## **Assistive Technology Devices for Writing and Spelling**

This document contains information on the range of assistive technology devices that can be used by struggling writers to increase the legibility, complexity, and accuracy of their written products. Many of these devices also support increased efficiency, productivity, and independence. In most instances, students use a combination of assistive technology devices to meet their writing needs. The types of assistive technology devices used to support writing are determined by individual student abilities and needs as well as the required writing tasks across all instructional environments.

In this document, assistive technology devices are organized into various categories based on the primary features or applications of the technology. Moreover, the age ranges for which the devices are appropriate are identified in the following categories: elementary, middle, and high school. Lastly, tools are linked to the various writing skill areas addressed in the Georgia Performance Standards. The skills areas are briefly defined below. It is recommended that individuals utilizing this document refer to the standards to determine the specific skills that are addressed at each grade level.

## **Writing Process**

- Organizational Structure Ideas are organized due to purpose (cause-effect, chronological) or genre (type of writing: persuasive, narrative, technical).
- Prewriting- Brainstorming- Ideas are generated based on the provided topic. In order to facilitate retention of these ideas, notes, outlines or concept maps may be used.
- Drafting –The ideas generated in the prewriting and brainstorming process are recorded by the student.
- Editing The student's worked is checked for spelling, grammar, and mechanics errors. These errors are corrected.
- Revising The draft is revised and this revision may include rewording sentences, adding details, and/or adding more content
- Use of Resources The student uses a variety of resources to obtain facts related to the writing topic. This may include informational resources such as encyclopedias, Internet resources, literary books, or reference books such as dictionaries or thesauruses.

## Conventions

- Grammar Includes subject–verb agreement, sentence structure and complexity, parts of speech, and word usage.
- Mechanics Includes punctuation (commas, semicolons, end marks), capitalization, and paragraph indentations.
- Spelling –Includes correct spelling of words used in the written product.
- Legibility Refers to spacing, letter formation, and size. Refers to the readers' ability to read the written product.

The assistive technology devices referenced in this document are included to provide examples of different types of devices used by students with disabilities to accomplish educationally relevant tasks in instructional and access areas. The document does not include all assistive technology devices within a device category and inclusion of a particular device does not constitute endorsement by the Georgia Department of Education. Additional devices may be added to the document by contacting the Georgia Project for Assistive Technology.

Additional information about the assistive technology devices referenced in this document is available on the Georgia Project for Assistive Technology's website at http://www.gpat.org. Additional information about the Georgia Performance Standards is available on the Georgia Department of Education's website at <a href="http://doe.k12.ga.us">http://doe.k12.ga.us</a>.

Device Category	Examples	F	Age Rang					S	Area									
			Middle School			ess				ntior riting								
		Elementary		High School	Organizational Structure	Prewriting	Drafting	Revising	Editing	Use of Resources	Grammar	Mechanics	Spelling	Legibility				
Positioning Aids	Slant boards, page holders (Pocket Full of Therapy, Therapy Shoppe)	Х	Х	Х										Х				
	Dycem, book stands (Sammons Preston Rolyan, Onion Mountain Technology)	Х	Х	Х										Х				
	Shelf liner/ nonslip mat (discount stores)	Х	Χ	Χ										Χ				
	Clipboards (office supply stores, discount stores)	Х	Х	Х										Х				
Contrast Aids	Highlighter tape, pens (Crystal Springs Books, office supply)	Х	Х	Х									Χ					
	EZC Reader / Reading Helper (Really Good Stuff)	Х	Χ	Χ									Χ					
	Colored overlays (National Reading Styles Institute, See It Right, Onion Mountain Technology)	Х	Х	Х									Х					
Adapted Writing Utensils	Pencils, pens, pencil grips (Onion Mountain Technology, Pocketful of Therapy, Sammons Preston, Beacon Ridge)	Х	Х	Х										Х				
Adapted Paper / Writing Guides	Paper: bold & raised lined , colored paper (Onion Mountain Technology, Sammons Preston, Beacon Ridge, Pocket Full of Therapy )	Х	Х	Х										Х				
	Dry erase boards (Really Good Stuff)	Х	Χ	Χ										Χ				
	Writing guides (Independent Living Aids)	Х	Х	Х										Х				
Personal Vocabulary /	Notebook (office supply stores, discount stores)	Х	X	Х									Χ					
Spelling Dictionaries	Quick Word Handbooks, bookmarks (Curriculum Associates)	Х	Χ	Χ							Χ		Χ					

