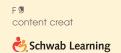


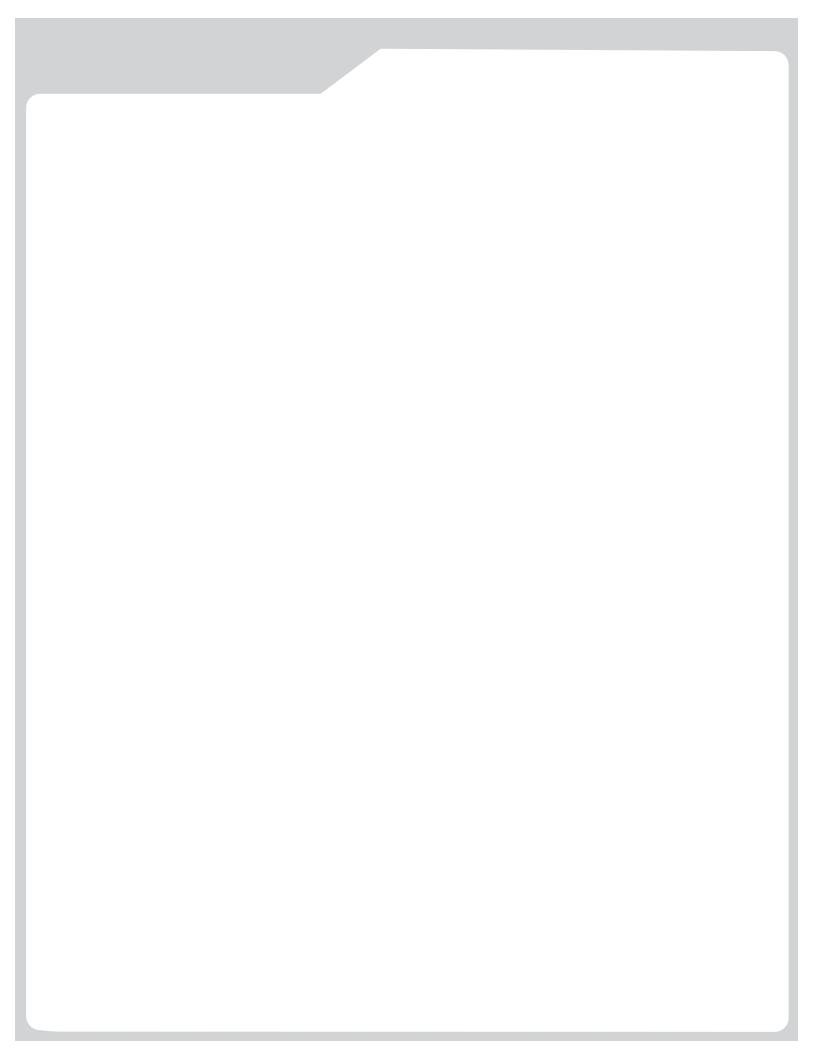
# **Assistive Technology**

A Parent's Guide

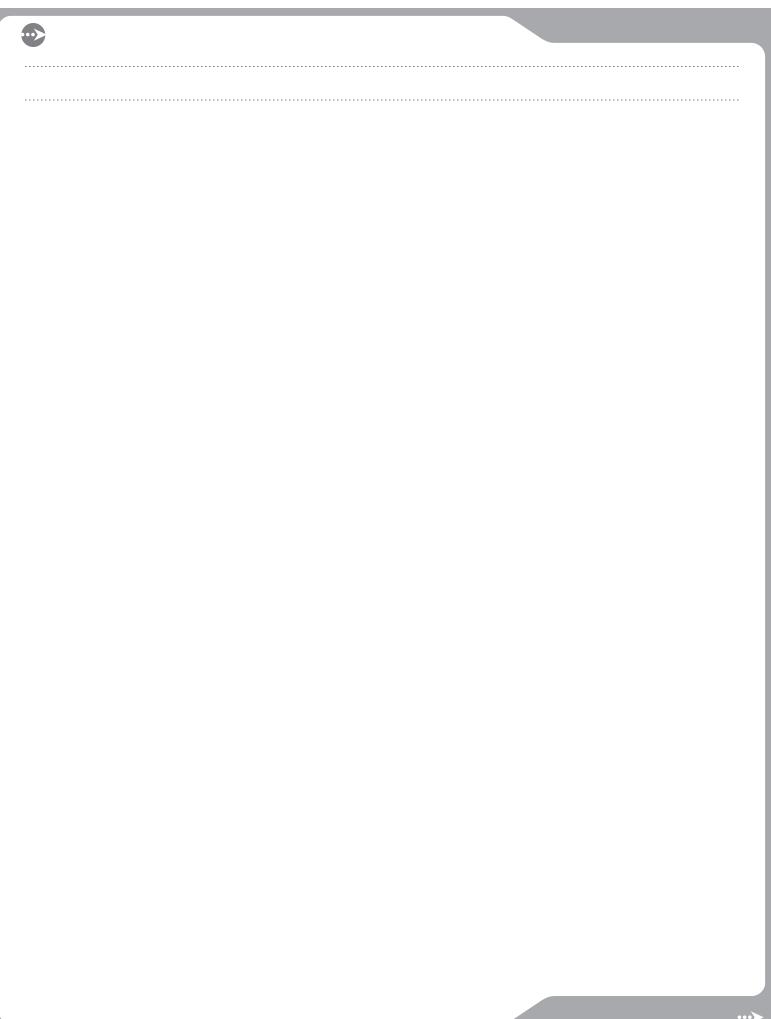












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#### **About the Authors**

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## A Parent's Guide to Assistive Technology

Assistive technology (AT) tools exist to help individuals with many types of learning disabilities (LD). Following is a snapshot of the AT tools for five types of LD. For more detailed information, please see our AT Tools Database at http://www.schwablearning.org/ATtools.

#### AT for Listening

Certain assistive technology tools can help people who have difficulty processing and remembering spoken language. Such devices can be used in various settings (e.g., a class lecture, or a meeting with multiple speakers). Tools include tape recorders and assistive listening devices.

#### AT for Math

Assistive technology tools for math are designed to help people who struggle with computing, organizing, aligning, and copying math problems down on paper. With the help of visual and/or audio support, users can better set up and calculate basic math problems. Tools include talking calculators and electronic worksheets.

#### AT for Memory and Organization

Assistive technology tools can help a person plan, organize, and keep track of his calendar, schedule, task list, contact information, and miscellaneous notes. These tools allow him to manage, store, and retrieve such information with the help of special software and hand-held devices. Tools include personal data managers and free-form databases.

#### AT for Reading

There is a wide range of assistive technology tools available to help individuals who struggle with reading. While each type of tool works a little differently, all of these tools help by presenting text as speech. These tools help facilitate decoding, reading fluency, and comprehension. Tools include optical character recognition, speech synthesis, and alternative format books.

#### AT for Writing

There is a wide range of assistive technology tools available to help students who struggle with writing.



## Matching Assistive Technology Tools to Individual Needs

You can gather information about a child's strengths and difficulties from several sources, including:

- school records
- prior diagnostic assessments (e.g., psycho-educational testing)
- interviews with individuals who are familiar with the student (e.g., parents, teachers, counselors, therapists, and tutors)

Additional data may be obtained by conducting formal assessments (e.g., standardized tests) and informal diagnostic techniques (e.g., observations) that focus on the academic skill areas. A student being evaluated for technology use should participate as a key member of the technology evaluation team and be interviewed about her understanding of the nature of her learning difficulties, as well as her strengths, talents, and special abilities.

The more you know about the components of a quality [AT] assessment, the greater the likelihood the appropriate technology match will be found for your child.

The potential effectiveness of any assistive technology tool also depends on the student's prior experience with, and interest in, using technology. Consideration should also be given to the student's technology experience and interest relative to the specific areas of difficulty (e.g., prior experience with/interest in a word processor to compensate for writing problems, or an OCR system for a reading difficulty), as well as the student's general working knowledge of technology, and overall interest and comfort level. Such information is needed to plan appropriate technology instruction and training.

