ASSISTIVE TECHNOLOGY RESOURCE GUIDE:
READING/TEXT TO SPEECH

What is available to support reading?

Like all academic areas, reading comprises of many skills. What supports we give a student depends on what area is giving them trouble. There is technology to support the visual aspect of reading, to simplify language in written passages, to help with decoding, to provide visual referents for definitions, and more. Supports with reading fall under the broad terminology of text to speech, though more specific tools may also be identified. Another important component is being able to access the physical text, consider being able to turn pages, see the text at a comfortable angle, and more.

What types of students might benefit?

With programs that can help with the visual parts of reading (highlighting, reducing distraction, enlarging, etc) students with ADD and or/visual issues may find reading easier with the right supports. Reading supports which which simply read aloud text can be a valuable support for students with visual issues, dyslexia, or other issues with decoding. Keep in mind that to benefit from hearing a book read aloud the student needs to be able to focus on the information being read to them, hold it in their working memory, and have auditory comprehension (language) skills to understand what is being read.

How does it help?

If a student can not see, or decode what they are seeing, they are losing access to much of their instruction. Reading is how we learn, especially third grade and up. Often it is also how we are testing what has been learned. Directions in science class, maps in social studies, and even math story problems include reading! Programs that provide access to text to speech, enlargement, highlighting, and more allow access to this important skill across the curriculum

Who can be a support on your team?

Reading Specialist, Speech Pathologist, Occupational Therapist, Physical Therapist, School Psychologist, Parent, Student

Reading Skills to Consider:

- Positioning reading material
- Identify letters/numbers
- Recognize/read name
- Decodes words
- Read common high-frequency words by sight
- Read words, sentences and/or longer passages
- Comprehend age/grade appropriate reading materials
  - Literal meaning
  - Inferential meaning
  - Main idea
- Summarize key points
- Retell stories with key details in correct sequence

- Reads with fluency

Common Classroom Tools:
- Computer/tablet/word processor
- Document camera
- Electronic texts
- Interactive whiteboard
- Projected information
- Supplemental texts
- Tests
- Textbooks
- Whiteboard
- Worksheets

Common Accommodations/Modifications/Strategies:
- Change complexity of material
- Custom vocabulary list
- Decrease assignment length
- High interest, low reading level materials
- Highlight to emphasize key points
- Increase print size
- Increase time
- Optimal student seating
  - appropriate lighting (not facing glare or in shadows)
  - away from extraneous noises
  - close proximity to the teacher (distance)
  - individualized visual proximity to educational environment/materials
- Peer/adult assistance
- Pre-teach new vocabulary
- Provide key points/details ahead of time
- Provide picture symbols to supplement printed words
- Provide questions ahead of time
- Provide two sets of textbooks
- Read text aloud
- Supplement print with audio

Assistive Technology Solutions:
- Page fluffers
- Positioning Aids (slant board/book holders for positioning books)
- Colored paper, overlay filters or lens
- Tracking aids
- Portable dictionary with speech output

- Handheld reading devices
- Specialized format books
  - large print
  - audio
  - electronic (eBook)
  - braille
- Adapted books
- Device, software or app
  - variable color text/background combinations
  - word processor .
  - picture-based
  - text-to-speech
  - eBook Readers
  - literacy suite software
  - document scanner
  - advanced reading and writing aid software that includes:
    - Optical Character Recognition
    - text-to-speech with highlighting
    - study tools dictionary
    - word prediction
  - braille note taker with refreshable display
  - Alternate access/accessibility features
    - adapted pointers
    - alternative mice
    - keyguards
    - alternative keyboards
    - switch access
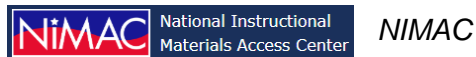   - screen readers
    - magnifiers

*Products mentioned below are examples of available items. Their listing in this guide is not an endorsement or suggestion for purchase. Consideration of the tool should be individualized to each student. **(Tools involving vision, Braille, and magnification are in the vision resource guide. Tools for physical access are with Seating/Positioning.)***

Examples on next page

Learning Ally
https://learningally.org/

Bookshare
https://www.bookshare.org/cms/

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Infinitec
infinite potential through technology

NIMAC

https://www.texthelp.com

TextHelp
https://www.nimac.us/

DonJohnston - Snap&Read
https://snapandread.com/

Infinitext
http://www.myinfinitec.org/infinitext

Rewordify
https://rewordify.com/

Scanning Pen
http://www.scanningpens.com

Open Dyslexic Font
https://www.opendyslexic.org/

CaptiVoice
https://www.captivoice.com/capti-site//
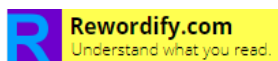
Claro
https://www.clarosoftware.com

Kurzweil
https://www.kurzweiledu.com

Built In Programs to support reading through accessibility
Microsoft (Office, Windows, XBox) - https://www.microsoft.com/en-us/accessibility
Google (Chrome, Android, YouTube, and more) - https://www.google.com/accessibility/
Apple (Mac, iDevices) - https://www.apple.com/accessibility/

Chaffee Amendment - Copyright information - More about NIMAS and NIMAC
To help answer questions regarding scanning or copying course materials to make them accessible. https://sites.ed.gov/idea/files/nimas-ga-08-2010.pdf