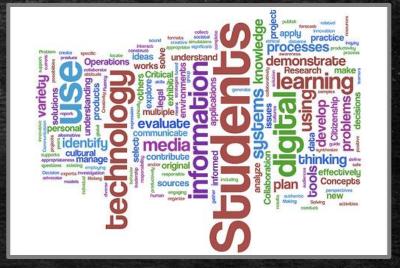
# Beyond Assistive Technology:

Ensuring Access Occurs



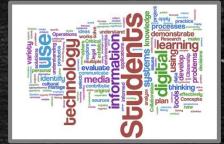


Vickie Plumley Tupper Lake CSD AT Team Member & Speech Pathologist

Matthew Southwick Tupper Lake CSD Director of Special Programs

### Where are you?







### How well is my school doing with implementing effective High Tech Assistive Technology with Students with Disabilities?



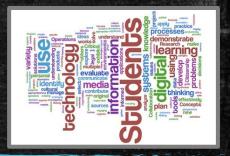
A



B







"High Tech" Assistive Technology applications and the potential hurdles to providing these services.

**Purpose:** Providing students better educational access in the areas of:

- Reading
- Writing

#### Session Objectives



• Recognize the benefits of Assistive Technology in meeting student's IEP identified needs.

• Identify possible hurdles/roadblocks to implementation.

• Begin to create a plan of strategic steps to build an effective Assistive Technology structure in your school.



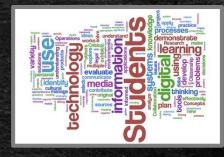
#### Regulations

It is a federal and state requirement that AT must be considered for all students during development of their IEP 200.4(d)(3)(v)

- at initial meeting to determine eligibility for special education
- at least annually thereafter

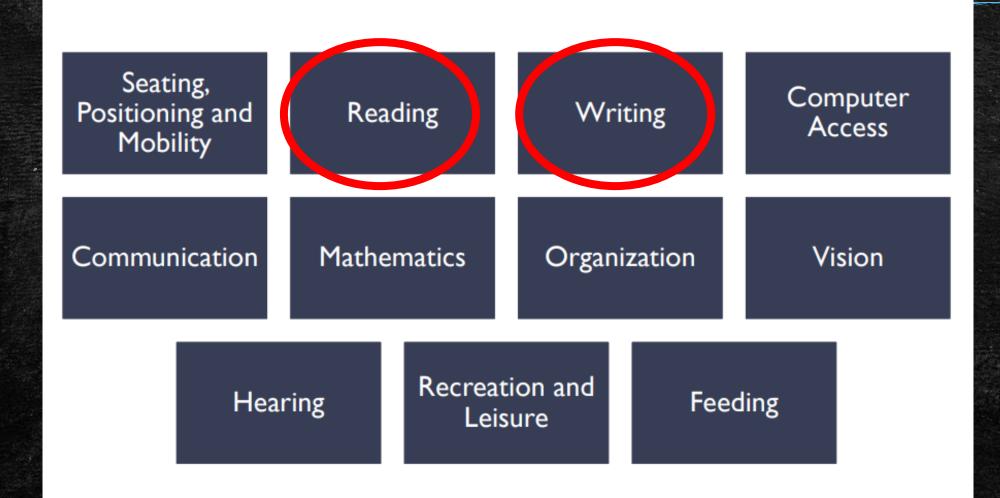
School districts must ensure that students who are blind or otherwise unable to use print materials, receive accessible format materials at the same time other students receive their instructional materials.

 Accessible format includes Braille, large print, audio and digital text.





### What Educational Challenges Can Assistive Technology Address?



#### Assistive Technology (AT) Consideration Checklist

This checklist was designed to support Committees on Preschool Education (CPSEs) and Committees on Special Education (CSEs) in their thorough consideration of AT devices for students with disabilities. The AT devices included on this checklist are not exhaustive, so CPSEs/CSEs are encouraged to make other student-specific considerations outside of the items on this checklist if necessary. This checklist is for consideration purposes and may be used to support the assessment of an assistive technology device (or, devices) for an individual student.

