

Iowa AEA's Systematic Process for Considering Assistive Technology Accommodations and AIM/AEM for Reading

Overview

The use of assistive technology (AT) for learner success and independence is of critical importance in our current era dominated by technology. When technology is carefully designed and thoughtfully applied, it has the potential to accelerate, amplify, and expand the impact of powerful principles of learning ([Reimagining the Role of Technology in Education](#), 2017). Assistive technology can often decrease the impact reading disabilities can have in learners ability to successfully participate in the general education curriculum and settings. Assistive technology for reading provides access to grade-level instructional materials while instruction to develop independent reading skills may continue to be provided. A few examples of assistive technology for reading might include: text readers, changing of digital font, style, color, screen masking, resource tools, magnification, etc.

The purpose of this guidance is to provide teams with a data-based decision-making process for considering AT supports to increase learner access and engagement with curricular materials for learners struggling to meet grade-level standards based on universal screening, Iowa Statewide Assessments, and/or other literacy assessments (not including learners taking alternate assessments). This guidance aligns with the [AEA Special Education Statewide Procedures](#) and is not in addition to described procedures.

In developing a child's IEP, the IEP team must include consideration of five special factors. One of these factors includes:

...whether the child needs assistive technology devices and services, including accessible instructional materials [Iowa Administrative Rules of Special Education, 281—41.324(1)(b)(5).

The following steps are outlined for teams to review using a Multi-Tiered System of Support (MTSS); these steps are implemented at the universal level of instruction with consideration of Iowa Specially Designed Instruction (SDI) Framework:

- **Engagement** - Learner requests and uses needed assistive technology accommodations to engage in learning tasks (reading proficiency).
- **Diagnose** - [Gather information by using RIOT and SCIL. Keeping AT in mind](#)

during this process...RIOT includes R-reviewing, I-interviewing or getting input, O-observing and T for testing or assessing to identify areas of concern; SCIL looks at the S- for Setting or environments, the C for Curriculum I for Instruction and L for Learner.

Through this diagnose process, teams will be able to answer

- What tasks are difficult for the learner?
- Why is a specific task difficult for the learner?
- What are the student's strengths, interests, and preferences, that the team wants to capitalize on and use as they consider supports needed for learner success. When diagnosing for specially designed instruction, the team will use these same steps as Assistive technology is considered as a support needed for the learner to successfully engage and interact with the curriculum.
- **Design** - Consider assistive technology to address identified areas of concern; Through this process, we will be able to answer
 - What assistive technology features does the learner need to perform these tasks as independently as possible?
- **Deliver** - Trial and implement the use of assistive technology; monitor progress and results; and through this process, we will be able to answer
 - How will we know if the assistive technology was effective?

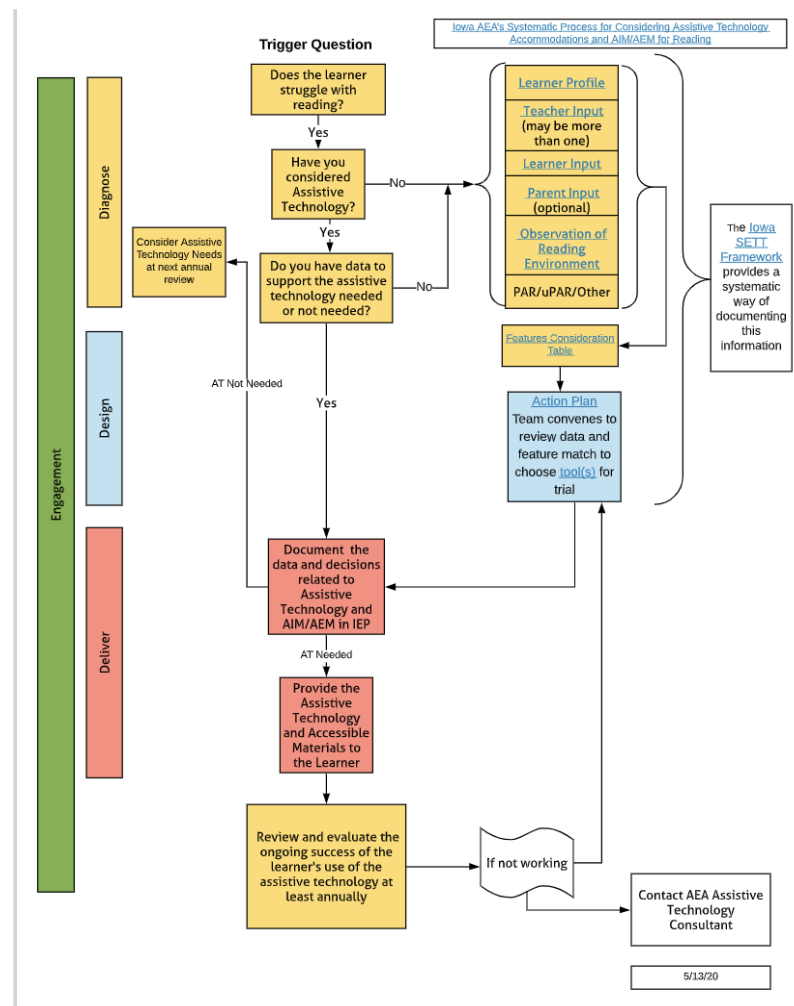
These steps follow the Student/Learner, Environment, Tasks, and Tools (Iowa SETT) Framework adapted with permission from Joy Zabala's SETT framework, however, terms used align with the Iowa Administrative Rules of Special Education (2010), MTSS and Iowa SDI Framework.

Consideration of Assistive Technology

The team follows AEA Procedures for collecting information to make decisions regarding consideration of the learner's assistive technology needs. The information provided below follows the AEA Procedures but have been expanded to facilitate ease of gathering and analyzing information to guide decisions.

This flowchart with links was created to provide a visual and usable tool for teams as they work through this systematic process.

[Flowchart \(https://rebrand.ly/iowareadingflowchart\)](https://rebrand.ly/iowareadingflowchart)



The process begins with the Trigger Question

Does the learner struggle with reading? If the answer is yes, begin the Engagement/Diagnose components.

