

Outreach Program and Technology Services

Arkansas Assistive Technology Consideration

Resource Guide

Assistive Technology Devices are "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability." -IDEA 2004

Assistive Technology Services are activities that help teams select, acquire and/or provide technical assistance in the use of assistive technology devices. Examples include: -IDEA 2004

- Assistive Technology Evaluation for the student
- Acquisition of AT purchasing or leasing
- Selecting, designing, fitting, customizing, adapting, applying, maintaining, replacing, and/or repairing AT devices
- Coordinating and using other therapies, interventions or services with AT devices
- Training or technical assistance for student or student's family
- Training or technical assistance for professionals, employees or others who are involved with the student

Useful Notes for Using this Resource Guide

Column A: Relates to basic instructional tasks which support the Arkansas State Standards and/or other tasks

Column B: Standard classroom materials available for student use (listed in alphabetical order)

Column C: Accommodations, modifications and/or strategies (listed in alphabetical order)

Column D: Potential Assistive Technology solutions (indicate tools for possible trial)



eastersealsopts.org

This document is designed to assist IEP teams by providing general examples in each area, but it not considered all inclusive or meant to be used as a checklist.

Writing/Written Composition				
Targe	et: Student successfully compo	sing written work to express ideas using	tools and/or strategies	
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology	
 Draw/illustrate Write name Copy information Write letters/words/numbers Align numbers and text Write from dictation Writes legibly Complete written worksheets and/or tests Outline/organize thoughts Write sentences, paragraphs, narratives Take notes Graph Use appropriate spelling, grammar, punctuation, and/or capitalization Use digital tools to produce and publish writing Write within time frames 	 Computer/tablet/word processor Crayon/Marker Dictionary, grammar and/or spell checker Document camera Interactive whiteboard Letter and number strip Paper/writing surface Pen Pencil 	 Change format or substitute alternatives for written assignments Decrease assignment length Decrease number of responses 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 Individualized visual proximity to educational environment or supplies Oral dictation Peer notetaker Picture symbols to supplement written words Pre-teach content specific vocabulary Provide outline or copy of lecture notes Use outline and/or webbing strategies Word banks, sentence starters, and close format writing activities for supports 	 Pencil grip or other alternative writing aids Adapted paper Bold line Raised line Different spacing Colored Graphed Positioning Aids (slant/clipboard) Non-slip material Personal dry erase board Slate and stylus Timers Device, software or app Spell and grammar checker Outlining/graphic organizers Note taking Word prediction Word processor Text-and-picture-based Text-to-speech (talking) Speech recognition Portable Anti-glare screen Digital recorders/recording software Smartpen Onscreen keyboard Document scanner Electronically scanned worksheets Literacy suite software Advanced reading/writing aid software includin Optical Character Recognition 	



			 Text-to-speech with highlighting Study tools dictionary Word prediction Braille writer Braille note taker with refreshable display Alternate access/accessibility features Adapted pointers Alternate mice Keyguards Alternative keyboards Switch access Screen readers Speech recognition Magnifiers
		Spelling	
Targe	t: Student successfully spells a	nd identifies correctly spelled words usin	g tools and/or strategies
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology
 Identify correctly spelled word Write spelling words from dictation Spell words orally Use correct homophones Look up words Complete writing tasks with correct spelling 	 Alphabet strip Computer/tablet/word processor Dictionary, grammar and/or spell checker Document camera Flashcards Interactive Whiteboard 	 Peer/adult assistance Personal dictionary Preview of vocabulary Use synonyms Word wall/list 	 Phonics phone Portable spell checker with or without auditory output Device, software or app Spell and grammar checker Word prediction Word processor Picture-based Text-to-speech Speech recognition Online dictionaries Advanced reading/writing aid software including: Optical character recognition Text-to-speech with highlighting