Student:	Date:
----------	-------

-						
١	Environments and	Challenge Areas	Possible AT Devices			
	Tasks (Check all applicable	Related to Tasks (Check "Independent" if the student functions	(For areas in which "Consider AT" is chosen in the preceding column, indicate any possible AT devices the CPSE/CSE may wish			
	environments and tasks in which the student may require	adequately with standard classroom tools. Check	to consider when assessing the student's AT needs.)			
١	AT support.)	"Consider AT" if additional support may be needed.)				
ŀ	Curriculum Tasks:	Seating, Positioning &	□alternative/adapted chair or	desk ∏other		
1	□Instruction	Mobility	☐stander	deskotilei		
1	☐Independent Work	□Independent	□stabilizing supports			
1	☐Group Work	□Consider AT	□grab bar/hand rail			
1	☐ Vocational Tasks		walking supports			
1	☐ Assessments		□wheeled devices			
1	☐ Transitions	Reading	reading window			
1	☐ Homework	□Independent		ng device for printed documents		
1	☐ Homework	☐Consider AT	☐text-to-speech software/app			
1	Physical Tasks:		□pictures/picture symbols add			
	Building Navigation		□scanner with Optical Charac     □other	ter Recognition (OCR)		
1	☐ Materials Manipulation	Writing	_	voice recognition software/app		
1	☐ Equipment Use	□Independent		word processor		
1		□Consider AT		adapted pens/utensils*		
1	Social Tasks:		□slant board* □	electronic dictionary/thesaurus		
1	☐ Communicating with			scanner		
١	Others			typing program with voice output		
١	☐ Participating in			other		
	Extracurricular Activities		software	" utensii modifications for art class, as well (drawing/painting, etc.)		
	Peer Interaction	Computer Access	☐Microsoft/Mac accessibility	arm stabilization		
١	☐ Game-Play	□Independent	options	_touch screen		
1		☐Consider AT	□adapted/alternative keyboard □eye gaze access			
	Safety Tasks:  Safety Drills		□adapted/alternative mouse □switch interface	□other		
١	☐ Building Safety					
١	☐ Bus Safety	Communication  Independent	□picture symbols □other			
١	☐ Equipment Safety	☐Independent ☐Consider AT	☐communication boards ☐voice output device with picture icons/overlays			
1	☐ Equipment Salety	Consider A1	voice output device with step			
	Environments:		□voice output device with dyn			
١	General Education		□written/typed communication			
١	Classrooms		☐text-based device with spee	ch production		
١	☐ Special Education	Mathematics	□manipulatīves	☐math software/app		
1	Classrooms	□Independent	□abacus	☐talking watch/clock		
١	☐ Hallways	☐Consider AT	☐talking calculator	☐graphing calculator software/app		
1	Outdoor Activity Areas		□adapted math paper	math recognition feature for text-		
١	☐ Assembly Spaces		□on-screen calculator □voice recognition	to-speech software/app □other		
١	☐Cafeteria/Meal Spaces		software/app with math			
	☐ School Bus		recognition			
	☐ Job Sites	Organization	□sensory/regulatory supports	□online search tools		
1	☐ Field Trips	□Independent	☐fidget items ☐sticky notes (low-tech or digital)	□digital graphic organizer □study skilis app		
1	☐ Home	□Consider AT	☐ highlighter (low-tech or digital)	□study skills app □app/computer-based video clips,		
	Other Tasks/Environments		☐handheld scanner/scanning pen	animations, tutorials		
	not listed:		□electronic organizer	□other		
			☐dividers/bins/color coding for desk/locker/cubby			

	Environments and	Challenge Areas	Possible AT Devices			
	Tasks (Check all applicable environments and tasks in which the student may require AT support.)	Related to Tasks (Check "Independent" if the student functions adequately with standard classroom tools. Check "Consider AT" if additional support may be needed.)	(For areas in which "Consider AT" is chosen in the preceding column, indicate any possible AT devices the CPSE/CSE may wish to consider when assessing the student's AT needs.)			
	Curriculum Tasks:  Instruction Independent Work Group Work Vocational Tasks Assessments Transitions Homework	Vision ☐Independent ☐Consider AT	large print   Braille devices/supports   color filters for reading   magnifier/magnifying devices (low-tech or electronic)   closed captioning   high contrast pen   large key calculator   talking calculator	math manipulatives     abacus     text-to-speech software/app     voice recognition software     typing program with voice output     audio recorder     tactile supports     GPS		
	Physical Tasks;  Building Navigation  Materials Manipulation  Equipment Use  Social Tasks:  Communicating with  Others  Participating in	Hearing □Independent □Consider AT	□classroom amplification □FM system □infrared system □induction loop system □voice recognition software (to re person's spoken message) □one-to-one communicator □personal amplification □visual/vibrating alerting device			
	Extracurricular Activities  Peer Interaction  Game-Play  Safety Tasks: Safety Drills Building Safety Building Safety Equipment Safety	Recreation and Leisure Activities □Independent □Consider AT				
G    C    C    C    C    C    C    C	☐ General Education  Classrooms ☐ Special Education ☐ Special Education ☐ Hallways ☐ Outdoor Activity Areas ☐ Assembly Spaces	Feeding  Independent Consider AT  Other:	□adapted feeding utensils □adapted bowls/plates □adapted cups □tray attachment for specialized s □other List other tools to consider in the			
	☐ Assembly Spaces ☐ Cafeteria/Meal Spaces ☐ School Bus ☐ Job Sites ☐ Field Trips ☐ Home  Other Tasks/Environments not listed:					

Adapted from the Kentucky State Assistive Technology Consideration Guide and the Wisconsin Assistive Technology Initiative (WATI)

Assistive Technology Assessment Checklist with acknowledgement to the Wisconsin Department of Public Instruction

#### Assistive Tech Follow Up Plan



Use this organizer to keep track of /plan for tasks you need to do when you return to your district.