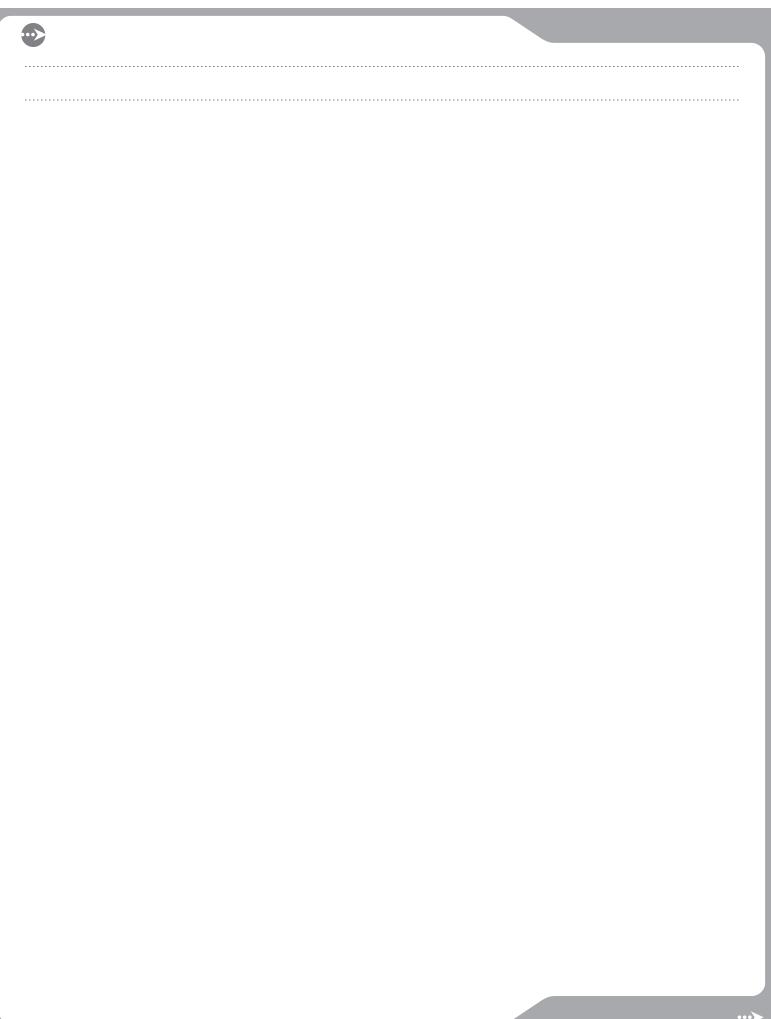
#### The Task to be Performed

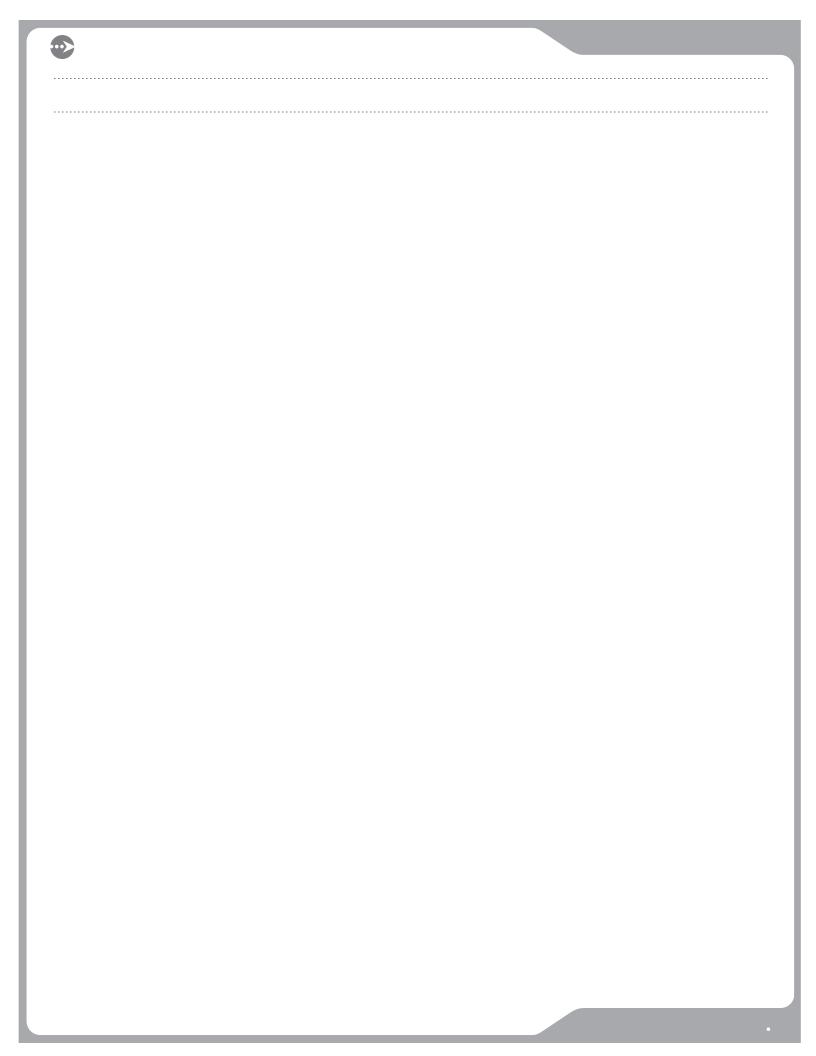
Another key factor in determining what AT tools might benefit a student is to pinpoint the specific task(s) she struggles with. For example, when it comes to writing an essay, she may construct sentences and tackle spelling with no problem, but she has trouble organizing and outlining the essay. In this case, a graphic organizer or outlining tool might help her plan and revise the "big picture" of her essay. In other words, not all AT tools for writing target the same skills or tasks. Knowing where a student struggles (and where she does not) are critical to choosing an appropriate AT tool.

#### Observation of Student, Technology, and Task in Action

Direct observation is the best technique for gathering information about a student's use of a technology tool to compensate for an area of difficulty. Only by observing the individual while she is actively using the technology tool to perform a specific task can it be determined that the tool is appropriate for her. It may be necessary to collaborate with AT professionals who are trained to observe students using technology. Some AT manufacturers' representatives will demonstrate specific technologies as well as provide opportunities for the student to try out specific products. (Keep in mind that a company representative may not be an objective observer of your child using the AT tool.) As the student experiments with a certain technology tool to perform tasks, the observer will want to note:

- the student's interest in and comfort level with the technology
- the student's ease in learning about and using the technology
- the degree to which the technology "taps" into the student's strengths