Device Category	Examples	F	Age Rang		Skill Area									
					Writing Proces								ntior riting	
		Elementary	Middle School	High School	Organizational Structure	Prewriting	Drafting	Revising	Editing	Use of Resources	Grammar	Mechanics	Spelling	Legibility
Handheld Word Identification														
Aids	Children's Talking Dictionary & Spell Corrector (Franklin)	Х								Χ	Χ		Х	Χ
	Merriam-Webster Speaking Dictionary & Thesaurus (Franklin)	Х	Χ	Χ						Χ	Χ		Χ	
	Speaking Language Master (Franklin)	Х	Х	Х						Х	Х	Х	Х	
Recorders	Handi-Cassette II (American Printing House for the Blind)	Х	Х	Х		Χ								Х
	Digital recorder (office supply store)	Х	Χ	Χ		Χ								Χ
	Pulse SmartPen (LiveScribe)		Х	Х									Х	Χ
Handheld Scanners	Notetakers (Wizcom)	Х	Х	Х										Χ
	Iris Pen (Onion Mountain Technology)	Х	Х	Х										Χ
Printed Graphic Organizers	Teacher-made graphic organizers	Х	Х	Х	Χ	Х								$\dashv$
	Microsoft Word (Microsoft)	Х	Χ	Χ	Χ	Χ							Χ	Χ
	Kidspiration, Inspiration, mywebspiration.com (Inspiration)	Х	Χ	Х	Χ	Χ							Χ	Χ
	Online printable graphic organizers	Х	Х	Х	Χ	Χ								
Portable Word Processor	AlphaSmart 3000 (no longer commercially available)	Х	Х	Х			X	Х	Х				Х	Χ
	Neo (Renaissance Learning)	Х	Х	Х			Х	Χ	Χ				Χ	Χ
	Dana (Renaissance Learning)	Х	Х	Х			Χ	Χ	Х				Χ	Χ
	Personal Digital Assistant – PDA (office supply stores)	Х	Χ	Χ			Χ	Χ	Χ				Х	Χ

Device Category	Examples	F	Age Rang		Skill Area									
						Wri	ting l	Proc	ess			ntior riting		
		Elementary	Middle School	High School	Organizational Structure	Prewriting	Drafting	Revising	Editing	Use of Resources	Grammar	Mechanics	Spelling	Legibility
Portable Word Processor	Laser PC6 (Perfect Solutions)	Х	Х	Х			Х	Χ	Χ				Χ	Χ
(continued)	CalcuScribe (CalcuScribe)	Х	Χ	Χ			Χ	Χ	Χ				Х	Χ
Concept/Webbing Applications	Inspiration (Inspiration)  Kidspiration (Inspiration)  Mywebspiration.com (Inspiration) (free)  Draft:Builder SOLO (Don Johnston)	X X X X	X X X	X X X	X X X X	X X X	X	X	X	X			X X X	X X X
Computer-based Word Identification Aid	WordWeb (WordWeb Software) (free version available) On-line dictionaries	X	X	X		X	X	X	X	X	X		X	
Standard Word Processing Software	Microsoft Word (Microsoft)  • WordTalk (www.wordtalk.org.uk)  WordPerfect (Corel)	X X X	X X X	X X X		X X X	X X X	X X X	X X X	X	X X X	X X X	X	X
Graphic Word Processing Software	Writing with Symbols 2000 (Mayer Johnson)  Classroom Suite 4 (IntelliTools)  Clicker (Crick)  PixWriter (Slater Software)	X X X	X X X	X X X		X X X	X X X	X X X	X X X				X X X	X X X
Talking Word Processing	Write:OutLoud 6 (Don Johnston)	Х	Χ	Χ		Χ	Χ	Χ	Χ		Χ		Χ	Χ
Software	Classroom Suite 4 (IntelliTools)	Х	Χ	Х		Χ	Χ	Χ	Χ		Χ		Х	Χ