		(0)
Action Step (describe)	Resources or Support Needed?	The second secon
Items to Locate:		
Ask About:		
To Do:		
1.		
2.		
3.		

#### Warm up Activity





What is the GOAL of Assistive Technology?



COORDINATOR SPECIAL EDUCATION POLICY AND PROFESSIONAL DEVELOPMENT Room 309 EB, 89 Washington Avenue • Albany, NY 12234 www.p12.nysed.gov/specialed/

May 2016

#### SPECIAL EDUCATION FIELD ADVISORY

FROM:

Patricia J. Geary Jahrens J. Heavy

SUBJECT: Webcast on Assistive Technology for Students with Disabilities

For many students with disabilities, assistive technology provides a bridge to overcome barriers to participation and progress in school. Assistive technology facilitates success and independence for students with disabilities while they work toward their academic, social, communication, occupational and recreational goals. By addressing the student's unique needs, assistive technology can reduce barriers to learning; assist students in progressing in their educational program; provide equitable access to the State's learning standards; and provide students with independence as they participate and progress along with their peers in school and in post-school living, learning and working. Additionally, assistive technology supports increased social and environmental access and completion of everyday tasks.

The New York State Education Department (NYSED) is pleased to announce a webcast on Assistive Technology for Students with Disabilities that provides an overview of policy, practices and resources related to assistive technology. This webcast was developed to assist school personnel in the consideration, assessment, recommendation and implementation of assistive technology that will effectively meet students' needs. This webcast can be accessed at: http://www.p12.nysed.gov/specialed/publications/2016-memos/assistivetechnology-webinar.html

Questions regarding assistive technology may be directed to the Office of Special Education Policy Unit at (518) 473-2878.



#### THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

OFFICE OF SPECIAL EDUCATION ASSISTANT COMMISSOINER

April 2017

TO: District Superintendents

Superintendents of Public Schools Public School Administrators Charter School Administrators

Superintendents of State-Operated and State-Supported Schools

Executive Directors of Approved Private Schools

Nonpublic School Administrators Directors of Special Education

Directors of Pupil Personnel Services

Chairpersons of Committees on Special Education

Organizations, Parents and Individuals Concerned with Special Education

FROM:

Christopher Suriano

SUBJECT: Assistive Technology for Students with Disabilities

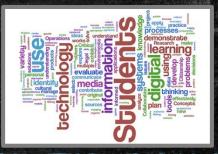
This memorandum is to inform school districts of the new policy brief, Assistive Technology for Students with Disabilities, developed by the New York State Education Department (NYSED) to assist school personnel in the consideration, assessment, recommendation, and implementation of assistive technology for students with disabilities. This policy brief should be used in conjunction with the guidance provided in NYSED's webcast on assistive technology for students with disabilities in New York State and the Assistive Technology Consideration Checklist, released in May 2016. This webcast and the consideration checklist can be found on NYSED's website at: http://www.p12.nysed.gov/specialed/publications/2016-memos/assistive-technology-webinar.html.

The goal of assistive technology is to facilitate success and independence for students with disabilities while they work toward their academic, social, communication, occupational, and recreational goals. By addressing the students' unique needs, assistive technology can reduce barriers to learning; assist students in progressing in their educational program; provide equitable access to the State's learning standards; and provide students with independence as they participate and progress along with their peers while in school and during post-school living, learning and working. Additionally, assistive technology supports increased social and environmental access, completion of everyday tasks and can enhance an individual's overall quality of life.

Questions regarding this memorandum may be directed to the Special Education Policy Unit at (518) 473-2878 or to <a href="mailto:speced@nysed.qov">speced@nysed.qov</a>.