	Reading				
	Target: Student success	sfully reading materials using tools and/o	r strategies		
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology		
 Positioning reading material Identify letters/numbers Recognizes/reads name 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 Read with fluency 	 Computer/tablet/word processor Document camera Electronic texts Interactive whiteboard Projected information Supplemental texts Tests Textbooks Whiteboard Worksheets 	 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 or supplies Peer/adult assistance Pre-teach new vocabulary Provide key points/details ahead of time Provide questions ahead of time Provide two sets of textbooks Read text aloud Supplement print with audio 	 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/ writing aid software including: Optical Character Recognition Text-to-speech with highlighting Study tools Dictionary Word prediction Farille note taker with refreshable display 		



r	T		
			 Keyguards Alternative keyboards Switch access Screen readers Magnifiers
	Oral	Communication/Language	
	Target: Student success	fully communicating using tools and/	or strategies
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology
 Gain attention of peers/adults within environment Express wants/needs Request assistance as needed Provide appropriate greetings Inform others Request clarification Participate in collaborative conversations Terminate conversation Ask and answer questions Retell stories Describe Define Sequence Explain Summarize Compare and contrast Persuade Give oral presentations Mock interviews 	 Books Computer/tablet/word processor Document camera Interactive Whiteboard Manipulatives Nonverbal communication (gestures and body language) Verbal communication Writing materials 	 Accept alternative responses (i.e. shortened, single word, less grammatically correct) Accept descriptive responses Additional response time Aided language stimulation Engineering the environment Interpreter Model use of communication device Provide questions ahead of time Repetition of spoken answers Teacher modeling Use "Total Communication" Verbal prompts Video modeling Visual supports 	 Speech amplification systems Communication representation (objects, pictures, symbols, tactile. Letters, words) Augmentative & Alternative Communication (AAC) solutions Sign language/gestures Communication books/board/wallets/vests Picture Exchange Communication Systems Voice Output Communication Aids Digitized/synthesized Multi-level, dynamic Static-level Computer/tablet app-based Device, Software of App Computer Tablet Alternate access/accessibility features Alternative mice Alternative keyboards Switch access Screen readers Magnifiers Graphic organizers Digital recorders



Target: Student successfully using environment controls and accessing a computer using tools and/or strategies				
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology	
Use a computer Use a tablet Use a printer Use a mouse Use a keyboard Detached Onscreen Use a trackpad Use technology /devices/ appliances (TV, radio, microwave, etc.)	 Desktop computer Laptop computer Tablet Printer Mouse Keyboard Trackpad TV, Interactive whiteboard, various appliances and devices 	 Change assignment format Change complexity of material Increased time Shortened assignments Placement of devices in relation to student Peer/adult assistance 	 Environmental control unit (Powerlink) Switch interface for a personal computer Switch interface for an iPad or tablet Switches (various types) Adapted Stylus Headpointer Mouth stick Stylus for hand/finger/arm Voice activation Adapted keyboard Large keys Small keys Color coded Adapted mouse Headpointer Eye gaze Headmouse Larger mouse Small mouse Joystick Trackball 	



	Math Target: Student successfully using and applying math skills using tools and/or strategies				
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology		
 Identify numbers Use number concepts Complete basic calculations Complete complex calculations Complete math word problems Use time concepts Use money concepts Use measurement concepts Use geometric concepts Use fractions and decimals Use and interpret data Explain knowledge of mathematical process. 	 Calculator Computer/table/word processor Document camera Formula sheet Graph paper Interactive whiteboard Manipulative Math chart Math drawing tools Math fact sheet Number line 	 Change assignment format Change complexity of material Color-code operation symbols and/or text Decrease assignment length Dictionary of math terms Group similar problems together Have students verbalize the process Increase print size Increased time Peer/adult assistance Provide additional spacing between problems Rephrase vocabulary in word problems Turn lined paper vertically for ready-made columns 	 Page fluffers Adapted paper Tactile graphics Calculator Alternative calculators Talking On-screen Braille Money Talking watch/clock/timer Voice activated assistant Alexa,Google Home Device, software or App Equation editors Math translator Document scanner Electronic math worksheets Graphing Color identifier Money identifier Adapted measuring devices Talking tape measures Rulers Compasses or protractors Thermometers 		



	Study and Organizational Skills				
Targ	et: Student successfully learnin	ng, studying and staying organized using	tools and/or strategies		
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology		
 Maintain dedicated study time Maintain 'to do' list Follow organizational system Keep track of assignments Follow steps to complete assignments Complete assigned task within designated timelines Request teacher/peer assistance when needed Have appropriate materials/supplies Identify important points Compile and organize information from various sources Take notes 	 Agendas Calendars Classroom reminders Computer/tablet/word processor Document camera Interactive whiteboard Notebooks Parent/student portals Rubrics Social learning networks Study guides Syllabuses 	 Additional spacing between desks Assignment sheet Color coding Daily planner book Dedicated study time Highlighters/sticky notes Optimal student seating appropriate lighting away from extraneous noises close proximity to the teacher individualized visual proximity to educational environment/materials Outline of key points Peer/adult assistance Provide long-term assignment timelines Provide oral and printed directions Provide portable electronic storage file system Cloud technology Portable hard drive USB flash drive Provide print copies of ordered steps in a task Sensory supports Auditory Tactile Visual Show a model of the end product Study carrel 	 Digital recorder Voice activated assistant Alexa, Google Home Smartwatch Device, software or app Auditory reminders Speech prompting Daily planners Outlining/graphic organizers 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 Timers Auditory Visual Specialized tote for students with visual impairments Smart pen 		