Diagnose

Using the RIOT process (Review, Interview/Input, Observe, and Test/Assess) and SCIL (Setting, Curriculum, Instruction, Learner), the team gathers information about the learner's reading skills to identify the potential need for accommodations. The team is specifically gathering assistive technology-based information that can support the learner's independent access to print-based and digital instructional materials. Keep in mind, the information is not gathered one step at a time, the pieces of information are gathered in unison.

- **Review**

Information is reviewed regarding the learner's growth and development. The team completes the Learner Profile to document important learner considerations.

- Speech and language development
- Hearing
- Vision
- Medical
- Physical (large and fine motor skills)
- Executive Functioning/Adaptive Behavior
- Behavior
- PAR/uPAR

[Learner Profile](#)

- **Interview/Input**

Interview questions are used to gather further information for areas of concern from the teacher/s (general and/or special education teacher), learner and parent. These are examples of questions to be asked; not all questions need to be used.

- [Teacher Input](#)
- [Learner Input](#)
- [Parent Input](#) (optional)

AIM/AEM Screening Questions below have been previously used within training from various Area Education Agencies. These questions still remain, however, are embedded within the teacher input questionnaire.

5 guiding questions...

1. Would the learner still be below grade level if the current reading goal is achieved?
2. Does the learner understand grade-level reading material when it is read to him/her, at a significantly higher level than if it is read independently?
3. Does the learner have an accommodation on the IEP that requires an adult reader at specific times?
4. The learner may read near grade level. However, is the time required to access the text substantially longer than that of same-grade peers, to the extent that it may interfere with access to, and engagement with, core-related materials?
5. Does the learner have a significant visual or physical impairment that prevents him/her from independently accessing standard print-based instructional materials?

- **Observe**

Checklists are used to gather further information about the classroom and the availability of technology, how technology is used by the teacher for instruction, and how the learner responds to use of technology.

[Observation of Reading Environment Checklist](#)

- **Test or Assess**

“Test” We are in the test phase of RIOT, however there is no official test, so we are using the PAR/uPAR as a Screener to look at the learner’s level of auditory comprehension with a text reader or human reader in comparison to their independent reading level. Use one of the following systematic processes:

- [PAR](#) (Protocol for Accommodations in Reading) free Don Johnston product
 - [PAR in Action](#) (a brief video of PAR administration)
- [uPAR](#) (Universal Protocol for Accommodations in Reading) paid Don Johnston product
- Other diagnostic reading assessments that look at learner reading skills across conditions as described above

Feature Matching

When considering assistive technology for a learner, we consider what features of that tool the learner needs. The answers from the input questions and other information gathered in the AT RIOT process are designed to lead to a list of AT features that matches what a learner may need. **There are certain input questions that are tied to specific features, so if an answer is marked “yes” that feature may meet a learner’s need.** In the Features Consideration Table there is a key that shows which input questions are aligned to specific features. Yes responses should be marked on the Features Consideration Table (e.g. Tallying, highlighting, or circling the key codes). Learner Profile responses correspond with the column headings.

Learner Name: _____ Birthdate: _____ Grade: _____ Date: _____

KEY
LP - Learner Profile T - Teacher Input L - Learner Input P - Parent Input O - Observation

Home Language	Speech Concerns	Vision	Hearing	Medical	Physical (large motor access)	Physical (fine motor access)	Executive Functioning Adaptive Behavior	Behavior	Takes longer to read	Loses place	Reads word by word	skips words/ lines	gets distracted	headaches, rubs eyes, enlarge text, moves closer/farther or away, squint, open eyes wide, take breaks, adjust reduce glare, close/cover eye	Comprehension	Decoding	Fluency	Vocab
LP P	LP P	LP T5 P	LP P	LP P	LP T4 P	LP T4 P	LP	LP P O	T1	T6 P2	T7	T8 P3	T9 P4	L14	LP T2 P1	T11	LP	T12
		Format text						Format text	Format text	Format text	Format text	Format text	Format text	Format text		Format text	Format text	
		Format background							Format background	Format background	Format background	Format background	Format background	Format background		Format background	Format background	
Vocabulary support								Vocabulary support							Vocabulary support			Vocabulary support

Oftentimes, features of tools support multiple areas of need and therefore, responses may yield an overlap in features to consider which may be an indication that a particular feature is a strong match. Options that align to the features for possible assistive technology are located at the bottom of the Features Consideration Table. The team may want to consider trialing tools or accommodations with multiple feature matches first.

[Features Consideration Table](#)

Frequently, a text reader is considered, therefore, a Text Reader Features Table has been included and lists commonly used text readers and the features of each.

[Text Reader Features Table](#)

Design

To ensure a successful trial of the selected assistive technology, the team completes an Action Plan. The Action Plan includes a description of the purpose and the assistive technology to be trialed (acquisition, training needed, management support, and learner use).

- [Action Plan](#)
- Note. There are no requirements for the duration of an intervention; it should be implemented for enough time to have sufficient monitoring data to make sound decisions ([Intervention System Guide](#), p.27).

Planning for AIM/AEM

If it is determined that a learner needs materials in an accessible format, the following tools may be used to help plan the learner's access to materials. In order to provide AIM/AEM we must ensure that the learner is receiving access to his/her accessible materials at the same time as general education peers.

Team members may complete the Identification of Current Learning Materials for each instructional course to assess the types and formats of educational materials required for ALL learners.

The team will discuss how the teacher is delivering the content, the format that the content is delivered, what instructional technologies may be used, and if the content is in a digital format. If the team is unsure where to get accessible materials, the team can use the Acquisition of Materials chart below.

[Identification of Current Learning Materials](#)

If possible sources of AIM/AEM are needed, teams may use Acquisition of Materials. These are sorted by teacher's delivery of original educational materials such as textbooks used, lecture content, web based material, etc.

Within Acquisition of Materials, teams will find the accessibility features

that are built within the AEA online resources.