Attachment: Assistive Technology for Students with Disabilities

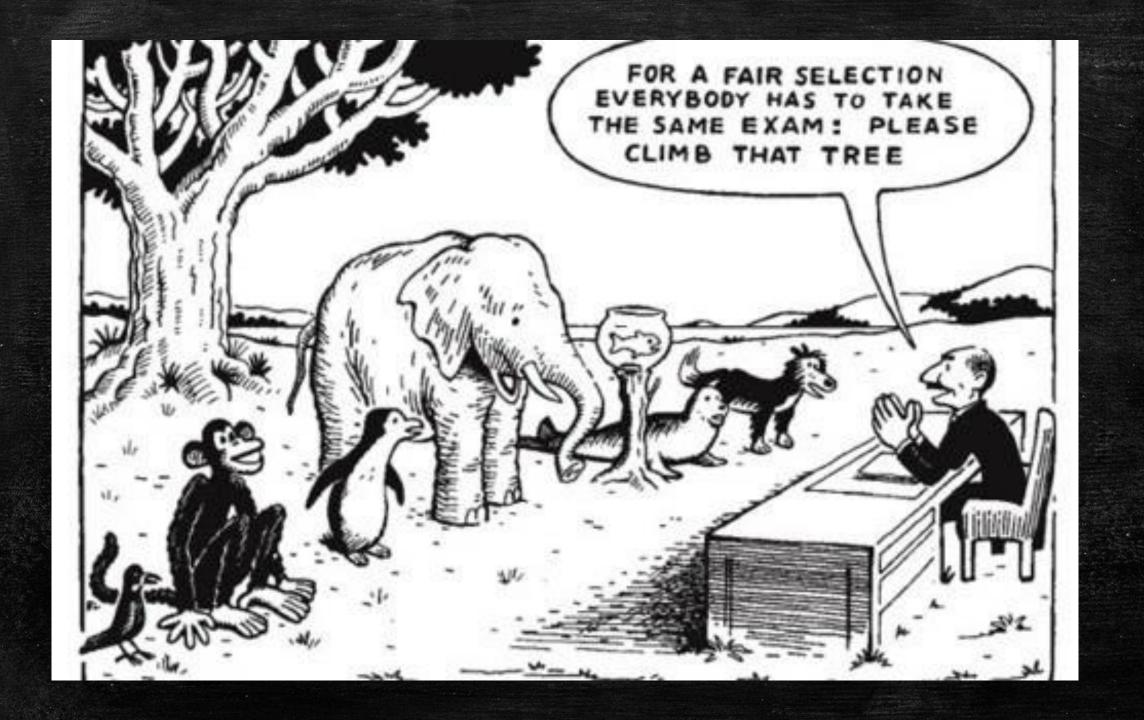
#### NYSED Definition:



**299** 

What is the goal of assistive technology?

The goal of assistive technology is to facilitate success and independence for students with disabilities while they work toward their academic, social, communication, occupational and recreational goals. By addressing the students' unique needs, assistive technology can reduce barriers to learning; assist students in progressing in their educational program; provide equitable access to the State's learning standards; and provide students with independence as they participate and progress along with their peers while in school and during post-school living, learning and working. Additionally, assistive technology supports increase social and environmental access, completion of everyday tasks and can enhance an individual's overall quality of life.

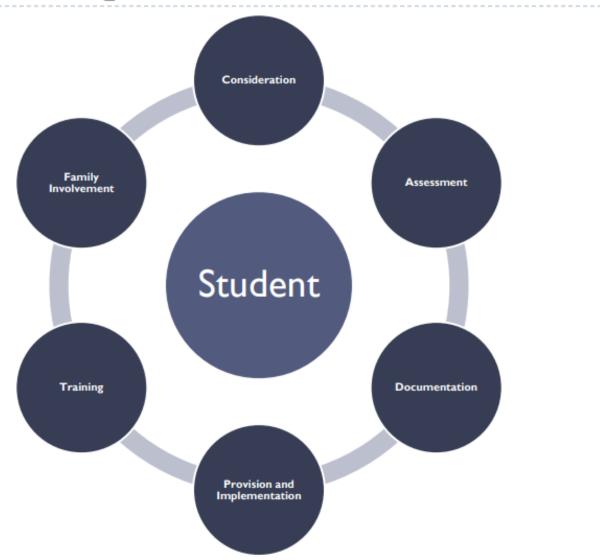


#### **NYSED Definition:**

Assistive technology devices range on a continuum from low technology (low tech) devices to high technology (high tech) devices:

- Low tech assistive technology devices can be homemade or purchased items that are not very sophisticated. They can also include simple modifications made to a student's existing equipment. Examples of low tech devices include (but are not limited to): wrist stabilizers, adapted pencil grips, pictures or icons attached to objects with Velcro®, crutches, walkers, nonmotorized wheelchairs, book holders, grab rails, and adapted paper.
- Mid tech assistive technology devices require more sophisticated technology in their creation and/or use and can include some battery-powered devices. Examples of devices that fall into the mid tech range of assistive technology include (but are not limited to): battery-operated word processors, visual timers, automatic page turners, adaptive switches, voice-output (speaking) devices using picture icons, and talking calculators.
- High tech assistive technology devices are advanced in design and typically digital in nature. Examples of high tech devices include (nut are not limited to): mobile devices, motorized wheelchairs, screen enlargement applications, eye-gaze interfaces, voice-output (speaking) devices with touch screens and dynamic displays, and text-to-speech software programs/applications.

#### The Assistive Technology Process: Essential Components



#### Assistive Technology is a





But who does it?

How do you ensure it happens?

