT and alt format is selected, student is referred to Alt Text Services in the DSS office

- ⦿ Student receives on going training on AT from ATRC staff

Alt Format Continuum – Basic Features

Technology	MP3	Learning Ally (Audio only Daisy)	Daisy	Rapid Reader – Speed Reading	Low-Cost Text to Speech SOFTWARE	Low-Cost Text to Speech APPS
User Interface	**Audio only** Convert text into audio format using program Text Aloud. Student can select voice and speed (see list) **Pro**: Portable **Con**: Difficult to navigate, computer voice	**Audio only** **Pro**: Real voice, easy to navigate **Con**: Membership fee required annually – check for eligibility. Audio only – no text Requires use of a Daisy Player software, hardware or app.	**Visual display and audio** **Pro:** Easy to navigate. Audio + visual display. Daisy files available to those who qualify for Bookshare. **Con:** Requires use of a Daisy Player software, hardware or app.	**Visual Speed Reading Software** **Pro:** Rapid Serial Visual Presentation (RSVP) **Con:** No Audio, Costs money for Pro Version if not using on campus	**Audio and Visual display of text** Text to Speech, Highlights as it reads **Pro:** Free/low cost, on student's personal computer. *CAR supports MathML **Con:** Computer voice, limited features	**Audio and Visual display of text** Text to Speech, Highlights as it reads **Pro**: Free/low cost, on student's personal mobile device **Con**: Computer voice, limited features
Voice	Computer	Real Voice	Computer	Computer	Computer	Computer
Readable Formats	.mp3	.daisy	.daisy	.doc, .txt,.r2d,PDF Copy from clipboard	.doc, PDF, .txt *MathML - CAR	PDF, .doc, .rtf, .html
Players	Windows Media, I Tunes, Personal Mp3 Player	Daisy Players, Easy Reader, Link **iOS apps** –Learning Ally, Read2Go **Android apps –** GoRead, Learning Ally	Daisy Players, Easy Reader, etc. **iOS apps** – Read2Go, Voice of Daisy, **Android apps -** GoRead	Rapid Reader * Equivalents available – Spritz, Spreeder, Flash Reader (iOS), Speed Reader (Android)	Built-ins, Natural Reader, Ghost Reader, Balabolka, Central Access Reader (CAR)	**iOS:** vBookz, Voice Dream Reader, ClaroSpeak, ClaroPDF, Built-ins **Android:** ezPDF Reader
Location	Portable	Portable, On Campus	Portable, On Campus	On Campus Free version available	On personal computer/device, on campus	On portable mobile device

Alt Format Continuum – Advanced Features

	Shared Features
Reading	• Text-to-speech • Highlighting text during audio • Speed adjustment • Create audio files of text • Reads internet browsers • Optical character recognition (OCR) • DAISY support
Writing	• Dictionary • Thesaurus • Word prediction • Spell checkers • Homophone finders • Foreign language support
Study Tools	• Multi-color highlighting • Annotations • Audio/voice notes • Generate outlines from text
Visual Display	• Background and other color changes • Text magnification • Text and highlighting color options

	WYNN	Read & Write	Kurzweil 3000
Unique Features	• Exact or text view display • Enhanced screen masking, font, color, and spacing • Skim reading feature • Bookmarks, sticky notes • Web annotations and masking • Notecards	• Single word display while reading • Vocab list • Screen shot reader • Speech Input/dictation (Windows version only) • Concept mapping • Web annotations • Screen overlay option • Fact Finder/Folder • iPad app for Safari	• Bookmarks, sticky notes • Concept mapping • Firefly – web/mobile access • Image Reader • Column and Foot Notes • Zone Editor
Notable Limitations	• No concept mapping • Not available for personal computers • Involved format conversion process (to Wynn format)	Missing features for Mac version: • Speech Input • Limited screen masking options	• Involved format conversion process (PDF to kes) • Missing Mac features – background color change, Image Reader
Voice	Computer	Computer	Computer
Readable Formats	Wynn files, PDF, .doc Read the web with WYNN browser	.doc and PDF Reads IE, Chrome, Safari	PDF, .kes .doc – formatting is off Reads Firefox and IE
Players	Within WYNN program	Floating Tool-bar	Within Kurzweil Program
Location	On campus only	On Campus, Free installation on personal computer	On Campus, Free installation on personal

Case Study – "Sara"

Sara is a grad student in the Veterinary Medicine department. She likes to play soccer and do arts and crafts when she has spare time. Sara was diagnosed with Dyslexia in elementary school. She struggles with reading speed, comprehension, and tracking, and finds big words difficult to read. She reports that she is "horrible with spelling" and that her mom proofreads her papers. She has an account with Learning Ally, but the majority of her textbooks this semester are not available. She also has many PDF readings posted from professors. When she reads, she typically likes to highlight and bookmark important items. After taking a learning style survey, she scored high on "Tactile," "Auditory," and "Visual." She has a new PC, as well as a Kindle Fire, and would like to learn about all her reading options on her personal devices.

Case Study – "Dave"

Dave is a freshman this year studying Biomedical and Mechanical Engineering. He moved to Colorado from Texas and is excited about all the outdoor experiences Colorado has to offer. He is currently taking all STEM courses. He was diagnosed with ADHD and Dyslexia in high school. He has tried audio books before because he states he is a slow reader, does not retain the info he reads, often loses his place, mixes up words, and can't concentrate. Dave mainly struggles with reading the surrounding text in textbooks versus formulas and equations, but would still like to learn about any software that reads aloud STEM content. Dave has used bubble mapping apps in high school to help him organize his thoughts while reading and writing. After taking a learning style survey, he scored the highest on "Auditory" and "Visual." He has a Windows laptop and an iPad and would prefer to do his readings on his own devices, but is open to using AT on campus as well.

Case Study – "Melissa"

Melissa is full time grad student working toward her M.A. in Leadership and Administration. She is also working at an insurance company and commutes about 30-40 minutes each way to/from school. She does most of her school work on her MacBook Pro at home and is rarely on campus. She has been recently diagnosed with Irlen Syndrome. Her main concerns include a very slow reading speed, re-reading multiple times, words jumping off the page, sensitivity to black on white on hard copy and computer readings, struggling with spelling, and mixing up words when reading and writing. She has thick textbooks to read, as well as PDFs from her professors.

Resources/Contacts:

[ATRC at CSU Website](http://www.atrc.colostate.edu) (http://www.atrc.colostate.edu)

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Thank you!