[Acquisition of Materials](#)

If the team is unable to find an AIM/AEM resource to support content on the Acquisition of Materials document, the team should move onto the Accessibility Tools document.

The Accessibility Tools document is a resource to plan, consider and problem-solve possible accessible technologies to support the creation or access to digital print and multimedia sources.

[Accessibility Tools](#)

An Encouraged Documentation Option

The Iowa SETT Framework allows the IEP team an opportunity to collect the information gathered within the Diagnose and Design Components into one document.

The questions embedded in the Iowa SETT Framework will guide teams in further discussion that will support decisions.

- [Iowa SETT](#)
- [Iowa SETT \(Guiding questions embedded **below** table\)](#)
- [Iowa SETT \(Guiding questions embedded **within** table\)](#)

Deliver

After a successful AT trial, the team will ensure the provision of AT through acquisition, documentation, and implementation. The Deliver component is ongoing and assistive technology should be reviewed at least annually when AT is considered as part of the IEP process.

- In the IEP, features that the learner needs in a tool should be listed. A description of what, when and where the learner uses AT is also included as well as training for the learner and staff.

Engagement

The team reviews and evaluates the ongoing success of the learner's use of the assistive technology. If the learner's reading results do not improve, the team would review other considerations to trial, and repeat the process. Specially designed instruction is considered successful when the learner uses assistive technology to engage and improve in learning tasks (reading proficiency).

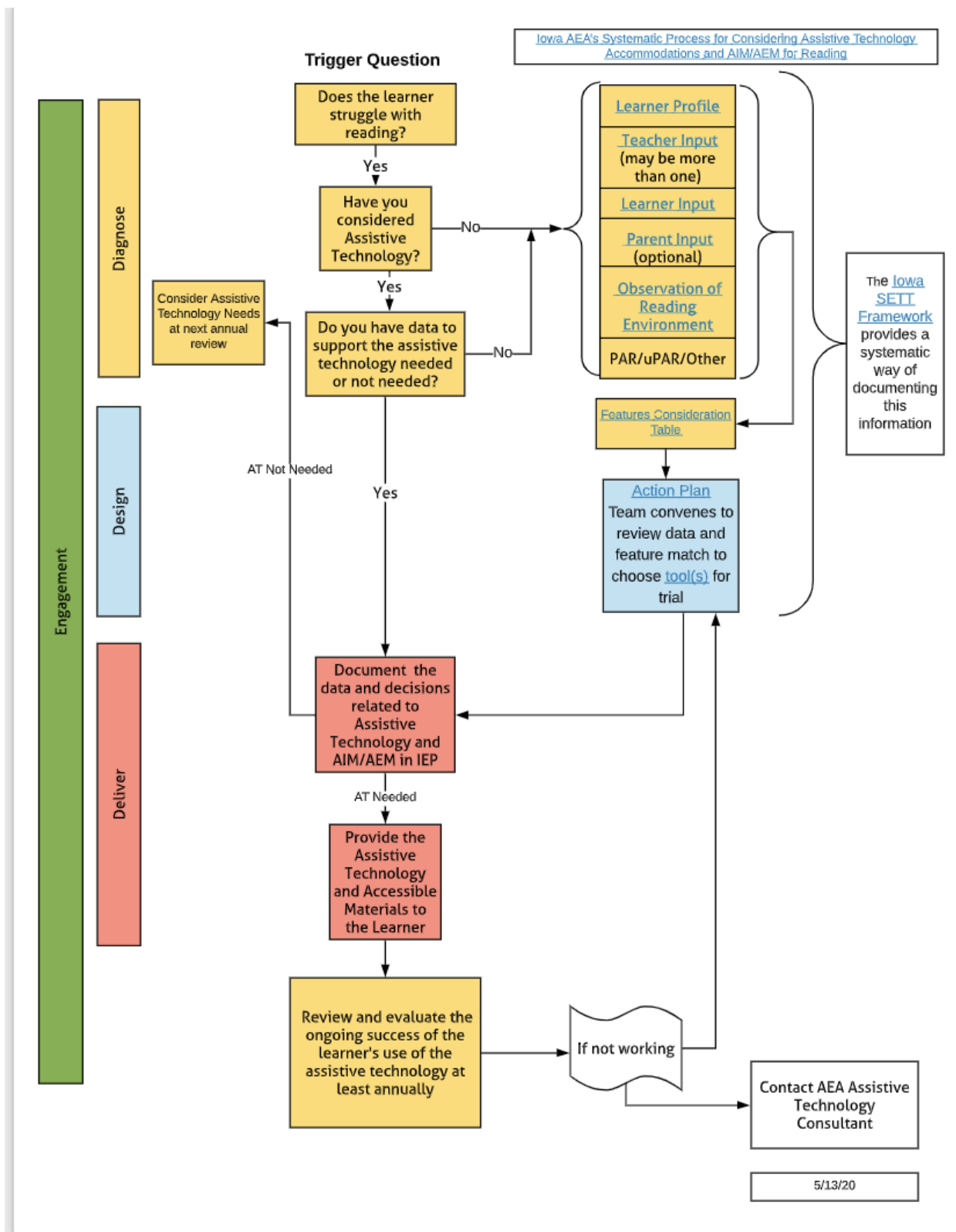
What to do if the selected AT is not effective:

- Gather input from learner and IEP team
- Consider fidelity checks through observations and data
- Review the Action Plan for other tools to trial
- Contact AEA Assistive Technology Consultant if necessary

Resources used to create this document include:

- [Iowa's Specially Designed Instruction \(SDI\) Framework](#)
- [Determining Supports for Learning and Performance for all Students](#)
- [Assistive Technology in Special Education: Resources to Support Literacy, Communication, and Learning 3rd Edition](#) by Joan Green
- [The New Assistive Tech: Make Learning Awesome for All! Christopher R. Bugaj](#)
- Accessible Educational Materials Navigator ([AEM Navigator](#))
- Student/Learner, Environments, Tasks, and Tools ([SETT Framework](#)) by Joy Zabala
- The Wisconsin Assistive Technology Initiative [WATI - Assessing Students' Needs for Assistive Technology](#)
- [Donna McNear.M.A., COMS](#)
- [Irlen Short Self-Test](#)