#### Ensuring Access:

Creating the

"Boots on the ground"

implementation of Assistive Technology.

#### Ensuring Access:

Top Five challenges:

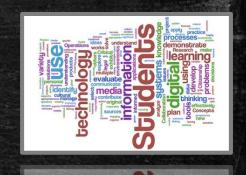


#### 1. Create/ Find an "A Team"

Speech Pathologists, Occupational Therapists, Teacher of the Visually Impaired, Teacher of the Deaf, Interested Special Education Teachers Technology Teachers.

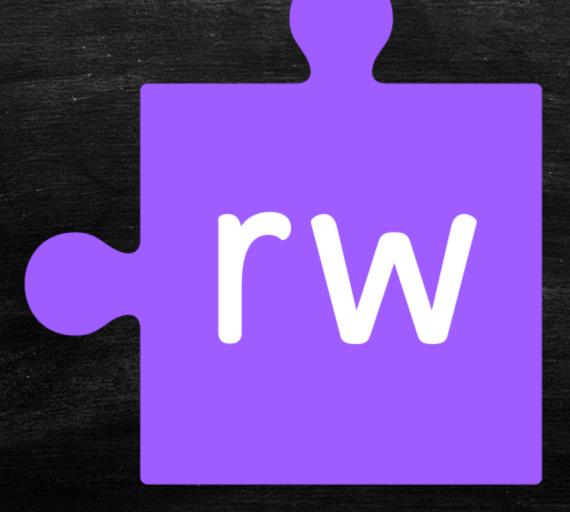
Think Outside the box.

# 2. Identify Universally Designed AT access that serves the ENTIRE student population. (Create the platform)



- Voice at District Wide Technology Teams and Discussions.
- Device Accessibility for all. Create procedures that allow for Push in to the general education classroom versus pull out.
- Create Universal or District endorsed platforms such as the Google Classroom structure or similar.
- Universal accessibility to applications such as Voice to Text/ Text to Speech. OCR readers. Email for students. Wireless. District Tech support in place.

#### READ and WRITE CHROME





# read&write and equatio are free for teachers



home > products > free for teachers

#### Setting up your Free Teacher account

We know how hard educators work everyday to support their students. As a thank you for your time and effort, we have made **Read&Write** and **EquatIO** FREE for teachers! This means you can get premium subscriptions to one or both of these products at no cost. If you're interested in getting set up with a free teacher account for either product, read below.

#### 3. Train Staff & Students.

Special Education/General Education Staff:

- Closing the Gap Conference
- Local/Regional AT Conferences
- Google Classroom
- Webinars

All Students: General Education & Special Education

- 3<sup>rd</sup> and 4<sup>th</sup> Grade Read and Write.
- Google Suite/Classroom.
- Email.
- Device capabilities.

4. Find a person(s) who serves as your primary AT Student/Teacher/Administrator Consultant.

Troubleshooter Organizer

Cheerleader Explorer Coordinator

Implementer

#### 5. Perform the Assessment.





NYS sets no specific criteria/credential to conduct an Assistive Technology Evaluation or provide AT Services

- 1. Create an "A Team"
- 2. Identify/ create an AT platform that serves all
- 3. Train People
- 4. Find a person or person(s) to champion the cause.
- 5. Identify Need Perform Assessments



#### Walk And Talk Activity

Task: What area is your strength?

What area do you need to grow in?

### What Educational Challenges Can Assistive Technology Address?



#### Assistive Technology Evaluations

#### Reading supports (Braille, digital, audio)

- Access and Use of Educational Materials is the key to this evaluation.
- Use the Technology tools that your district is already using if possible *and then* be prepared to look beyond to meet the needs of some students.
- Be systematic and document everything that you tried in a manner that affirms or eliminates the need for technology as a reading support for each student

#### Assistive Technology Evaluations (Con't)

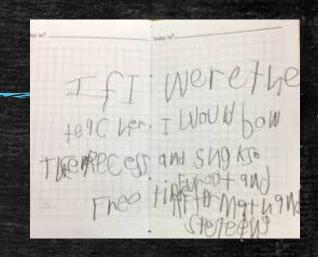


#### Reading supports evaluation (Braille, digital, audio)

- Determine the student's present independent reading level.
- Use available data points to support your recommendation.
- Progress Monitor applications with student to ensure AT accommodations being used are effective.

#### Assistive Technology Evaluations (Con't)

#### Writing supports evaluation



#### Have an OTR as lead on this if possible

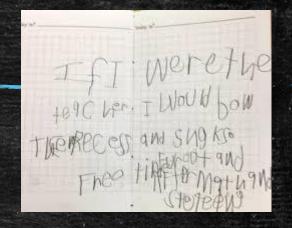
Must identify reason to evaluate to tailor process to student's needs.