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											Wri	ting I	Proc	ess			ntio:	
		Elementary	Middle School	High School	Organizational Structure	Prewriting	Drafting	Revising	Editing	Use of Resources	Grammar	Mechanics	Spelling	Legibility				
Talking Word Processing	Talking Word Processor (Premier Assistive Technology)	Χ	Χ	Χ		Χ	Χ	Χ	Χ		Χ		Χ	Χ				
Software (continued)	Tex-Edit Plus (Trans-Tex Software)	Χ	Χ	Χ		Χ	Х	Χ	Χ		Χ		Χ	Χ				
	Writing with Symbols (Mayer Johnson)	Х	Х	Х		Χ	Χ	Х	Х		Χ		Χ	Х				
Word Prediction Software	Co:Writer 6 (Don Johnston)	Х	Х	Х			Χ	Х	Х		Χ		Χ	Х				
	Read & Write (TextHelp)	Χ	Χ	Χ			Χ	Χ	Χ				Χ	Χ				
	Aurora Prediction 3.0 for Windows (Aurora Systems)	Χ	Χ	Χ			Χ	Χ	Χ		Χ		Χ	Χ				
	Word Q2 (Quillsoft)	Х	Χ	Χ			Χ	Χ	Χ				Χ	Χ				
	SoothSayer (Applied Human Factor)	Х	Χ	Χ			Χ	Χ	Χ				Χ	Χ				
	Sounds Like – Spell, Write! (Applied Human Factor)	Х	Χ	Χ			Χ	Χ	Χ		Χ		Χ					
	Sound-It-Out Keyboard (Add-on to REACH Keyboard)	Х	Х	Х			Χ	Х	Х		X		Χ	Х				
Text Correction Software	Ginger (Ginger Software)	Χ	X	X			Χ	X	Х		X		X	Х				
Electronic Worksheets	PaperPort (Nuance Communications)	Х	Χ	Х										Х				
	OmniForm (Nuance Communications)	Χ	Χ	Χ										Χ				
	TestTalker (Freedom Scientific)	Х	Χ	Х										Х				
Academic Suite Software	Classroom Suite 4 (Intellitools)	Х	X	Х		Χ	Χ	Х	X				Χ	Χ				
	SOLO (Don Johnston)	Х	Χ	Х	Х	Χ	Χ	Х	Х				Χ	X				

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		Elementary	Middle School	High School	Organizational Structure	Prewriting	Drafting	Revising	Editing	Use of Resources	Grammar	Mechanics	Spelling	Legibility								
Advanced Reading and Writing	Kurzweil 3000 (Kurzweil Educational Systems)	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ			Χ	Χ								
Aid Software	Read & Write Gold (TextHelp)	Χ	Χ	Χ		Χ	Χ	Χ	Χ	Χ			Χ	Χ								
	TestTalker (Freedom Scientific)	Х	Χ	Χ										Χ								
	WYNN (Freedom Scientific)	Х	Χ	Х		Χ	Χ	Χ	Χ	Χ			Χ	X								
Voice Recognition Software	Microsoft Speech Recognition (Microsoft)  Dragon Naturally Speaking Preferred (Nuance Communications)		X	X			X	X	X		X	X	X	X								
	MacSpeech Dictate(Nuance Communications)		Χ	Х			Χ	Х	Х		Χ	Χ	Х	X								