Appendix Master Documents



Learner Profile

Learner Name:		Birthdate:		Grade:		Date:		Learner's primary language:	
Does your learner have any concerns with the following...				If yes, please state learner information regarding the area. (for example, vision: the learner is farsighted)				Learner Strengths	
Speech		Yes or No							
Vision		Yes or No		If learner is blind or has CVI contact TVI					
Hearing		Yes or No							
Medical		Yes or No						Learner Preferences	
Large Motor		Yes or No							
Fine Motor		Yes or No						Learner Interests	
Executive Functioning/Adaptive Behavior		Yes or No							
Behavior		Yes or No							

Current Independent reading level Fluency Data (rate & accuracy) and source of data Comprehension Data and source of data																				
Results from the PAR, uPAR or other Diagnostic Reading Assessment? (Protocol for Accommodations in Reading)			Does comprehension increase when s/he reads with digital/audio supports?	What is the learner's preference for reading? (By self, adult reader, textreader, other) Use this space if needed for additional PAR/uPAR conditions or results																
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"></td> <td style="width: 20%;">Grade Level</td> <td style="width: 20%;">Comprehension Accuracy</td> <td style="width: 40%;">Likert</td> </tr> <tr> <td style="height: 40px;">Self Read</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="height: 40px;">Adult Read</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="height: 40px;">Text Reader</td> <td></td> <td></td> <td></td> </tr> </table>				Grade Level	Comprehension Accuracy	Likert	Self Read				Adult Read				Text Reader				Yes or No	
	Grade Level	Comprehension Accuracy	Likert																	
Self Read																				
Adult Read																				
Text Reader																				
Likert 1 - did NOT like it 2 - did not like it much 3 - liked it a little 4 - really like it																				

Teacher Input

Learner name:

Birthdate:

Date:

Grade:

1.	If the learner is reading near or at grade level, does it take a substantially longer time and effort to read materials?	Yes or No
2.	Does the learner have increased comprehension of grade-level reading material when it is read to him/her versus when he/she reads it independently?	Yes or No
3.	Does the learner have an adult/peer reader for specific tasks (e.g. testing, worksheets, chapter books, etc.)?	Yes or No
4.	Is the learner unable to physically access and manipulate print-based materials (e.g. turn the page, hold the book, etc.)?	Yes or No
5.	Does the learner have significant visual impairments that prevent him/her from independently accessing standard print-based materials (worksheets, textbooks, computer screens, etc.)?	Yes or No
6.	Does the learner lose his/her place while reading?	Yes or No
7.	Does the learner read word by word?	Yes or No
8.	Does the learner sometimes skip word/lines or repeat or reread lines?	Yes or No
9.	Does the learner get distracted while reading?	Yes or No
10.	Does the learner currently use technology to access print-based materials?	Yes or No
11.	Does the learner struggle with decoding?	Yes or No
12.	Does the learner struggle with understanding grade-level or key vocabulary?	Yes or No

April 2020

5/30/2020

Learner Input

Learner Name:

Birthdate:

Grade:

Date:

Have the learner rate the following	I haven't tried it	I don't like it	I like it a little	I really like it
1. How I feel when an adult reads to me				
2. How I feel when a partner reads to me				
3. How I feel when asked to read aloud in front of my teacher				
4. How I feel when I read with a partner				
5. How I feel when asked to read aloud in class				
6. How I feel when I read to myself silently				
7. How I feel when I read aloud to myself				
8. How I feel when I listen and read with a computer (computer voice)				
9. How do I feel when I listen and read audiobooks (human voice)				
10. How I feel when I read books on a device (Kindle, iPad, etc)				
11. How do you feel when you need to wait to have an adult read something to you				
12. How do you feel when you need to leave the room to have something read to you				

13. What do you do when you have difficulty reading

- I take breaks
- I use my finger or a guide to help me read
- I reread the text for understanding
- I have someone read the text to me
- I read the text out loud to myself
- I ask for help if I don't understand the meaning of a word
- I read in a quiet space
- I have the text in my home language
- I highlight as I am reading

14. While I am reading or using a computer

- I rub my eyes
- I use enlarged text
- I get headaches when I read
- I move closer or further away from the text
- I squint
- I open my eyes wide
- I take breaks
- I make adjustments to reduce glare
- I close or cover one eye
- I read word by word

15. Is there anything else you would like to tell me about reading?

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Parent Input

Child's Name:

Child's primary language:

Date:

Birthdate:

Grade:

Does your child have any concerns with the following...		If yes, please state child information regarding the area. (for example, vision: child is far sighted; behavior: child has trouble focusing and completing tasks)	Learner Strengths
Speech	Yes or No		Learner Preferences
Vision	Yes or No		
Hearing	Yes or No		
Medical	Yes or No		
Large Motor	Yes or No		Learner Interests
Fine Motor	Yes or No		
Behavior	Yes or No		

1. Does it seem that your child understands better if you read to him/her?	Yes or No
2. Does your child lose his/her place while reading?	Yes or No
3. Does your child sometimes skip word/lines or repeat or reread lines?	Yes or No
4. Does your child get distracted while reading?	Yes or No
5. Does your child use technology to read books?	Yes or No
6. Does your child read at home? If "no" explain	Yes or No
7. How would you describe your child's attitude about reading?	
8. What types of books does your child read?	

Adapted instructional materials			
Other _____			

Instructional Materials and Technology Record the presence or absence of EACH TYPE of technology by checking the corresponding box.