- poor penmanship
- poor spelling
- poor writing productivity for grade level
- over-arching disability that affects writing ability

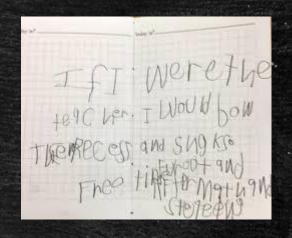
#### Assistive Technology Evaluations (Con't)

#### The "HOW" of it:

- Set aside 30 60 minutes
- Find out student interests in advance
- Prepare writing prompts to use when eliciting each writing sample with each condition



#### Writing supports evaluation



Observe and document characteristics of the student using each tool attempted:

- word processing
- spell prediction
- speech-to-text

Include number of self-corrections, skills with keyboard, number of words typed and duration of each attempt.

# "High Tech" programing for Reading Accomodations.

#### **NYSED** TESTS READ Decision-Making Tool

is there evidence that the student's access to and/or performance on print-based tasks improves when information is presented to the student in auditory formats (by way of human reader or the use of assistive technology)?

Does the student use read-aloud accommodations during instruction and/or classroom testing (by way of human reader or the use of assistive technology)?

is the student provided instructional materials in auditory formats?

#### Attachment

#### Testing Accommodation Decision-Making Tool for "Tests Read"

The chart below may be used by school personnel to facilitate collaborative decision-making related to the recommendation of "tests read" (via human reader or technology) as a testing accommodation for students with disabilities in grades 3 through 8. The questions in this tool should be considered each time a student's individualized education program (IEP) or Section 504 Accommodations Plan (504 Plan) seviewed to determine the appropriateness of this accommodation. After completing the chart, check the box below indicating the recommended testing accommodation for the Committee on Special Education (CSE) or Section 504 Committee to review and consider when developing the student's IEP/S04 Plan. This tool is for local use, only. Do not submit this form to the New York State Education Department (ANSET).

Student:	ent: Date:					
Persons involved in Decision-Making:	Persons involved in Decision-Making:					
Questions	YE8	NO	N/A	Comments/Evidence		
Is there evaluative information indicating that, even after explicit and systematic reading instruction, the student's disability productes or severely limits the student's ability to decode print?						
Has the student been provided systematic, explicit, research- based reading intervention(s) to improve decoding skills?						
If the student is blind or visually impaired, is he or she learning to read braille?						
If the student is blind or visually impaired, has it been determined that his or her disability precludes or severely limits the ability to access and/or develop proficiency in braille?						
If the student is deaf or hard of hearing, is there evidence deposstrating, that the student's disability precludes or severely limits his or her ability to decode printed text (possibly due to other co-occurring disabilities or long-term use deprivation in early childhood)?*						
Is there, the content of the student's access to and/or performance or subject tasks improves when information is presented to the student in auditory formats (pg. way of human reader or the use of assistive technology)?						
Does the student use read-aloud accommodations during instruction and/or classroom histing (by way of human reader						
is the student provided instructional materials in auditory toposats?						
Has the student proceed input to inform specific recommendation related to the "tests read" testing						
Are the additional considerations for recommending "tests read" for this student, specific to his or her unique disability- meds? If so, explain in the space below:						
"if the answer to this question is "YES", and the student also understands sign language, the CSE may consider recommending a sign language interpreter to translate text if appropriate to the needs and skills of the student.						
Check the recommendation that is most appropriate  "Tests read" is not an appropriate testing accommode				of this student:		
"Tests read" should be recommended for this student comprehension.#	on State	and loc	al tests,	except tests of reading		
"Tests read" should be recommended for this student on all State and local tests, including tests of reading						

"These recommendations indicate that the Grades 3-8 ELA Assessments will not be read to the student

### Universal Protocols for Accommodations in Reading uPAR (available through Don Johnston)



http://donjohnston.com/upar/

### So what is uPAR and how does it work?

The quick answer?

A tool for

## Smarter, Faster Decision-Making

Relying on subjective judgement, teachers are no better than chance at determining whether a student needs a read aloud accommodation (Fuchs & Fuchs, 2001; Helwig & Tindal, 2003). What happens when students get the wrong accommodations?