- the extent to which the student is able to use the technology independently and "troubleshoot" as necessary





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#### Step 2: Review Possible Assistive Technology Tools

Review the AT database at www.schwablearning.org/ATtools for detailed descriptions of AT tools. In the list below, place a check mark next to any tools that seem appropriate for your child. Then add those tool types to the "Possible AT Tools" column in the chart above.

### Step 3: Observe Your Child Using the AT Tool

AT Tool Reviewed:

Observe your child experimenting with the AT tool to perform the task(s) that are difficult. Compare this to the performance of the same task using no technology or using a different strategy. Circle the number that best describes the apparent match between your child, the task, and the AT tool:

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Step 4: Consider the	e Setting and Context for the AT	Γ Tool Usage	
AT Tool Paviewed:			

For each setting listed below, answer "yes" or "no" depending on where your child will need/want to use the AT tool.

Setting	Compatible with existing technology			ate space able		opriate e available	On-site support (e.g., adult familiar with AT)		
	YES	NO	YES	NO	YES	YES	YES	NO	
Classroom									
Home									
Other									







## A Parent's Guide to Assistive Technology

Resources & References

Visit our AT Tools Database for more information:

http://www.schwablearning.es

Resources & References

References

#### Matching Assistive Technology Tools to Individual Needs

#### Other Resources

#### Websites

National Center for Learning Disabilities:
Online Chat Transcript: Making Technology Part of Your Back-to-School Planning http://www.ldtalk.org/transcripts/transcript\_081705.html

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