	Present-Not Used	Present-Used	Not Present
Overhead Projector/Elmo			
Mobile Computer/Device Lab			
Smartboard			
Desktop/laptop			
One-to-one Device			
Bring your own Device			

Environmental Observation Summary

DESCRIBE THE READING TASK(s)

WAYS THAT TYPICAL LEARNERS PARTICIPATED IN TASK

WAYS THE TARGET LEARNER PARTICIPATED IN TASK

BARRIERS TO TARGET LEARNER'S PARTICIPATION

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Observation of Environment

(Conduct observation while a reading activity is occurring)

General Information	
Learner Name:	
Birthdate:	Grade:
School:	
Observer:	
Date of Observation:	Length of Observation
Environmental Observation	
Describe the Environment <i>Record short answers in the space provided</i>	

Is this observation in the special education or general education classroom?	
How many adults were in the room?	
How was the learner receiving instruction: whole class, small group, or individually?	
Describe the format of the reading materials	
Describe the listening environment during this reading observation	
List and describe any special equipment available	

Access to Assistive Technology *Record the presence or absence of EACH TYPE of assistive technology by checking the corresponding box. Record the AT found in the classroom as a whole, not just the AT used by the target student.*

	Present-Not Used	Present-Used	Not Present
Positioning Equipment			
Amplification			
Magnifiers			
Braille/Braille materials			
Digital Text readers			
Switch			

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Adapted instructional materials			
Other _____			

Instructional Materials and Technology Record the presence or absence of EACH TYPE of technology by checking the corresponding box.

	Present-Not Used	Present-Used	Not Present
Overhead Projector/Elmo			
Mobile Computer/Device Lab			
Smartboard			
Desktop/laptop			
One-to-one Device			
Bring your own Device			

Environmental Observation Summary

DESCRIBE THE READING TASK(s)

WAYS THAT TYPICAL LEARNERS PARTICIPATED IN TASK

WAYS THE TARGET LEARNER PARTICIPATED IN TASK

BARRIERS TO TARGET LEARNER'S PARTICIPATION

April 2020

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Learner Name: _____ Birthdate: _____ Grade: _____ Date: _____

KEY

LP - Learner Profile			T - Teacher Input			L - Learner Input			P - Parent Input		O - Observation					Fluency	Vocab	
Home Language	Speech Concerns	Vision	Hearing	Medical	Physical (large motor access)	Physical (fine motor access)	Executive Functioning Adaptive Behavior	Behavior	Takes longer to read	Loses place	Reads word by word	skips words/ lines	gets distracted	Get headaches, rub eyes, enlarge text, move closer or farther away, squint, open eyes wide, take breaks, adjust glare, close/cover eye	Comprehension	Decoding		
LP P	LP P	LP T5 P	LP P	LP P	LP T4 P	LP T4 P	LP	LP P O	T1	T6 P2	T7	T8 P3	T9 P4	L14	LP T2 P1	T11	LP	T12
		Format text						Format text	Format background	Format text	Format background	Format text	Format background	Format text		Format text	Format background	
		Format background												Format background		Format background		
Vocabulary support								Vocabulary support							Vocabulary support			Vocabulary support
Visual vocabulary support			Visual vocabulary support												Visual vocabulary support			Visual vocabulary support
Draw visual attention to text		Draw visual attention to text					Draw visual attention to text	Draw visual attention to text	Draw visual attention to text	Draw visual attention to text	Draw visual attention to text	Draw visual attention to text	Draw visual attention to text	Draw visual attention to text	Draw visual attention to text			
		Enlarge material																
					Support to manipulate books	Support to manipulate books												
Cover portions of page/screen		Cover portions of page/screen					Cover portions of page/screen	Cover portions of page/screen	Cover portions of page/screen	Cover portions of page/screen	Cover portions of page/screen	Cover portions of page/screen	Cover portions of page/screen	Cover portions of page/screen				

May 2020

This is not an exhaustive list of text readers. Features of tools get updated frequently and may not always be current. See websites for current information.																	
Features	Built-in Accessibility Features - Links to the most current Operating System					School/Home currently has --check the features available below	Multi-Platform Including Web-Based					Tablet Apps					
	Chromebook	iOS (iPad/iPhone)	Mac	PC (Microsoft)	Android (Tablet/Phone)		Read & Write For Google "Free"	Read & Write for Google Chrome Premium	Kurzweil	Snap & Read Universal	Immersive Reader	Speechify	Capli Voice (iOS)	Dolphin EasyReader (iOS, Android)	Voice Dream Reader (iOS, Android)	Seeing AI (iOS)	Text Fairy (Android)
Company Name							TextHelp	Cambium	Don Johnston	Microsoft		Charmtech Labs	Dolphin Computer Access	Voice Dream	Microsoft		Renard
Overview Video			Voice Over				Overview	Overview	Overview		Overview	Overview	Overview	Overview	Overview		Overview
Overview Sheet	Accessibility	Accessibility	Accessibility	Accessibility	Accessibility		Handout	Features	Handout			Video	Website	Video	Video		
Text to Speech (TTS)	Select-to-speak	Select to Speak	X		Select to Speak		X	X	X	X	X	X	X	X	X	X	X
Change TTS Voice	x	x	X		x		X	X	X	Female or Male	x	X	x	X	x	x	
Change TTS Speed	x	x	X		x		X	X	X	X	X	X	x	X	X	x	
High lights words while reading by word and sentence	x		X				X	X	X	X		X	X	X	X		
Single Word Translator							X	X	X	X	X	X	X	X	X		
Translator (verbatim)								X	X	X	X	X	X	X	X		
Read files from Google Drive							X	X	X	X	X	X	x	X			
Read Bookshare books							X	X	With screenshot reader		x	X	x	X			
Magnify Text	Fullscreen or Docked Magnifier	Zoom	X	Magnifier	Magnification			X									
Change Background and Text Color	Change to black background with white print or vice versa	Change to black background with white print and vice versa	X	Color Filters	Color Lens		few contrast choices on web	X									
Change Background and Text Color	Color Filter	Color Filter		High Contrast Themes	High Contrast Text					X				X	X		
Talking Dictionary							X	X	X						X		
Picture Dictionary							X	X	X	X							
Thesaurus								X									
Screen Masking							X	X	X	X							

Action Plan for Assistive Technology Considerations/Trials

Learner Name: _____ Birthdate: _____ Grade: _____ Date: _____

Features of AT to consider: [Features Consideration Table](#)