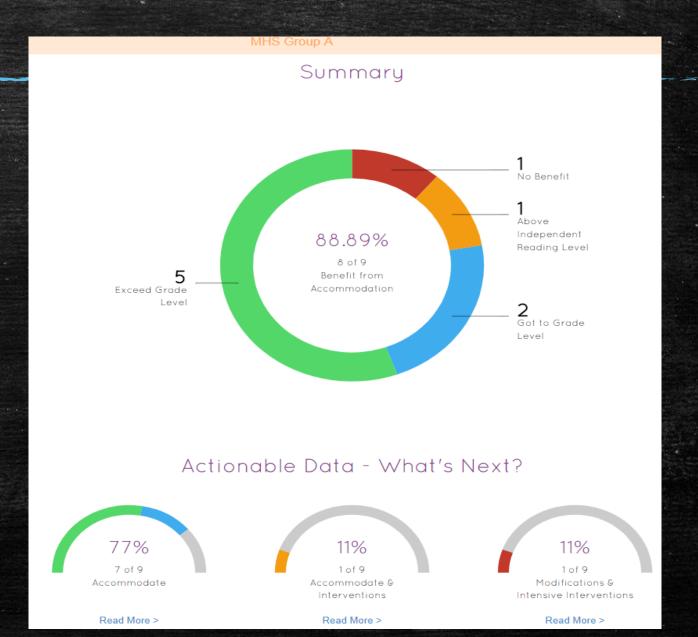
- They don't perform as well as they should
- They don't use their accommodations because they have the wrong ones
- Teachers and parents don't agree about which accommodation the student needs

uPAR turns this subjective decisionmaking into a data-driven diagnostic process that anyone on the IEP team can implement.

#### What the Overall Data tells us about our read-to accomodations?

This is the summary page for the 8/11 students that completed uPAR.

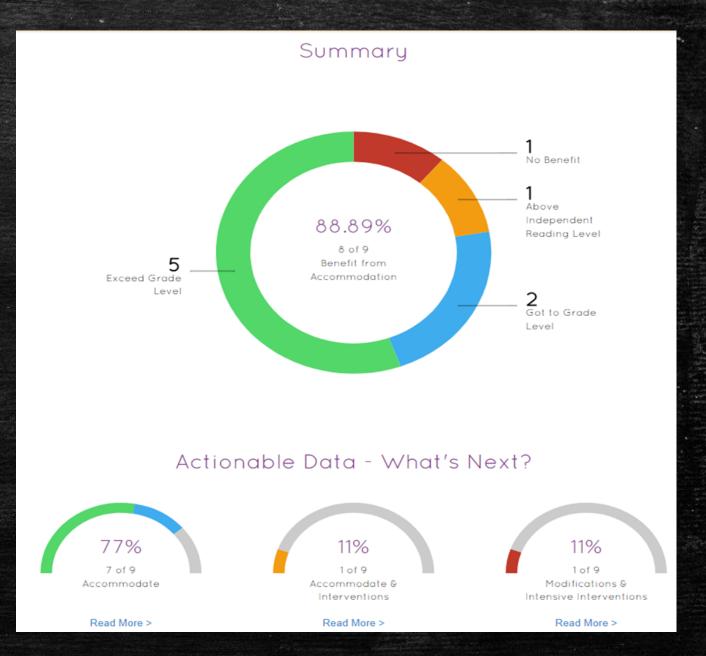
Three students have not completed the assessment due to time factors and will be able to finish it soon.



#### What does the Overall Data tells us about our read-to accomodations?

This is the summary page for the 8/11 students that completed uPAR.

Three students have not completed the assessment due to time factors and will be able to finish it soon.



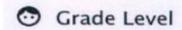
#### Student # 1 Grade 9

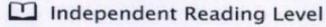
Student specific report and recommendation generated at the completion of each student's test.

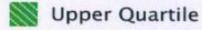
Completed Date: 2018-02-15

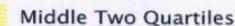
Recommendation: Read-Aloud Accommodation

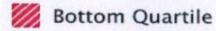
Grade Level	Silent Read	Human Audio	Text Reader
12		38%	
11		83%	58%
10		83%	
9 💿		75%	92%
8			
7			
6			
5			
4			
3 🔟	100%		
2			
1			

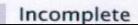












## Student # 2 Grade 9

Background:

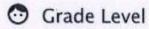
This student has used reading and writing accommodations/supports since 4<sup>th</sup> grade.

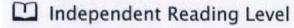
Z

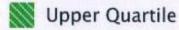
Completed Date: 2018-02-15

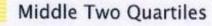
Recommendation: Read-Aloud Accommodation

Grade Level	Silent Read	Human Audio	Text Reader
12			
11			
10			67%
9 📀		58%	75%
8		75%	
7			
6			
5			
4			
3			
2 🔟	100%		
1			









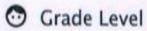
## Student # 3 Grade 11

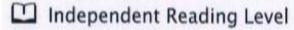
S J

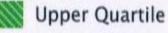
Completed Date: 2018-03-06

Recommendation: Read-Aloud Accommodation

Grade Level	Silent Read	Human Audio	Text Reader
12		92%	83%
11 💿		92%	83%
10			
9			
8 🖺	83%		
7			
6			
5			
4			
3			
2			
1			







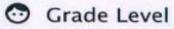
## Student #4 Grade 9

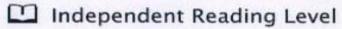
B S

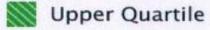
Completed Date: 2018-02-15

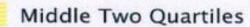
Recommendation: Read-Aloud Accommodation

Grade Level	Silent Read	Human Audio	Text Reader
12			
11			
10			
9 📀		50%	67%
8		100%	75%
7			
6			
5			
4			
3			. —
2 🔟	75%		
1			









The 1<sup>st</sup> group administration of uPAR revealed that speakers on several of the computers were not working.