	Hearing and Listening				
Sample Tasks Follow verbal directions Listen to stories and answer questions Listen to classroom discussion and apply information Listen to teacher lecture and apply information Listen to verbally presented information and retell with correct sequencing and facts Listen to videos to gather information about current instructional topics Participate in PE and/or recess Participate in field trips Respond to environmental	nt successfully accessing the s Standard Classroom Materials Closed captioning access to caption ready television and video presentations Computer/tablet/word processor Digital recorder/player Headphones for clarity of sound and blocking of extraneous noises Document camera Interactive whiteboard Projection system/overhead projector Television Video player	 ame information as students who can he Accommodations / Modifications Audio-tape verbally presented information for repeated presentation Break directions into smaller steps/segments Have student verbally summarize directions 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 note-taker Pre-teach vocabulary and/or components of the lesson Provide a written outline of lecture Provide organizer in advance 	Assistive Technology • Speech amplification systems • Communication representation (objects, pictures, symbols, tactile, letters, words) • Augmentative & Alternative Communication (AAC) solutions • Sign language/gestures • Communication books/board/wallets/vests • Picture Exchange Communication Systems • Voice Output Communication Aids • Digitized/synthesized • Multi-level, dynamic • Static-level • Computer/tablet app-based • Device, software or App • Computer		



	Vision				
Target: Stude	ent successfully accessing the	same information as students who can se	ee, using tools and/or strategies		
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology		
 Paraphrase information heard Read Write Use a computer Participate in classroom activities Navigate the classroom/building campus Complete activities of daily living Participate in PE and/or recess Participate in field trips Access the same information as students who can see 	 Braille materials Consistent placement of materials Copy of overhead/smartboard activities at desk Eliminate unnecessary noise High contrast materials Large print Oral testing or provide scribe Paraphrase information heard Preferential seating Provide task lighting Recorded text/audio books Slant board to reduce glare Tactile activities Teacher to verbalize all information Use of reading guide 	 Reduced assignments Extended time Modify assignments to avoid extensive visual scanning/visual fatigue Provide teacher/peer support for cues 	 Color overlays and reading strips Bold line or raised line paper Bold line pencil (e.g. Faber-Castell #8B) or marker (e.g. 20/20 pen) Slant board Large print/high contrast keyboard Braille technology Tactile/bump dots or strips to identify items Task lighting Play/work trays to define space Magnifiers Screen readers Audio-books Auditory/beeping recreational equipment Speech recognition/dictation software Large print or talking calculator/dictionary 		



	ł	Activities of Daily Living	
Target #	#1: Student safely eating and d	Irinking during meal and snack times usir	ng tools and/or strategies
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology
Feed self using appropriate utensils Drink using appropriate utensils Prepare simple snack Prepare basic meal	 ADA compliant accessibility features Cleaning materials and appliances Computer/tablet/word processor Document camera Eating and cooking utensils Personal hygiene tools Safety Rails Ramps 	 Have task performed by aide Have student complete only part of task independently Model appropriate skills Modify task length and complexity Move items in environment so they are within reach/easily accessible Provide additional time to complete tasks Provide set up of the task and have student complete Provide verbal prompts Use picture cues and prompts 	 Adapted eating utensils Adapted drinking equipment Adapted plates, bowls, trays Robotic feeder Non-slip surface material
	Target #2: Student successful	u ly utilizing self care/ life skills using tools	and/or strategies
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology
Dress/undress using appropriate tools/clothes Personal hygiene (toileting, hand washing) Grooming tasks Perform chores Acknowledge relevant health information/stats	 ADA compliant accessibility features Cleaning materials and appliances Computer/tablet/word processor Document camera Eating and cooking utensils Mirror Personal hygiene tools Safety Rails Sink Ramps 	 Have student complete only part of task independently Have task performed by aide Reduced assignments Model appropriate skills Modify task length and complexity Move items in environment so they are within reach/easily accessible Provide additional time to complete tasks Provide set up of the task and have student complete Provide verbal prompts 	 Adapted table/plinth Step stool Levers/handles on faucets Raised toilet or adapted toilet Grab bars Tools for perineal hygiene Dressing equipment Reacher Dressing Stick Long-handled shoe horn Sock aid



