Accessing the College Classroom: Assistive Technology for Students with Intellectual and Developmental Disabilities

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Outline

• Who we are
• Forming a collaborative team between the IPSE and the Department of Disability Resources
• Technology to meet the writing and literacy needs in the college classroom
• Open Discussion
Aggie ACHIEVE at Texas A&M University

Aggie ACHIEVE launched in fall 2019 with a twofold mission:

1. provide an inclusive and immersive college education;
2. equip young adults with intellectual and developmental disabilities for employment in the community.

- The first two years of the program are designed to introduce students to college life by offering seminars that focus on independent living, career awareness, and self-determination as well as on-campus internship opportunities.
- The last two years focus heavily on career development and field specialization, including opportunities for off-campus paid internships in a student’s field of interest.
Disability Resources

Mission statement:

Disability Resources staff members interact and collaborate with faculty, staff, and students to achieve an equitable learning environment for students with disabilities at Texas A&M University.

Five main focus areas:

Access Coordination, Assistive Technology, Testing Center, Communication Access, Outreach and Consultation

Collaboration:

• Collaborate with many different departments on campus to Dining, Housing, Career Center, Parking, Information Technology, Aggie Achieve, etc.
Inclusive Coursework Opportunities

- Aggie ACHIEVE students enroll in one academic course at Texas A&M University each semester, using a modified syllabus and Independent Learning Agreement created in collaboration with course instructor.

- Students receive support from peer mentors and participate in shared activities with their peers to demonstrate content mastery.

- Just like any other student at TAMU, Aggie ACHIEVE students receive accommodations in partnership with Disability Resources.
Forming a Collaborative Relationship

- Collaborating early on in the process
- Department appointed point person
- Steering Committee representation
- Defining roles and responsibilities for working with Aggie Achieve students
Modifications vs. Accommodations

Accommodations - Disability Resources
- The focus is on removing barriers to access by altering the environment, format, or equipment.
  - Accommodations include extended testing time, testing in a reduced distraction environment, accessible books, copies of PowerPoints.

Modifications - Aggie Achieve
- The focus is on student success by modifying or changing the curriculum.
  - A modified syllabus gives students a choice between taking a test, doing a presentation, or writing a paper.
Universal Design for Learning
How many of you have heard or used the Read & Write Software?
Text-to-Speech

• Text is read aloud and simultaneously highlighted using a variety of highly-customizable settings.
R&W: Text-to-Speech

• Place your cursor where you would like to start.
• Click the Play button.
• R&W uses dual color highlighting to improve reading comprehension.
Text-to-Speech Supports:

• Processing
• Reading speed
• Comprehension
• Multi-modality
• ESL
Read the Web / Hover Speech

• Text is read aloud simply by hovering the cursor.
• PDF Reader: A collection of tools to accessibly read and use PDF files.
R&W: Read the Web / Hover Speech

• Click Hover Speech icon.

• Hover cursor over text you would like read.

• OR just highlight text and click the Hover Speech icon.
Read the Web / Hover Speech Supports:

- Processing
- Reading speed
- Comprehension
- Multi-modality
- ESL
Check It

• Reviews writing for incorrect grammar, spelling (phonetic), capitalization, punctuation, verb tense and more.
R&W: Check It

• Click Check It icon on R&W toolbar.
• The errors in your doc will be underlined in purple.
• Click on an error to see suggested corrections.
• Select the word you want to use or click Ignore.
Check It Supports:

- Processing
- Grammar
- Spelling
- Reflection and review
- ESL
Talk&Type

• Turns the spoken word into text.
R&W: Talk&Type

• Click the Talk&Type icon.
• Start talking when the microphone appears.
• Click the Talk&Type icon to stop.
Talk&Type Supports:

• Processing
• Writing
• Spelling
• Reflection and review
 Prediction

• Enrich your writing with word suggestions.
R&W: Prediction

• Click Prediction icon.
• A list of word suggestions will appear as you type.
• You can hover over a word to hear it read aloud.
• Click the word to use or type Ctrl + the number next to it.
Prediction Supports:

- Processing
- Communication
- Spelling
- ESL
Collect Highlights

- Collect your thoughts and take notes with coloured highlighters.
R&W: Collect Highlights

• Select text and then click a highlighter button.
• Extract your highlights into a new Google Doc using the Collect Highlights button.
• Choose the colors and how to sort them. Click Okay.
• A new Google Doc will automatically generate containing your highlights and a link back to the original source.
Collect Highlights Supports:

• Notetaking
• Study
• Reflection and review
Vocab List

• Save words and compile your own personal glossary.
R&W: Vocab List

• Highlight individual vocabulary words using the colored highlighters.