Student KR completed the whole thing without audio support. She did not inform the proctor even though the proctor checked in with her, she chose to continue the process without the audio.

How would you interpret this?

<

R

NO AUDIO - computer

Completed Date: 2018-02-15alfunction

Recommendation: Read-Aloud Accommodation

Grade Level	Silent Read	Human Audio	Text Reader
12		67%	83%
11 💿		83%	83%
10			
9			
8			
7			
6 🖺	75%		
5			
4			
3			
2			
1			

Story Type: Informational



Grade Level



Independent Reading Level



Upper Quartile

Middle Two Quartiles

completed in 2 sess

Completed Date: 2018-03-06

due to speaker malfunction

Recommendation: Read-Aloud Accommodation

Grade Level	Silent Read	Human Audio	Text Reader
12			
11		67%	
10		75%	
9 💿		83%	50%
8			100%
7			
6			
5			
4			
3 🔟	88%		
2			
1			

Story Type: Informational

Grade Level

Independent Reading Level

W Upper Quartile

Middle Two Quartiles

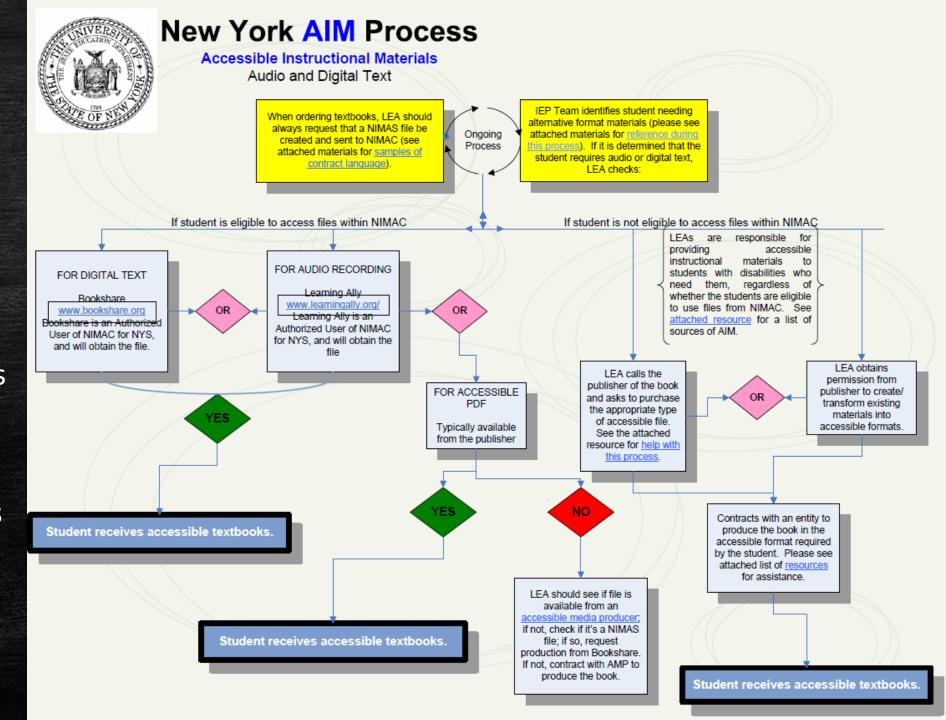
uPAR allows you to set up students to read informational, narrative or all text types.

I chose informational text for all students since that mirrors the academic setting.

TL stated "I learned a lot while I was taking this and I liked the computer text reader."

#### National Instructional Materials Accessibility Standard (NIMAS)

Created by IDEA 2004, NIMAC is a federally funded, online file repository of source files in the NIMAS format. Here, authorized users can access more than 48,000 K-12 NIMAS files that can be used in the production of accessible formats for students with disabilities.





Accessible Instructional Materials
Audio and Digital Text

When ordering textbooks, LEA should always request that a NIMAS file be created and sent to NIMAC (see attached materials for <u>samples of</u> contract language).

Ongoing Process going attach

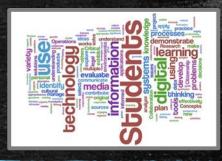
alternative format materials (please see attached materials for reference during this process). If it is determined that the student requires audio or digital text, LEA checks:

### Resources

- NYSED Assistive Tech Webinar and Materials
- Center for Applied Special Technology (CAST) –
   UDL Resources
- •IRIS Center AT Training Module
- National Center on Accessible Educational Materials
- Bookshare
- Learning Ally
- •NIMAS
- Clarkson Assistive Technology







# What will you do?