-
-

Planning for AEM Resources:
[Identification of Current Learning Materials](#)
[Acquisition of Materials](#)
[Accessibility Tools](#)

Possible AT Tools to trial

-

Technology & Trial Acquisition	Description of Assistive Technology	Person Responsible	Timeline
	Features: Name of Tool: Platform (tablets, pc, etc): Persons to be trained: Training required: How training will be provided <input type="checkbox"/> Watch a video <input type="checkbox"/> Adult modeling <input type="checkbox"/> Peer modeling <input type="checkbox"/> Hands-on practice <input type="checkbox"/> <input type="checkbox"/>		
Training			

Student Use:	<p>Try in</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fabricated situations (structured practice) <input type="checkbox"/> Authentic situations (classroom setting - low stakes task - daily assignment) <input type="checkbox"/> Authentic situations (classroom setting - high stakes task - assessment) <p>Tasks:</p> <p>Opportunities to practice with the support</p> <p>Opportunities to practice independently</p> <p>Opportunities for staff observation</p>		
Management/Support	Support to be provided (e.g. set up, troubleshoot, recharge, program, etc.)		
Decision Making include date for follow-up when trials are completed	<p>The purpose of the following assistive technology is:</p> <p>We will know if the AT tool is working if:</p> <p>Options if AT tool is not working:</p> <ul style="list-style-type: none"> • Conduct fidelity checks through observations and data collection • Trial another AT tool • ReSETT (revisit SETT if used) • Contact Assistive Technology Consultant 		
Final Acquisition after successful trial	Name of Tool:		
Procedural Checks	<ul style="list-style-type: none"> <input type="checkbox"/> Action Plan filed (and SETT if used) in student's confidential folder <input type="checkbox"/> Assistive Technology documented on the IEP <input type="checkbox"/> Accessible Instructional Materials/Accessible Educational Materials (AIM/AEM) appropriately documented 		

Planning for AIM/AEM Acquisition of Materials

Use this resource to plan, consider and identify possible 'sources' for AEM sorted by TYPE of original educational material.
Embedded links are included throughout this document to suggest possible **sources/repositories** to create and/or provide accessible content..

Textbook/Workbook Options for Acquiring Accessible Textbooks/Workbooks	Lecture Content: Teacher Prepared	Lecture Content: Real-Time Audio Audio only lectures	Classroom Printed Materials: Worksheet Packets, or Assessments	Classroom Digitally Available Materials Worksheets, Packets, Assessments, or Presentations, or Websites	Literature: Books, Magazines and/or Novels	Websites	Multimedia Video & Image Description
Bookshare Contact Publisher for accessible digital text/audio file or online content option District created accessible formats (scan, audio, etc.) Learning Ally (paid subscription) National Library Service for the Blind & Physically Handicapped	Create the materials in a digital format initially Provide lecture content in accessible format to student	Create and provide audio recording Provide copies of digital teacher/ peer notes	Create accessible format (s) using OCR Scanned Conversion Tool Open Educational Resources (OER Commons)	Ensure digital text is in an accessible format Open Educational Resources (OER Commons)	AEA Digital Resources AEA and Public Libraries audiobooks and ebooks Bookshare Digital Epic Audio Learning Ally (paid subscription) National Library Service for the Blind & Physically Handicapped Additional Websites (Digital or human audio)	Ensure websites are accessible for textreaders or have a built-in textreader Ability to change text complexity within the articles offered on their website Britannica School Newsela Tween Tribune Readworks Wikipedia Breaking News English	AEA Digital Resources Described & Captioned Media Program (USDOE) National Center for Accessible Media (NCAM)

*This list includes examples but is not meant to be all-inclusive

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(April 2020)

Resource	Description	Assistive Features
AEA Scout (4th-12th)	Single sign-on and searchability to access multiple digital resources. Pleasant use contact your AEA librarian for access to student acco.	<ul style="list-style-type: none"> • Text to Speech • Varying reading grade levels • Citations • Note-taking features • Google Translation • Closed Captioning
AEA Digital Library (PreK-12)	With over 400 titles, this collection includes streaming video, still images and digital documents. <ul style="list-style-type: none"> • PreK-3 Literature • 4th-8th Science • 7th-12th Health & Guidance 	<ul style="list-style-type: none"> • Closed captioning (English/Spanish) • Media Quality Options for Streaming • Keywords (Vocabulary) • Grade level standards connection • Citations • Downloading options.
BookFlix (PreK-3)	Online literacy resource pairing fictional video storybooks with related nonfiction books.	<ul style="list-style-type: none"> • Read Aloud features (highlights words as they are read) • Varying reading grade levels • Some Spanish titles included • Extension activities
Britannica School (PreK-12)	A collection of resources for K-12 including an encyclopedia, dictionary, atlas, articles and more.	<ul style="list-style-type: none"> • Varying reading grade levels • Linked-in Spanish translator • Text-to-speech
CultureGrams (K-12)	A resource for detailed information about countries and their citizens.	<ul style="list-style-type: none"> • Text-to-speech • Video clips
FreedomFlix (4th-12th)	Provides 60+ ebooks and video clips, supplying information relevant to science and social studies core topics.	<ul style="list-style-type: none"> • Read Aloud features (highlights words as they are read) • Extension activities • Video clips • Adjustable Text Size • Table of Contents
GALE (PreK-12)	An eResource package offering content from magazines, newspapers, and reference materials. Resources are designed for age-appropriate access.	<ul style="list-style-type: none"> • Built-in translation feature • Text-to-speech • Varying reading levels • Adjustable Text Size
MackinVIA (PreK-12)	Collection of e-Books and audiobooks. (Individual student accounts available for students)	<ul style="list-style-type: none"> • Varying reading grade levels • Text-to-speech
ScienceFlix (4th-12th)	Books and short video clips about science topics.	<ul style="list-style-type: none"> • Varying reading levels • Additional instructional resources are available.