	Recreation and Leisure				
Targe	et: Student successfully particip	pating in specials/leisure/recreation using	tools and/or strategies		
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology		
 Participate in games and play activities Participate in art activities Participate in sports and exercise activities Listen to music Read a book Watch TV/movie Play with toys Participate in social media/online communities Access events in the community 	 Art materials Books and magazines Games Computer/tablet/word processor Document camera Music (e.g. musical instruments, digital player, CD player, etc.) Puzzles Sports and exercise equipment Toys 	 Adjust workspace for easier access Adult/peer assistance Change complexity of task Model appropriate skills Modify games and activities Sensory supports Auditory Tactile Visual Use readily available materials to provide modifications Verbal and/or visual cues 	 Puzzles with knobs Switch adapted spinners Oversized dice Adapted utensil holders (i.e. crayons, paint brush, stamps) Raised line coloring sheets Adapted scissors Card holders Adapted games Adapted games Adapted books Accessible books Specialized format books Adapted music with symbols Adapted instruments Non-skid surface Switch accessible toys/devices Environmental control devices Power control units and battery adapters Alternative mice Adapted pointers Alternative keyboards Switch access Switch access Switch access Switch access 		



	Pre-vocational and Vocational				
Tar	get: Student successfully using	tools and/or strategies for pre-vocational	and vocational tasks		
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology		
 Completes assigned tasks within designated timelines Utilizes tools and/or equipment to complete tasks Completes single and multiple step tasks Stays on task until work is complete Stays on task without supervision Self-advocates to get needs met Procurement of accessible instructional materials (AIMS) Contacts post-secondary service providers to obtain assistance Manages finances Safely navigates community and local environments Complete steps to obtain a job Complete online applications Develop resumes Operate a time clock 	 Computer/table/word processor Document camera Office equipment Pencil and paper Sorting and assembling materials Timers and watches 	 Break tasks into smaller steps/segments Cooperative participation with peers and adults Daily planner book Determine and teach regularly traveled routes to students with visual impairments Follow a picture task analysis Individualized task and material modifications to meet student needs Location identifiers Modification of task length and complexity Orientation to unfamiliar environments Sensory supports Auditory Tactile Visual Show a model of the end product Sighted guide for visually impaired Student self-monitoring sheets Teacher modeling Verbal and/or visual cues Video modeling Work checklist 	 Watches and timers Electronically scanned application Device, Software or App Auditory reminders Speech prompting Daily planners outlining/graphic organizers Financial management software Screen enlargement Document scanner OCR scanning software Braille translation software Braille note taker with refreshable display Braille embosser Digital recorder/player Long white cane GPS for students with visual impairments Smartphone with appropriate apps Augmentative & Alternative Communication (AAC) solutions Alternate access/accessibility features Adapted pointers Alternative mice Alternative keyboards Switch access Screen readers Magnifiers 		



		Seating and Positioning	
Target: Student properly positioned to allow for participation using tools and/or strategies			
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology
 Sit or stand for duration of instruction Maintain functional posture for optimal use of hands/arms Ergonomic design to increase efficiency 	 Chairs Desks Tables 	 Careful scheduling of daily activities (e.g., order, location) Provide peer and adult assistance Modify requirements based upon student's daily energy level and the task to be completed 	 Non slip surface Wiggle disc T-stool Activity chair Adapted seat Foot rest or stool Standing desk Modified/adapted desk Modified/adapted seat
		Mobility	·
I	Target: Student successfully tra	aveling the school and campus using tools	s and/or strategies
Sample Tasks	Standard Classroom Materials	Accommodations / Modifications	Assistive Technology
 Move about the classroom, building and campus in timely manner Travel skills for field trips Transport /carry materials Community travel skills 	 Elevator Handrails Ramps Stairs 	 Careful scheduling of daily activities (order, location) Extra time for travel between classes Preferential locker/cubby Provide assistance (hold hand, guided walking) Provide duplicate materials to reduce need to carry/transport materials 	 Manual wheelchair Power wheelchair Stroller Cane Walker Crutches Scooter Adapted car seat for school bus/van