• Click the Vocab icon.

• A new doc will be created in your Google Drive containing a vocabulary chart.
Vocab List Supports:

• Processing
• Comprehension
• Spelling
• Reflection and review
• ESL
Voice Note

• Make auditory notes within documents.
R&W: Voice Note

• Place your cursor wherever you want to insert the comment.
• Click the Voice Note icon.
• Click microphone icon to begin speaking.
• Listen to your recording, rerecord or insert it into your document.
Voice Note Supports:

• Study
• Reflection and review
• Multi-modality
Simplify

• Provides a reduced-distraction experience for reading web sites and articles.
R&W: Simplify

• Click Simplify icon.

• A decluttered version of the webpage will open in a new tab.

• Use toolbar to further simplify article, change font appearance or adjust contrast.
Simplify Supports:

• Processing
• Comprehension
• Reflection and review
Strengths of Read & Write

- Compatible with all Google products
- Easy of PDF reading
- Continuous reading and highlighting the words as it reads
- Extensive features
- Age appropriate
Areas for Improvement

- iOS Features
  - iPad accessibility
  - iPhone
- Best used on Chrome
- Desktop v. Chrome Extension can be confusing
- Training Needed
- Scanned documents are unreadable
- Costly
Student Perspectives

“Sometimes [reading] is hard...helps me read...my textbooks. I like talking in it [to type].” -Miguel, Junior in Aggie
ACHIEVE
“I like to journal so it helps me with spelling words. I use it for class too and it helps me understand what I am reading.” - Julia, Sophomore in Aggie ACHIEVE
Student Perspectives

“This helps me with emailing, writing, and listening to my books.” - Lexi, Junior in Aggie

ACHIEVE
“I use Read & Write mostly for school but I could use it for other stuff. I really like it because I am not good at reading. It is easy to highlight and you know have it read to me...my textbooks or whatever it is for class or work.”

-Rayshaun, Sophomore in Aggie
Other Resources for Text-to-Speech
Speechify
https://speechify.com/Speechify
Natural Reader

www.naturalreaders.com/software
Welcome to Voice Dream Reader, the most accessible reader in the world. Thank you very much for being a customer. We hope our app will serve you well.

The lite version stops speaking after a few sentences. We hope you like our app and buy the paid version. Of course, the paid version speaks the entire text until the end.

I'll walk you through the key features. Please go through the Help section in Settings for more details.

Text navigation controls are located at the bottom. You can rewind or fast forward by sentence, paragraph, page, chapter, highlight, bookmark, 15, 30, or 60 seconds. These are called Navigation Units. You can change the
Other Resources for Writing Support
Co-Writer

https://learningtools.donjohnston.com/product/cowriter/
Ghotit Real Writer

https://www.ghotit.com/dyslexia-software-real-writer-for-windows
The origin of life has been debated for many years, but most agree of the presence of...
Other Resources for Speech-to-Text
Windows Speech Recognition / Mac Dictation
Type with Your Voice in Docs

support.google.com/docs/answer/4492226?hl=en#zippy=%2Ctype-with-your-voice
Dictate in Word365

https://support.microsoft.com/en-us/office/dictate-your-documents-in-word-3876e05f-3fcc-418f-b8ab-db7ce0d11d3c
Inclusive Higher Education around the US

- 300+ college programs for students with intellectual disability across the US
  - (15 in Texas!)
- Visit thinkcollege.net for more information about these innovative programs!
Questions?

What technology have you found to be useful in accessing the college classroom?
Session Evaluation

• Your feedback helps shape future programming.

• Thank you for attending!