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SIRS Researcher (7th-12th)	Exploration of the perspectives (pro vs. con) and essential questions under debate on over 300 social issues.	<ul style="list-style-type: none"> • Varying reading grade levels • Text-to-speech • Citations • Translation features
Teen Health and Wellness (7th-12th)	Provides students with nonjudgmental, straightforward information on today's teen health and wellness issues.	<ul style="list-style-type: none"> • Hotline Support • Mobile Apps • Google Translation • Text-to-Speech (All languages) • Social-Emotional Support
TrueElix (3rd-6th)	Combines Scholastic True Books ebooks content with reading supports and a deep and diverse collection of related videos, images, web links, and text.	<ul style="list-style-type: none"> • Read Aloud features (highlights words as they are read) • Varying reading grade levels • Extension activities • Video clips • Adjustable Text Size • Table of Contents

Additional Websites

Digital	Audio
Gutenberg - Public Domain - out of copyright books	Storyline Online - stories read by the Guild Actors
Open eBooks - App - may be resource for students who don't have print disability	Unite for Literacy - books read in multiple languages, including sign language
Manybooks - free public domain ebooks	Eollett Shelf - Contact your school librarian or media director to see if your district has an account
Planetebook -free classic literature. All our novels and books are entirely free for you to download.	Librivox - App or online - public domain audiobooks are free for anyone to listen to, on their computers, iPods or other mobile devices, or to burn onto a CD
Overdrive - access books from your current library via an ebook	YouTube - search for titles of books Storytime Read Aloud -YouTube channel with videos of authors reading their books
Free-ebooks - 5 free downloadable books a month	The Big List of Children's Authors Doing Online Read-Alouds and Activities - stories read by the author
	Brightly Storytime - videos of stories being read
	Read Out Loud - videos of stories being read
	Story Nory - audiobooks of Fairytales, Classics, Myths and World, and Poems
	Overdrive - access books from your current library via an audiobooks
	Tar Heel Reader - a collection of free, easy-to-read, and accessible books on a wide range of topics

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Planning for AIM/AEM Accessibility Tools & Tips

Use this resource to plan, consider, and problem-solve possible accessible technologies to support the creation or access to digital print and multimedia sources.

This list is not inclusive of all available accessibility tools but simply provides examples for school teams to review and consider as they get started.

Captioning Tools

These tools work across platforms, are free and require internet

Audiologist and Teacher of the Deaf and Hard of Hearing Consultants may have more options

[YouTube captioning](#)

[Google Slides](#)

[Powerpoint](#)

[Zoom](#)

[Google Meet](#)

[Microsoft Teams](#)

Digital OCR (Optical Character Recognition) Scanning

Tools to scan or take picture of inaccessible paper-based material so it is accessible and can be read by a textreader

Copier/Scanner with option to create “accessible” PDF - scan as PDF from copy machine and email it. Open in a textreader, [Google Drive](#) or [Microsoft Office Lens](#)

Standalone Scanner (ie. Flatbed scanner, Hovercam, Solo 8) - scan as PDF and open in a textreader, [Google Drive](#) or [Microsoft Office Lens](#).

Camera on phone - open in a textreader, [Google Drive](#), [Google Keep](#) or [Microsoft Office Lens](#) and take a picture

■ Setup of Scanning Station Example:

Using Hovercam

1. Launch Chrome Browser
2. Connect Hovercam and launch software - go to www.hovercamflex.com (create free account first and log in) or www.thehovercam.com/livecam (In Chrome go to Tools, Clear Browsing Data if the camera is not picked up and then restart the Chrome Browser)
3. Place page under the document camera
4. Open one the text reader tool below:
 - Image Reader from Kurzweil 3000 - select text displayed on screen with Image Reader tool (locate in Read menu in Kurzweil 3000.) Kurzweil Taskbar menu, Kurzweil will process and read aloud
 - Read and Write Gold - select Screenshot Reader tool, select text on screen
 - Snap&Read (Chrome extension) - choose select tool on toolbar, select text on screen (this is preferred option for Chromebook)

Using iPevo

Digital Text Enlargement Tools

Teacher of the Visually Impaired may have more options

Built-In Zoom Magnification Tools

Desktop or Handheld magnifiers for printed material

[Zoom Chrome Extension](#) Easily zoom in or out on web page using the zoom button and mouse scroll wheel for more comfortable reading

How to Check if Material is Accessible

[Microsoft Accessibility Checker](#) - Check your Microsoft PowerPoint for accessibility.
[Nomouse.org](#) The #NoMouse Challenge is a global effort to raise awareness about *accessible web design*.
[Wave Extension](#)- Evaluates web accessibility within the Chrome browser.
[Grackle Accessibility Checker for G Suite](#)-Quickly check to see if the Google Document or Sheets is accessible.
[AEM/Cast](#)- Best Practices for Educators

Screenshot Reader Tool

Tools to read inaccessible digital text

[Snap & Read](#)- Screenshot reader by Don Johnston
[Read&Write for Google - Screenshot Reader](#)
[ABBY Screenshot Reader](#) lets you save image screenshots in JPEG, Bitmap or PNG formats.

Text Complexity Reduction/Simplification Tools

School teams must provide opportunities for all students to read and comprehend content at grade level complexity with scaffolding as needed at the high end of the student's comprehension range. Modified content may therefore be needed for individual students to provide for meaningful learning opportunities within core instruction. Teacher modified versions of the content and/or digital tools to reduce text complexity may be beneficial. Modifying and Summarizing tools may be useful as identified and documented for individual student learning needs. Contact your AEA Special Education and/or Reading Consultant if you need more assistance.

Modifying Text

- Snap&Read ([Dynamic Text Leveling Tool](#)) Simplifies vocabulary complexity of their reading passages to desired levels Toggles between adjusted & original text
- [Rewordify website](#) - Website tool to simplify text

Summarizing Text

- [Text Compactor](#)- a free website that allows you to paste in content and have it summarized.
- <https://simmry.com/> free website that allows you to paste in content and have it summarized.
- [Shorten extension](#) Extract the key points in any article you read

Assistive Technology Consideration: Student, Environment, Tasks and Tools (SETT)

Adapted from the work of Joy S. Zabala. (2005) Assistive Technology Consideration Guide. Based on Denham, A. P., & Zabala, J. S., (1999). Assistive Technology Consideration Guide for IEP Teams and Penny Reed (2004). WATI Assessment Forms www.wati.org

Student: _____ Birthdate: _____ Grade: _____ School Building: _____ District: _____
 Contact/Case Manager: _____ E-Mail: _____ Initial Meeting Date: _____
 Team Participants: (Names/Titles)

AT Consideration: Select the instructional area/s in which the student is experiencing difficulty completing tasks and/or goals.

	Y	N	Writing	Y	N	Reading	Y	N	Math	Y	N	Communication	Y	N	Behavior	Y	N	Employability
Physical	Y	N		Y	N		Y	N		Y	N		Y	N		Y	N	
Other-Specify:	Y	N		Y	N		Y	N		Y	N		Y	N		Y	N	

Identify any related IEP goal(s):

Discuss the Student, Environment, and Tasks, deciding what the student needs to do in different environments. Lastly... look at the most appropriate tools to accomplish those tasks.

STUDENT What are the student's needs? (Instructional areas?)	ENVIRONMENTS Classes/situations where help is needed.	TASKS Tasks student needs to be able to accomplish.	TOOLS What AT tools or services will address these tasks? (Current, New or Additional)

Conclusion: Select one of the three boxes

Student's needs are being met WITHOUT assistive technology – "considered but not needed" on IEP	Student's needs are being met WITH assistive technology – List items and related and support services on IEP	AT concerns continue to exist – Further assessment necessary
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April 2020

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Student: Birthdate: Grade: School Building: District: Initial Meeting Date:
 Contact/Case Manager: E-Mail:
 Team Participants: (Names/Titles)

AT Consideration: Select the instructional area/s in which the student is experiencing difficulty completing tasks and/or goals.

Y N Writing	Y N Reading	Y N Math	Y N Communication	Y N Behavior
Y N Physical	Y N Hearing	Y N Vision	Y N Adaptive Behavior	Y N Employability
Y N Other-Specify:				

Identify any related IEP goal(s):

Discuss the Student, Environment, and Tasks, deciding what the student needs to do in different environments. Lastly... look at the most appropriate tools to accomplish those tasks.

STUDENT What are the student's needs? (Instructional areas?)	ENVIRONMENTS Classes/situations where help is needed.	TASKS Tasks student needs to be able to accomplish.	TOOLS What AT tools or services will address these tasks? (Current, New or Additional)
<ul style="list-style-type: none"> What does the Student need to do? What are the Student's strengths? What are the Student's special needs? What are the Student's current abilities? What strategies does the student use? 	<ul style="list-style-type: none"> What materials and equipment are currently available in the environment? What is the physical arrangement? Are there special concerns? What is the instructional arrangement? Are there likely to be changes? What supports are available to the student? What resources are available to the people supporting the student? 	<ul style="list-style-type: none"> What naturally occurring activities take place in the environment? What is everyone else doing? What activities support the student's curricular goals? What are the critical elements of the activities? How might the activities be modified to accommodate the student's special needs? How might technology support the student's active participation in those activities? 	<ul style="list-style-type: none"> What no tech, low tech, mid-tech, and high tech options should be considered when developing a system for a student with these needs and abilities doing these tasks in these environments? What strategies might be used to invite increased student performance? How might these tools be tried out with the student in the customary environments in which they will be used? Does the student require accessible, alternate format versions of printed textbooks and printed core materials?

Conclusion: Select one of the three boxes

Student's needs are being met WITHOUT assistive technology – "considered but not needed" on IEP	Student's needs are being met WITH assistive technology – List items and related and support services on IEP	AT concerns continue to exist – Further assessment necessary
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Student: Birthdate: Grade: School Building: District: Initial Meeting Date:
Contact/Case Manager: E-Mail:
Team Participants: (Names/Titles)

AT Consideration: Select the instructional area/s in which the student is experiencing difficulty completing tasks and/or goals.

Y	N	Writing	Y	N	Reading	Y	N	Math	Y	N	Communication	Y	N	Behavior
Y	N	Physical	Y	N	Hearing	Y	N	Vision	Y	N	Adaptive Behavior	Y	N	Employability
Y	N	Other-Specify:												

Identify any related IEP goal(s):

Discuss the Student, Environment, and Tasks, deciding what the student needs to do in different environments. Lastly... look at the most appropriate tools to accomplish those tasks.

STUDENT What are the student's needs? (Instructional areas?)	ENVIRONMENTS Classes/situations where help is needed.	TASKS Tasks student needs to be able to accomplish.	TOOLS What AT tools or services will address these tasks? (Current, New or Additional)

<ul style="list-style-type: none"> • What does the Student need to do? • What are the Student's strengths? • What are the Student's special needs? • What are the Student's current abilities? • What strategies does the student use? 	<ul style="list-style-type: none"> • What materials and equipment are currently available in the environment? • What is the physical arrangement? Are there special concerns? • What is the instructional arrangement? Are there likely to be changes? • What supports are available to the student? • What resources are available to the people supporting the student? 	<ul style="list-style-type: none"> • What naturally occurring activities take place in the environment? • What is everyone else doing? • What activities support the student's curricular goals? • What are the critical elements of the activities? • How might the activities be modified to accommodate the student's special needs? • How might technology support the student's active participation in those activities? 	<ul style="list-style-type: none"> • What no tech, low tech, mid-tech, and high tech options should be considered when developing a system for a student with these needs and abilities doing these tasks in these environments? • What strategies might be used to invite increased student performance? • How might these tools be tried out with the student in the customary environments in which they will be used? • Does the student require accessible, alternate format versions of printed textbooks and printed core materials?
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Student's needs are being met WITHOUT assistive technology – "considered but not needed" on IEP	Student's needs are being met WITH assistive technology – List items and related and support services on IEP	AT concerns continue to exist – Further assessment necessary